



AMERICAN INSTITUTES FOR RESEARCH

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# **A Study of the Kentucky Schools for the Deaf and Blind and Services for All Students Who are Sensory Impaired**

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## **FINAL REPORT**

*Submitted to:*

The Kentucky Board of Education

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- Dr. Robert Davila, Vice President for the National Technical Institute for the Deaf
- Dr. Michael Bina, President of the Hadley School for the Blind
- Dr. Sandra Lewis, Coordinator of the Program in Visual Impairment at Florida State University
- Dr. Thomas Kluwin, Chair of the Department of Educational Foundations and Research at Gallaudet University

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## Abstract

In the 1990s, the reauthorization of the federal Individuals with Disabilities Education Act (IDEA) sought to improve the educational opportunities and achievement of children with disabilities across the nation. These goals, in turn, are embraced in the new and emerging national agendas for the education of blind and visually impaired (B/VI) and deaf and hard of hearing (D/HH) students. The Commonwealth of Kentucky has been active in response to and in concert with these national education reform movements to improve academic proficiency for *all* of Kentucky's students, including those who are B/VI and D/HH.

To ensure that all students reach academic proficiency by 2014, the Kentucky Board of Education (KBE) and Kentucky Department of Education (KDE) initiated a multi-stage process of reviewing performance indicators at its two state schools: the Kentucky School for the Blind (KSB) in Louisville and the Kentucky School for the Deaf (KSD) in Danville. In continuing this assessment in the fall of 2001, the KBE issued a Request for Proposal for an intensive and comprehensive six-month study of the program offerings and facilities at KSB and KSD, which was awarded to the American Institutes for Research (AIR).

This report presents findings and recommendations from this study of KSB and KSD, as well as services for all sensory impaired students in the Commonwealth of Kentucky. The research team used a broad range of methodological approaches to address the complex and diverse research questions posed for this evaluation. These methods included extant data analysis, site visits, meetings with a stakeholder group, focus groups with state school staff and students, and interviews with state school staff, parents, KSB and KSD graduates, service providers, district special education directors, and other interested parties. A panel of national experts in the fields of education of B/VI and D/HH children was convened to provide guidance and input to the study.

The various findings provide foundation for a series of recommendations that are intended to help the state move toward its objective of academic proficiency by 2014 for all B/VI and D/HH children:

1. Early identification and intervention should be bolstered to include all infants and toddlers qualifying for B/VI and D/HH services across the state.
2. A stronger commitment towards strengthening family involvement is needed, including family-oriented services such as parental education and counseling throughout the child's education.
3. In order to have effective early intervention programs, increased family involvement, and viable services for children with B/VI and D/HH of all ages, appropriate service alternatives must be brought closer to where these children reside through cooperative structures.
4. The roles of KSB and KSD as statewide resources need to be more clearly defined and include proactive responsibilities such as tracking all B/VI and D/HH children in the state and assisting the state in meeting their needs.
5. KSB and KSD need to develop clearer philosophies of service and purpose.

6. As more children with complex needs enter KSD and KSB, additional evaluation of the skills and services necessary to address the needs of these children will be needed. One of the two schools should develop specialized services for deaf-blind students.
7. More needs to be done to train B/VI and D/HH professionals and to retain them in these fields. This is especially true in areas in which personnel shortages are the greatest.
8. Increased and redirected investments in technology and vocational training programs are needed, while continuing to hold B/VI and D/HH students to the same academic standards as all students statewide.
9. While we believe that B/VI and D/HH children are able to learn and should be held to the same academic standards as others, we also recognize that these students have additional learning needs. To facilitate achievement of a broader range of educational objectives and to include their additional learning needs, D/HH and B/VI children should have an additional extended-academic year, extended day, or additional years of public schooling programs available to them as needed.
10. The KDE should appoint a director to oversee services received by all B/VI and D/HH students statewide, ages birth to 21.
11. State funding for B/VI and D/HH students should be revised to allow the funds needed to provide high quality services to B/VI and D/HH children follow them to their most appropriate placement.
12. Changes in the physical plant of both schools are needed, with KSD in need of substantial renovation and alterations.

## Chapter One: Introduction

In this report, the American Institutes for Research (AIR) presents findings and recommendations from an evaluation of the Kentucky School for the Blind and the Kentucky School for the Deaf, as well as services for all sensory impaired students in the Commonwealth of Kentucky. The study was conducted for the Kentucky Board of Education, which is responding to changes occurring nationally and statewide in the education of blind and visually impaired (B/VI) and deaf and hard of hearing (D/HH) students. This chapter provides an overview of the study, background about the national agendas for these children, and the organization of this report.

### Overview of Study

Since the mid 1990s, the Commonwealth of Kentucky has been engaged in comprehensive educational reform to improve the quality and delivery of educational services for all of its students, including those with special needs. To ensure that all B/VI and D/HH students reach academic proficiency by 2014, the Kentucky Board of Education (KBE) and Department of Education (KDE) initiated a multi-stage process of reviewing performance indicators at its two state schools for blind and visually impaired and deaf and hard of hearing students: the Kentucky School for the Blind (KSB) in Louisville and the Kentucky School for the Deaf (KSD) in Danville.

After reviewing KSB's and KSD's state assessment scores, the KDE determined that readjustments were needed to help move the schools and students to academic proficiency by 2014. Each school's curriculum was evaluated, and teams of curriculum consultants were assigned to work with KSB and KSD staff to revise the schools' curricula to meet state standards and be aligned across grade levels. That curriculum reform is still in process at both KSB and KSD. To ensure that the amended curricula were actually being taught and that the instructional staff had the necessary administrative support, the KDE conducted a Scholastic Audit, which it does for school districts that fail to meet the necessary improvements on the state assessment. KSB was audited in May 2001 and KSD in September 2001, and both schools are in the process of addressing the recommended adjustments.

To follow up on the curriculum reform and Scholastic Audits, the KBE issued in the fall of 2001 a Request for Proposal for an intensive and comprehensive six-month study of the program offerings and facilities at KSB and KSD. The American Institutes for Research (AIR) in Palo Alto, California, responded to the KBE's Request for Proposal and was contracted to begin work on the evaluation in December 2001.

In its Request for Proposal for this study, the KBE identified the following program delivery issues to consider:

- What types of programs and services will be required for blind and visually impaired and deaf and hard of hearing students over the next 20 years to ensure they reach academic proficiency? Specifically, what types of educational programs and settings would support a comprehensive plan for these students?
- What array of services and educational environments would be needed?
- What resources would be necessary to support these students' learning needs?

- What specific facility needs and administrative support would be required to achieve these goals? Are there any other specific and unique needs of these student populations to be considered?

In structuring its Request, the KBE specified that the contractor provide the state with the following five components:

1. An architectural review with recommendations
2. A program delivery review with recommendations
3. A fiscal review of all programs and funding recommendations
4. A review of efficient utilization of skilled staff
5. Recommendations for state-of-the-art campuses that meet the needs of students and serve as statewide resource centers.

With data in these areas, the KBE will be in a position to initiate other policies and programs that will improve the educational opportunities and performance of all of Kentucky's students, including those with sensory impairments.

## **Background**

The reforms initiated by the Commonwealth of Kentucky in the past few years have not occurred in a policy vacuum. In the 1990s, special education, through the reauthorization of the federal Individuals with Disabilities Education Act (IDEA), sought to improve the educational opportunities and achievement of children with disabilities across the nation. The goals of the IDEA have been aligned with the goals of a broad education reform movement in the U.S. that seeks to increase and measure outcome-based student learning against high standards. These goals, in turn, are embraced in the new and emerging national agendas for the education of blind and visually impaired and deaf and hard of hearing students.

## **National Agenda for the Education of Children and Youths with Visual Impairments**

In 1995, stakeholders in the education of blind and visually impaired students developed "The National Agenda for the Education of Children and Youths with Visual Impairments, Including Those with Multiple Disabilities" to serve as a framework for continued educational reform. Reflecting the larger educational reform movement that seeks outcome-based student learning measured against higher standards, The National Agenda focused on five elements of reform:

1. Challenging standards and aligned assessments
2. Comprehensive state and local reform plans
3. High quality professional development aligned to standards
4. Comprehensive technical assistance
5. Whole school, rather than individual or categorical, reform

To achieve the reform elements, The National Agenda set forth the following eight goals, which are being used to guide educators in their efforts for better educational opportunity and achievement for B/VI students:

1. Students and their families would be referred to an appropriate education program within one month of being identified as having a suspected visual impairment.
2. Policies and procedures would be implemented to ensure the rights of parents to full participation and equal partnership in the education process of their children.
3. Institutions of higher education with at least one full-time faculty member in the area of visual impairment would prepare a sufficient number of educators of B/VI students to meet the nation's personnel needs.
4. Service providers would determine caseloads based on student need, and would require ongoing professional development for all teachers of B/VI students and O&M instructors.
5. Local education programs would ensure that all students have access to a full array of placement options.
6. Student assessment would be conducted by personnel with expertise in B/VI education, and in collaboration with parents.
7. Access to educational and developmental services would include the assurance that instructional materials are available to students in the appropriate media and at the same time as their sighted peers.
8. Educational and developmental goals, including instruction, would reflect the assessed needs of each student in all areas of academic and disability-specific core curricula.

This National Agenda has been used as a framework for organizing, directing, monitoring, and enhancing program development at the local, state, and national levels. Educators, parents, and service providers of B/VI students believe that the achievement of these goals will help improve the educational opportunities and service delivery for blind and visually impaired children.

### **National Agenda for the Education of all Deaf and Hard of Hearing Children**

With the nation's renewed focus on literacy, educators have also embarked on creating a National Agenda for deaf and hard of hearing children. At the annual Conference of Educational Administrators of Schools and Programs for the Deaf (CEASD) held in late April 2002 in Fremont, California, administrators of schools for the deaf and hard of hearing further discussed the document, "Achieving Educational Equality – A National Agenda for the Education of All Deaf and Hard of Hearing Children." In the agenda, stakeholders set forth eight proposed goal statements:

1. Early intervention is necessary to provide an array of options and services to families of D/HH children at the earliest possible moment.
2. Communication and language support are critical for D/HH children to develop age appropriate expressive and receptive communication and language skills (including English skills) to become literate and productive adults.

3. Partnerships are important because the education of D/HH students is the shared responsibility of educators, parents, and the community.
4. Accountability is necessary and instruction for D/HH students must be data-driven and focus on multiple measures of student performance.
5. Placement programs and services must be made available to D/HH students on a continuum, with recognition that the least restrictive environment is intricately linked to communication and language.
6. Technology must be maximized to promote learning and listening knowledge, skills, and abilities, if the student uses his or her residual hearing.
7. Personnel preparation, recruitment, retention and on-going professional development will be the result of a collaborative partnership of universities, schools, and communities in order to meet the needs of a diverse population of deaf and hard of hearing learners.
8. Research priorities in areas related to the education of the deaf and hard of hearing will be established based upon input from affected constituencies.

By focusing their attention on accomplishing these goals, educators intend to maximize the educational opportunities and outcomes of deaf and hard of hearing students.

The Commonwealth of Kentucky has been active in response and in concert with these national education reform movements to improve academic proficiency for *all* of Kentucky's students, including those who are blind or visually impaired and deaf or hard of hearing. This study is just one component of the Commonwealth's reform activities.

## **Organization of Report**

This report is organized into six chapters. The next chapter on methodology describes the data collection process. Chapter Three describes the services currently provided to B/VI and D/HH children, either by the state or through private services. The chapter on findings presents the data and issues that emerged from our research. The fifth chapter lays out the recommendations made by AIR and its panel of expert advisors to the Kentucky Board of Education about how the KDE may achieve its goal of improving the academic proficiency of blind and visually impaired and deaf and hard of hearing students in the state.

The reader may note variations in the terms used to describe students who are B/VI and D/HH. When referring to the blind and visually impaired and deaf and hard of hearing populations in general, the abbreviations B/VI and D/HH are used. However, when referring to specific counts by primary disability category or findings derived from those data, the abbreviations VI and HI apply, as those are the designations used by KDE for these students.

## Chapter Two: Methodology

This chapter describes the data collection methods used for this study. The study team drew from a broad range of methodological approaches to address the complex and diverse research questions posed for this evaluation. An abbreviated list of the existing data collected and reviewed is provided in Exhibit 2.1. An overview of the telephone interviews conducted is shown in Exhibit 2.2. A variety of other informal interviews were conducted to further inform the evaluation. Other methods used are described in greater detail below, such as convening an expert panel of advisors and stakeholders group. During the course of the study, the AIR research team met with the KSD/KSB Oversight Committee to present its approach and preliminary findings.

### SECTION I: Analysis of Extant Data

The study team requested and analyzed data from the Kentucky Department of Education (KDE), the Kentucky School for the Blind (KSB), and the Kentucky School for the Deaf (KSD), as listed below in Exhibit 2.1.

#### Exhibit 2.1: KDE/KSB/KSD Extant Data Reviewed

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<b>Fiscal Data</b>
<ul style="list-style-type: none"><li>• Expenditure Histories (FY 1999-2001)</li><li>• FY 2002 Expenditures through November 2001</li><li>• Personnel Salaries</li><li>• Salary Schedules</li></ul>
<b>Staffing Data</b>
<ul style="list-style-type: none"><li>• KSB and KSD Staffing Lists</li><li>• KSB and KSD Descriptive Staff Lists</li><li>• KSB and KSD Organizational Charts</li><li>• KSB and KSD Job Descriptions/Class Specifications</li><li>• District B/VI &amp; D/HH Teachers Statewide</li></ul>
<b>Student Counts</b>
<ul style="list-style-type: none"><li>• KSB and KSD Student Rosters</li><li>• Additional KSB and KSD Student Information: day/residential status, date of birth, date of enrollment, disability category</li><li>• KSD Early Childhood Regional Program Student Rosters</li><li>• KSB Short Course Student Rosters</li><li>• Statewide District Placement Data (December 1st counts by district) for VI, HI, and MD*</li><li>• Students Served by KSB KIDS Team Services</li><li>• Students Served by KSD Outreach</li><li>• KY Instructional Materials Resource Center (KIMRC) Legally Blind Count, January 2002</li></ul>
<b>Assessment Data</b>
<ul style="list-style-type: none"><li>• 2001 Test Scores: Comparisons of Students with Disabilities</li><li>• Spring 2001 KY Performance Report and Evaluator's Edition</li><li>• Spring 2000 KY Performance Report and Evaluator's Edition</li><li>• Comparison of CTBS Test Results by Content Areas</li><li>• Growth Charts</li><li>• CATS KY Score Release CD, October 2001 (all student scores by district)</li><li>• KCCT/CTBS Scores 1999-2001 (compiled for the team by KDE's Office of Assessment and Accountability. Includes all VI, all HI, KSD, KSB, and deaf-blind student scores*)</li></ul>

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**Exhibit 2.1: KDE/KSB/KSD Extant Data Reviewed (continued)**

<b>Transition/Graduate Data</b>
<ul style="list-style-type: none"> <li>• Transition to Adult Life Data Submitted to KDE for KSB, KSD, and all students statewide (1993-2001)</li> <li>• Transition Status of B/VI Students in the State for 1999 and 2000 (provided by KSB)</li> <li>• KSB and KSD Graduate Contact Information for Classes of 2001 and 2000</li> </ul>
<b>Facilities Data</b>
<ul style="list-style-type: none"> <li>• Buildings Data for KSB and KSD (sq. footage, age, condition)</li> <li>• Division of Facilities Management memorandums on KSB and KSD observations</li> </ul>
<b>Data from Other Sources</b>
<ul style="list-style-type: none"> <li>• Visually Impaired Preschool Services, Inc. (VIPS): counts of B/VI children ages 0-2 served by district</li> <li>• Louisville Deaf Oral School: counts of D/HH children ages 0-2 served by district</li> <li>• Lexington Speech and Hearing Center: counts of D/HH children ages 0-2 served by district</li> <li>• Commission on Children with Special Health Care Needs: counts of children ages 0-2 diagnosed with hearing loss</li> </ul>

\* The terms VI and HI are used here because these are the classifications used by the KDE to designate blind and visually impaired and deaf and hard of hearing children.

In addition to work conducted by AIR, the research team contracted Dr. Robert J. Beadles, Jr., Ph.D., CRC, the Research Director of the Alabama Institute for Deaf and Blind (AIDB), to conduct the financial and staffing analyses presented in this report. Dr. Beadles provided a comparison of KSB and KSD data with two national longitudinal financial and staffing studies of residential schools for the deaf and residential schools for the blind over the period 1996-1998. The two studies began in 1995 and calculated the costs of educating students who were either deaf or blind in a residential school setting. Those studies were conducted with funding from the AIDB Foundation and were supported by two organizations representing schools for the deaf (Conference of Educators and Administrators for Schools for the Deaf) and schools for the blind (Council of Schools for the Blind). The Kentucky Department of Education, specifically KSB and KSD, provided the data used to compare KSB and KSD to the national studies. Through personal communications with administrators at each school, Dr. Beadles gathered additional information regarding the scope of the programming and clarification of funding principles at each school. The entirety of Dr. Beadles' report is in Appendix A.

**SECTION II: Expert Panel**

Throughout January 2002, the AIR research team worked to identify experts in the fields of education of the blind and visually impaired and the deaf and hard of hearing to act as advisors to the study. The team received a list of 24 experts in the field of education of blind and visually impaired children from Dr. Ralph Bartley, Superintendent of KSB. The Interim Superintendent of KSD, Dr. Vivian Link, provided a list of five experts in the field of education of deaf and hard of hearing children.

AIR also contacted other special education researchers in the field to identify additional candidates. An e-mail with a brief description of the study was sent to identified candidates, including those provided by KSB and KSD. They were asked to respond to AIR if they were interested in participating in the study. The e-mail also asked candidates in the field to recommend any reading materials or data as related to the education of the blind and visually impaired and deaf and hard of hearing and recommend other candidates they believed were qualified. AIR created protocols for the screening process of the expert candidates (see Appendix D). The study team chose expert advisors based on expertise and experience, and to represent a

broad array of educational positions, such as professors in institutions of higher education, state school administrators, and practitioners.

The final list of nominees in the field of education of the blind and visually impaired included 31 people, of whom 26 were contacted. Fourteen people responded to the e-mail request, and ten respondents were screened in regard to their availability and suitability for this project. Of those ten people, eight were willing to participate as advisors. Several people declined participation because they felt they had a conflict of interest with the study or were unavailable at the time. The study team chose three expert advisors in the field of education of the blind and visually impaired to serve on our advisory panel. They include: Dr. Philip Hatlen, Superintendent of the Texas School for the Blind and Visually Impaired; Dr. Michael Bina, President of the Hadley School for the Blind; and Dr. Sandra Lewis, Coordinator of the Program in Visual Impairment at Florida State University.

With additional referrals from other special education experts, the final list of experts in education of the deaf and hard of hearing included 26 people, of whom 18 were contacted. Ten responded to the e-mail request, and seven of these candidates were screened. The study team chose three expert advisors based on their experience and expertise. They include: Dr. Robert Davila, Vice President for the National Technical Institute for the Deaf; Dr. Kenneth Randall, Superintendent of the Arizona State School for the Blind and Deaf; and Dr. Thomas Kluwin, Chair of the Department of Educational Foundations and Research at Gallaudet University.

The study team conducted one-hour follow-up interviews with all of the selected expert advisors to confirm their interest and willingness to participate, and to discuss their role as advisors to the study.

The study team asked expert advisors to review and comment on data collection instruments, presentations to the KSB/KSD Oversight Committee, and the preliminary findings. One of the advisors, Dr. Kenneth Randall, accompanied the team on a site visit to Kentucky in March, and had the opportunity to tour the two schools, and meet with administrators, staff, and students. This was a valuable first-hand experience, and Dr. Randall shared his observations and experiences with the study team and the expert panel via e-mail (see Appendix B).

The team also met directly with Drs. Randall, Davila, and Hatlen in Fremont, California, on April 29<sup>th</sup> and 30<sup>th</sup> to discuss findings and recommendations.<sup>1</sup> Dr. Michael Bina participated during the first day of discussion by phone.

All expert advisors reviewed a draft of this report and submitted comments, which were carefully read and included with few exceptions. This does not mean that there was complete unanimity regarding all findings and recommendations. However, we believe that there is much more agreement than disagreement from our advisors in regard to the overall content of this report. Ultimate responsibility for these findings and recommendations, of course, lie with the AIR study team.

### **SECTION III: Stakeholder Group**

At the meetings with the KSB/KSD Oversight Committee in December 2001, the study team requested that a Stakeholder Group be formed, representative of the constituent groups important to this evaluation, to further inform the team of important issues regarding education of the blind

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<sup>1</sup> We are thankful to the California School for the Deaf for allowing us to use their facilities for these meetings, and for assisting us in locating interpreter services.

and visually impaired and deaf and hard of hearing. Mr. William Stearns, AIR's liaison at the KDE, contacted the superintendents from each school, and asked for a list of people who might be interested in participating and would be able to attend several meetings with the research team. The Stakeholder Group included individuals who are blind or visually impaired and deaf or hard of hearing, individuals from higher education institutions in the state, representatives from state schools and local school districts, members of advocacy organizations, local school administrators, teachers, and parents. There was an effort to represent the geography of the state, since issues might vary from region to region. The panel originally included 18 members and expanded to 22. A list of those participating as Stakeholders is provided in Appendix C.

In January 2002, the study team met with the Stakeholder Group and gave an overview of the study and study approach. The team posed questions and addressed comments made by the group. The group also reviewed a list of potential candidates for the expert panel, and suggested some additions. The team met again with the Stakeholder Group in March to discuss the preliminary findings of the study.

#### **SECTION IV: Telephone Interviews**

During January, February, and March of 2002, AIR conducted telephone interviews with important constituent groups in the state. These groups included district special education directors, district-level teachers of B/VI and D/HH students, parents of students at KSB and KSD, parents of B/VI and D/HH students in the local public schools, and graduates of KSB and KSD. Random samples were based on the total number of possible respondents in each subgroup. The purpose of the telephone interviews was to gain important information, perspectives, and issues from unique groups of respondents. They provided a rich foundation of qualitative data to inform the remainder of the study. The study team designed the telephone interview protocols to last no more than one hour. The AIR team focused these discussions around specific areas, appropriate to each respondent type. The expert advisors reviewed and provided input to the protocols for state school parents, graduates, and local school district teachers of B/VI or D/HH students.

To safeguard the privacy of parents and graduates, the study team provided letters describing the study and requesting participation to be distributed by KSB and KSD to individuals in the random sample. The study team did not contact these individuals unless they had consented to an interview, either by contacting the state schools or AIR directly. Efforts were made to interview all respondents in the random samples who agreed to participate. However, in some cases, participants did not respond to attempts to schedule an interview, were not available at the agreed time, or responded after the data collection ended. Interviewers made accommodations for deviations from the protocol if an interviewee introduced other issues that seemed relevant to either his or her own experiences with the Kentucky educational system or to the study. The interviewers also assured participants that their identity and participation would be kept confidential. Interview notes were summarized and sorted to identify emerging themes (see Appendix E). Chapter Four of this report provides further details on the themes that emerged from those interviews.

**Exhibit 2.2: Interviews Conducted with Constituent Groups**

<b>Respondent Type</b>	<b>Number in Sample</b>	<b>Number Responded</b>	<b>Number Interviewed</b>
<b>District Level Interviews</b>			
District Special Education Directors	26	18	18
District teachers of B/VI	14	5	4
District teachers of D/HH	12	7	7
<b>Parents of KSD Students</b>			
Parents of KSD residential students	10	1	1
Parents of KSD day students	10	3	2
Parents of KSD regional program students	10	2	1
Self-selected/volunteer parents of KSD students	Not applicable—no sample chosen	5	4
<b>Parents of KSB Students</b>			
Parents of KSB residential students	10	3	2
Parents of KSB day students	10	5	4
Parents of KSB short course students	10	7	6
Self-selected/volunteer parents of KSB students	Not Applicable – no sample chosen	2	2
<b>Parents of Public School Students</b>			
Public School Parents	Not Applicable – no sample chosen	13	5
<b>Graduates of KSD/KSB</b>			
Graduates – KSD class of 2001	10	1	1
Graduates – KSD class of 2000	10	0	0
Graduates – KSB class of 2001	5 (all graduates)	4	2
Graduates – KSB class of 2000	7 (all graduates)	4	3

***District Special Education Directors***

A random sample of 26 district special education directors was selected from various districts in the state. The criteria for selection was that districts had at least two students identified as B/VI and at least two students identified as D/HH. These criteria were set in order to ensure that we could interview district directors who had experiences relevant to the educational issues reviewed in the study. Jefferson County was added to the sample with certainty because of the size of the district, and the large number of students identified as B/VI or D/HH. The team conducted 18 interviews with district directors using a protocol (see Appendix D) that included questions about placement options, local resources, quality of educational options, and vision of the future regarding the education of blind and visually impaired and deaf and hard of hearing students.

***District Level Teachers of the Blind and Visually Impaired and Deaf and Hard of Hearing***

The study team selected a random sample of 14 district level teachers of B/VI and 12 district level teachers of D/HH, and tried to ensure that all regions were represented. Some teachers in the sample had to be replaced because they were no longer working in that district or in the education of B/VI or D/HH students. One teacher refused to be interviewed. The team conducted four interviews with teachers of B/VI students, and seven interviews with teachers of D/HH students using a protocol (in Appendix D). These teachers were asked about their experiences working with B/VI and D/HH students in the state, resources that were available to them, the quality of educational options, alignment with core curriculum, and their interactions/relationships with KSB and KSD.

### ***Parents of KSB and KSD Students***

The study team chose a random sample of 30 parents each from KSB and KSD. They included parents of ten residential students, parents of ten day students, and parents of ten KSB KEYS Short Course or the KSD Early Childhood Regional Program students. Letters requesting participation in our interviews and the interview questions were e-mailed to Mr. William Melton at KSD and to Dr. Ralph Bartley at KSB, for distribution to sampled parents (see Appendix D). The letters were translated into Spanish for those parents who are non-English speakers. The letters also requested the respondents' preferred method of communication so that accommodations could be made. A follow-up letter (see Appendix D) was sent to parents in March to encourage additional participation in the evaluation. Of the 30 sampled from each school, 6 parents of KSD students and 15 parents of KSB students responded. The team conducted interviews with four of the parents sampled from KSD, including parents of one residential student, two day students, and one regional program student. The team also conducted interviews with thirteen parents sampled from KSB, including parents of four residential students, two day students, and seven short course students. As time permitted, the study team also conducted interviews with parents who volunteered to be interviewed, but were not part of the sample. The study team attempted to reach all of the sampled parents who responded to the request. However, some parents did not respond to the study team's attempts to schedule an interview or were not available at the interview time. Interviewers used a protocol (see Appendix D) that included questions about the parents' experiences with KSB/KSD and public schools, services available, communication with the school, and expectations for their children.

### ***Parents of Public School Students Who Are Blind and Visually Impaired and Deaf and Hard of Hearing***

The study team asked the district special education directors who were interviewed if they would be willing to mail a letter to parents of B/VI and D/HH children in their districts requesting their participation for telephone interviews. These parents were considered volunteers and thus, there was no sample selected of public school parents of B/VI and D/HH children. Thirteen of the district directors agreed and sent letters requesting an interview, along with the interview protocol to identified parents. Thirteen parents responded, several towards the end of the data collection process. Due to time constraints, five public school parents were interviewed, though attempts were made to reach all participants who responded to this request. Interviewers used a protocol (see Appendix D) that asked about parents' experiences with local public schools, placement options, local resources available to them, and their impressions of the quality of education that their children were receiving.

### ***Graduates of KSB and KSD***

The study team selected a sample of KSB and KSD graduates from the classes of 2000 and 2001. For class sizes that were less than ten, all graduates were selected and for those larger than ten, a random sample of ten was selected. We e-mailed a letter to the superintendent of each school, or their designee, which was then sent to the graduates. The letter explained the study, requested an interview and provided a list of questions that would be asked (see Appendix D). As with the parents, the graduates were asked to let us know their preferred method of communication. The study team sent a follow-up letter (see Appendix D) to graduates via the schools in March, to encourage additional participation in the study. The team conducted six interviews with graduates of KSB and KSD, though an effort was made to reach all sampled graduates who responded to the requests. Interviewers used a protocol (see Appendix D) that included questions about graduates' impressions of their education at KSB or KSD, residential experiences (if appropriate), and transition to adult life.

## **SECTION V: Site Visits at KSB and KSD**

### ***Initial Site Visit***

An introductory visit to Kentucky took place in December 2001. Dr. Parrish and Dr. Harr presented an overview of the study and the study approach to the KSB/KSD Oversight Committee. The study team responded to comments from both the committee and the public. The team also met with KDE staff to finalize the contract and discuss data that would be needed from KDE for the study. During the second day of the visit, the team went to each of the schools and toured the buildings, had informal discussions with administrators about a future visit, and discussed what data were immediately available.

### ***Subsequent Site Visits***

In late January 2002, the study team conducted a second site visit to the two schools. Careful planning for each site visit was required given the number of meetings, interviews, and focus groups that had to be scheduled. The study team developed an itinerary in the weeks prior to the visit and shared it with KSB and KSD administrators.

At each school, the study team also interviewed individual teachers and administrators, and conducted both teacher and student focus groups made up of representatives chosen by the schools. Prior to the visit, the team provided a list of criteria to guide the KSB and KSD in selecting members for the focus group to ensure diverse perspectives. For instance, teachers were supposed to represent a range of grade levels, whereas the student groups were to have residential, day, and mainstreaming experiences. For the interviews and focus groups, the study team used protocols containing discussion points to cover during the course of the session, but also followed-up on other issues raised by participants. The interviews and focus groups were audio taped after receiving permission from the participants who were guaranteed confidentiality. Interpreters were used when needed.

During the site visits, the study team held a town meeting at both KSB and KSD to educate the public about the study, to address any concerns or questions, and to obtain input about pertinent issues. At the town meeting, an overview of the study was presented, followed by a question and answer period. A list of questions for discussion and consideration were posed to the community at the meetings (Appendix D).

On this visit, the study team also met with the Stakeholders Group in Frankfort, and Dr. Parrish presented an overview of the study, as previously discussed in Section III.

In March 2002, two team members gave a presentation of the study's preliminary findings to the KSB/KSD Oversight Committee. As noted in Section II, Dr. Randall, an expert advisor to the study, accompanied the team on a third site visit following the meeting with the Oversight Committee. At KSD, the team conducted two focus groups, one for teachers and the other for students. Members of the focus groups were selected by the school and were comprised of students and teachers who did not participate in the first round of focus groups in January. The team also interviewed individual administrators, with interpreters assisting as needed. At KSB, the team interviewed individual administrators and toured the campus.

## **Chapter Three: Overview of Services for Blind and Visually Impaired and Deaf and Hard of Hearing Students**

### **Introduction**

In this chapter, AIR presents a summary description of services currently available to blind and visually impaired (B/VI) and deaf and hard of hearing (D/HH) children in Kentucky. Profiles of the Schools for the Blind and Deaf are provided in Section I. Section II reviews the direct and indirect services provided by KSB to visually impaired and blind students, while KSD and its affiliated programs are described in Section III. Both sections provide overviews of how the state schools are fulfilling their legislated mandate to be statewide educational resources on blindness and deafness, respectively, and briefly cite other educational services available for B/VI and D/HH students. It is important to note that the majority of B/VI and D/HH students in Kentucky are served in their local public schools and do not attend KSB or KSD. The chapter concludes with a brief review of these students' educational placements.

### **SECTION I. Profiles of KSB and KSD**

The Kentucky School for the Blind (KSB) was founded in 1842 in Louisville in Jefferson County, and was the third public school for blind and visually impaired students in the country. It is the only school for B/VI students in Kentucky. In 1855, KSB moved from its original site to its present location on Frankfort Avenue. In 1967, the 1855 structure was razed to build the current school structure. The KSB campus occupies 14 acres, and currently has 80 students and 116 staff.

KSB is located adjacent to the American Printing House for the Blind (APH), and reports a close relationship with the University of Louisville (UL), which is the only institution of higher education in the state that offers certification in the Education of the Visually Impaired and in Orientation and Mobility Services (O&M). The presence of KSB, the APH, and the UL have made Louisville the center for education and services for blind and visually impaired people in Kentucky.

The Kentucky School for the Deaf was established in 1823 in Danville, a small city in Boyle County in central Kentucky. It was the first public school serving deaf and hard of hearing students in the country (most schools for the deaf were private institutions), and is the only state school for D/HH students in Kentucky. The School for the Deaf has been at its present location on South Second Street in Danville since 1825, and the campus has several historic buildings, some of which are still in use and some not. The KSD administration building, Jacobs Hall, was built in 1857 and houses the school museum. Of the 170 acres that make up the KSD grounds, only 70 acres are currently being used as the school campus. KSD's 179-year history in Danville has made it one of the oldest and most prominent institutions in Boyle County, and has attracted a large deaf and hard of hearing population to the Danville area. KSD presently has 152 students and 117 staff members.

As state schools, KSB and KSD are public schools under the direct management of the Kentucky Department of Education. The Kentucky Board of Education serves as the local school board for KSB and KSD. The superintendents of the state schools report to the Office of Special Instructional Services within the KDE.

## **SECTION II. Services for Blind and Visually Impaired Students in Kentucky**

### ***Kentucky School for the Blind***

The Commonwealth of Kentucky offers a variety of services to its blind and visually impaired (B/VI) residents. One of the most prominent of those services is the Kentucky School for the Blind. KSB's mission is "to provide comprehensive educational services to all Kentucky students who are blind and visually impaired, birth through 21."

The programmatic direction and philosophy of the school comes from its governance structure. KSB has a superintendent who oversees 111 staff in five divisions: Instruction, Residential Services and Transportation, Business Services (which includes maintenance, housekeeping, and food services), the Kentucky Instructional and Diagnostic Services (KIDS), and the Kentucky Instructional Materials Resource Center (KIMRC). In addition to the superintendent, KSB also has an assistant superintendent and a principal who provide instructional leadership. Twenty-four of KSB's instructional staff are teachers and four are teacher aides. The school also has a counselor, psychologist, and a rehabilitation instructor in its instructional program, and a rehabilitation instructor and 18 house parents in its residential services division. Another 34 employees provide operational, maintenance, housekeeping, food and health services. Of KSB's 111 employees, nine work in the Kentucky Instructional and Diagnostic Services (KIDS) program and eight in the Kentucky Instructional Materials Resource Center (KIMRC), respectively.

Like other residential schools for the blind across the country, KSB has experienced the changes in special education underway since the 1970s. Within the last 30 years, enrollment at residential schools has declined, and the student profile has become more complex. Currently, KSB has 80 students enrolled for the 2001-2002 school year. Sixty-one of these students are residential, arriving on campus Sunday night and returning home every Friday afternoon. The other 19 students commute daily from home to attend classes.

KSB provides a variety of educational services to blind and visually impaired students enrolled at the school. In addition to the core academic curriculum mandated by state law, KSB provides specialized instruction in reading and writing Braille, Orientation and Mobility, and vocational and independent living skills training. Instruction is provided using tactile, auditory, and visual means. To enable B/VI students to compensate for their visual impairments, KSB provides a range of assistive and adaptive technology. KSB students have computers in the classrooms, labs, and dormitories that are speech accessible and have large print displays. Students also have access to electronic note taking devices, recorded and large print books, and the Internet. Students at KSB also have the option of attending classes in the Jefferson County Public Schools (JCPS), which allows them a broader range of academic and vocational courses.

KSB has two programs designed to increase the post-secondary independence of its graduates: the Community-Based Education (CBE) program and the Adult Living program. The CBE program offers classes to KSB students with special needs in the areas of functional development and practical living. CBE students receive direct instruction in community and domestic functioning, vocational, and recreational/leisure skills in a variety of community environments and are taught to integrate skills to perform realistic activities.

For academically and socially responsible residential high school students, KSB has an adult living program. Eligible KSB juniors and seniors are allowed to live in an independent dorm in which they are expected to cook, clean, and shop independently, meet their personal care needs without assistance, and in general learn to live independently and productively.

Both KSB and KSD are mandated by state law House Bill 237 (1998) to serve as a statewide educational resource center on blindness and deafness, respectively. The law states that KSB and KSD “shall provide technical assistance and resource services to local school districts, parents, and other agencies or organizations serving children and youth who are deaf and hard of hearing or who are blind and visually impaired.” These services may include, but not be limited to assessments, curriculum consultation, language and communication, orientation and mobility (O&M), classroom devices, assistive technology, professional development, and program development and implementation. KSB and KSD are authorized to enter into collaborative agreements with local education agency (LEAs) and other public and private agencies to provide for regional or satellite programs.

KSB offers a variety of services that allow it to meet the HB237 requirement to serve blind and visually impaired students attending LEAs. The KSB program, Knowledge to Empower You to Succeed (KEYS) Short Course, provides targeted instructional services to blind and visually impaired students attending LEAs. At no cost to the parents or LEA, students come to Louisville to attend KSB from one to twelve weeks of specialized instruction in such areas as study skills, computer and assistive technology, O&M, Braille, and low vision skills. While a student is participating in the KEYS Short Course, he is still enrolled in his local public school, and his schoolwork is sent from his LEA to KSB to allow him to maintain his regular class work while attending the short course. A student’s participation in the KEYS Short Course is determined by his Individual Education Plan (IEP) and does not influence his placement because the student continues to be enrolled in his LEA. In recent years, KSB has served approximately 30 students a year through the short course program.

KSB’s Summer Enrichment Program is another service KSB offers to blind and visually impaired students in LEAs, as well as to its own students. The school offers three summer programs: the Elementary Camp for students in grades K-5, the Middle/High School Camp for students in grades 6-12, and the Career Camp for students in grades 9-12. All of the camps combine recreation and leisure activities along with Braille, O&M, and daily living skills training.

KSB also acts as a statewide resource through its outreach programs that indirectly benefit blind and visually impaired children, many of whom are not on-site students. These services are primarily for school districts, teachers, and other service providers who, in turn, support B/VI students and their families. KSB’s primary outreach programs are the KIMRC and KIDS, both housed on the KSB campus. Their on-campus location at KSB is not commonly found at other residential schools.

The Kentucky Instructional Materials Resource Center (KIMRC) provides specialized educational materials, such as Braille and large print textbooks, Braille writers, light boxes, and four-track tape recorder players for B/VI students in LEAs. The KIRMC provided books and materials to 427 students in 114 LEAs in the 2000-2001 school year. Furthermore, the KIMRC helps repair four-track tape players and Braille writers loaned to LEAs. In addition, teachers and parents of blind and visually impaired students can receive resource materials from the KIMRC Parent Resource Center.

The Kentucky Instructional and Diagnostic (KIDS) program provides indirect services for blind and visually impaired children ages 0-21 through student assessments, consultations, and in-service training for LEAs. KIDS also hosts workshops and conferences, including an annual parent conference at KSB, and maintains a low vision clinic staffed by an optometrist specializing in low vision exams and a low vision educational coordinator. KIDS also facilitates the Quality Programs for Students with Visual Impairment to help LEAs identify strengths and needs in their own VI services. Until this year, KIDS was active in supporting the University of Louisville’s

Distance Education program in class design and in teaching and mentoring teachers of blind and visually impaired students. As part of KSB's effort to provide statewide resources, KIDS has begun in recent years to work with Kentucky's educational cooperatives to establish networks of teachers. It will also be providing cooperatives with field-based regional consultants who will work with cooperatives to develop service plans based on local needs. KIDS and KSB will employ these consultants. In addition, KIDS maintains a state directory of parents of blind and visually impaired students to facilitate parent networking. In 2000-2001, KIDS served 172 children, 112 of whom were students from LEAs and 60 of whom were KSB students.

Part of the KIDS program is PREVIEW, a professional development program for preschool teachers and other direct service providers who work with blind and visually impaired children ages 0-5. The PREVIEW program offers early childhood trans-disciplinary assessments, training, and annual seminars for service providers of the blind and visually impaired. PREVIEW is a cooperative effort with KIDS and the University of Louisville (UL) and is co-sponsored by the KDE's Preschool Division and the Commission for Children with Special Health Care Needs (CCSHCN). Participants can receive credit from UL.

KSB, in cooperation with the American Printing House (APH), also sponsors an annual 3-day professional development conference for teachers of blind and visually impaired students. Participants can stay at KSB free of charge as space allows, and there may be a small fee for materials.

### ***Other Services for Blind and Visually Impaired Students***

According to the December 2001 district student count, 407 children with VI as their primary disability were attending schools other than KSB. These students may also receive indirect services from KSB as well as from other state and private programs. There are, however, no private schools for blind and visually impaired students in Kentucky.

The Visually Impaired Preschool Services (VIPS) is a private organization partly funded by federal IDEA Part C funds, providing early childhood educational services for B/VI children ages 0-3. This organization is described in more detail in Chapter Four.

The American Printing House for the Blind (APH) is a national resource with a close affiliation to KSB located next to the school in Louisville. Founded in 1858, APH is the oldest organization of its kind in the United States and has been officially designated by the U.S. Government as the source of special educational products for blind and visually impaired students across the county. APH provides books and magazines in Braille, large type, recorded and on computer disk; instructional aids, tools, and supplies; and the ACCESS textbook reference database. The American Printing House also conducts an annual census to determine the number of legally blind students in the U.S.

## **SECTION III. Services for Deaf and Hard of Hearing Students in Kentucky**

While the Kentucky School for the Deaf (KSD) is the oldest and most prominent educational institution serving deaf and hard of hearing (D/HH) students in the state, it is not the only service provider. A range of public and private services is available to deaf and hard of hearing residents of Kentucky.

### ***Kentucky School for the Deaf***

In response to state law H.B. 237 which established KSD as a statewide educational resource center on deafness, KSD created a five-year strategic plan to become a comprehensive statewide resource. In that strategic plan, KSD states its vision as being “the Commonwealth’s premier educational center on deafness, serving children and youth who are deaf and hard of hearing from birth to 21 and their families through comprehensive on-campus and regional education programs and the Statewide Educational Resource Center on Deafness.” Also in the plan, KSD defines its mission as “ensuring that deaf and hard of hearing children and youth in Kentucky have educational opportunities to develop their potential to become educated, life-long learners and productive citizens.” Providing deaf and hard of hearing students “an equal playing field” to compete with their other hearing peers is central to the mission of the school.

The Kentucky School for the Deaf presently has an interim superintendent who oversees a staff of 117 organized in four divisions: Instruction, Student Life, Outreach, and Fiscal and Support. The Instructional Services Division has a principal who oversees the elementary, middle and high schools, as well as career and technical education, the alternative school/behavior center, and the literacy/homework center. Other administrators include the Dean of Students, Athletics Director, and Special Programs Coordinator. Of KSD’s 117 employees, there are 49 teachers, 6 teacher aides, and 3 counselors. The residential services staff of 43 employees includes 25 student development assistants and specialists and 12 house parents who provide evening and night time supervision for residential students. Fifty of the 117 staff provide operational, maintenance, housekeeping, food, and health services. KSD also employs 26 people engaged in outreach activities as part of the school’s efforts to be a statewide resource on deafness.

Like KSB, KSD has experienced declining enrollments in recent decades. From a high point of approximately 300 students in the 1920s, KSD now has a total enrollment of 152 students ranging from Pre-K to 12<sup>th</sup> grade. Of those, 94 are residential students and 58 are day students. KSD provides both the core academic content required by the state and vocational/career and technical education within a specialized environment that tailors instruction to deaf and hard of hearing students. Instruction is provided in a range of communication means, such as oral or manual communication (e.g., American Sign Language (ASL) or manually coded English). KSD does not, however, offer courses that teach students ASL or other manual communication.

KSD also allows its students to attend classes for part of their day in the Danville Independent and Boyle County public school systems. Furthermore, KSD’s collaborative career and technical education program—operated in conjunction with Boyle County and the Danville Independent School Districts—and facilities are available for use by the public schools. The collaborative alternative school program is also operated in conjunction with Boyle County and the Danville Independent School Districts. As KSD has more space and facilities than it currently needs, some of its classroom space is used by the districts for the alternative school program which serves hearing students from the LEA (although currently there is one deaf student participating in the alternative program). KSD also has budgeted three teachers for the alternative school program.

Another statewide resource KSD offers is its summer program, which is available to deaf and hard of hearing students both at KSD and in LEAs. In 2001, 67 students (37 from LEAs and 30 from KSD) spent two weeks participating in educational and recreational activities. KSD also started a youth leadership training camp in 2001, which was attended by 26 students from KSD and LEAs. In 2000-2001, KSD served a total of 321 students in its summer and other special programs, such as the family learning vacation, sports festival, and leadership training camp.

Unlike KSB, however, the School for the Deaf does not have a short course program that allows deaf and hard of hearing students at LEAs to attend KSD for a short period of time during the school year for specialized instruction.

In 2000-2001, KSD served 491 students on campus. This included the 170 full-time enrolled students (early childhood/preschool through high school) and 321 students in the summer and special programs. An additional 39 students were enrolled in the collaborative alternative school, and 41 students participated in the career and technical education program.

As part of its efforts to provide statewide resources on deafness, KSD offers a number of other outreach programs that provide both direct and indirect services to students and their families and service providers of the deaf and hard of hearing throughout the state.

Within early education and family support services, KSD has its Early Childhood Program, which has become a critical component of the school's new mission to serve as a statewide resource on deafness. KSD's regional programs serving children ages 0-5 are located in five areas in western and northern Kentucky:

1. Paducah in McCracken County
2. Princeton in Caldwell County
3. Owensboro in Daviess County
4. Bowling Green in Warren County
5. Erlanger in Kenton County

At present, only the Northern Kentucky regional program, housed at River Ridge Elementary School in Erlanger, has a site-based preschool program for children ages 3-5. The Northern Kentucky regional program is operated in cooperation with the educational cooperative in Region 4. The other regional programs provide outreach services to families with deaf or hard of hearing children ages 0-5, with KSD's regional teachers making home visits to assist families in the early education of their children. KSD's five regional programs served 52 children total in 2001-2002.

The KSD Kentucky Early Years (KEY) program is jointly funded by KDE and the Commission on Children with Special Health Care Needs that provides training for service providers of deaf and hard of hearing children ages 0-5. Service providers are trained on appropriate inclusionary practices, natural environments, language development techniques, and family interventions. KEY has two consultants serving the state, one in the Eastern region and one in the Western, who serve the areas of Bowling Green, Danville, Hazard, Kenton County, Owensboro, and Paducah. KEY has also recently developed a 20-week, in-home intensive literacy program for D/HH children, which it intends to implement in Fall 2002. KSD also provides a wide variety of parent information and resource guides through KEY and its other outreach programs. KEY's family education services served 27 children ages 0-2 in their local communities in 2000-2001.

A popular component of the KEY program is the Family Learning Vacation, which allows families of D/HH children attending LEAs to visit the school and interact with other families with deaf children. Hearing family members can practice sign language and learn more about the education of their deaf or hard of hearing child, as well as learn about Deaf culture. Parents of D/HH students report that the Family Learning Vacation was an important source of support and information, especially in the early years of their children's hearing loss. As part of KSD's

increasing regional focus, the Family Learning Vacation program will be held in different parts of the state and in Danville in alternating years, starting in Fall 2002.

Other KSD outreach services include evaluation and assessment, sign language and interpreting services, the auditory equipment loan program, and technical assistance. KSD's long history and experience in the education of deaf and hard of hearing students have resulted in it being a major provider of evaluation and assessment services to school districts in the state in the areas of audiology, psychology, speech and language, and social services. KSD's Evaluation Center administers assessments and families stay at the KSD campus free of charge for the length of the four-day evaluations. KSD also offers some off-site evaluations. In 2000-2001, KSD provided audiological, psychological, and comprehensive evaluations for 115 LEA students.

KSD's Sign Language and Interpreting Services program provides interpreters for KSD students in mainstream settings and provides support for local school districts and other agencies that need educational interpreters. The Sign Language and Interpreting Services program also coordinates community sign language classes in the Danville area. In addition, in response to state law requiring that all interpreters be certified to practice by Fall 2003, KSD's Sign Language and Interpreting Services program is collaborating with Eastern Kentucky University (EKU) to give a Sign Communication Proficiency Interview to interpreters to measure their skills.

KSD also has an Auditory Equipment Loan program that assists LEAs with their equipment needs. School districts can borrow auditory equipment for 30 days and evaluate the benefit of the device for a particular student without having to buy it first. The Auditory Loan Program provided assistance to 21 students in LEAs in 2000-2001.

School districts can also take advantage of KSD's Captioned Media Depository, which has open-captioned educational videos and instructional sign language videos. In 2000-2001, LEAs checked out a total of 4,643 items. In addition, KSD provides technical assistance to districts needing evaluation, educational programming, classroom adaptations, interpreting, assistive devices, appropriate inclusionary practices, and student development.

### ***Other Services for Deaf and Hard of Hearing Students***

Unlike parents of blind and visually impaired students, parents of deaf and hard of hearing children have educational options in the private sector as alternatives to sending their children to KSD or to their local public schools. There are two private schools that educate deaf and hard of hearing students in Kentucky: the Louisville Deaf Oral School, founded in 1948; and the Lexington Speech and Hearing Center, a private organization that serves infants and toddlers ages 0-2, preschool children ages 3-5, and provides speech therapy to older children. The Lexington Speech and Hearing Center serves both D/HH children and hearing children with communication disabilities and uses both speech and signing as means of communication. In addition, a private Catholic school, St. Rita's School for the Deaf, in Cincinnati, Ohio, and the private Ohio Valley Oral School, also in Cincinnati, are options for families living in Campbell, Boone, and Kenton counties in Northern Kentucky. St. Rita's uses a whole language model, using both signing and speech as communication methods. The Ohio Valley Oral School, established in 2000, serves children ages 2-7 and uses speech as the chief mode of communication.

## **SECTION IV. Placement of Blind and Visually Impaired and Deaf and Hard of Hearing Students Served in Local Public Schools**

For the 2001-2002 year, Kentucky reported a total of 459 children with vision impairment (VI) as their primary disability<sup>2</sup>, 407 of whom were listed as not attending KSB. Of these 407, 58 are in the 3-5 age group. Thirty-eight of the 3-5 year olds are in regular early childhood education programs in the public schools, 18 are in regular and special settings, while two attend separate schools. For the 349 VI students ages 6-21 not attending KSB, 278 spend 80 percent or more of their school day in mainstream classrooms, and 55 spend 40-80 percent of their school time in mainstream classrooms. Only nine VI students attending public school spend 40 percent or less of their day in mainstream classrooms. Two VI students have been placed in private facilities, while five are being educated at home.

The December 1 district counts also show that 579 out of 711 students with hearing impairment (HI) as their primary disability do not attend KSD and spend most of their school day in the mainstream classroom.<sup>3</sup> Of those, 86 were ages 3-5: 22 of whom were in regular early childhood education classrooms, 9 in special early childhood education classes, 25 in both regular and special early childhood settings, and 26 attended a separate school (non-KSD). The remaining four were being educated at home. Among the 493 HI students ages 6-21, 287 spend 80 percent or more of their school day in mainstream public school classrooms, and 130 spend 40-80 percent of their day in the same setting. Sixty-two spend 40 percent or less of their school day in mainstream classrooms. Four have been placed in other public facilities. Eight HI students have been placed in a private school through their LEAs, and two are home-schooled.

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<sup>2</sup> The term VI for visual impairment is being used in this instance because that is the designation the Kentucky Department of Education uses in its annual district child counts.

<sup>3</sup> The term HI for hearing impairment is being used in this instance because that is the designation the Kentucky Department of Education uses in its annual district child counts.

## Chapter Four: Findings

Chapter Four reviews the findings resulting from this study. The chapter is multi-focused; the initial sections deal primarily with KSB and KSD data, while subsequent sections move toward a statewide perspective, particularly in the context of early intervention, regional programs, local services, and service provider shortage.

The chapter begins with analyses conducted by Dr. Robert Beadles of the Alabama Institute of the Deaf and Blind (AIDB). As mentioned in the methodology chapter, Dr. Beadles conducted national studies on residential schools for the deaf and blind from 1996 through 1998. Over the course of three years, 24 schools for the deaf, including KSD, and 24 schools for the blind participated. These comparative analyses provide staffing ratios, spending per student, square footage and acreage per student (Sections I, II, and III). Dr. Beadles' report and further analyses are provided in full in Appendix A.

Section IV reviews the academic indicators such as assessment scores and transition rates for KSB and KSD graduates. The next section provides data on the populations of students who are blind and visually impaired (B/VI) and deaf and hard of hearing (D/HH), such as counts by region, ethnicity, type of disability, residential status, length of enrollment, and the extent to which state school students attend classes in the local public schools. Section VI presents statewide counts of infants and toddlers who are B/VI and D/HH, along with a review of early intervention services available. In Section VII, family involvement research and data from the study's interviews are provided. Issues regarding regional programs, services at the local level, and service provider shortage are then discussed in Sections VIII and IX. Sections X and XI discuss other issues such as technology and the need for extended time.

There are eight state-designated regional service centers located throughout Kentucky, and in many instances, the data are presented according to these eight regions. The purpose of the service centers, in cooperation with regional educational partners, is to improve student achievement by assisting districts and schools to assess professional development needs, diagnose appropriate implementation strategies, and develop an internal capacity for change. It seems appropriate then to disaggregate the data according to these service centers. A map detailing the eight regions is provided in Appendix F.

As discussed in Chapter One, the reader may note variations in the terms used to describe students who are B/VI and D/HH. When referring to the blind and visually impaired and deaf and hard of hearing populations in general, the abbreviations B/VI and D/HH are used. However, when referring to specific counts by primary disability category or findings derived from those data, the abbreviations VI and HI apply, as those are the designations used by KDE for these students.

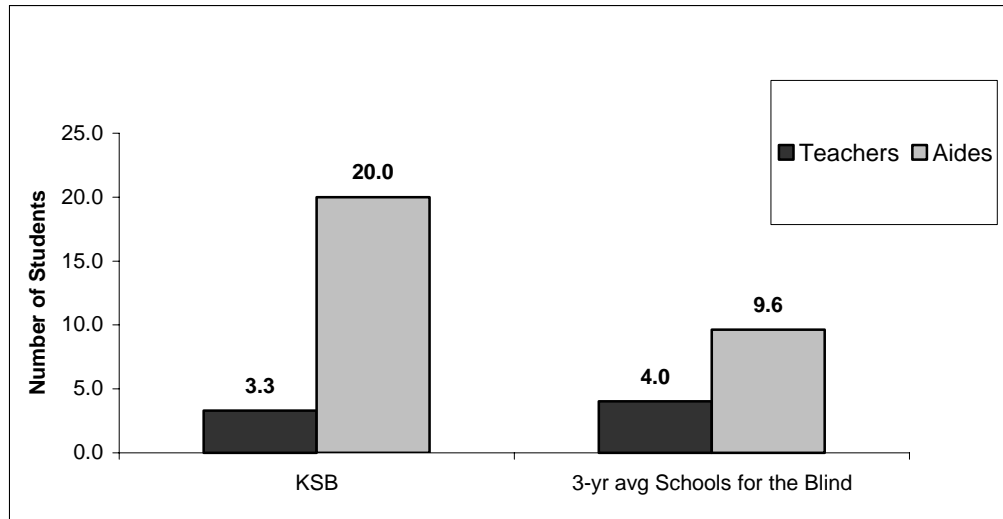
### **SECTION I: Staffing Ratios**

The following data and observations were taken from Dr. Beadles' analysis that compares KSB and KSD instructional and residential ratios to schools participating in national studies conducted by the AIDB between 1996 and 1998. The instructional and residential staffing ratios are presented first for KSB, followed by KSD, in comparison to the three-year average of the other schools participating. As KSD participated in the AIDB studies, it was removed from the sample; therefore the three-year average represents 23 schools for the deaf, while the average for the schools for the blind contains 24 schools. Dr. Beadles' full report with further analysis is in Appendix A.

### ***KSB Instructional and Residential Staffing Ratios***

As demonstrated in Exhibit 4.1, the ratio of 3.3 students per teacher at KSB appears to be consistent with the national average of 4.0. However, the ratio of 20 students per teacher's aide is twice as high as that of other residential schools for the blind (9.6).

**Exhibit 4.1: Students per Teacher and Teacher Aides at the Kentucky School for the Blind**

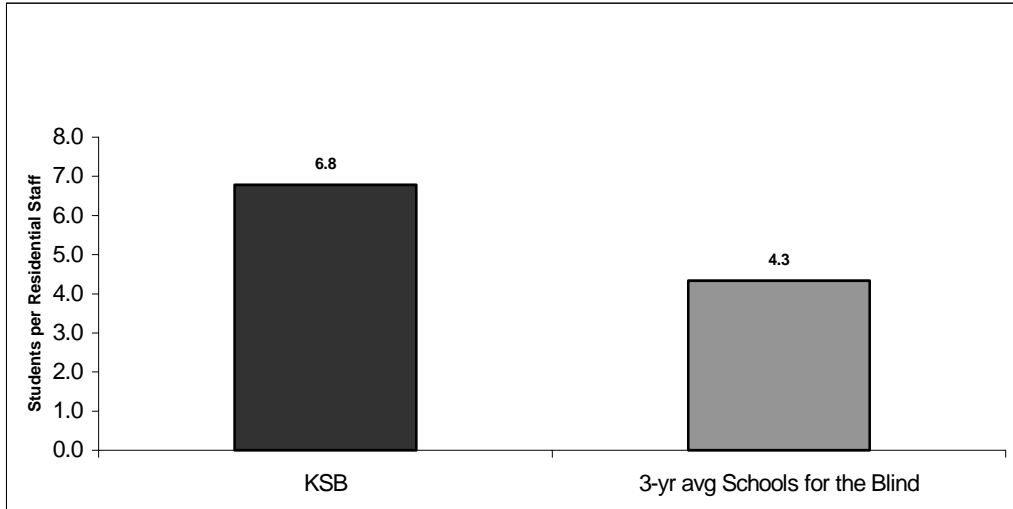


Over the years, with dwindling educational budgets and the need to address other instructional issues, including meeting the technology, Braille, and behavioral needs of students, many residential schools have had to reevaluate staffing and reduce the number of aides available to teachers. In essence the aides are still there, just in more specialized roles such as Braillists and technology specialists. This may be the case with KSB.

Furthermore, in some schools for the blind, as much as 82 percent of the school's student body is comprised of students with multiple disabilities (MD). Because a lower percentage of KSB students (32.5 percent) have MD as their primary disability (see Exhibit 4.35), there may not be as great a need for teacher's aides at KSB. From the AIDB studies of other schools for the blind, students per teacher aide ratios ranged from 7.5 to 12.9.

Exhibit 4.2 shows the residential staffing ratio to be 6.8 students per residential staff at KSB. This ratio is higher than the average of 4.3.

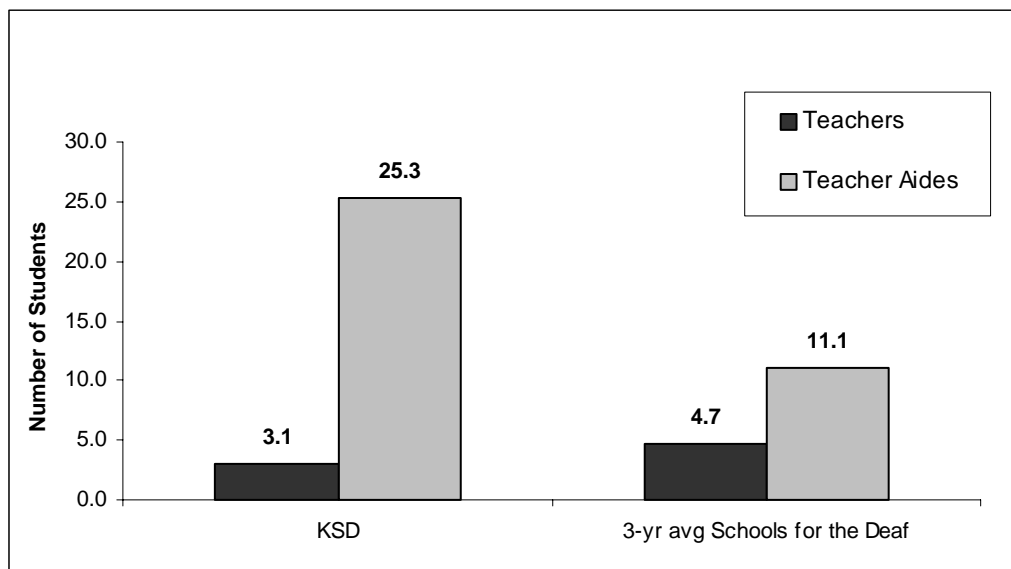
**Exhibit 4.2: Students per Residential Staff at the Kentucky School for the Blind**



### ***KSD Instructional and Residential Staffing Ratios***

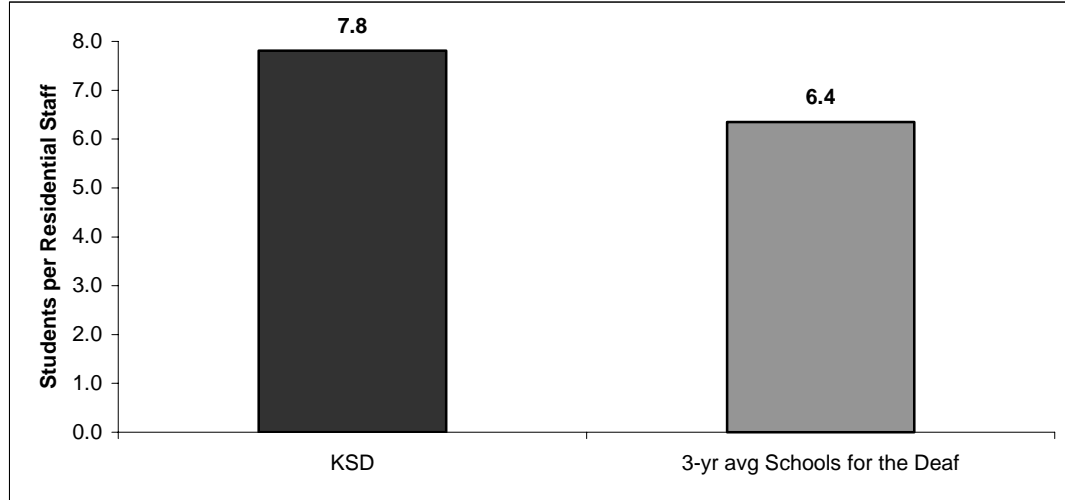
Exhibit 4.3 shows the numbers of students to teachers and teacher's aides at KSD. The ratio of 3.1 students per teacher at KSD was lower than at other residential school programs for the deaf, which had an average 4.7 students per teacher. However, the staffing ratio of 25.3 students per teacher aide is twice as high as the national average of 11.1. Again, the student body composition plays a role in understanding the ratio of students to teacher aides. In some schools for the deaf, approximately 40 percent of the student population are classified as multiply disabled and may require additional assistance. At KSD, however, only about 15 percent of the student population has multiple disabilities as a primary disability (see Exhibit 4.35), which may account for the lower numbers of teachers aides in comparison to other schools. The ratio at other schools in the AIDB national studies ranged from 10.1 to 12.5 students per teacher aide.

**Exhibit 4.3: Students per Teacher and Teacher Aide at the Kentucky School for the Deaf**



As shown in Exhibit 4.4, the ratio of 7.8 residential students per residential staff is slightly higher than that of other residential schools in the United States, with an average of 6.4.

**Exhibit 4.4: Students per Residential Staff at the Kentucky School for the Deaf**



## SECTION II. Per Student Expenditures

As with the staffing ratios, the following data and observations come from Dr. Beadles' analysis that compares KSB and KSD instructional, residential, and annual total spending from the 2000-2001 school year to the three-year average of other schools participating in national studies conducted by the Alabama Institute for the Deaf and Blind, 1996-1998. The three-year average provided for the KSD comparison contains 23 schools for the deaf, while the KSB comparison average uses data from 24 schools for the blind.

Spending on the instructional component accounts only for the salaries and benefits of teachers and aides employed to provide educational services to day and residential students at the state schools.<sup>4</sup> The *total* spending per day student includes this instructional component as well as expenditures on administration, student support, food, health, and transportation.<sup>5</sup>

Residential spending is comprised of the salaries and benefits of residential staff as well as the expenditure on meals for residential students. The *total* spending per residential student includes expenditures on the residential program as well as on instruction, administration, student support, food, health, and transportation. KSB's instructional, residential, and total spending are presented first, followed by those for KSD. The spending estimates derived from the national studies have been cost-adjusted to reflect 2001 dollars.

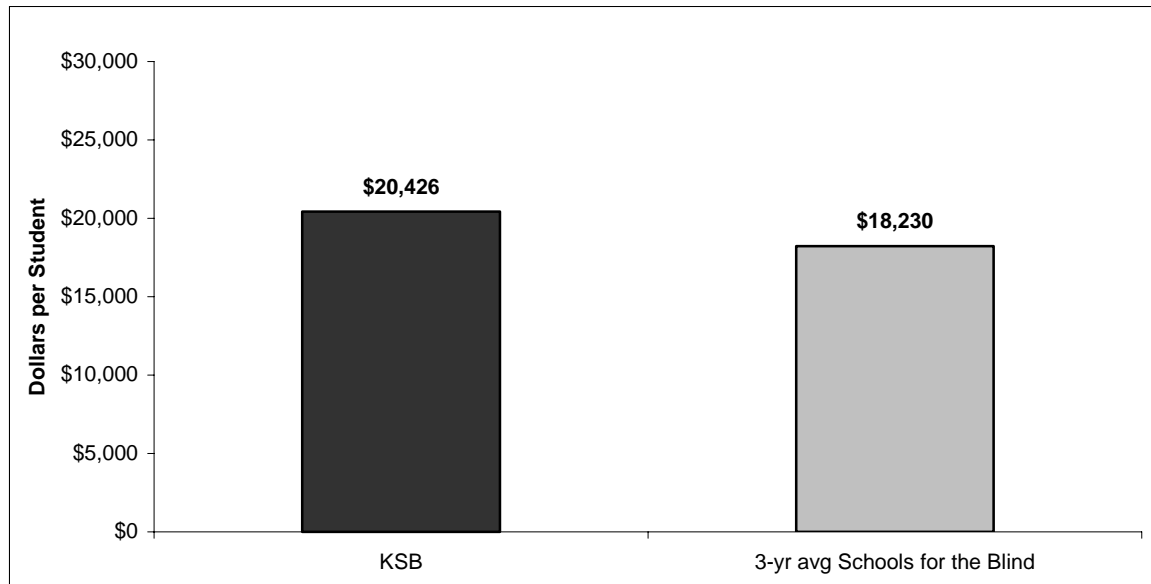
<sup>4</sup> The spending on the instructional component also includes music, art, and physical education teachers, coaches, librarians, computer specialists, media aides, and other teaching specialists.

<sup>5</sup> The total spending per student for KSB does not include transportation expenses. Student support services included in the total spending consist of orientation and mobility specialists, interpreters, occupational/physical therapists and aides, speech/language therapists, job coaches, transition specialists, technology specialists, admissions and guidance, social workers, and case managers.

### ***KSB Instructional, Residential, and Total Spending***

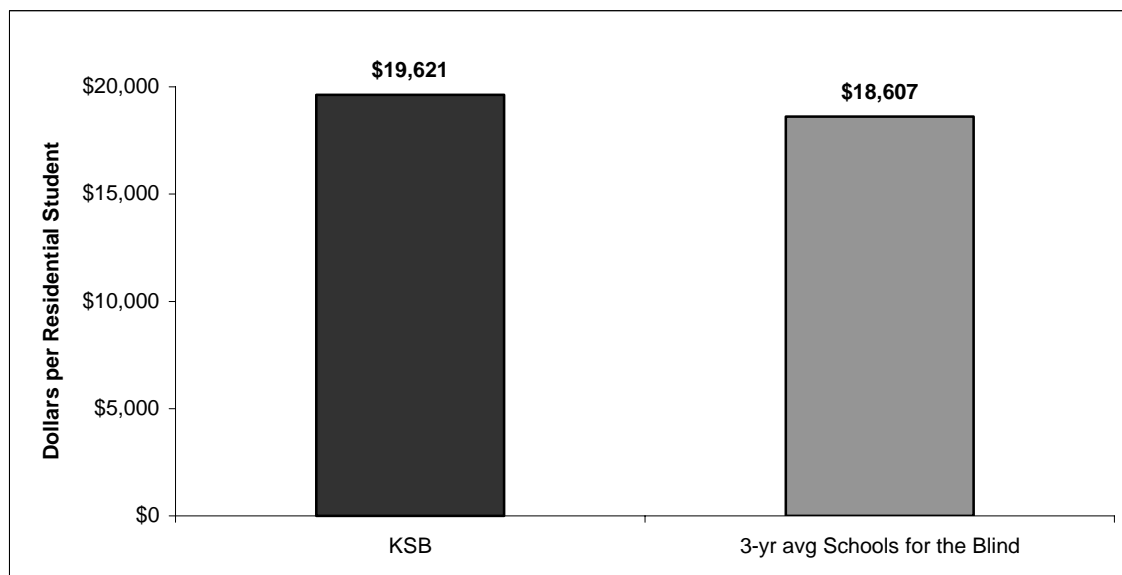
In Exhibit 4.5, KSB instructional spending of \$20,426 per student appears to be slightly higher than the national average of \$18,230.

#### **Exhibit 4.5: Kentucky School for the Blind Instructional Spending per Student (Teachers, Aides, and Instructional Support Services)**



As seen in Exhibit 4.6, the KSB residential spending of \$19,621 per student appears to be within the range of expenditures calculated for other residential schools for the blind, which average \$18,607 per student.

#### **Exhibit 4.6: Kentucky School for the Blind Residential Spending per Student (Residential Staffing and Food)**



The total spending of \$26,828 per day student at KSB (Exhibit 4.7) appears to be slightly lower than the average cost of \$29,965 for other day students.

**Exhibit 4.7: Kentucky School for the Blind Total Spending per Day Student (Includes KIDS Programming)**

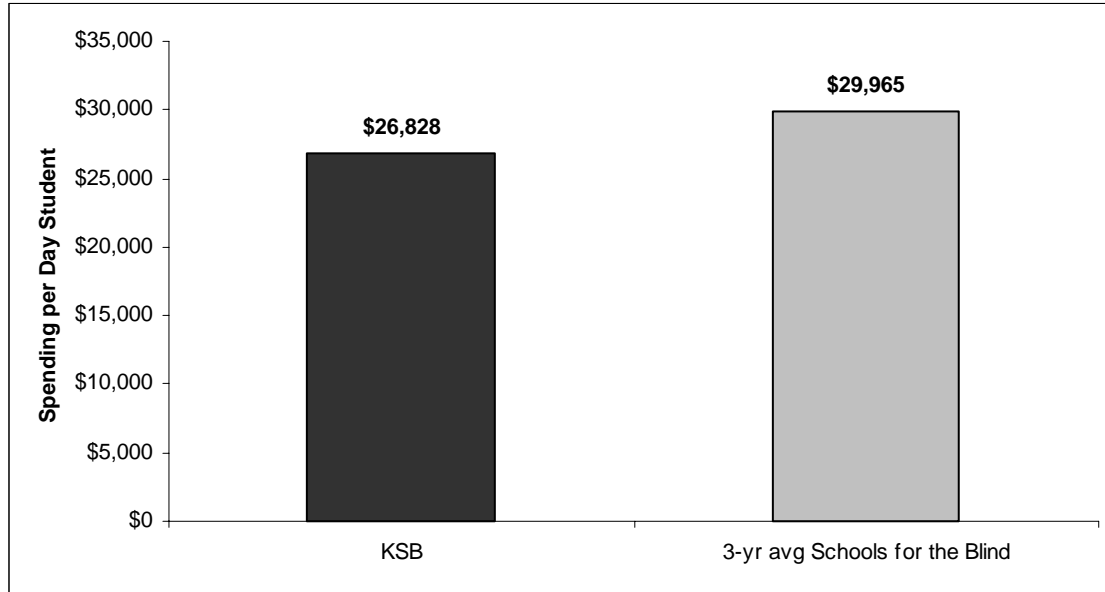
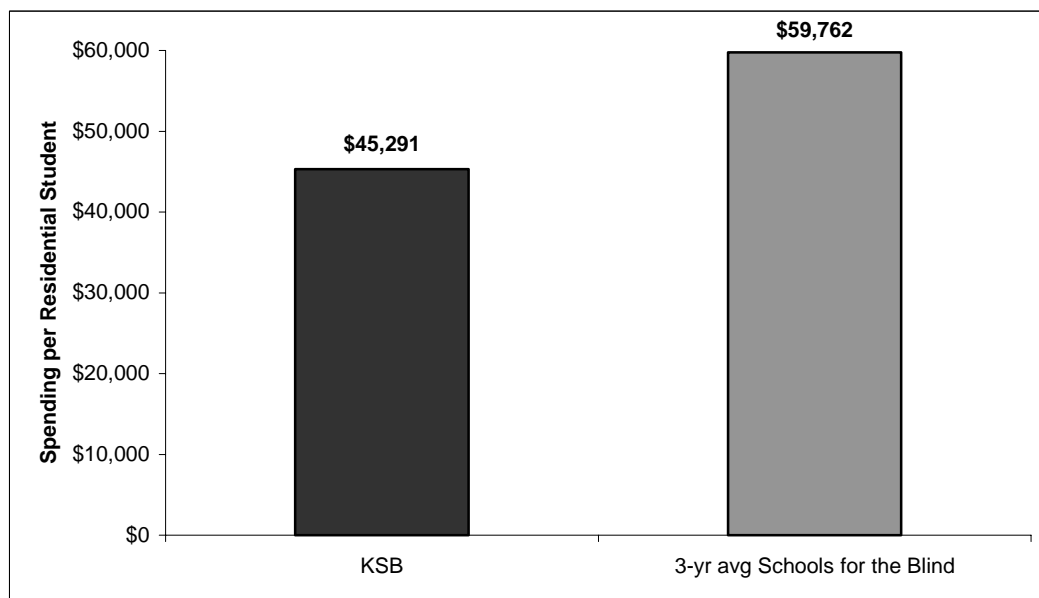


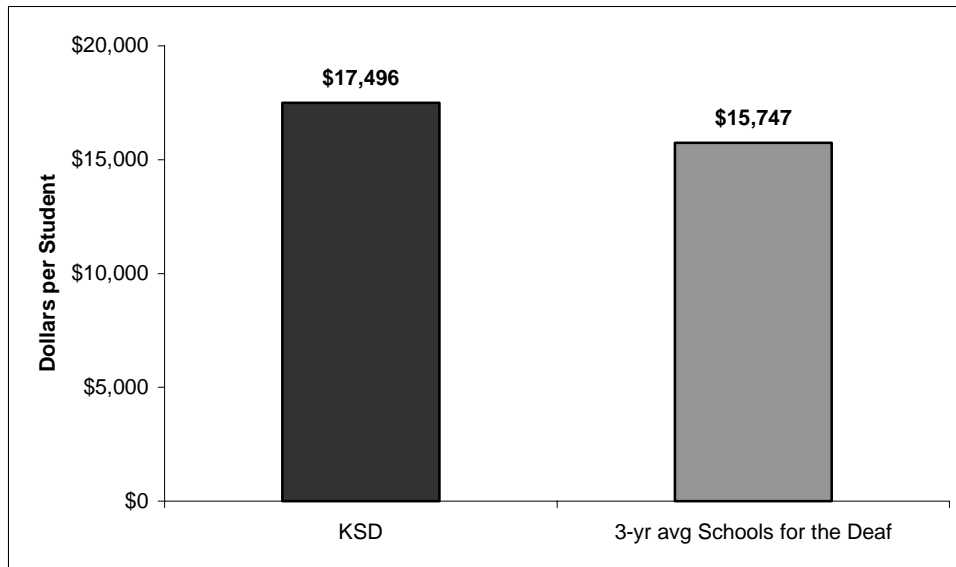
Exhibit 4.8 shows that the total spending of \$45,291 per residential student at KSB is substantially lower than the \$59,762 average for a residential student at other schools.

**Exhibit 4.8: Kentucky School for the Blind Total Spending per Residential Student**

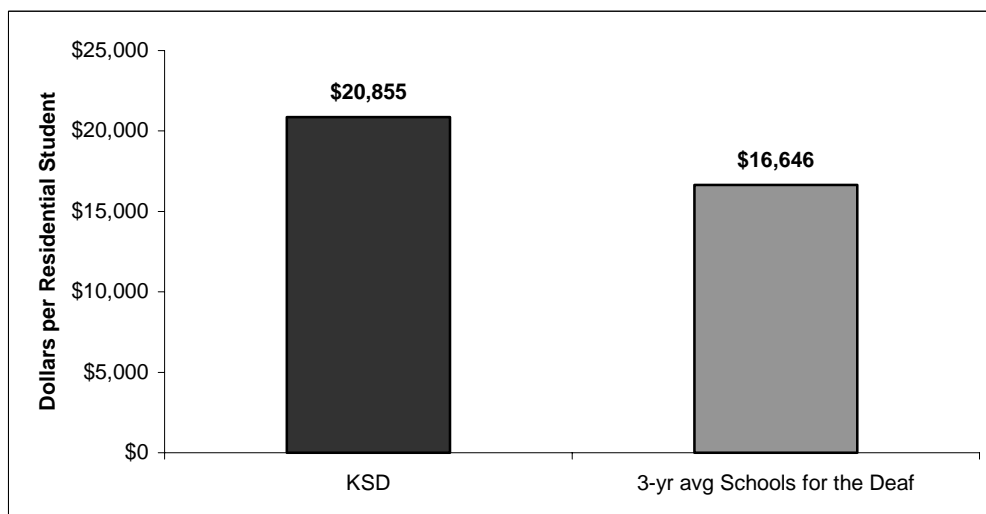


**KSD Instructional, Residential, and Total Spending**

Exhibit 4.9 shows that the spending on instructional staff of \$17,496 per student at KSD was higher than the average \$15,747 at other residential schools.

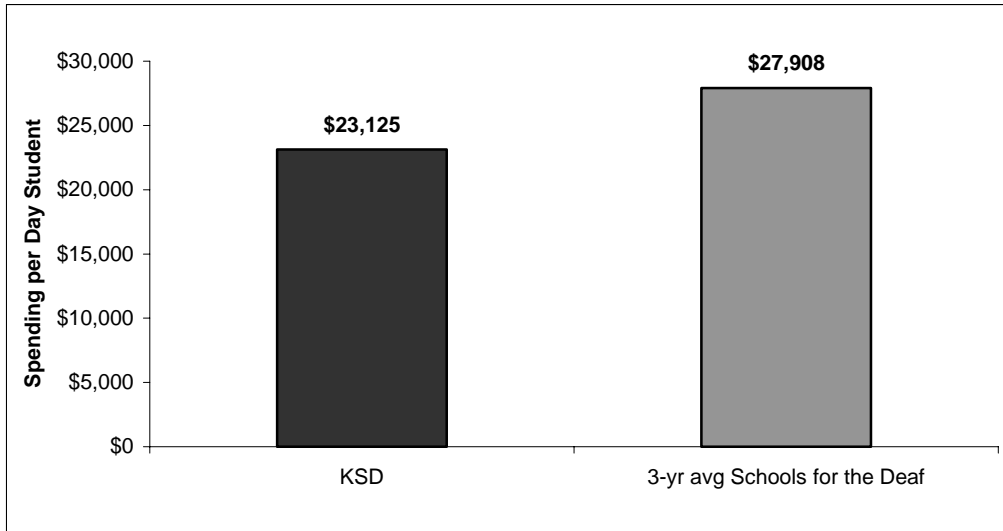
**Exhibit 4.9: Kentucky School for the Deaf Instructional Spending per Student (Teachers, Aides, and Instructional Support Services)**

As presented in Exhibit 4.10, the spending of \$20,855 per residential student was significantly higher than the average of \$16,646 at other residential schools for the deaf.

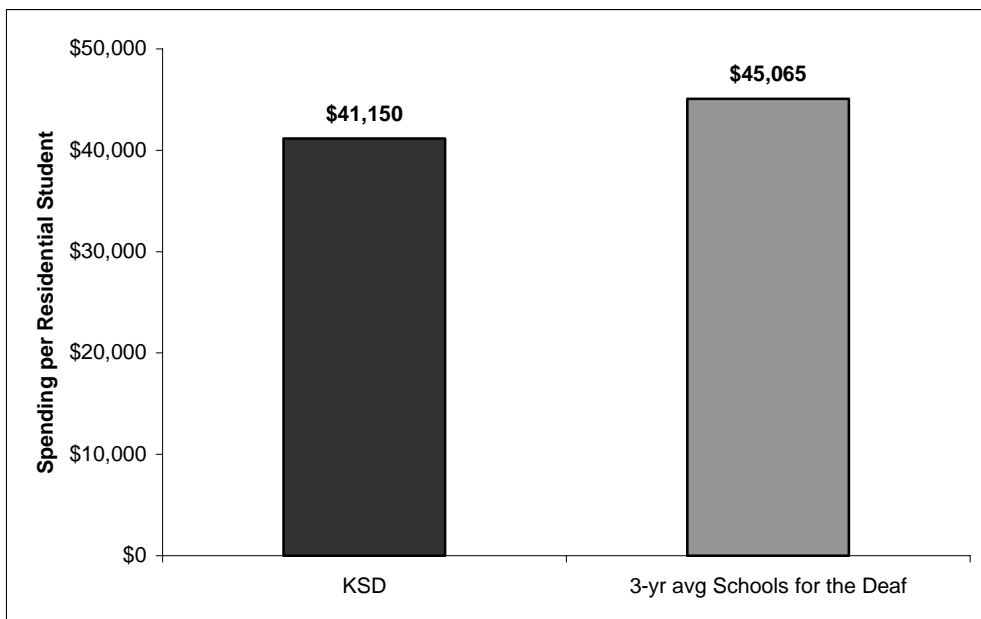
**Exhibit 4.10: Kentucky School for the Deaf Residential Spending per Student (Residential Staffing and Food)**

Exhibits 4.11 and 4.12 demonstrate the total spending per day and residential students at KSD, respectively. The expenditure of \$23,125 per day student at KSD was lower than the average of \$27,908 for day students at other schools for the deaf. The total spending of \$41,150 per residential student at KSD was slightly lower than to the average \$45,065 for the other participating schools.

**Exhibit 4.11: Kentucky School for the Deaf Total Spending per Day Student**



**Exhibit 4.12: Kentucky School for the Deaf Total Spending per Residential Student**



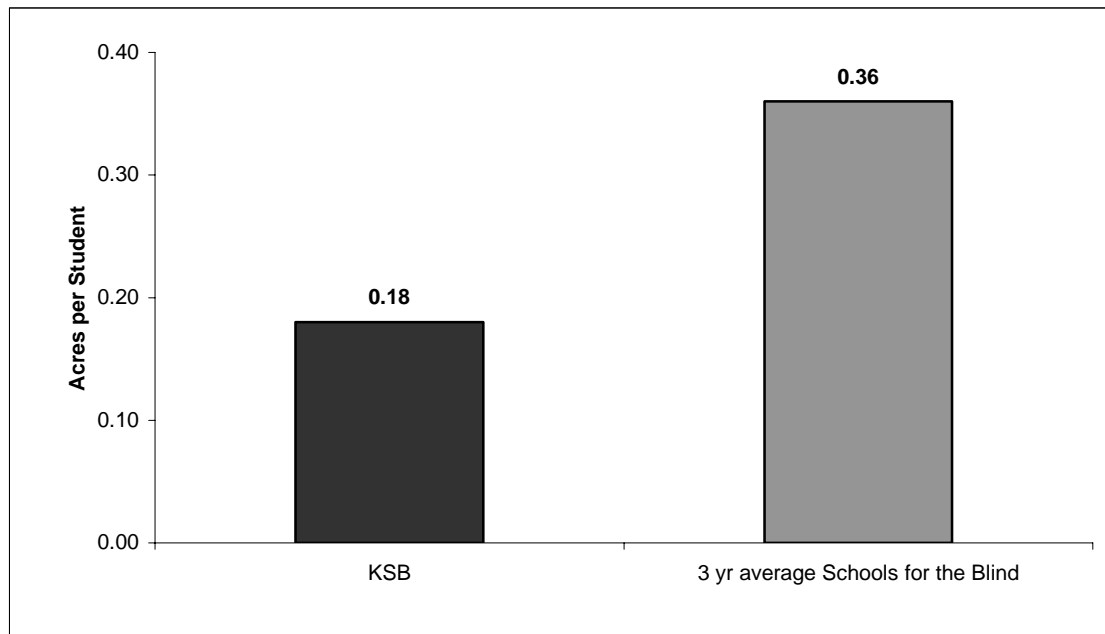
### Section III. Physical Plant

Below is Dr. Beadles' comparison of building square footage and acres per student at KSB and KSD to the three-year average of schools for the blind and deaf participating in his studies from 1996-1998.

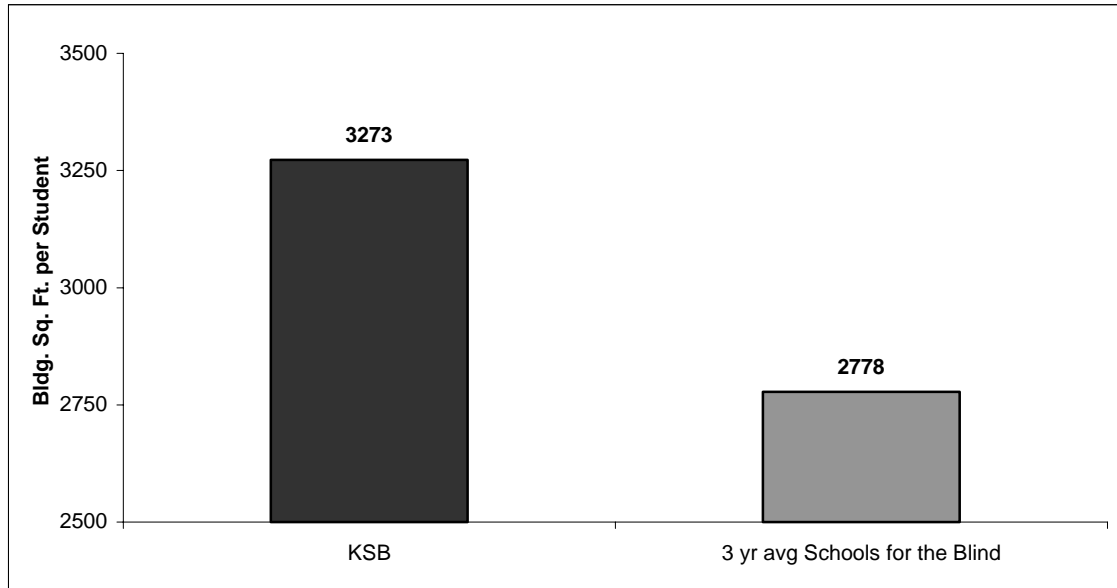
#### **KSB**

KSB's more modern campus (all educational buildings are post-1964) sits on 14 acres and has 261,851 total square footage. Using data produced by the AIDB national studies on schools for the blind, Exhibit 4.13 provides the acreage per student at KSB in comparison to the three-year average of the other 24 schools for the blind participating in the national studies. Exhibit 4.14 shows that the square footage per KSB student is significantly greater than the other schools.

**Exhibit 4.13: Kentucky School for the Blind Campus Acres per Student**

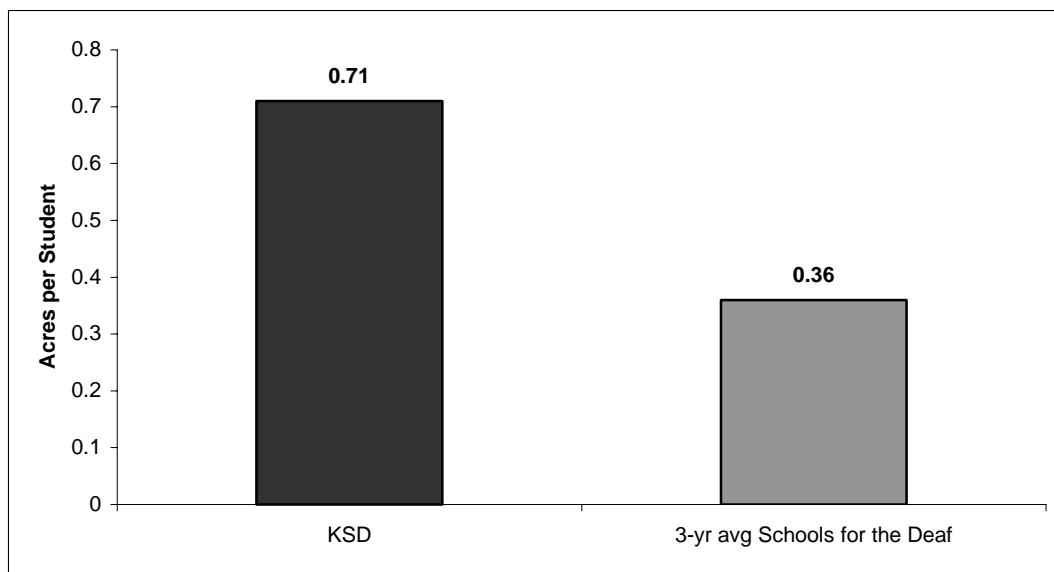
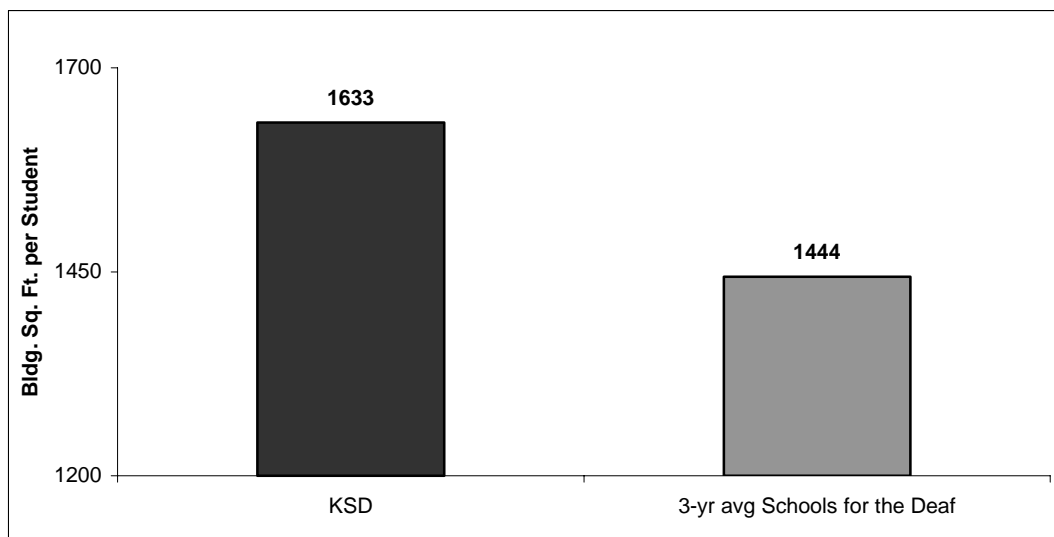


**Exhibit 4.14: Kentucky School for the Blind Building Square Footage per Student**



**KSD**

Established in 1823, KSD’s campus is situated on 170 acres, of which 100 are currently unused for instructional purposes. The total square footage of KSD buildings is 414,266. Declining student population and other issues have caused several buildings to be underutilized or closed entirely. Two buildings—a total of 55,488 sq. ft.—are presently closed, although structurally sound. One (built 1931) would need extensive renovations to be an educational facility, and the high school classroom building (built 1977) is closed due to mold. Questions also arise regarding the best disposition for the excess acreage that is not currently being actively utilized. Exhibits 4.15 and 4.16 demonstrate acres and square footage per student, respectively. While KSD’s square footage per student is in a similar range with other state schools across the nation, KSD has nearly twice as many acres per student.

**Exhibit 4.15: Kentucky School for the Deaf Campus Acres per Student****Exhibit 4.16: Kentucky School for the Deaf Building Square Footage per Student**

## SECTION IV: Academic Indicators

This section reviews assessment data from 1999-2001 on the Comprehensive Test of Basic Skills and the Kentucky Core Content Test, as well as the transition rates for KSB and KSD graduates for 1993-2001. As the students are categorized by their primary disability in the assessments, the abbreviations VI and HI are used to make that distinction.

### **Assessment Scores**

A driving force behind this study is the interest in improving academic proficiency for all B/VI and D/HH children. As such, performance on the Kentucky Core Content Test (KCCT) and the Comprehensive Test of Basic Skills (CTBS) provides indicators of student success. Exhibits 4.17–4.20 provide KCCT and CTBS assessment scores for the years 1999-2001 for state school students with a primary disability of VI and HI, in comparison to their counterparts in public schools statewide. Due to the limited numbers of students at KSB and KSD taking the test, all scale scores regardless of grade were combined for each content area across all three years for the KCCT analysis. Scale scores for all grades and all content areas were combined for the CTBS for each year to provide a three-year average. Scale scores are designed to be constant measures, and therefore allow for comparisons to be made across multiple grades and content areas.

As our expert advisor Dr. Kenneth Randall states, “Although interest in educational reform is commendable for all children, recognition must be made that not all children enter school with equal background, training, and experience.” Thus, caution should be exercised when drawing conclusions from these scores. It is important to examine scores in a comparative context, as without some benchmark, success cannot be judged. However, B/VI and D/HH students not at the state schools may not necessarily be an appropriate benchmark. Although all students included in these analyses had VI or HI as their primary disability, the state school and public school populations could be different. For instance, as will be discussed in the section on Types of Disabilities, 30.4 percent of KSB students are Braille readers, whereas only 5.6 percent of legally blind children who do not attend KSB use Braille as their reading medium (see Exhibits 4.31 and 4.32). Furthermore, 1.3 percent of KSB students are non readers, meaning they have no reading proficiency, whereas 20.3 percent of legally blind students not attending KSB are non readers, which indicates a public school population with more complex needs. Data from which these findings were drawn do not indicate which of these VI and HI students may have multiple disabilities (and hence are not included in the assessment analyses). Data from a survey conducted by the Gallaudet Research Institute show that 21.6 percent of students in their statewide sample of 334 in Kentucky had a profound hearing loss, whereas approximately 61 percent of KSD students have a profound hearing loss (see Exhibits 4.33 and 4.34). As with the legally blind students, we do not know from these data whether these students have multiple disabilities. In short, based on the data available, we do not know whether students with a primary disability of VI and HI at the state schools are more or less involved than those in the public schools.

With these data limitations in mind, the following exhibits show the state schools’ assessment results on the CBTS and KCCT in comparison to public school students with sensory impairments as their primary disability. As seen in Exhibits 4.17 and 4.18, the 3-year CTBS average shows that KSB students’ scores were 5 points lower on average than those for all other VI students statewide, while KSD students scored 3 points lower on average than other HI public school students. Overall, VI students in both state and public schools fared better than HI students at KSD and public schools.

**Exhibit 4.17: CTBS Normal Curve Equivalent Score KSB VI and Statewide VI, All Grades and All Content Tests Combined (No. Tested)**

	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>3-year average</b>
KSB- VI students*	46 (10)	32 (16)	34 (15)	36 (41)
All other VI students	40 (86)	43 (91)	41 (100)	41 (277)
Statewide- All students			52	

\*The scores for KSB students include those with VI only (as designated on their tests) and not those with multiple disabilities. The term VI is used here because that is the designation used in the KDE database of assessment scores.

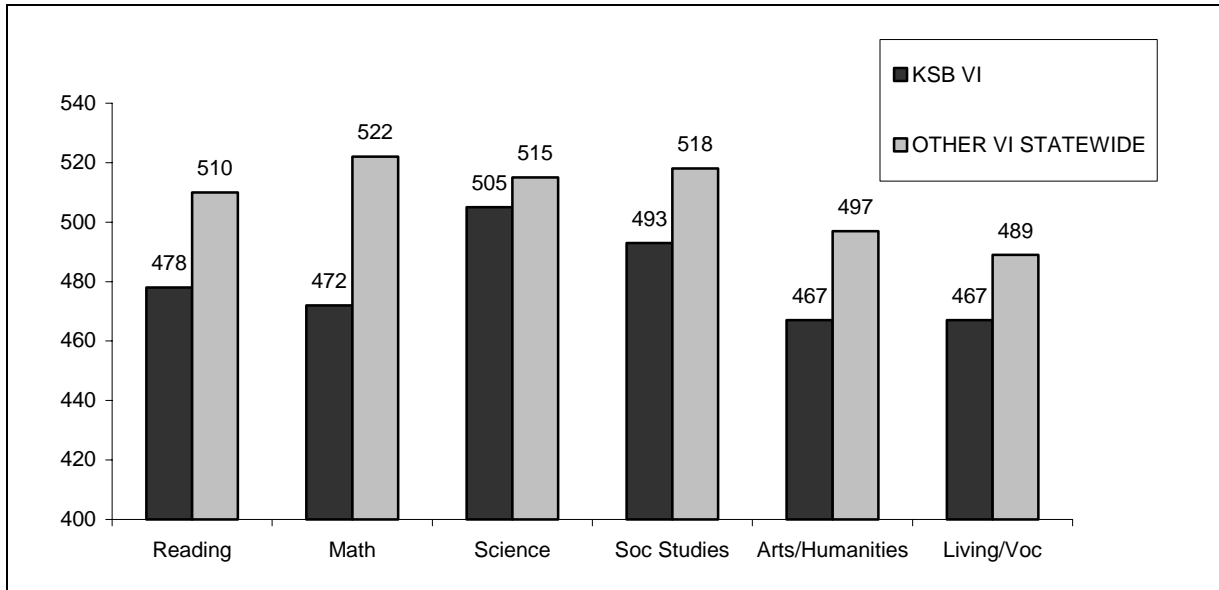
**Exhibit 4.18: CTBS Normal Curve Equivalent Scores KSD and Statewide HI, All Grades and All Content Tests Combined (No. Tested)**

	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>3-year average</b>
KSD- HI students*	29 (32)	31 (34)	28 (22)	30 (88)
All other HI students	33 (124)	34 (123)	32 (101)	33 (348)
Statewide- All students			52	

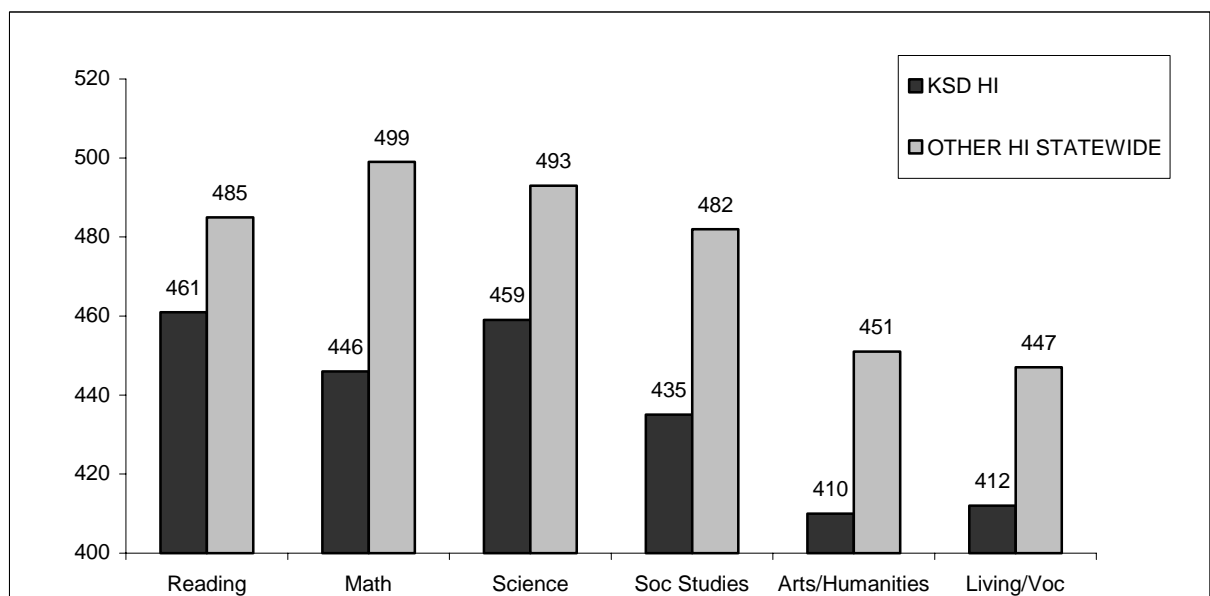
\* The scores for KSD students include those with HI only (as designated on their tests) and not those with multiple disabilities. The term HI is used here because that is the designation used in the KDE database of assessment scores.

Provided as average test scores in Exhibits 4.19 and 4.20, the KCCT analysis allows us to see performance across different content areas. For both state schools, the largest difference in performance was in math, when compared to other VI and HI students statewide. The narrowest gap for KSB students with their VI public school counterparts was in science, while the narrowest gap for HI students was in reading. Both state school and public school HI students scored markedly low in the areas of Arts/Humanities and Living/Vocational Skills.

**Exhibit 4.19: Three-year Average for KCCT Scores for KSB VI Students and All Other VI Students Statewide, 1999-2001**



**Exhibit 4.20: Three-year Average of KCCT Scores for KSD HI Students and All Other HI Students Statewide, 199-2001**

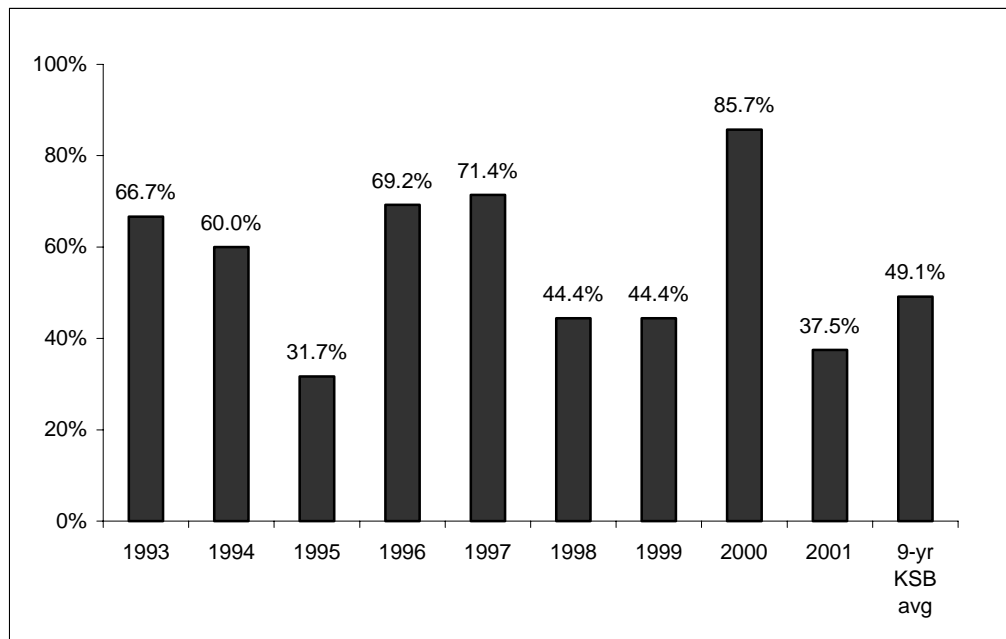


### Transition to Adult Life

The Kentucky Department of Education collects transition data on KSB and KSD graduates, as well as on all students statewide. These data regarding the students' status are collected on November 1 following graduation.<sup>6</sup> As shown in Exhibits 4.21 and 4.22 below, the "successful" transition rates vary considerably by year for KSB and KSD. The eight-year average from 1993-2000 for all students statewide is 94.5 percent.<sup>7</sup> However, comparing KSB and KSD graduates to students statewide is not ideal as the populations are very different. As demonstrated in Section V, the KSB population is 32.5 percent MD and 67.5 percent VI, while KSD is 15.1 percent MD and 84.9 percent HI. Other than self-initiated surveys conducted by KSB on the transition rates of B/VI graduates statewide, there are no data on visually impaired and blind non-KSB public school graduates, and no specific data are collected on deaf and hard of hearing non-KSD public school graduates.

Exhibit 4.21 shows that 37.5 percent of KSB graduates in 2001 transitioned successfully into higher education, vocational training, or employment. Nearly 45 percent and 86 percent of KSB graduates transitioned successfully in 1999 and 2000, respectively. Over the period of nine years, an average 49 percent of KSB graduates transitioned successfully. KSB has conducted its own survey of B/VI graduates not attending the state school for the years 1998-1999 and 1999-2000. According to these data, the successful transition rate for B/VI graduates from non-KSB public schools was approximately 59 percent in 1999 and 57 percent in 2000.<sup>8</sup>

**Exhibit 4.21: Successful KSB Transitions Six Months After Graduation, 1993-2001**



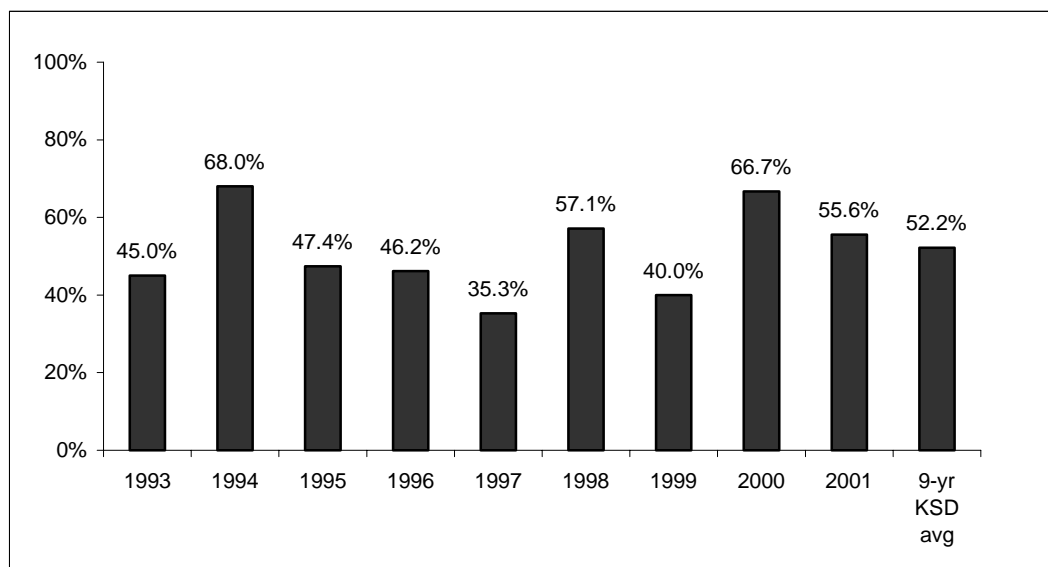
<sup>6</sup> The measures of successful transition include attending an in-state or out-of-state college full-time; attending a vocational, technical, or special school full-time; serving in the military; working full-time (including full-time community service or caring for a home, family, and/or children full-time); or a combination work/school. Unsuccessful students are those working less than 30 hours and not attending school; attending college but carrying less than 12 credits a semester and not working; and those of unknown status. The transition rate for 1993 KSD graduates was recalculated by AIR because two unknowns had been included in the "successful" category.

<sup>7</sup> 2001 data on the transition rates for students statewide were not available. The nine-year average for state schools includes the years 1993-2001.

<sup>8</sup> Nineteen (61 percent) of the 31 districts with VI 12<sup>th</sup> graders or VI students 18 years or older during the 1999-2000 school year responded, while 31 (86 percent) of the 36 qualified districts responded in 1998-1999.

For the 2001 KSD graduates, 55.6 percent were “successful” based on the criteria, compared to a nine-year low of 35.3 percent in 1997 (see Exhibit 4.22). The nine-year average shows that more than half of the graduates transitioned successfully based on the six-month indicator. This date may be too early after graduation to identify students as being successful. Currently, there is no follow-up data collection in place to track these students over time.

**Exhibit 4.22: Successful KSD Transitions Six Months After Graduation, 1993-2001**



Anecdotal evidence from our interviews suggests that some KSB and KSD graduates are successfully transitioning to adult life. In interviews conducted with six recent graduates of KSB and KSD, all were living on their own, and five were either working, attending college, or preparing to attend college in the fall. KSB graduates in particular reported that their experience at KSB had prepared them for independent living, although one KSB graduate currently attending university said KSB did not prepare her academically for college. However, due to the small sample size and low number of respondents, there is no assurance that these perspectives and experiences are representative of state school graduates.

Kentucky has the “Community Based Work Transition Project” (CBWTP), a collaborative effort to provide vocational training to high school students with disabilities and better prepare them for post-graduation employment. CBWTP is a joint program between the Department of Vocational Rehabilitation, Kentucky Department of Education, University of Louisville, and the local school districts. The program targets juniors and seniors whose IEPs determine the need for supportive work experience to obtain and maintain employment. Students undergo evaluations to determine their interests and aptitude, followed by training, and additional on-site training. Neither state school presently has any affiliation with the project. KSD has initiated discussions with the Department of Vocational Rehabilitation to employ a job coach next year to implement the program for KSD students. KSD is also considering transitioning students back to their home communities during their senior year for an “internship” or other work experience to build the students’ confidence and enable them to utilize their skills after graduation.

The superintendent of KSB indicated that the Community-Based Education instructors perform many of the job coach tasks. Moreover, there is a KSB project that assists students who are not independent travelers or workers to transition to a job site with the help of a teacher of the blind

and visually impaired. There is also a “Transition Work Program” that allows juniors and seniors at KSB to work at jobs both on-campus and in the community, with the assistance of a teacher if necessary. Presently, KSB does not have the resources or personnel to establish a separate job coach position.

The number of unsuccessful graduates and high unemployment rates are concerns at both schools, and for B/VI and D/HH graduates across the nation. According to the American Federation for the Blind, 55 to 60 percent of blind and visually impaired persons ages 18-69 are not employed based on 1994-95 data. The National Center for Health Statistics reported that 21.3 percent of adults ages 18-44 who are D/HH were either unemployed or not in the labor force in 1990-1991. For the 45-64 year age group, 36.2 percent were unemployed or not in the labor force. Given this, the schools know they need to equip students with the vocational and living skills necessary to succeed in adult life and compete in the workforce. This requires a consideration of how their transition-based objectives should relate to academic achievement goals for B/VI and D/HH students. While endorsing the same academic standards as all children, the state must also recognize that these transition data suggest that about 50 percent of B/VI and D/HH state school graduates are leaving school without the skills needed for success in adulthood. In the push toward higher academic achievement, the emphasis and investment in vocational and life skills programs may be, but should not be, downsized. Members of the teacher focus group at KSD expressed concern that vocational programs have been de-emphasized as focus intensifies on the academic content and test scores, leaving children without the functional skills needed to be successful.

## Section V. Student Population and Characteristics

In this section, data on child counts by region and ethnicity are provided for all VI and HI children in the state. Also provided are data specifically regarding state school students, such as type of disability, residential status, and length of enrollment by grade.

### ***Counts Statewide and by Region***

Exhibit 4.23 provides the count of B/VI children from birth to age 21 served statewide. VIPS provided a count of 91 children 0-2 years old served by their organization in January 2002, while the school-age counts are derived from the district VI child count conducted in December 2001 and from a KSB student roster dated January 2002. The district child count includes only students who have VI as their primary disability, and only students with VI as their primary disability were included from the KSB roster. According to this count and VIPS, there are 551 B/VI children ages 0-21 statewide. This count does not include students with MD in state or public schools who might have vision impairments.

### **Exhibit 4.23: Counts of B/VI Children Served by Region**

	<b>Ages 0-2</b>	<b>Ages 3-5</b>	<b>Ages 6-21</b>	<b>Totals</b>
Region 1	0	6	39	45
Region 2	16	11	64	91
Region 3	44	5	58	107
Region 4	5	4	47	56
Region 5	10	9	45	64
Region 6	8	11	63	82
Region 7	6	4	36	46
Region 8	2	8	50	60
<b>Statewide</b>	<b>91</b>	<b>58</b>	<b>402</b>	<b>551</b>

Ages 0-2: VIPS count, January 2002

Ages 3-21: Districts VI child count December 2001  
and KSB roster, January 2002

Exhibit 4.24 provides a more inclusive count derived from the KIMRC database of legally blind children. Districts and other agencies report these counts annually to the American Printing House for the Blind, and in return, districts receive funding by which they obtain materials from the APH. This total count is more than double of that indicated by the district child count.

**Exhibit 4.24: KIMRC Counts of Legally Blind Children, 2002**

	<b>Ages 0-2</b>	<b>Ages 3-5</b>	<b>Ages 6-21</b>	<b>Totals</b>
Region 1	0	16	86	102
Region 2	16	19	138	173
Region 3	44	13	251	308
Region 4	5	17	94	116
Region 5	11	17	111	139
Region 6	10	17	127	154
Region 7	6	6	71	83
Region 8	2	10	103	115
<b>Statewide</b>	<b>94</b>	<b>115</b>	<b>981</b>	<b>1190</b>

Based on available data, Exhibit 4.25 shows there are 902 D/HH children ages birth to 21 statewide. For children ages birth through two, 190 were identified by the Commission on Children with Special Health Care Needs (CCSHCN) as being diagnosed as D/HH. As with the VI count, the age 3-21 numbers were derived from the district HI child count conducted December 2001 and from a January 2002 KSD roster. The district child count includes only students with HI as their primary disability, and only children with HI as their primary disability were counted on the KSD roster.

**Exhibit 4.25: Counts of D/HH Children by Region**

	<b>Ages 0-2</b>	<b>Ages 3-5</b>	<b>Ages 6-21</b>	<b>Totals</b>
Region 1	13	11	60	84
Region 2	30	29	70	129
Region 3	20	18	82	120
Region 4	23	11	91	125
Region 5	41	22	121	184
Region 6	30	8	98	136
Region 7	17	3	34	54
Region 8	16	4	50	70
<b>Statewide</b>	<b>190</b>	<b>106</b>	<b>606</b>	<b>902</b>

Ages 0-2: Commission on Children with Special Health Care Needs

Ages 3-21: District HI child count December 2001 and KSD roster, January 2002

**Exhibit 4.26: Numbers of Total Enrollment, Total Special Enrollment, HI and VI, and KIMRC Legally Blind, ages 3-21 by Region**

	December 1, 2001 Counts and KSB/KSD rosters, ages 3-21*				KIMRC Count, ages 3-21
	Total Enrollment (Public and Private)	Total Special Education Enrollment	HI Count	VI Count	Legally Blind Count
Region 1	70,674	11,900	71	45	102
Region 2	105,750	14,892	99	75	157
Region 3	117,306	13,387	100	63	264
Region 4	108,395	13,646	102	51	111
Region 5	111,203	14,030	143	54	128
Region 6	95,444	15,649	106	74	144
Region 7	47,995	7,641	37	40	77
Region 8	35,981	7,001	54	58	113
<b>Statewide</b>	<b>692,748</b>	<b>98,146</b>	<b>712</b>	<b>460</b>	<b>1096</b>

\*The December 1 count shows that there are 711 HI children and 459 VI children statewide. However, the state school rosters as of January 2002 were used to determine the students' home district, as the December 1 counts do not detail this information for KSB and KSD students. Both rosters had one additional VI and HI child each since the December 1 counts, which accounts for the difference in statewide totals.

**Exhibit 4.27: Percent of Total Student Population aged 3-21 Identified as Special Education, HI, VI, and Legally Blind by Region**

	December 1, 2001 Counts and KSB/KSD rosters, ages 3-21			KIMRC Count, ages 3-21
	% of total student population identified as special education	% of total student population identified as HI	% of total student population identified as VI	% of student population identified as legally blind
Region 1	16.8%	0.10%	0.06%	0.14%
Region 2	14.1%	0.09%	0.07%	0.15%
Region 3	11.4%	0.09%	0.05%	0.23%
Region 4	12.6%	0.09%	0.05%	0.10%
Region 5	12.6%	0.13%	0.05%	0.12%
Region 6	16.4%	0.11%	0.08%	0.15%
Region 7	15.9%	0.08%	0.08%	0.16%
Region 8	19.5%	0.15%	0.16%	0.31%
<b>Statewide</b>	<b>14.2%</b>	<b>0.10%</b>	<b>0.07%</b>	<b>0.16%</b>

Using the total enrollment and disability counts provided in Exhibit 4.26, Exhibit 4.27 shows the identification rates for special education, HI, VI, and legally blind children ages 3-21 by region. The least populated region in the state, Region 8, has the largest percentage of school-aged students identified as special education, HI, VI, and legally blind. While the identification rates for VI hold relatively constant across all other regions, Region 8 at .16 percent is well above the statewide average of .07 percent. Such high identification rates may be the result of social and ecological factors that increase the incidence of disabilities. On the other hand, Region 7 exhibits the lowest percentage of children identified as HI. This raises the question of whether children who are D/HH are being appropriately identified and served in this part of the state.

Additional data presented in Exhibit 4.28 show that the identification rates for HI children ages 6-21 in Kentucky are low in relation to the nation as well as compared to selected states. Kentucky

identifies 9 children as HI per 10,000 students, while the national average is 17. This raises concern about the identification process for D/HH children, although the implementation of the universal newborn hearing screening program, which began in 2000, may close the gap between Kentucky and the nation. Kentucky's VI rate of 5 per 10,000 is more consistent with the national average and across selected states, and suggest that B/VI children are being identified appropriately. While the lower rate for HI may indicate under-identification, there may be differences in state definitions for HI and VI disabilities that result in these variations. It could be possible that children in Kentucky with HI may be more likely to be categorized under a different disability label, or that the state is more selective about degree of hearing loss qualifies a child as HI. For instance, the 2000-2001 data from the Gallaudet Research Institute suggest that D/HH students in Kentucky have more profound losses (45.8 percent), than those in other southern states (36.5 percent) and across the nation (32.2 percent). This suggests that Kentucky might have a higher standard for identifying D/HH students.

**Exhibit 4.28: No. of Students Designated as Hearing and Vision Impaired per 10,000 Population Ages 6-21 in Kentucky, Selected Other States, and the Nation**

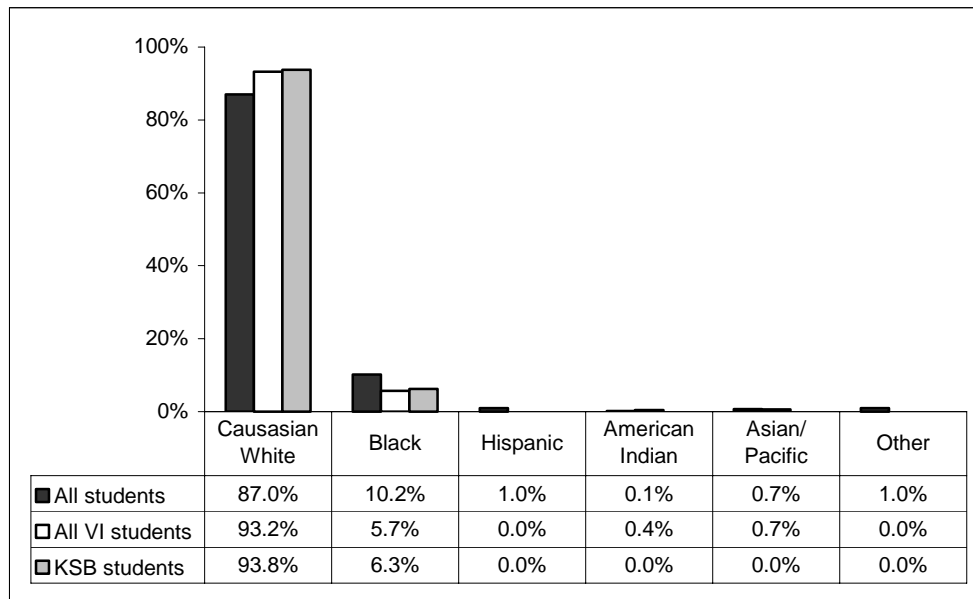
	HI	VI
<b>Kentucky</b>	<b>9</b>	<b>5</b>
Arizona	13	5
Florida	16	6
Indiana	14	7
Ohio	11	5
New York	25	8
Texas	25	10
<b>National Average</b>	<b>17</b>	<b>6</b>

Source: Special education data collected for OSEP by Westat for the 1998-99 School Year.

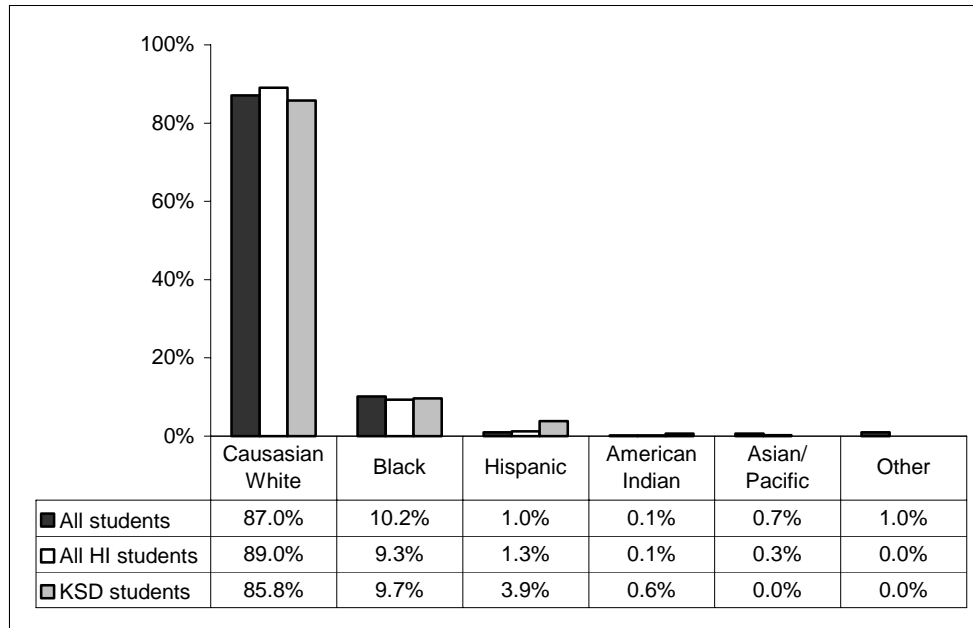
## Ethnicity

Examining the ethnicity of student populations is helpful in determining whether there is over- or under-identification of certain groups as special education students and in certain settings. Exhibits 4.29 and 4.30 compare ethnicity data for all students in Kentucky to the ethnicity data of students identified as having VI or HI as a primary disability, and more specifically those at KSB and KSD.<sup>9</sup> Overall, the VI and HI populations correspond with the total student population. In our random sample of ten parents of KSD residential students, two were Spanish-speaking. As populations become more diverse, it is important to address cultural and language differences that may influence parental involvement in decisions made about their child's educational needs and placement.

**Exhibit 4.29: Ethnicity of All Students, All VI Students, and KSB VI Students**



<sup>9</sup> Source: Ethnicity of all students: 2000-2001 Superintendent's Annual Attendance Reports (SAAR) Ethnic Membership Report (updated 04/17/02), KDE, Division of School Finance. Ethnicity of VI/HI students: <http://www.kde.state.ky.us/osis/children/Data/2001-02/2001Race.XLS> Race/Ethnicity Data by Disability, 2001-2002, based on Dec. 1, 2001 child count., KDE, OSIS. Ethnicity of KSB/KSD students: <http://www.kde.state.ky.us/osis/children/Data/2001-02/2001Disability.XLS> Child Count by District with Race and Gender Data, 2001-2002, based on Dec. 1, 2001 child count, KDE, OSIS.

**Exhibit 4.30: Ethnicity of All Students, All HI Students, and KSD HI Students**

### ***Type of Disabilities***

Understanding the characteristics of students attending state schools is important in the development of appropriate services and resources. This section presents data on the disabilities of students at KSB and KSD. State school populations may also be different from B/VI and D/HH students attending public schools. Without more sophisticated data on student characteristics, it is difficult to definitively demonstrate this. The exhibits below, however, provide some indication of the varying populations at KSB and legally blind children statewide.

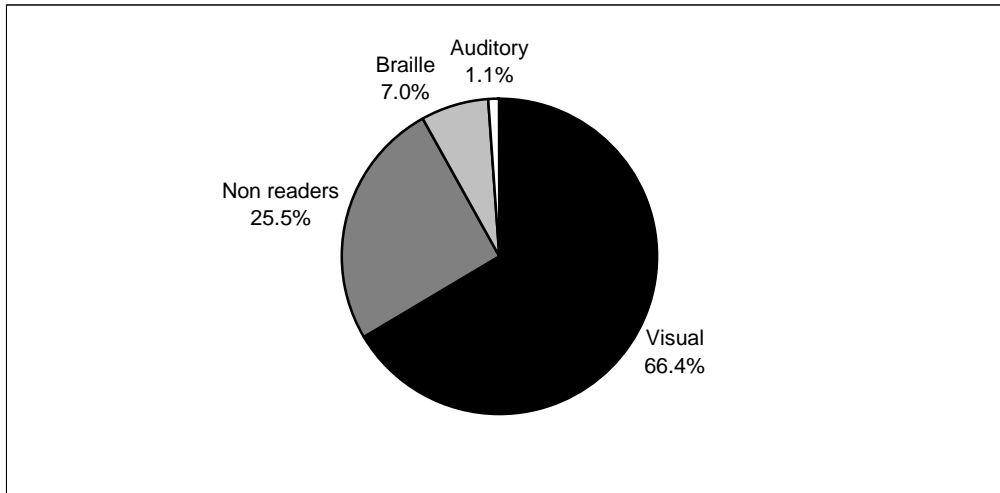
Based on the KIMRC count of legally blind children ages 0-21, Exhibit 4.31 indicates the reading mediums of legally blind children not attending KSB (n=887), while Exhibit 4.32 provides KSB student data (n=79).<sup>10</sup> The designations for reading medium are made by either the LEA or KSB, depending on where the child attends school, according to the APH guidelines. The population compositions show some variation. While the percentages of visual readers are similar, KSB has only one non reader, in comparison to 25.5 percent (or 226 students) of statewide legally blind students, respectively. A non reader is described as a student who shows no reading potential. The average age of those in the non reader category was 12 years. The large percentage of non readers statewide suggests that there are more severely challenged B/VI students *not* attending KSB. As these data are derived from the legally blind counts, these children may have multiple disabilities in addition to their visual impairment.

Furthermore, 30.4 percent of KSB students use Braille as their primary means of reading. This larger percentage of Braille users at KSB in comparison to others in the state (5.6 percent) might indicate a lack of availability of specialized Braille instruction in the LEAs. Hence, students who

<sup>10</sup> Visual Readers are those primarily using print in their studies; Braille Readers primarily use Braille in their studies. Auditory Readers primarily use a reader or auditory materials in their studies. Non readers are nonreading students; students who show no reading potential; students who do not fall into any of the above categories. Pre-readers are students working on or toward a Readiness level (e.g., all infants and preschoolers; older students with reading potential). Pre-readers (n=224) were removed from the analysis, as KSB does not typically serve preschool children.

are Braille readers may come to rely upon the services of KSB. It is likely that if more LEAs offered quality, appropriate Braille instruction and other necessary services, more Braille readers would be in the public school setting.

**Exhibit 4.31: Reading Mediums of Legally Blind Students Not at KSB, 2002 (n=887)**



**Exhibit 4.32: Reading Mediums of KSB Students, 2002 (n=79)**

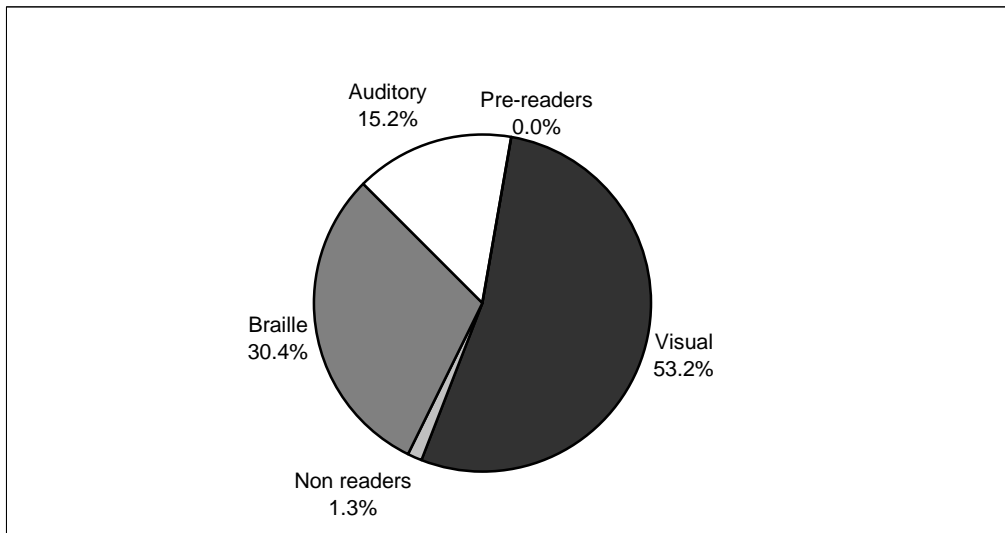
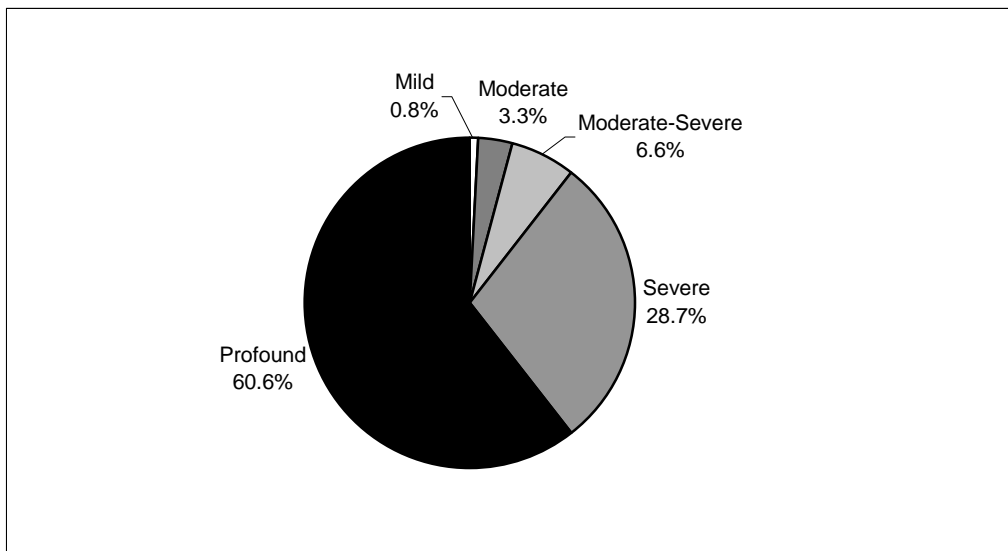
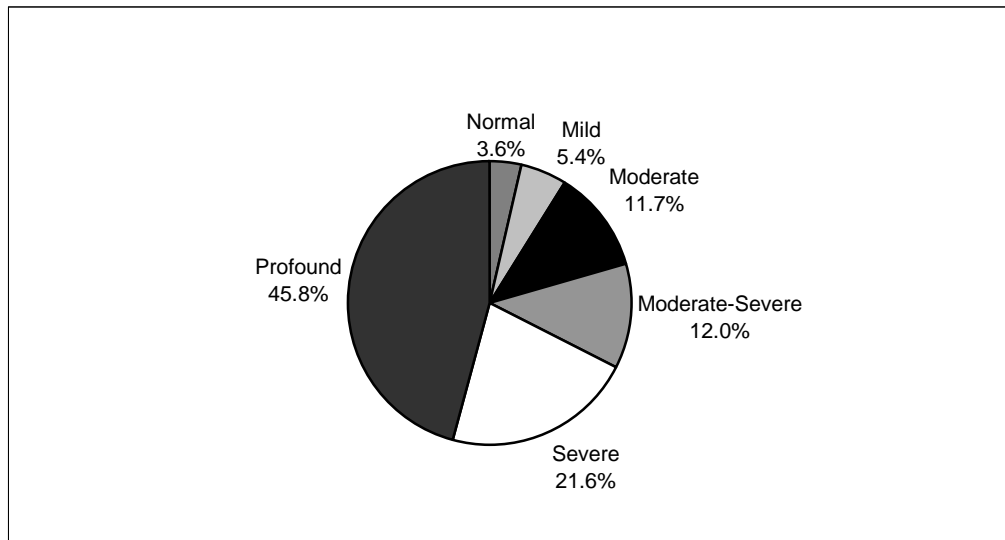


Exhibit 4.33 demonstrates data on the hearing loss levels of KSD students based on assessments prior to September 2000 (n=122). Comparable data for D/HH children statewide were obtained from an annual survey conducted by the Gallaudet Research Institute, 2000-2001 (n=334) and are presented in Exhibit 4.34. Exhibit 4.33 shows that the majority of students at KSD have profound hearing loss.<sup>11</sup> However, a small percentage have mild to moderate hearing impairments, which raises the question as to whether these students could be served in the local public schools. It is important to bear in mind that the numbers provided here do not indicate whether these children have additional disabilities along with their hearing loss. Discussions with some administrators at KSD indicate that the students with mild and moderate hearing losses have other issues such as neuro-processing, behavioral, and emotional difficulties. Degree of hearing loss is one of many factors utilized in determining a placement.

**Exhibit 4.33: Hearing Loss Levels of KSD Students Based on Assessments Prior to September 2000 (n=122)**



<sup>11</sup> Hearing loss levels are based on B.A. Chaudoin's "Familiar Sounds Audiogram" (1984), which is adapted from J.L. Northern and M.P. Downs' *Hearing in Children* (Williams & Wilkins, 1984). The KSD database contained 143 students total, but only 122 were used to construct the graph as some students had graduated or withdrew from KSD. The Pure Tone Average in the better ear was used to determine severity of hearing loss.

**Exhibit 4.34: Hearing Loss Levels of Students Who Are D/HH Statewide, 2000-2001 (n=344)**

Source: Gallaudet Research Institute (January 2002). *Regional and National Summary Report of Data from the 2000-2001 Annual Survey of Deaf and Hard of Hearing Children and Youth*. Washington, DC: GRI, Gallaudet University.

Based on 2000-2001 data from the Gallaudet Research Institute (GRI), KSD appears to serve a higher percentage of students with profound hearing loss levels than the statewide percentage.<sup>12</sup> This indicates that the school is serving students who may have more complex language and communication needs. As noted earlier, data from the GRI also indicate that D/HH students in Kentucky as a whole have more profound losses (45.8 percent) than those in other southern states (36.5 percent) and across the nation (32.2 percent).<sup>13</sup>

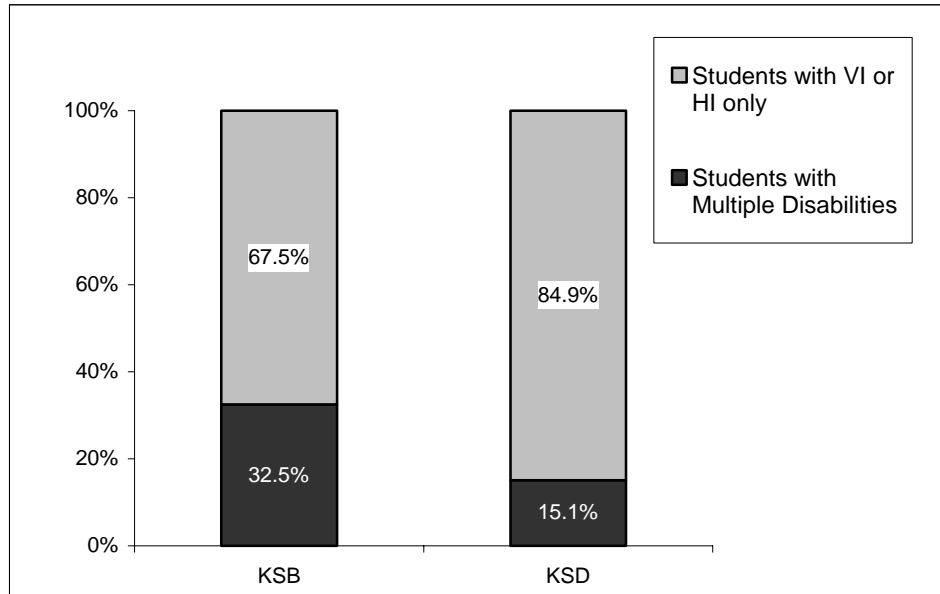
Students' needs are becoming increasingly more complex. It is no longer about hearing loss or visual impairments alone. As more at-risk children survive birth, the population that is growing is children with multiple disabilities. The GRI 2000-2001 survey results for Kentucky show that 34.5 percent of D/HH students in the sample (n=354) had disabilities in addition to deafness. Moreover, a higher percentage of D/HH children in Kentucky (83.4) had one or more functional limitations in comparison to southern states (73.3 percent) and nationwide (69 percent).

<sup>12</sup> The measures of hearing loss used in the Gallaudet Research Institute survey correspond with those used to categorize KSD students.

<sup>13</sup> Southern states included AL, AR, DE, DC, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, and WV.

As demonstrated in Exhibit 4.35, approximately 15 percent of students at KSD and nearly 33 percent of KSB students in 2001-2002 had multiple disabilities (MD) as their primary disability. Only .5 percent of the total public school-age population is MD.

**Exhibit 4.35: Percentage of KSB and KSD Students with Multiple Disabilities**



However, our experts in blind and deaf education, Dr. Philip Hatlen of the Texas School for the Blind and Visually Impaired (TSBVI) and Dr. Kenneth Randall of the Arizona School for the Deaf and Blind (ASDB), have indicated a much larger percentage of students with multiple disabilities at their state schools as well as for schools around the nation. Dr. Hatlen estimates that 80 to 85 percent of students at TSBVI are multi-disabled, while Dr. Randall remarks that the schools for the deaf have approximately 40 to 45 percent of students at schools for the deaf have multiple disabilities. Given these percentages, KSB and KSD do not appear to be directly serving a large proportion of children with the most complex needs.

One particular category of children with complex needs is those with deaf-blindness (DB). While there are 17 students ages 3-21 counted by districts as having deaf-blindness as a primary disability, there are 179 deaf-blind children ages birth through 21 statewide according to the census maintained by the Kentucky Deaf/Blind Project. There is a large discrepancy between the number that state deaf-blind projects identify and the number identified as having DB as their primary disability. The state coordinator for the Kentucky Deaf/Blind Project contends that local school districts most often do not count children as “deaf-blind” for one of two reasons: 1) they do not always understand the true definition of deaf-blindness, and 2) they are reluctant to count a child as deaf-blind for fear that they may be required to offer additional services beyond what they perceive to be within their capabilities such as deaf-blind classrooms. The majority of students on the Kentucky Deaf/Blind Project census are identified in the district child count as multi-disabled. It is important to note that this is a national issue and not unique to Kentucky.

Furthermore, the state coordinator of the project believes that deaf-blind children are not always served appropriately. They are “often placed in segregated classrooms for children with multiple disabilities—services are more respite in nature, lacking actual instruction.” Neither state school has been designated to serve deaf-blind students. However, two students identified on the

Deaf/Blind Project census attend KSB, and four students at KSD have been identified as being deaf-blind, but have not yet been certified for the census.

Using data from the 22<sup>nd</sup> Annual Report to Congress on the Implementation of the IDEA (2000), Exhibit 4.36 shows the percentages of students placed in residential settings by disability category for all 50 states, the District of Columbia, and Puerto Rico. In comparison to other states, Kentucky places a relatively high percentage of students with HI and VI as their primary disabilities in residential settings. For instance, 25 percent of children with HI as their primary disability are placed in residential settings in Kentucky, while the national average is 11 percent. On the other hand, Kentucky places only one percent of students with a primary disability of multiple disabilities in residential settings, compared to the national average of 8 percent. Also telling is the non-existent percentage of residential placements for Kentucky students with a primary disability of deaf-blindness, versus the national average of 16 percent. These data suggest that KSB and KSD typically do not directly serve children with arguably the most complex needs in Kentucky—those with multiple disabilities and deaf-blindness—and that the state school populations are predominately those with the primary disability of HI and VI only. The GRI 2000-2001 survey data (n=374) also show that Kentucky is more likely to place D/HH children in a special school or center than are states in the south or the nation as a whole (62 percent versus 28.8 and 27.9 percent, respectively).

**Exhibit 4.36: Percentage of Students Served in Residential Placements by Type of Disability Across All States**

<b>HEARING IMPAIRMENT</b>	<b>VISUAL IMPAIRMENT</b>	<b>MULTIPLE DISABILITIES</b>	<b>DEAF BLINDNESS</b>	<b>ALL DISABILITIES</b>					
MARYLAND	27%	MISSISSIPPI	29%	UTAH	49%	N. CAROLINA	68%	NEW JERSEY	6%
IDAHO	26%	S. DAKOTA	27%	S. CAROLINA	32%	WEST VIRGINIA	68%	UTAH	4%
<b>KENTUCKY</b>	<b>25%</b>	WASH. DC	18%	NEW JERSEY	24%	N. DAKOTA	58%	MASS.	3%
MISSISSIPPI	23%	ALABAMA	18%	RHODE ISLAND	22%	NEW JERSEY	52%	MARYLAND	3%
ALABAMA	22%	PENN.	17%	ARIZONA	19%	IDAHO	46%	CONNECTICUT	3%
ARIZONA	22%	IOWA	16%	MASS.	19%	S. CAROLINA	42%	RHODE ISLAND	3%
MASS.	20%	W. VIRGINIA	16%	ARKANSAS	13%	LOUISIANA	36%	NEW YORK	3%
MONTANA	20%	MINNESOTA	15%	MISSISSIPPI	12%	MASS.	36%	PENNSYLVANIA	2%
N. CAROLINA	18%	OKLAHOMA	15%	N. CAROLINA	12%	MISSISSIPPI	31%	ILLINOIS	2%
NEW MEXICO	18%	NEW MEXICO	15%	NEW YORK	11%	CONNECTICUT	27%	NEW Hampshire	2%
FLORIDA	18%	<b>KENTUCKY</b>	<b>14%</b>	TENNESSEE	9%	MINNESOTA	26%	CALIFORNIA	2%
S. Dakota	18%	FLORIDA	14%	ALABAMA	9%	NEW MEXICO	25%	OREGON	2%
Puerto Rico	17%	MISSOURI	14%	S. DAKOTA	9%	ILLINOIS	23%	VERMONT	2%
NEW YORK	17%	IDAHO	13%	New Hampshire	8%	TEXAS	22%	ARIZONA	2%
OKLAHOMA	16%	OREGON	12%	MARYLAND	8%	UTAH	21%	PUERTO RICO	2%
LOUISIANA	16%	INDIANA	11%	LOUISIANA	7%	OREGON	20%	SOUTH DAKOTA	1%
NEW JERSEY	16%	ARIZONA	11%	INDIANA	7%	VIRGINIA	20%	LOUISIANA	1%
S. CAROLINA	13%	MONTANA	11%	CONNECTICUT	7%	WASHINGTON	18%	VIRGINIA	1%
IOWA	13%	N. CAROLINA	11%	CALIFORNIA	6%	S. DAKOTA	17%	ARKANSAS	1%
OREGON	13%	OHIO	10%	MONTANA	5%	NEW YORK	14%	COLORADO	1%
CONN.	13%	NEW YORK	10%	NEBRASKA	4%	ALABAMA	13%	MONTANA	1%
W. VIRGINIA	12%	ILLINOIS	8%	NEW MEXICO	4%	FLORIDA	11%	MINNESOTA	1%
VIRGINIA	11%	S. CAROLINA	7%	KANSAS	4%	MAINE	11%	FLORIDA	1%
PENN.	11%	TEXAS	6%	MISSOURI	3%	COLORADO	10%	MAINE	1%
MISSOURI	10%	LOUISIANA	6%	IDAHO	2%	MONTANA	4%	TENNESSEE	1%
CALIFORNIA	10%	VIRGINIA	6%	VIRGINIA	2%	OKLAHOMA	4%	NEBRASKA	1%
MAINE	10%	WISCONSIN	6%	OKLAHOMA	2%	CALIFORNIA	4%	IOWA	1%
GEORGIA	10%	COLORADO	6%	PUERTO RICO	2%	INDIANA	2%	MISSISSIPPI	1%
TENNESSEE	10%	CONN.	5%	IOWA	2%	ALASKA	0%	N. CAROLINA	1%
ILLINOIS	9%	NEW JERSEY	5%	VERMONT	1%	ARKANSAS	0%	NEW MEXICO	1%
MINNESOTA	9%	MASS.	4%	MAINE	1%	DELAWARE	0%	GEORGIA	1%
WASH. DC	9%	CALIFORNIA	4%	TEXAS	1%	GEORGIA	0%	NORTH DAKOTA	1%
INDIANA	8%	DELAWARE	3%	PENNSYLVANIA	1%	HAWAII	0%	<b>KENTUCKY</b>	<b>1%</b>
VERMONT	8%	Rhode Island	3%	COLORADO	1%	IOWA	0%	OKLAHOMA	1%
NEBRASKA	7%	ARKANSAS	2%	WASHINGTON	1%	KANSAS	0%	IDAHO	1%
WISCONSIN	6%	NEBRASKA	2%	<b>KENTUCKY</b>	<b>1%</b>	<b>KENTUCKY</b>	<b>0%</b>	ALABAMA	1%
COLORADO	6%	MICHIGAN	1%	HAWAII	0%	MARYLAND	0%	MISSOURI	1%
OHIO	5%	UTAH	1%	MICHIGAN	0%	MISSOURI	0%	KANSAS	1%
MICHIGAN	3%	MARYLAND	1%	ALASKA	0%	NEBRASKA	0%	INDIANA	1%
N.H.	2%	N.H.	1%	NEVADA	0%	NEVADA	0%	DELAWARE	1%
N. DAKOTA	1%	GEORGIA	1%	OHIO	0%	N. HAMPSHIRE	0%	S. CAROLINA	1%
UTAH	1%	TENNESSEE	0%	DELAWARE	0%	OHIO	0%	OHIO	0%
TEXAS	1%	ALASKA	0%	FLORIDA	0%	PENNSYLVANIA	0%	WISCONSIN	0%
WYOMING	1%	HAWAII	0%	GEORGIA	0%	PUERTO RICO	0%	WASHINGTON	0%
Rhode Island	0%	KANSAS	0%	ILLINOIS	0%	RHODE ISLAND	0%	WEST VIRGINIA	0%
DELAWARE	0%	MAINE	0%	MINNESOTA	0%	TENNESSEE	0%	WYOMING	0%
HAWAII	0%	NEVADA	0%	N. DAKOTA	0%	VERMONT	0%	HAWAII	0%
ARKANSAS	0%	N. Dakota	0%	OREGON	0%	WISCONSIN	0%	MICHIGAN	0%
ALASKA	0%	Puerto Rico	0%	WEST VIRGINIA	0%	WYOMING	0%	TEXAS	0%
KANSAS	0%	VERMONT	0%	WISCONSIN	0%	ARIZONA	0%	ALASKA	0%
NEVADA	0%	WYOMING	0%	WYOMING	0%	MICHIGAN	0%	NEVADA	0%
<b>ALL STATES</b>	<b>11%</b>	<b>ALL STATES</b>	<b>8%</b>	<b>ALL STATES</b>	<b>8%</b>	<b>ALL STATES</b>	<b>16%</b>	<b>ALL STATES</b>	<b>1%</b>

Source: Twenty-second Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act, US Department of Education (2000), Table AB2.

Of the eight KSB staff with additional certificates in other disabilities, four have endorsements for teaching those with mental disabilities. One instructor is certified to teach emotionally disturbed children. Three of the eight have certificates in learning and behavioral disorders, grades primary through 12, and two staff have certificates for teaching children with moderate and severe disabilities. Of the four teachers at KSD with additional certifications, three are certified in learning and behavioral disorders, and two have endorsements to teach children with mental disabilities.

However, two of the teachers in the KSB teacher focus group indicated concern about their confidence and lack of training to effectively serve MD students. Three of the five KSB teachers also noted that the average B/VI students are frustrated with the increased numbers of MD students in their classrooms; higher-functioning students feel held back by lower-level students and are not given as much time with the teacher. One KSB graduate also reported this frustration. However, one district special education director commented that she would like to see the state schools be more receptive about serving multiply disabled students, versus only students with a primary disability of VI and HI. It is worthy to note that KSD has a complex for students with multiple disabilities that currently is unused for student use except to serve as a residence for some students on a temporary basis.

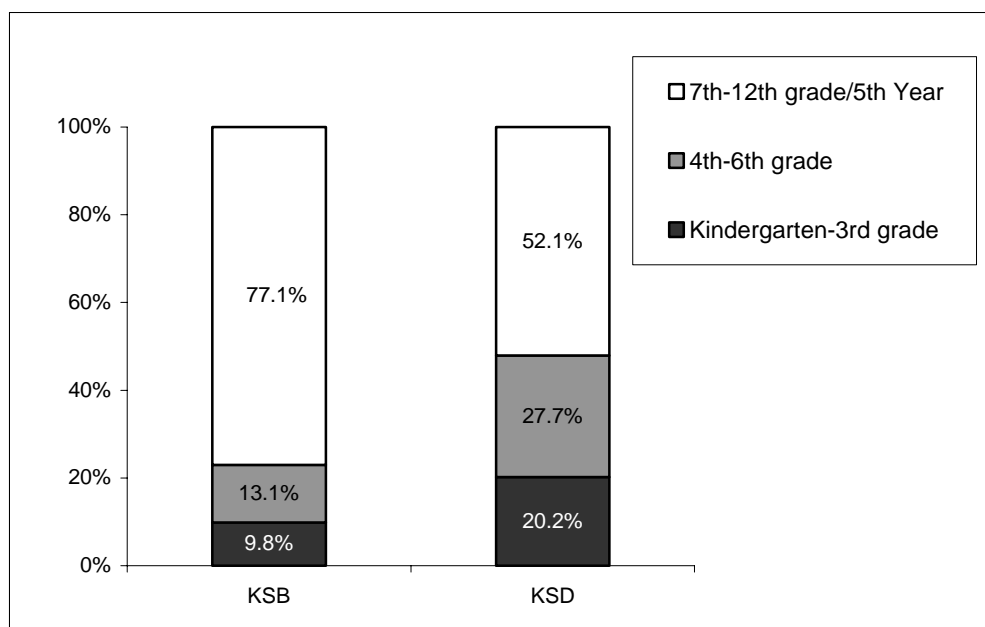
The issue of how to best serve children with complex needs is a statewide issue. For example, one of the public school parents interviewed had a deaf child with multiple disabilities and experienced difficulty with finding a school that would provide comprehensive services. She explained, “Some school programs don’t know how to deal with [my son] as a whole.” She noted that in general, “educators are only trained and able to serve his hearing disability, but cannot deal with the other complications.”

Another parent of a B/VI child with additional needs who was entering the public school system asserted, “It was like pulling teeth to get services like speech, occupational therapy, physical therapy, and to just get her in the program... It is really hard for parents with disabled children who have multiple problems because we have to fight for everything our kids get.”

### ***Residential Status and Length of Enrollment***

Interviews with many district special education directors and senior administrators at the state schools generally indicated that the decision to place children at the state schools almost exclusively lies with the parents. It appears that in many instances, this decision is not need-driven or based on whether the school district can provide for the child.

As seen in Exhibit 4.37, 23 percent of KSB residents are in 6<sup>th</sup> grade or below, with nearly 10 percent in kindergarten through 3<sup>rd</sup> grade. In addition, nearly 48 percent of the residential population at KSD are 6<sup>th</sup> grade or younger, with 20.2 percent falling into the kindergarten to 3<sup>rd</sup> grade group. This indicates that a significant portion of the residential community is 13 years or younger. At the same time, more than 75 percent KSB residential students are 7<sup>th</sup> grade or older, which might be expected due to the need for more intensive services and independent living skills at this age.

**Exhibit 4.37: Residential Students by Grade**

Another question regarding residency arises from concern that 8.2 percent of the residential students at KSB are from the local community (in comparison to the 2.1 percent of KSD residents). This may be an appropriate placement for some students to facilitate independent living skills before transitioning to adulthood. However, it appears that there are presently no clear guidelines as to when residential placement for local students might be appropriate and for what reasons. For instance, one of the KSB residents from the local community is in the fourth grade. In a student focus group, another local student, who is now a senior, indicated that she started residing at KSB in kindergarten. Although they abide by the Admission and Release Committee's (ARC) decision, some staff at KSD have indicated that the residential criteria are not entirely clear and are concerned that KSD serves as a "babysitter" for a few students from the local community. One of the dorms has a policy that allows day students from the local community to participate in extracurricular activities and stay one night per week at KSD with prior permission. However, two students from the local community are noted to remain regularly at KSD for more than one night a week. This practice may be appropriate, but as residential services are costly, they raise the question as to who should receive these and for what purpose.

In regard to independent living skills, KSB has an adult living program for eligible juniors and seniors that allows them to live in independent apartments on campus. The students are responsible for their own cooking, cleaning, shopping, and caring for their needs without assistance. In short, students learn to live independently and productively. KSB students valued the opportunity to live on their own while still in high school. KSB students report highly valuing the opportunity to live on their own while still in high school. Parents cited independence as being one of the most important things their children can learn. They have credited KSB for teaching B/VI children how to function independently and argued that public schools and parents are often not equipped to do this. Several district special education directors also noted that the independent living skills program at KSB was valuable and believed it could not be easily provided in local districts.

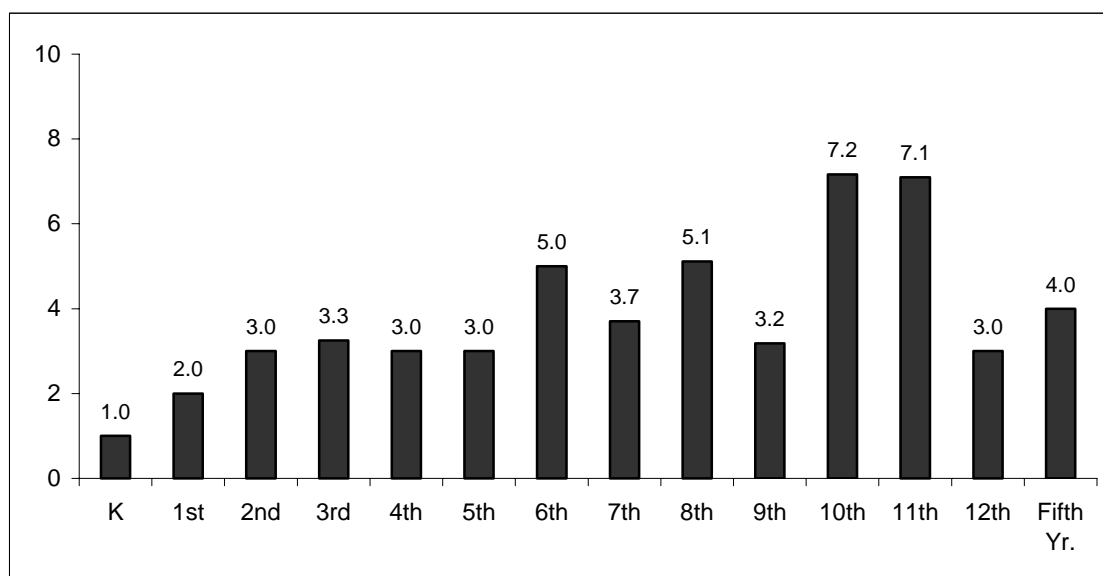
KSD at one time had an honors independent living program, similar to that of KSB, but it has since been discontinued. KSD teachers as well as students suggested that the program should be reintroduced.

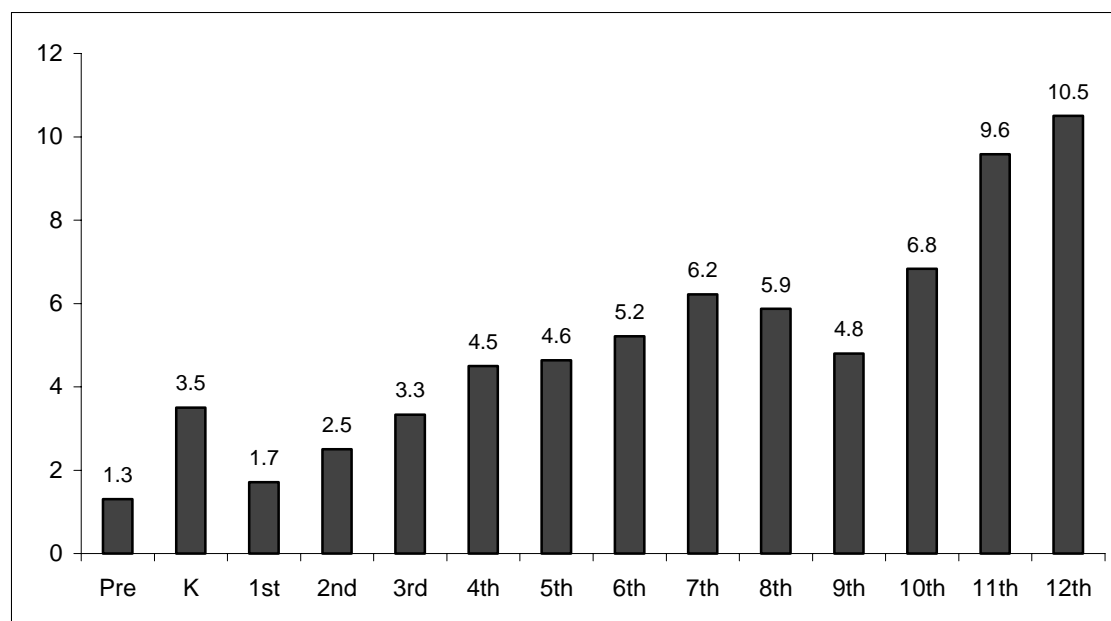
Appropriate length of stay at the two schools appears unclear. KSB has moved in the direction of creating shorter-term opportunities at the school with the KEYS Short Course program. KEYS allows children in the local school districts to attend KSB for one to twelve weeks for intensive services in Braille, O&M, and vision skills. Parents of short course students especially value this program because it allows their children to benefit from some of the services at KSB without having to become full-time residential students. One KSB teacher remarked, “It would be hard for me to imagine a time when K-12 [placement at KSB] would be justified. I know we have some students who have chosen that. I think their educational experience would have been richer and better served had they had experience in the regular education program.” While KSD has no such short course approach, the school is considering offering job training and community based work experience for one or two semesters after which students could transfer back to their home communities.

Exhibits 4.38 and 4.39 present the average number of years that current students in each grade have been enrolled at KSB and KSD. For current 11<sup>th</sup> graders, the average length of enrollment at KSB has been 7.1 years and at KSD, 9.6 years. Further analysis of data shows that students currently in the 9<sup>th</sup> through 12<sup>th</sup> grades at KSB have been there an average 4.8 years, while the equivalent at KSD is 7.6 years. According to our expert advisor, Dr. Philip Hatlen, the average stay at the Texas School for the Deaf and Visually Impaired is 2.5 years. This indicates that placements at these schools tend to be long term, particularly for KSD students.

Exhibit 4.40 presents the data in table form along with the numbers of students in each grade, so that the reader may see from how many students the average was derived.

**Exhibit 4.38: Average Length of Enrollment in Years for KSB Students by Grade, 2001-2002**



**Exhibit 4.39: Average Length of Enrollment in Years for KSD Students by Grade, 2001-2002****Exhibit 4.40: Average Length of Enrollment in Years at KSD and KSB, 2001-2002**

Grade	KSD		KSB	
	Total Number of Students (Day only)	Total Average Length of Enrollment	Total Number of Students (Day only)	Total Average Length of Enrollment
Preschool	13 (13)	1.3	-	-
Kindergarten	4 (3)	3.5	1	1.0
1	7 (3)	1.7	4 (3)	2.0
2	4 (1)	2.5	2 (1)	3.0
3	22 (11)	3.3	4 (1)	3.3
4	10 (4)	4.5	4 (2)	3.0
5	11 (1)	4.6	6 (1)	3.0
6	14 (4)	5.2	1	5.0
7	9 (5)	6.2	10 (2)	3.7
8	8 (1)	5.9	9 (1)	4.5
9	15 (4)	4.8	11 (3)	3.2
10	12 (2)	6.8	6 (1)	7.2
11	19 (4)	9.6	10 (4)	7.1
12	4 (2)	10.5	10	3.0
Fifth Year	-	-	2	4.0
<b>Total Averages</b>	<b>152 (58)</b>	<b>5.0</b>	<b>80 (19)</b>	<b>3.8</b>

### **Mainstreaming**

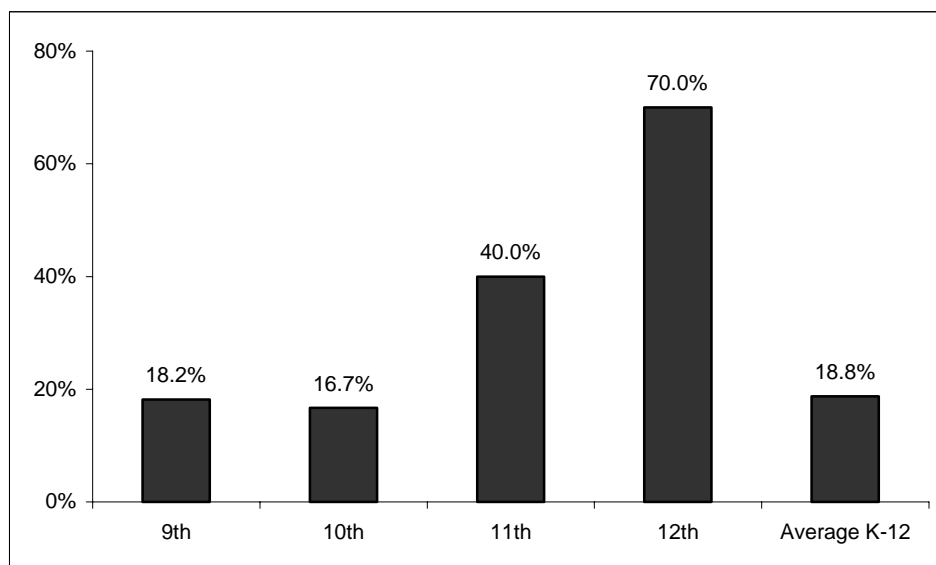
As mentioned previously, students at the state schools have the option of taking courses in the local public schools. KSB students said they valued the opportunity of attending mainstream classes, because the public schools offer a wider range of courses than does KSB. KSB graduates also reported believing that their classes in the Jefferson County Public School System (JCPS) better prepared them for college. One KSB graduate who was currently attending college in Kentucky commented, "I used Central (High School in JCPS) for academics, KSB for life skills." Current students at both KSB and KSD reported in

their focus groups that the academics at public schools were more challenging and faster-paced than those offered at the state schools. They often have to rely upon local public schools for foreign languages and advanced science and math courses. Some KSD students remarked that the instruction in their school is repetitive and slow. Two of the older students who participated in the KSD student focus groups voiced frustration at being held back by what they considered to be the slow pace of instruction at KSD. One KSD elementary school student commented about KSD: “I feel like we are moving slow. In public school things fly, we are learning all the time.” Likewise, some KSB students remarked that because their teachers at KSB had to respond to a broad range of cognitive skills in the classroom, it created difficulties for both high- and low-level students.

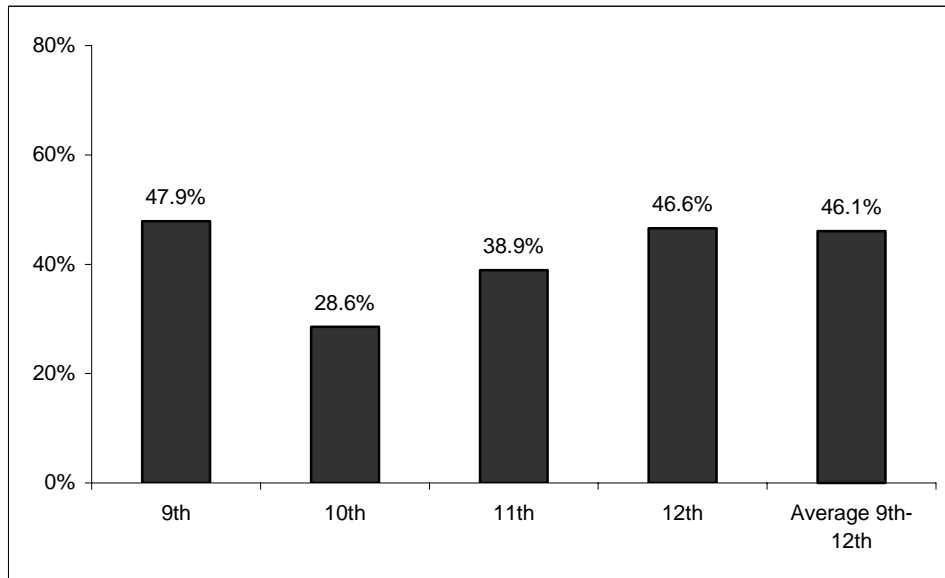
Mainstreaming, however, did not appeal to everyone. Some KSD students viewed classes in the public school as a waste of time; they preferred to stay on campus and not commute back and forth. A downside to mainstream settings was that students had to rely upon interpreters for communication. Five of the seven KSD students who participated in focus groups reported being frustrated working with interpreters in public school settings as it inhibited direct interaction with the teachers and peers. Regardless of their position on mainstreaming, however, KSD students generally said they would prefer the option of taking more advanced or specialized courses.

Exhibits 4.41 for KSB and 4.43 for KSD indicate the percentage of students in each grade who attended classes in public schools in the Fall of 2001. Exhibits 4.42 for KSB and 4.44 for KSD demonstrate the percentage of time that the mainstreamed students spent in public schools. Approximately 19 percent of the K-12 population at KSB attended classes in the public schools; however, all came from grades 9 through 12. Seventy percent of 12<sup>th</sup> graders took classes in the local school for nearly half (46.6 percent) of their school week. This seems to indicate that as students near graduation, they are able to increasingly benefit from a greater range of courses and experiences.

**Exhibit 4.41: Percentage of KSB Students in Each Grade Who Attended Classes in Public Schools, Fall 2001**

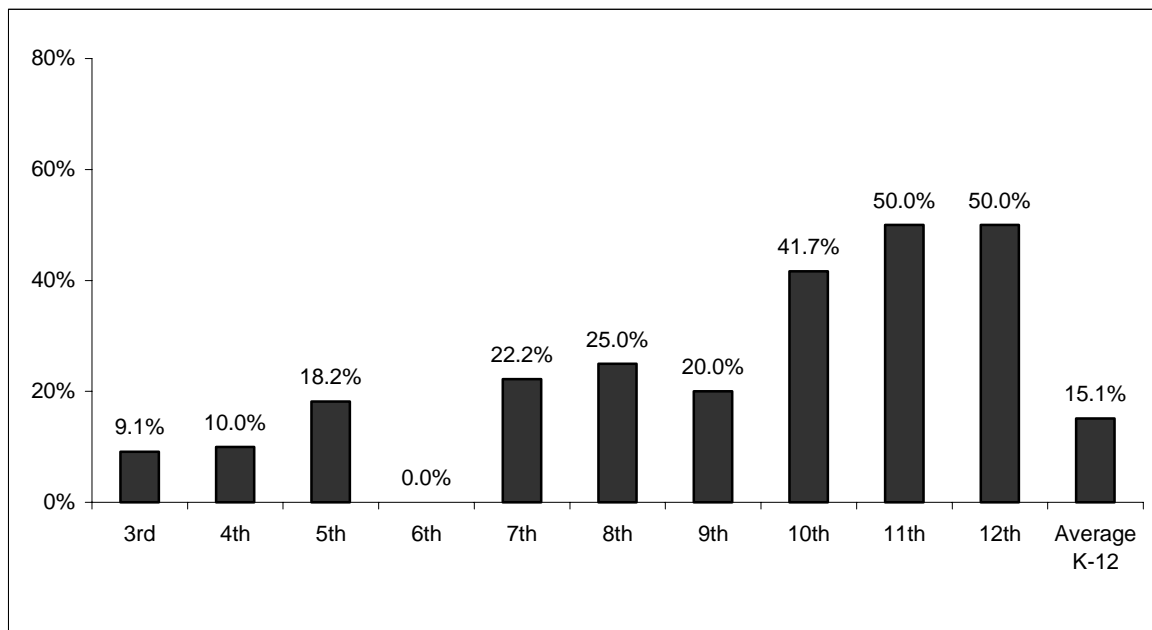


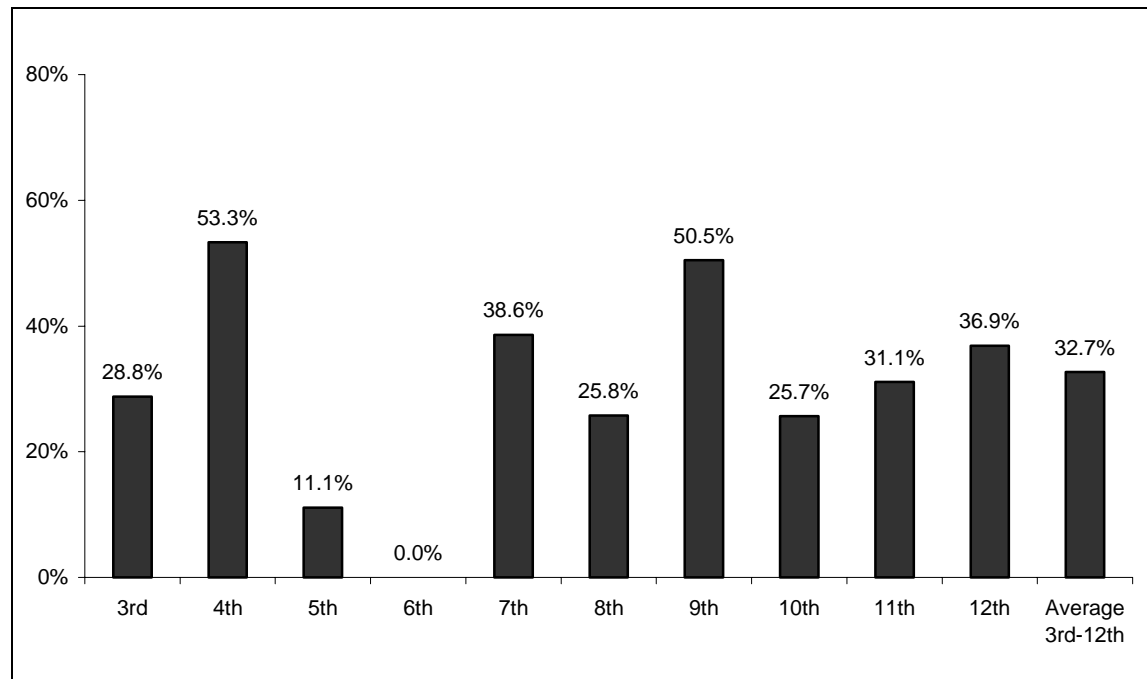
**Exhibit 4.42: Percentage of Time Mainstreamed KSB Students Spent in Public Schools Per Week by Grade, Fall 2001**



As viewed in Exhibit 4.43, KSD students in grades from 3 to 12—with the exception of 6<sup>th</sup> grade—were mainstreamed to some extent. Fifty percent of 11<sup>th</sup> graders and 12<sup>th</sup> graders attended public school offerings for 31 percent and 37 percent of their school week, respectively. The overall average percentage of time that KSD students spent in public schools was 32.7 percent (see Exhibit 4.44). Do the philosophies of the state schools encourage and facilitate opportunities in the public schools? Should the schools make transitioning students into the public school system a goal? Some service providers in the Danville area argued that KSD’s graduation requirements in career education hinder students’ ability to take classes in the local public schools. “KSD has put up barriers to students taking mainstream classes,” one local service provider commented. Some students were said to ultimately transfer from KSD to either Danville Independent or Boyle County schools because of the difficulty they encounter in splitting their time between KSD and the local public schools.

**Exhibit 4.43: Percentage of KSD Students in Each Grade Who Attend Classes in Public Schools, Fall 2001**



**Exhibit 4.44: Percent of Time Mainstreamed KSD Students Spent in Public Schools Per Week by Grade, Fall 2001**

## SECTION VI. Early Identification and Intervention

Part C of the Individuals with Disabilities Education Act (IDEA) mandates early intervention services to infants and toddlers who have or are at risk for disabilities or developmental delay. This mandate was initiated in the 1986 amendments to P.L. 99-457, the Education of All Handicapped Children Act (renamed the IDEA in 1990), under Part H. Research indicates that intensive early intervention can have a positive impact in the cognitive and developmental outcomes of young infants with disabilities or infants who are socially and economically disadvantaged (Guralnick, 1997; Infant Health and Development Program, 1990; Ramey & Ramey, 1992; 1998). According to the Joint Committee on Infant Hearing (JCIH), without appropriate opportunities to learn language, children who are deaf and hard of hearing will fall behind their hearing peers in language, cognition, and social-emotional development. It also is very important for blind and visually impaired children to receive appropriate instruction in orientation and mobility as early as possible, since doing so increases the likelihood that they can participate meaningfully in many aspects of their schooling, including academic, nonacademic, and extracurricular activities (Office of Special Education and Rehabilitative Services, 2000). Most infants and young children with visual impairments have usable vision, and the best time for them to learn to use this vision is within the first five years of life when the brain is still developing (Hyvarinen, 1994).

While there is agreement that early intervention is vital to a child's development, concerns were expressed that there is not a single strong, coherent system for best meeting the needs of B/VI and D/HH children throughout the state. Rather, there are many public and private services presently in place provided by a variety of sources. For instance, the Visually Impaired Preschool Services, Inc. (VIPS), a private, non-profit agency partially funded by Part C, is a primary provider serving blind and visually impaired children and their families. Considered a national model for blind and visually impaired early intervention, VIPS enables these children to adjust to the sighted world, while providing a variety of services to address the individual needs of each child and family. This program along with others, such as the KSD Early Childhood Regional Programs, serve as key components and provide a foundation from

which to build. However, the system and relationships appear disjointed, and hence not effective in serving *all* families. In addition, there is a need to know who these children are and where they are. The following sections provide data on the known counts of B/VI and D/HH infants and toddlers.

### **Counts of deaf and hard of hearing infants and toddlers**

The Kentucky General Assembly passed the Kentucky Invests in Developing Success Act (KIDS NOW!), a legislative piece through which the Commission for Children with Special Health Care Needs (CCSHCN) was charged with implementing a mandatory program for statewide Universal Newborn Hearing Screening (UNHS). The Universal Newborn Hearing Screening was implemented July 1, 2000. State statutes KRS 211.645, 211.647 and 216.2970 establish a process mandating that all hospitals offering obstetrical services with at least 40 births per year provide an auditory screening for all infants and provide the report to CCSHCN. State tobacco settlement funds totaling \$1.7 million were allocated for state fiscal years 2001 and 2002 to support the implementation of this initiative.

In 2000, the UNHS program screened 69.42 percent of newborn infants prior to hospital discharge and identified 4,024 infants as having risk factors for hearing loss.<sup>14</sup> Two thousand four hundred of these infants received hearing screenings before their hospital discharge. Of the “at risk” infants, 2,063 (85.96 percent) passed their newborn hearing screening. Of those, an additional 401 infants received evaluations following receipt of information from the HHRR/UNHS program. The remaining 337 (14.04 percent) were referred for audiologic diagnostic services. Referral information was tracked by the UNHS program in collaboration with the hospitals providing services, First Steps, the Kentucky Early Intervention System, and the Kentucky Early Years program.

Currently, 142 children ages 0-2 have been reported by the Commission on Children with Special Health Care Needs (CCSHCN) as being diagnosed as having a hearing loss. The counts by region are provided in Exhibit 4.45.

#### **Exhibit 4.45: Number of Children Ages 0-2 Who Have Been Diagnosed as Having a Hearing Loss**

Region 1	11
Region 2	23
Region 3	16
Region 4	14
Region 5	33
Region 6	24
Region 7	12
Region 8	9
<b>Total</b>	<b>142</b>

The current data collection system for First Steps, the state’s Part C early intervention program, cannot break out this count of children according to the nature of their needs or the characteristics of their disability. The best count of children they can provide of children ages 0-2 with a hearing loss receiving early intervention services through First Steps is 17, which is a clearly an incomplete count. This is because children may not be diagnosed with a specific sensory impairment, but rather categorized under “developmental delay.” The Part C coordinator for First Steps indicated they hope to redesign the data collection system within the next year to resolve this issue. In short, the state does not have a conclusive count of children ages 0-2 who are D/HH and are in need of services.

<sup>14</sup> According to the Kentucky Title V Maternal and Child Health Services Block Grant 2000 annual report and 2002 application.

From the rosters of children enrolled in the KSD center-based preschool and regional programs, we know that there are 31 D/HH children between the ages 0-2 being served (8 at the center-based program and 23 in the regional programs). The Louisville Deaf Oral School and the Lexington Speech and Hearing Center, which are private schools specializing in deafness, serve 66 and 20 D/HH children ages 0-2, respectively. For ages 3-5, the district IDEA count shows 105 children with HI as their primary disability.

#### **Exhibit 4.46: Counts of D/HH Children Ages 0-2 Served in Kentucky**

<b>Identifying Agency</b>	<b>0-2 year olds</b>
Louisville Deaf Oral School	66
Lexington Speech and Hearing Center	20
KSD Early Childhood Regional Programs	31

#### ***Counts of blind and visually impaired infants and toddlers***

Districts regularly provide counts of legally blind children to the American Printing House for the Blind (APH) and in return the districts receive funding to obtain materials from the APH. The KIMRC at KSB maintains a database of these numbers. The KIMRC count shows there are 94 children between the ages 0-2 and 115 children between 3-5 years old who are legally blind<sup>15</sup> while the district child count shows 58 children ages 3-5 with VI as their primary disability. VIPS currently provides some form of service to 91 B/VI children ages 0-2. The KIMRC data suggest that nearly 97 percent of identified legally blind 0-2 year olds (91 of 94) receive some services by VIPS. Given that VIPS offices are based in Jefferson and Fayette counties (Region 3 and 5), it is likely that there are additional children ages birth to two who have not been identified, particularly in the remote regions.

#### **Exhibit 4.47: Counts of Legally Blind Students in Kentucky, Ages 0-2 and 3-5, by Region**

<b>Region</b>	<b>0-2 yrs.</b>	<b>3-5 yrs.</b>
1	-	16
2	16	19
3	44	13
4	5	17
5	11	17
6	10	17
7	6	6
8	2	10
<b>Totals</b>	<b>94</b>	<b>115</b>

#### ***Early Intervention Services***

This section reviews the early intervention services that are in place in Kentucky for B/VI and D/HH infants and toddlers (see Exhibit 4.48). Early intervention services include First Steps, which is part of Kentucky's Early Intervention System (KEIS) funded by IDEA Part C. The organization serves children ages 0-2 who have a developmental delay. After referral, the First Steps team assists families in locating a service provider who is contracted through First Steps. Early intervention services are based on the child's needs and are provided through multiple agencies encompassing multiple disciplines with the ultimate goal of diminishing the effects of developmental delays. Services may be provided in home, in center-based programs, or in clinical settings depending upon the needs of the child and family and the availability of services in a given area. Services include evaluation and assessment, service coordination, transportation, respite care, certain non-routine health services, nutrition services, physical and

<sup>15</sup> Based on children's ages on December 31, 2001

occupational therapy, speech and communication services, vision and hearing services, developmental intervention, and assistive technology. Of the 12 parents of children with D/HH interviewed, three participated in First Steps and found the services valuable.

**Exhibit 4.48: Early Intervention Services Specifically For B/VI and D/HH Children Ages 0-2 in Kentucky**

<b>Who</b>	<b>What</b>	<b>Where</b>
<b>DIRECT SERVICES</b>		
First Steps	Serves any child, ages 0-2, identified as having developmental delay. Contracts service providers to provide services to eligible families.	Statewide
VIPS	Serves any child, ages 0-2, identified as having a visual impairment. Direct and indirect services.	Fifty mile radius around Louisville/Lexington receive direct services; outside the radius, families receive indirect services
KSD Early Childhood Regional Program	Serves any child, ages 0-5, identified as deaf and hard of hearing. Direct services.	Four regions, including KSD. Counties: McCracken, Caldwell, Daviess, Warren, Kenton, and Boyle
Louisville Deaf Oral School	Private program, contracted by First Steps to provide direct early intervention services.	Louisville
Lexington Speech and Hearing Center	Private program, contracted by First Steps to provide direct early intervention services.	Lexington
<b>INDIRECT SERVICES</b>		
PREVIEW	Provides training for educators working with blind and visually impaired children ages 0-5. Also conducts evaluations of children.	Statewide
Kentucky Early Years (KEY)	Provides training and technical assistance to families and services providers serving deaf and hard of hearing children ages 0-5.	Statewide
Deaf-Blind Project	Provides family support, training, and technical assistance to families, schools, and other agencies serving children 0-21 who are deaf-blind.	Statewide

Research indicates that many of the professionals who work for early intervention and early childhood programs lack the experience or training needed to meet the specialized needs of these children and their families (Bishop, 1991). For example, a parent of two D/HH children commented that although she is

satisfied with the one-on-one support provided by the teacher of D/HH children, she believes these services are provided in isolation since the regular teacher's pedagogical approach is not aligned with her daughters' needs. She stated that regular teachers need to receive professional training to understand the needs of their special education students, as well as the best approaches to teach them.

Professionals in the medical field are frequently in a position to have early contact with the families of B/VI and D/HH infants and toddlers. Therefore, they can play an important role by taking proactive measures to introduce families to early intervention services. However, approximately half of the parents interviewed reported that their child's hearing loss was not identified until after the child was 12 months or older, after this important early opportunity for language acquisition has been lost. Two parents reported learning about early intervention services from friends or other parents of children who are D/HH, and not from health or education service providers.

A parent whose daughter was diagnosed as being D/HH when she was 15 months old emphasized, "The early intervention component is the most important and probably the least known about... something needs to be done before kindergarten [because otherwise] five years are wasted [without] that intervention." She added that many parents like herself do not know about what services or options are available. In her case, a friend informed her about an early intervention program where her daughter was referred for audiological screening. The parent suggested that hospitals or the office where infants are registered for the birth certificate should provide parents with a packet containing information about early warning signs, as well as program information. Another mother suggested that the state should play a larger role in disseminating information regarding hearing screening, options, services, programs, and resources available to them. She reported that she had to find this information "on her own and piece by piece" and suggested one option would be to compile this information in a pamphlet or booklet.

Another mother stated that the parents of children who are D/HH need all the help they can get because they feel confused and scared, and they have many unanswered questions. She noted that neither her daughter's pediatrician nor her audiologist gave them information about the free services available in her community.

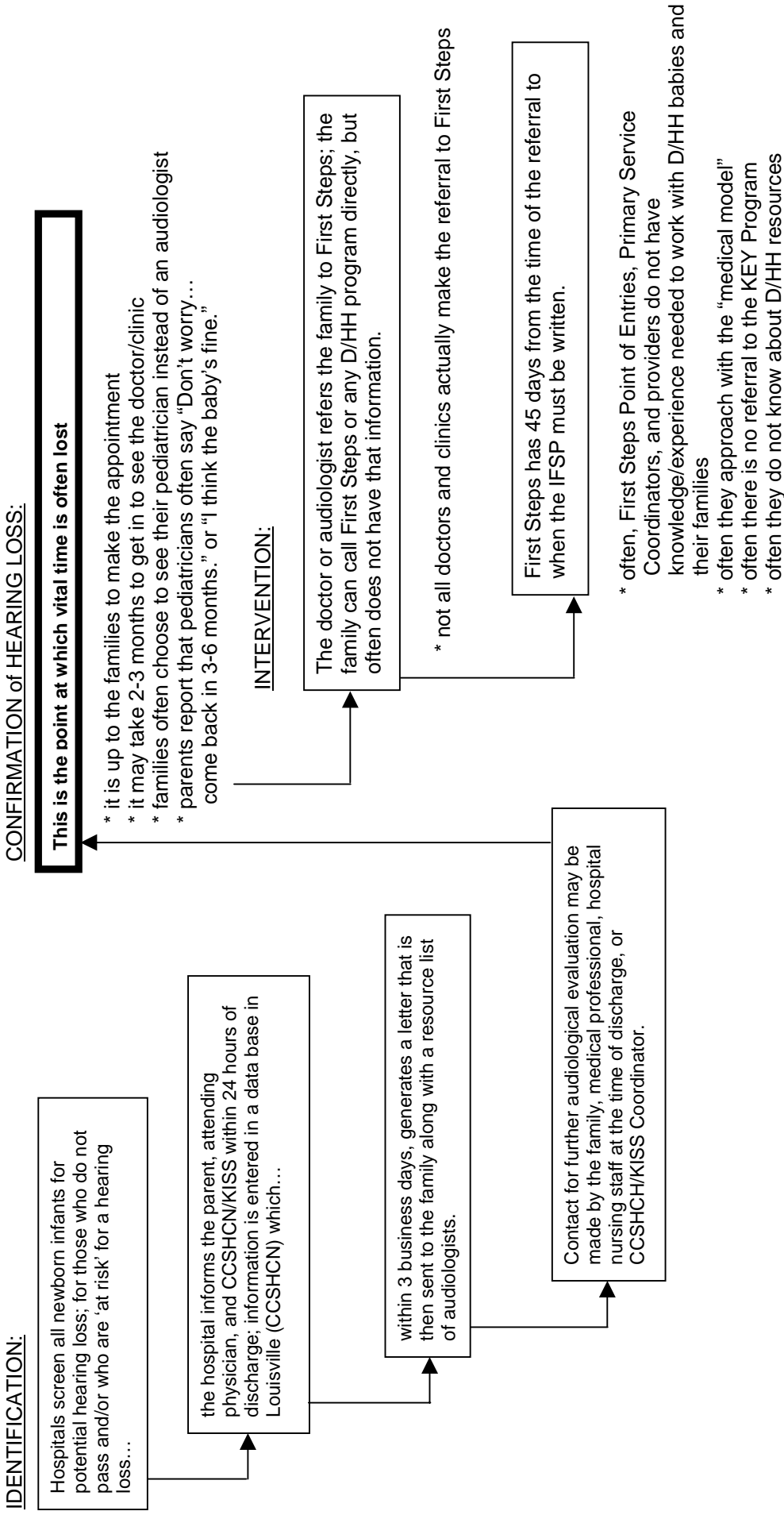
A parent of twins who were D/HH reported that she did not find about her daughters' hearing losses until they were two-and-a-half years old. Her children never received early intervention services because they were almost three years old by the time they were diagnosed with a hearing loss.

Early intervention staff at KSD believes that there is a disconnection between health and education services for young D/HH children. They expressed concern that service providers contracted by First Steps do not necessarily have expertise about or experience with the language-specific needs of deaf and hard of hearing children. Parents are provided with a list from which they pick a service provider in their area. The list does not have additional information on the provider other than service type. Furthermore, of the 15 districts by which First Steps is organized, five of them do not have a First Steps teacher of the deaf and hard of hearing. All districts had speech therapists listed as a First Step provider, but speech therapists do not have the same training as teachers of the deaf and hard of hearing. KSD early intervention staff indicated that by the time educational services reach the child, the language deficit is already well-established. It then becomes an issue of trying to compensate for the delay, rather than trying to prevent it. In addition, two of the seven district D/HH teachers interviewed expressed dissatisfaction with the depth of services First Steps provides to children with hearing loss. Please see Exhibit 4.49 for the flowchart of the referral process developed by Pat Bruce, a D/HH early intervention specialist at KSD.

This flowchart depicts how the system currently operates for D/HH identification and identifies issues Ms. Bruce believes need to be addressed. It indicates that crucial time is lost before the child's hearing loss is diagnosed and when intervention starts. Delays occur in getting a doctor's appointment, and there are misdiagnoses that miss the hearing loss and result in losing valuable time. Moreover, the burden is

upon the parents to make the medical appointment. Even when First Steps is notified, its service providers may not have expertise with addressing the specific needs of D/HH children and their families.

**Exhibit 4.49: Identification of and Early Intervention Services for Children Who Are Deaf and Hard of Hearing in Kentucky**



This division between early intervention and the public school system is also apparent in one parent’s experience with her B/VI child. While the mother was very satisfied by the early intervention services, she was concerned about her daughter’s transition to the public preschool because she feared that the services that her daughter had been receiving all along would not be provided with the same intensity or could even be discontinued. In a three-month period, the parent and school had four ARC meetings, and the parent felt that she “had to do a lot of fighting” to obtain a comprehensive set of services. She explained that the district special education director had decided that her daughter could only attend the program two days per week. However, the early intervention specialists had recommended four days a week. Her daughter has additional problems and is expected to be legally blind by ten years of age. Therefore, her mother wants her to receive comprehensive services while she still can make use of her vision and therefore make the most of her learning experiences. She explained, “If we don’t get the services now, when she is ten nothing is going to do any good.”

Exhibit 4.50 shows the number of infants and toddlers who are D/HH and B/VI, per 10,000 birth to age two population served by region. The total population of birth to two year olds by region was estimated based on the total public and private enrollment of 3-21 year olds. The numbers for both populations show considerable variation across the regions.

**Exhibit 4.50: Number of Children Ages 0-2 with D/HH and B/VI Served by Region Per 10,000**

	Estimated total population ages 0-2	Number of D/HH ages 0-2 served by region	Number of B/VI ages 0-2 served by region	Number of D/HH Served per 10,000 population	Number of B/VI Served per 10,000 population
Region 1	11,159	10	0	9	0
Region 2	16,697	15	16	9	10
Region 3	18,522	55	44	30	24
Region 4	17,115	7	5	4	3
Region 5	17,558	21	10	12	6
Region 6	15,070	8	8	5	5
Region 7	7,578	0	6	0	8
Region 8	5,681	1	2	2	4
Statewide	109,381	117	91	11	8

The HI and VI identification rates for Kentucky, the nation, and selected states of children ages 6-21 appeared in Exhibit 4.28 earlier in this chapter. The reader may recall that the state identification rate for HI was 9 per 10,000, whereas the national average was 17. For VI, the rate was 5 per 10,000 for Kentucky, which aligned closely with the national average of 6 per 10,000. As such, the numbers of children who are D/HH ages 0-2 served in Regions 1, 2, and 5 appear to be on target with the Kentucky school-aged HI identification rates. Region 3 shows a much higher number served per 10,000 population than the statewide average, suggesting a higher concentration of D/HH services. Data suggest that the remaining four regions—Regions 4, 6, 7, and 8—may not be serving all children who are D/HH, as the numbers served are significantly smaller than the statewide identification rate. All regions except for Region 3 fall short of the national average identification rate of 17 per 10,000.

The number of children ages 0-2 with B/VI per 10,000 served in Regions 2, 3, 5, 6, and 7 corresponds with or exceeds both the state and national VI identification rates of 6-21 year olds (5 and 6 per 10,000 respectively). This suggests that children who may have B/VI are being served

in these regions. As with D/HH, Region 3 exhibits a much higher number of B/VI children served per 10,000 than all other regions, indicating a concentration of services in this area. However, the lower number served in regions 1, 4, and 8 indicate that these regions may have additional children with B/VI who are not being served.

The transition from programs serving ages 0-2 to programs serving ages 3-5 (which are the responsibility of the public school system) is problematic for many parts of the state. The relationship between local First Steps agencies and school districts does not appear to be well-connected to provide seamless transition for infants, toddlers, and families. For instance, one of the public school parents interviewed indicated that her daughter would be without services over the summer, as the 3-year old child was no longer eligible to receive early intervention services and the district did not provide school-age services over the summer for D/HH and B/VI children.

### B/VI Early Intervention Services

VIPS serves as a primary provider of early intervention services for many children identified as B/VI. For all 15 regions for First Steps, VIPS is cited as a provider of teachers of visually impaired children. While recognized as a national model, VIPS does not provide direct services to B/VI children statewide. Direct services to children and their families are limited to a 50-mile radius of Louisville and Lexington, while outreach support is provided to those beyond that scope. Exhibit 4.51 shows that 21 legally blind children in the state receive only indirect services or quarterly visits from VIPS providers. As mentioned throughout this section, the services for children with B/VI appear to be concentrated in certain regions, and in Region 3 particularly. While other First Steps providers may be serving these children in some form, the director of VIPS indicated that these providers may not necessarily have expertise in B/VI. PREVIEW, a program operated through KSB, provides indirect support through training sessions for educators who work with blind and visually impaired children ages birth through five. PREVIEW also conducts annual comprehensive evaluations for preschool B/VI children. KSB's regional program is in preliminary stages, with a single B/VI consultant placed in Eastern KY (Region 8; Perry County) earlier this year.

**Exhibit 4.51: Numbers of B/VI Children Receiving Direct or Outreach Services from VIPS, by Region, 2002**

	<b>Direct</b>	<b>Outreach</b>	<b>Total</b>
Region 1	0	0	0
Region 2	2	14	16
Region 3	44	0	44
Region 4	5	0	5
Region 5	9	1	10
Region 6	4	4	8
Region 7	6	0	6
Region 8	0	2	2
<b>Total</b>	<b>70</b>	<b>21</b>	<b>91</b>

### D/HH Early Intervention Services and Preschool

For D/HH children ages birth to two, there is not a comparable organization to VIPS. Direct early intervention services are available from the KSD Early Childhood Regional Programs, the Louisville Oral School (private), and the Lexington Speech and Hearing Center (private). Although private, they are vendors for First Steps and therefore provide early intervention services to eligible families at no charge. As with B/VI, the services appear to be centered around

particular locations and regions, such as Regions 3 and 5. Exhibit 4.52 indicates that no D/HH children are served in Region 7 by these programs, although data from the CCSHCN suggest that there are 12 children ages 0-2 diagnosed with D/HH in Region 7. While there are First Steps speech therapists available, there are no teachers of the deaf and hard of hearing on the provider list for many of those districts in this region. With the exception of Region 3, in general there are more children diagnosed as having a hearing loss than there are being served.

**Exhibit 4.52: D/HH Children Ages 0-2 Served by Region in Comparison to Children Reported to CCSHCN as Having a Hearing Loss**

	<b>Lexington Speech and Hearing Center</b>	<b>Louisville Oral School</b>	<b>KSD and Regional Programs</b>	<b>Total Served</b>	<b>Children ages 0-2 diagnosed as having a hearing loss (CCSHCN)</b>
Region 1	-	-	10	10	11
Region 2	-	5	10	15	23
Region 3	-	55	-	55	16
Region 4	-	4	3	7	14
Region 5	13	2	6	21	33
Region 6	6	-	2	8	24
Region 7	-	-	-	-	12
Region 8	1	-	-	1	9
<b>Total</b>	<b>20</b>	<b>66</b>	<b>31</b>	<b>117</b>	<b>142</b>

Forty-six D/HH children ages 0-5 are served through five of KSD's Early Childhood Regional Programs which have been established in Regions 1 (two programs), 2 (two programs), and 4. See Exhibit 4.53 on the following page. These programs are particularly important, as First Steps does not have a teacher of the deaf and hard of hearing listed as a service provider for many of the counties in these regions.

The 0-5 age span served by the regional programs may ensure continuous educational services to both children and their families and redress the potential disconnection between early intervention and educational services. While children of preschool age in Regions 1 and 2 are served through home visits, children ages 3-5 in Region Four attend a site-based preschool program. In addition, 15 children 0-5 are served by KSD, seven of whom are ages 3-5 and attend the preschool and kindergarten programs on the campus of KSD in Region 5.

The Kentucky Early Years (KEY) program provides indirect services by providing statewide training and technical assistance to families and service providers serving D/HH children ages 0-5.



Exhibit 4.54 shows the student:teacher ratios of the regional programs. The ratios of students to teachers in these regional programs are significantly higher than the statewide average of 4.2 students, ages 3-21, to all certified teachers of the deaf and hard of hearing in the state (see Exhibit 4.65). These high ratios raise questions as to whether the services in place in Regions 1, 2, 4 and 5 are adequate.

**Exhibit 4.54: Ratio of D/HH Students (Ages 0-5) to D/HH Teachers in KSD’s Regional Programs**

Paducah Ind.	Region 1	6:1
Caldwell Co.	Region 1	9:1
Bowling Green Ind.	Region 2	11:1
Owensboro Ind.	Region 2	7:1
Kenton Co.	Region 4	13:1
KSD	Region 5	7.5:1
Average		9.2:1

Moreover, a cursory glance at Exhibit 4.53 shows that the eastern regions (6-8) are not being served by a KSD regional program. There are 13 children ages 3-5 identified in Regions 6-8 as having HI as their primary disability. Region 7 is without services from both the regional programs and private schools. In fact, the “Big Sandy” region of the First Steps program (which is made up of districts in Region 7 and 8) does not have any teachers of the deaf and hard of hearing with which to contract.

## SECTION VII. Family Involvement

Part C of the Individuals with Disabilities Education Act (IDEA) established the need for family-centered services for young children who are at risk of or who have identified developmental disabilities. Research indicates that effective early intervention programs are family-centered, interdisciplinary, culturally competent, and build on informed choice for families (Baker-Hawkins and Easterbrooks, 1994). Building partnerships with parents while providing a variety of options and opportunities of purposeful and meaningful involvement at multiple levels within the early intervention process, can lead to benefits for children, families, service providers, program administrators, and the community.

The service delivery currently in place in Kentucky does not appear to be family-oriented. For instance, the student:provider ratio is high across the state. Fewer service providers for a child translates to less support for the family as a whole. Furthermore, VIPS services—which are crucial to the early development of B/VI children and their families—are centered around two locations, Louisville and Lexington. Families outside a 50-mile radius from those locations receive quarterly support; such infrequent support does not maximize the role of parents as the child’s first teacher nor encourage continuing family involvement. Of the 16 parents of B/VI students interviewed, three had their children in VIPS. These parents viewed the program as “wonderful,” and described it “our life support for a while,” but one added, “The services were there, but you have to ask.”

For ages 0-2, Part C requires a family-centered approach through the development of an Individual Family Service Plan (IFSP). However, from age three onwards, the model of service moves to focus upon the child and the Individual Education Plan (IEP) developed by the Admissions and Release Committee (ARC). The transition from the IFSP to the ARC in terms of the needs of the family is difficult and often not well done.

For some parents, the system presents barriers to parental involvement and produces tension and frustration. One public school parent remarked, “Parents are really willing to help and pitch in for their kids, but there is no one to really turn to, and you have to fight and fight...you feel disempowered...they treat parents like we are stupid.” Of the 28 parents interviewed, nearly all reported having to become advocates to get their child the services they needed and legally deserved. Many wanted parental education, both in terms of available services and families’ legal rights and in ways they as parents could assist with their child’s education. This is a notion supported by research, which indicates that it is crucial to provide families with the necessary assistance and information in order to promote their ability to support their child’s growth and development, as well as to enhance their capacity to serve as advocates for their children (Bodner-Johnson & Sass-Lehrer, 1999). The inclusion of parent perspectives in all aspects of the early intervention process is an essential element in the provision of family-centered, culturally competent services (Rosin, 1996).

## **SECTION VIII. Regional Programs and Services at Local Level**

In addition to its KIDS and KIMRC outreach programs, KSB’s regional effort is in preliminary stages, with a B/VI consultant established to serve Eastern KY (Region 8, Perry County). On the other hand, the KSD Early Childhood Regional Program has been established for several years and offers direct services to its students. As discussed in the early intervention section, KSD has five off-campus regional program sites serving 52 children total: two programs in Region 1, two in Region 2, and one in Region 4 (please refer to Exhibit 4.53). These regional programs presently focus upon D/HH children ages 0-5, with the exception of the Northern KY cooperative program which continues through first grade. The other regional programs serve preschoolers through home visits.

The Northern KY (NKY) cooperative has been in operation for about 3-4 years, according to its regional director, Bernie Sandfoss. It was the first regional location started by KSD in the state. Superintendents representing 17 districts from 4 counties entered into an agreement with KSD to jointly fund the program. KSD supplies a preschool instructor, one primary teacher, and two coordinators and offers direct services. Each district supports the program yearly (approximately \$500 per district), and the districts that currently have children participating in the program are assessed for each child that attends the half-day program (\$5,900 per child for ½ day). The board overseeing the cooperative program is comprised of the 17 superintendents from the participating districts. Each district is responsible for transportation of the child. The NKY cooperative program reports that 30 children from seven to eight local school districts will be participating in the program next year. Currently, the NKY cooperative program is also the only regional program to provide a classroom setting for their preschool through 3<sup>rd</sup> grade D/HH children, and they are in the process of planning for 4<sup>th</sup> and 5<sup>th</sup> grade services. The regional director attributed the program’s success to the large suburban setting with a good road system which allows him to be at any of the districts within 30 minutes.

One district special education director commented that she felt the drive of the regional programs was to bring the children to them, but she would prefer to see the programs send teachers into the schools to observe and help regular teachers make sure the students are getting what they need. Two other district directors noted that while they felt the regional program in their area was working well, they also felt that the program was expensive and required costly equipment.

Of the eight parents of KSD students interviewed, four were participating in KSD’s regional programs, three in the Northern Kentucky program at River Ridge. All of these parents supported

the idea of regionalization because it allowed them to keep their child at home while still receiving preschool services for the D/HH. These parents would like the regional program to offer a full-day preschool and kindergarten like the Ohio Valley Oral School does, and would also like more emphasis on speech and language development. Furthermore, one parent reported having conflicts with KSD's Northern KY staff about communication modes, primarily due to philosophical differences over the parents' decision to pursue an oral approach. As our expert advisor Dr. Randall notes,

*The vast majority of sensory impaired children and students do not have parents who are sensory impaired. Frequently, educators attempt to force parents into making decisions for which they may not be either emotionally or psychologically prepared. It is unfortunate, but true, that many parents and educators place a child into the positions of 'failing first.'*

All four of the parents participating in the regional programs intend to mainstream their children after preschool, underlying the importance of continuing high quality services at the local level.

The KSD regional programs have offered comprehensive benefits to parents of D/HH children, as the following case shows. At the time their daughter was almost two years old, the parents became involved with a regional program run by KSD. A special education teacher met with them twice a month at their home. These meetings helped them learn different ways to help prepare their daughter for preschool. For example, they started using sign language, engaged in speech and language activities, met other parents of deaf and hard of hearing children, deaf adults, and interpreters. Through these contacts they learned about and utilized other services available in their region, such as the "Family Learning Vacation" in Danville, First Steps program, free speech therapy sessions, and financial aid for the cost of hearing aides through the Commission for Children with Special Health Care Needs. The parent also stated that when they got involved with KSD's Regional program, it did not have a preschool yet. She added, "and what a Godsend when they did... we got so lucky!"

District special education directors and parents of D/HH and B/VI children attending public schools expressed frustration in interviews at the lack of quality services at the regional or local level. Until three years ago, Fayette County (Region 5) centralized its D/HH services at one elementary, one middle, and one high school in Lexington. Deaf and hard of hearing students in nearby counties were eligible to participate in this program until high school, when they were mainstreamed back to their local public schools. Now that Fayette County is phasing out that program, students have been transferred back to their local public schools when they transition from elementary to middle or from middle to high school.

Of the five public school parents interviewed, four had children attending public schools in Fayette County. One parent whose child will be returning to nearby Harrison County for high school was satisfied with her child's education in the program, but reported not being notified by Fayette County about the discontinuation of the district program. However, another parent of a deaf child with multiple disabilities ended up removing him from Fayette County D/HH program because the teachers would not serve his other needs. She was upset that the "school that could teach him the most in sign and communication is not serving the whole child." Parents of D/HH children in Region 5 do have the option of the Lexington Speech and Hearing Center, but not all families have the economic means to send their children to private school.

There appears to be a disproportion of service providers and high teacher:student ratios (see Exhibits 4.55 and 4.56) across the eight regions. KSB teachers believed that more B/VI service providers will be needed in order for a regional service model to be effectively implemented. Our expert advisor Dr. Bina strongly endorses what he considers an extremely valid point: more B/VI service providers are necessary in order to have appropriate local services.

## SECTION IX. Shortage of B/VI and D/HH Service Providers

The shortage of service providers is not unique to Kentucky; it is recognized as a problem throughout the nation, particularly with the pending retirement of much of the workforce. Another issue with which to contend is the geographic disproportion of certified teachers in the state. In other words, it is an issue of both supply and distribution. It is no surprise that urban areas have higher numbers of providers due to larger student populations. However, rural areas may be less appealing for service providers, even though there may be a demand. For instance, Region 1 in Western KY has a ratio of 10.2 B/VI students to 1 B/VI teacher (or 23.7 to 1, according to the KIMRC legally blind counts), relatively high in comparison to the statewide average of 4.3. Similarly, Region 7 in Eastern KY exhibited an extremely high ratio of 29 students to 1 D/HH teacher. See Exhibits 4.55 and 4.56 below for ratios.

The teacher database (last updated in the fall of 2001) from which the B/VI teacher ratio was calculated designated teachers as full-time, part-time, certified, and non-certified, although not all data fields were completed consistently. Full-time teachers were counted as 1, while part-time staff were counted as the percent of full-time worked. To determine this percentage, KSB provided additional data on most part-time staff; those for whom no information was available were designated as 50 percent. Two teachers in this database were designated as being emergency certified.

The D/HH teacher database contains only certified teachers in the state; it does not indicate percentage of work time, nor does it indicate whether these individuals are presently teaching D/HH children. All teachers in the D/HH database were counted as 1. According to the Education of Professional Standards Board, there are four teachers (non-KSD staff) who have been approved for emergency HI certification. These teachers have not been included in the D/HH student:teacher ratio.

**Exhibit 4.55: Ratio of B/VI Students per B/VI Teacher by Region (not including KSB-based students or staff)**

Region	Number of B/VI teachers	No. of Students ages 3-21 per Teacher (using the district child count)	No. of Students ages 3-21 per Teacher (using the legally blind count)
1	4.1	10.2	23.7
2	14.2	4.7	10.1
3	30	1.6	8.2
4	5.8	6.1	15.7
5	13.2	3.7	9.1
6	11.5	6.1	11.7
7	7.4	5.4	10.3
8	9.2	6.1	12.1
<b>Average</b>	<b>95.3</b>	<b>4.3</b>	<b>10.7</b>

**Exhibit 4.56: Ratio of HI Students Ages 3-21 per D/HH Teacher by Region (not including KSD-based students and staff)**

Region	Number of Certified Teachers	No. of Students ages 3-21 per Teacher (using district child count)
1	17	3.9
2	13	6.8
3	30	3.0
4	22	4.3
5	25	3.9
6	20	3.7
7	1	29.0
8	10	5.0
<b>Average</b>	<b>138</b>	<b>4.3</b>

KSD has two teachers who are emergency certified to teach D/HH children, with an additional two in the early childhood regional programs. While all KSB teachers are content certified, seven of KSB's instructional staff are emergency certified to teach B/VI children and are presently working toward their certification at the University of Louisville.

There is only one university in each field to offer credentials in the state: University of Louisville (UL) for B/VI and Eastern Kentucky University (EKU) for D/HH. EKU has an undergraduate 5-year program in which students become dually certified in both regular education and D/HH education. The Master's degree in D/HH education is also available. The university has between 80-100 students currently enrolled in the program and has in the past had up to 120 students, including graduate students. In addition to D/HH and interpreting education, EKU also has a satellite interpreter training program based in Louisville, which in combination with the training program in Richmond, is producing approximately 15 interpreters per year. The University of Louisville's B/VI teacher preparation program is a distance education program done through video conferencing and the Internet. The program currently has 20 students in the B/VI program and eight in the Orientation & Mobility certificate program. Nearly all are already teachers, either teaching special or regular education and seeking additional certification, or are on an emergency certificate teaching B/VI and are working to get their permanent license.

One KSD teacher and one district D/HH teacher both expressed the view that EKU's teacher training program was not producing teachers prepared to teach D/HH, while another district D/HH teacher advocated for more signing training. One district B/VI teacher opined that UL was not doing an adequate job of training B/VI teachers in Braille instruction. Another district B/VI teacher who believed that UL's B/VI program is good expressed the desire for more emphasis on technology in B/VI teacher preparation.

The directors of the B/VI and D/HH teacher preparation programs at the UL and EKU are aware of the service provider shortage and distribution problems and are attempting to devise ways to address them. Although everyone involved in special education agrees that there is a shortage of service providers, there is disagreement among teachers, directors of special education, and university educators in B/VI and D/HH education as to the reasons for the shortage. Of the four district B/VI teachers interviewed, three argued that if districts wanted to attract more B/VI and O&M specialists, they should offer higher, more professional salaries and more actively recruit. These teachers believe that school districts "get what they pay for" when it comes to specialists in these fields. Echoing these sentiments, one educator involved in teacher preparation argued that B/VI and O&M consultants are hired by educational cooperatives to serve several districts "because the superintendent is too cheap to get a teacher" for the district. District directors of

special education argue that their districts recruit aggressively both through their cooperatives and as individual LEAs, but that they are often unable to hire a full-time B/VI or D/HH teacher.

Of the 18 district special education directors interviewed, nine noted difficulty in attracting B/VI or D/HH staff, due to either regional location or pay scale. Two district directors commented that they had difficulty in recruiting and retaining certified providers because neighboring states pay much higher wages. In addition, one noted there is resentment toward people who get B/VI or D/HH certification and then do not use their credentials but instead contract themselves out as consultants. The district director noted that there should be better enforcement of incentive programs and tuition reimbursement programs to ensure that people who get their education paid for by the state actually work in these fields. Another district special education director argued that the state should offer more incentives for teachers to go into D/HH and B/VI. A district B/VI teacher said that B/VI teacher training should not be a “free Master’s Degree.” An educator in teacher training noted, however, that state law allows district superintendents to require B/VI and D/HH certified staff to teach in those areas, but that some superintendents do not use this power. Another special education director argued that the state should offer more incentives for teachers to go into the fields of D/HH and B/VI.

In addition, two of seven D/HH service providers interviewed expressed concern with the passage of a recent state law requiring the certification of all interpreters for D/HH students by 2003 and about the quality of interpreting services currently available. These teachers support the higher standards for interpreters, but fear that the state is artificially limiting the supply of interpreters during a period of existing shortage.

The issue of teacher shortage is also linked to the importance of continuing professional development and support from state schools and other agencies. KSB runs an annual professional development program, and its early intervention program PREVIEW provides training for educators serving B/VI children ages 0-5. Supported in part by KSD, the KEY Program provides technical assistance and training to educators serving D/HH children ages 0-5. Also available is SHIPP (Severe Handicapped Integrated Preschool Programming), which provides an intensive 10-day training course certified by the University of Louisville for those teaching students with complex needs. The state coordinator of the KY Deaf/Blind Project is concerned about the “quick-fix coursework” which gets people out quickly but does not truly address the need.

However, even with these programs in place, B/VI and D/HH teachers interviewed repeatedly expressed the desire for more professional development opportunities in their fields. Itinerant teachers often reported spending as much time driving as teaching. Two of the seven district D/HH teachers commented that they feel professionally isolated because they work in regions outside of central Kentucky and are itinerant. One itinerant D/HH teacher in Region 8 commented that her service area is so large that she spends an hour each day driving to and from schools. It is common for itinerant teachers, especially of the blind and visually impaired, to serve students in five or six counties. Two of the district D/HH teachers noted that D/HH service providers have an annual conference, the Kentucky Educators of the Deaf and Hard of Hearing meeting at ECU in Richmond, but that many teachers do not attend because of the distance. Another district D/HH teacher noted that KSD used to bring D/HH teachers together to Danville for professional development and networking, but KSD discontinued the program. This teacher felt that that program was very valuable because it allowed D/HH teachers working in LEAs to meet with their KSD counterparts and share teaching strategies. B/VI teachers are more organized through UL, since most of them are alumni.

## SECTION X. Investment in Technology

According to expert advisor Dr. Randall, children who have a loss of vision or hearing should have access to instructional materials in a similar manner and in a similar time as their non-disabled peers. Technology has significantly altered the provision of instruction to all students. The demands of educational reform and performance accountability have increased the presence of technology in classrooms and schools. Dr. Randall states that, “as the economy moves from agriculturally based, to industrial, to information-based technology, it is critical that sensory impaired students are no longer under-educated or under-employed.”

In general, there are three major issues in educational technology: application, acquisition, and costs/maintenance. Blind and visually impaired and deaf and hard of hearing student populations need to have access to technology for success as students and as adults, but there are inordinate costs in providing technology to these students. In the area of maintenance, costs for the repair or replacement of technology hardware and software are expensive for both special needs populations.

The application needs for blind and visually impaired students tend to be in the area of access to existing software. Acquisition issues for the blind and visually impaired tend to be much more difficult because of the inordinate costs to achieve accessibility and connectivity. It has been estimated that the cost for providing accessibility and connectivity for blind and visually impaired students is approximately six times that of the regular technology provisions made for non-disabled students.

The application needs for deaf and hard of hearing students tend to be in the manipulation of communication and language. Acquisition issues for deaf and hard of hearing students tend to focus on the degree to which the software is aligned with instructional benchmarks identified within educational reform. There are few, if any, resource centers at site-based schools that have established standards for the selection of software.

The Kentucky Educational Technology System (KETS) was established in an effort to provide students in the state with equal access to technology, and to improve student’s academic achievement. Created as a part of the Kentucky Educational Reform Act of (KERA) 1990, KETS was established to provide partial funding to state schools and local school districts for technology needs such as: school networks, student workstations, teacher workstations, printers, telephones in the classroom, e-mail, Internet access, instructional and administrative servers, and related equipment. KETS also created standards for the purchase and deployment of the equipment and policies on usage. The KETS Master Plan stated that all KETS funding provided by the state must be matched “dollar for dollar” with local funds. State schools and local school districts are offered an average number of dollars per student for the year (\$18 per student for 2002), and if the schools can match the offer, they receive the entire offer amount. If, however, the schools can only match a portion of the offer, the remaining dollars go into an escrow account for up to three years. The schools are given an opportunity to match and claim those funds at a later date. Neither state schools nor LEAs can use any kind of general funds to match the offer. Both state and local funds are considered “KETS Trust Funds” and are subject to KETS policies and regulations controlling expenditures. The KETS funds cannot be used toward maintenance or upkeep of existing technology.

While LEAs can draw upon local taxing funds to meet the matching of KETS dollars, the state schools do not have similar funds from which to draw and match state dollars. The state schools must either use “receipt award” funds and grant or fundraising monies in order to match KETS

dollars. The KETS legislation does not recognize significant differences in residential student population needs, such as access to technology beyond the end of the school day or that the state schools themselves have a much smaller student enrollment count than LEAs. In summary, state schools receive proportionally less funding than is available to local public schools, when arguably these very special schools need appreciably more.

Dr. Randall notes that instructional application should be driving technology acquisition. However, during the study team's site visit in March, Dr. Randall observed that technology appeared to be primarily used for word processing activities for staff members and drill activities for students. Also, at KSD, he observed that only computer labs were being used. While labs are a cost-effective way to provide equal access to students, Dr. Randall notes that integrating technology into the delivery of instruction in the student's classroom is critical.

Although KSB provides accessible technology to its students, most of it is funded through private fundraising. A review of private donations shows that the reserve is quickly being depleted to build up the school's technology base, leaving little or no new funds to replace or maintain the technology. As recognized above, the replacement of technology is expensive, particularly since it costs, on average, six times more than what is needed for a non-disabled student. Discussions with technology staff indicate that the technology at KSB is already becoming out-dated. KSD relies mostly on receipt awards and grant awards. Administrators at KSD report that they do not have the money to complete all the work that is required for a residential facility. They have similar kinds of needs in all of the dormitory areas as are allotted by KETS for each regular classroom, so that students can have accessibility to computers 24-hours a day.

There are two components of technology for the B/VI and D/HH students. Firstly, there is accessibility of general technology, previously discussed. Secondly is assistive technology that allows student to access the curriculum. While KETS funds can be used on certain types of assistive technology, the funds are very limited for the type of costly assistive equipment that is needed by B/VI and D/HH students. KSB administrators indicate that they purchase most of their assistive technology with donated funds, as the KETS funds are insufficient to cover those needs. Administrators at KSD report they purchased items such as TDD's and Alpha Smarts text writers with KETS funds. Parents of KSB students view the technological support their children receive at KSB as vital to their ability to succeed in school and in the larger world, and parents would like to see a greater investment in technology at KSB, as well as for all blind and visually impaired students regardless of where they attend school. Two parents of KSB students noted that it is difficult to afford technology that is expensive and rapidly changing. They rely on the state schools to help provide assistive devices for their children.

In the local settings, district special education directors report that they invest a great deal of resources into assistive technology for their students, and can purchase available technology that is necessary for their students. Several district directors noted that they have purchased technology such as zoom tech computers, monocular and visual tools, software to accommodate and modify materials, tactile equipment, light boxes, and Intellitalk for B/VI students, and amplification devices, ear molds for hearing aids, sign language software, and resource books for D/HH students. Unfortunately, as one district director points out, most technology technicians are not familiar with specialized equipment such as Braille printers, so maintenance and upkeep are problematic. Parents of public school students note that they would like to see more technology programs in public schools. Interviewed parents commented that they consider knowledge of current technology and computers a necessity for their children's future.

## SECTION XI. Extended Time

There is general agreement that most students should have the same standards as those in public schools, but they may not necessarily be accomplished in the *same timeframe or at the same pace*. It may not be possible to do all—core content, enabling students to compensate for language delays and mobility needs, vocational training, etc.—on the same academic schedule as non-disabled peers.

Furthermore discussion about extended time also relates to a continuity of service for younger ages. One parent was very concerned that after her daughter turns three years old, the early intervention services will be discontinued for three months during the summer vacation. The school has already informed this parent that they are not required to provide the same services offered by the early intervention program. The mother is frustrated to see this discontinuity since her daughter has received three years of services that have been available to her daughter twelve months per year. She noted, “If we serve these kids all year long and help them correct the problem, then maybe by a certain age they’ll be out of special education and you will save money from there on... instead of having to come in every August to rebuild what they lost in those three months because nobody worked with the kids.”

The residential setting may also provide additional educational opportunities. In interviews, parents of students at KSB expressed the desire for more educational opportunities for their children during after school hours. Two of the five parents of KSB residential students wanted their students’ time used more efficiently, with independent living and non-core academic subjects, such as music, to be done after school to allow for the earlier part of the day to be dedicated to instruction in core academic content. This parent advocated that second shift house parents be trained to provide instruction in independent living skills. Another parent of a KSB residential student also advocated for the residential life program to more strongly reinforce the skills being learned during the instructional part of the day.

Two district special education directors interviewed expressed concern with the application of discipline in the dormitories, and felt that supervision could be more rigorous. One director commented, “There is no excuse for kids in the dorms not doing homework. Why can’t they (the KSD administration) motivate them? They live there!”

KSB current and former students, interviewed in focus groups and individually, expressed dissatisfaction with the quality of the third-shift staff. Three of five KSB students interviewed in a focus group, and all five KSB graduates interviewed all expressed the view that some house parents applied discipline inconsistently and “played favorites” with students.

The activities and qualifications for residential staff at the state schools indicate that there is a rich opportunity to enhance the educational experience of residential students. At both schools, residential support staff are part of the Kentucky State Classified service and the employment criteria for such positions is set by the state Cabinet for Personnel. Both KSB and KSD have two shifts of residential staff: the first shift, which supervises after-school activities from after-school until evening, and the nighttime shift, which is responsible for students’ welfare after students go to bed. At KSD, there is special attention to hiring employees with knowledge and experience working with deaf and hard of hearing children, particularly the ability to sign.

KSB has 18 house parents, divided into two shifts. There is a branch manager responsible for all residential services, including house parents, health services, recreation, and the transportation of residential students to and from home during the weekend, and supervises the nighttime staff. The

branch manager also works with the dormitory's dean of students to ensure that the instructional staff follows up as needed with residential issues, such as the independent living program, behavior plans, or transportation. Staff in the first shift tend to have more education and experience working with adolescents because part of their responsibility is supervision of students after the dismissal of school. However, both sets of house parents receive training at the beginning of each year and for the past several years the KSB administration has sent residential staff to the Kentucky Behavioral Institute, a three-day conference about children with behavioral and emotional problems. Staff receives training both in-house and at the Institute about how to develop behavior plans to help students with inappropriate behaviors or emotional problems.

The KSB residential staff works with the instructional staff to provide after-school learning opportunities, such as tutoring sessions, study hall, and a reading program that is run in cooperation with local Louisville public libraries.

KSD has a Dean of Students who oversees student life programs for the elementary, middle and high school programs as well as the night dormitories, the literacy and homework center, student health services, and athletics and recreation. A Houseparent Coordinator and a Dormitory Program Supervisor oversees the third shift of residential staff. There are 37 residential staff, 25 of whom are Student Development Supervisors, Specialists or Assistants and 12 house parents. Student Development staff work the second shift, after school and before curfew, when house parents become responsible for KSD's residential students.

The Student Development positions were created in 1995-96, and have greater educational and professional requirements than the position of house parent. A Student Development Supervisor must have a Master's degree in an education field, and a Student Development Specialist must have either a Bachelor's degree with one year experience working with children or four years of work experience with two years of university training. The Student Development Assistant position requires at least one year of experience working with children. All residential staff is expected to know how to manually communicate with deaf and hard of hearing children.

The Student Development staff is required to have greater educational and professional experiences because they are responsible for a variety of after-school educational activities and programs, such as the Homework Center and guest speaker visits. The Student Life staff also work with students to prepare them for the annual state CATS assessments through the CATS High-Q, a competitive academic event similar to the Academic Bowl.

KSD residential staff receives training when they are first hired, and then participate in the annual Student Life Summer Institute, which started in 1997. Residential staff has also participated in a variety of professional development trainings, ranging from First Aid to Crisis Management and Prevention to the Kentucky Behavior Institute.

## Chapter 5: Recommendations

This chapter presents our recommendations, which have been developed within the context of the full set of research questions posed for this study. The primary purpose of the study was a comprehensive review of the state's Schools for the Deaf and Blind. The scope of the study includes such far-reaching questions as, "What types of programs and services will be required for hearing and visually impaired students over the next twenty years to ensure they reach proficiency? What array of services and educational environments will be needed? What resources will be necessary to support their learning needs?"

Questions such as these necessitate looking beyond what the two schools are currently providing for the students they are serving to the consideration of how these students were selected for admission, why they are being served there, for what specific reasons, whether this population is most appropriate, and what is recommended for continuance into the future.

These issues broaden the scope of the study to consider the most appropriate sets of service configurations for B/VI and D/HH students across the state. This is especially important because one primary reason cited for students attending the two schools was a lack of appropriate and suitable services in their home school districts. If appropriate high quality services could be developed as viable alternatives statewide, the continuum of services for children who are B/VI and D/HH across the state could be extended to include options other than just itinerant or state school services. (Note that this lack of viable alternatives was found in some, but not all, regions of the state.) A greater continuum of services might allow a broader range of B/VI and D/HH students to be served appropriately in their local communities and to spend more time with their families. This would allow for a sharper definition of the mission of the two schools, the types of students they are designed to serve, the exact purpose for which these students are attending the schools and for what period of their lives. It might also increase the extent to which students most in need of highly specialized and concentrated B/VI and D/HH services are allowed full access to the special resources available only at the state schools. In addition to allowing for a clearer definition of the role of the schools, this broader range of services could considerably benefit B/VI and D/HH students statewide, including those whose primary category of disability is multiple disabilities or deaf-blindness.

The provision of high quality services to B/VI and D/HH students statewide, irrespective of where students live and their primary category of disability, is an important step towards reaching the broader state objective of ensuring that *all* students will be able to meet the education goals set by the state. Perhaps even more fundamental in meeting this goal is developing a more comprehensive system of strategic and seamless early intervention services for B/VI and D/HH infants and toddlers and their families. For too many students in the state, it appears that this critical window of opportunity for language and sensory development is being missed. As a result, far too many children enter school with serious learning deficits. It is not in the best interests of children, their families, and the state to allow developmental delays to form during years in which early intervention is likely to be most effective and then attempting to compensate for these delays at a later time when it is more difficult to do so. It is for this reason that the first set of recommendations for this study focuses on enhanced statewide early intervention.

To summarize the overarching theme of our recommendations, we have come to the conclusion that while the option of residential services for B/VI and D/HH children is an important element on the continuum of services, the roles of the state schools within the context of this continuum must be more fully clarified. At the same time their roles should be extended to serve more fully as a resource for all B/VI and D/HH students in the state. In addition, the services for B/VI and

D/HH children must be broadened to start as early as possible, to be as family- and home community-centered to the greatest extent possible, within the context of the educational needs of the child. Our recommendations recognize an ongoing need for the KSB and KSD, but at the same time some fundamental alteration of their structure, roles, scope of activities, and philosophies is needed to meet their full potential as resources to all B/VI and D/HH children statewide.

## **SECTION 1. Early Identification and Intervention**

Research has consistently supported the need for early intervention for B/VI and D/HH children. Recognized at the federal level through Part C of the Individuals with Disabilities Education Act (IDEA), early intervention is implemented in Kentucky through a program called First Steps. This program, through its network of direct service providers, supports early intervention services for many B/VI and D/HH infants and toddlers across the state. As an example, one of its providers, the VIPS program based in Louisville, is a national model of high quality early intervention services for B/VI infants. However, this program is not able fully to reach young B/VI children statewide and comparable service provisions tailored for young D/HH children are not available statewide.

Although there are a number of private and public services available in the state, as described in the previous chapter, the overall early intervention system for B/VI and D/HH children and their families appears disjointed, and hence not effective in serving *all* families with these children. The system for the identification and provision of early intervention services need to be streamlined and made more consistent across the state. Additionally, the task is to identify the components of a high quality intervention program and how it should be administered and operationalized across the state. Some of the recommended elements include:

- Uniform screening should occur throughout the state for hearing loss and vision impairments in newborns.
- When a screening reveals a potential problem, an appointment for further evaluation should be made for the family at the time of discharge from the hospital.
- Information should be given to First Steps to allow follow-up with the family, and the family should receive information about First Steps.
- First Steps should contact VIPS regarding any infant and toddler found with a vision impairment in the state.
- Funding should be provided to allow VIPS to work in conjunction with KSB to establish a network of direct service providers, parent training, and support statewide.
- A full network of direct service providers, parent training, and support should be established statewide for D/HH infants and toddlers and their families. Leadership for the formation of this network should be provided by First Steps in close conjunction with KDE and the leadership of KSD. It should also draw heavily on existing regional resources available in the state as identified in Chapter 4. First Steps would continue to fund all direct services resulting from this network.
- This network of services for D/HH infants and toddlers should be overseen by one of the predominant extant public or private service providers in the state and should be

governed by a board with full representation of the alternative approaches to language acquisition available to D/HH children.

- All professionals providing direct services to B/VI and D/HH children and their families should have appropriate training regarding the needs of these populations and how to best serve them.
- B/VI and D/HH children and their families should begin receiving services as soon as possible after identification.
- These services should seamlessly transition, without a break in service, as these children become three years of age, at which time they leave the early intervention system and transition to services provided by the state education system.

## SECTION II. Family Involvement

To achieve high academic standards and generally maximize education outcomes for all students, it is in the state's best interest to create vehicles for, and remove obstacles to, direct and full family involvement throughout the child's education. This is especially true for young children, even more true for young children with disabilities, and is absolutely essential for B/VI and D/HH infants and toddlers. This need is clearly recognized in the federal early intervention legislation, Part C of the IDEA, which requires an Individualized Family Service Plan (IFSP) for infants and toddlers with disabilities, rather than an individualized education plan (IEP), which tends to just focus on the needs of the student.

Thus, early intervention and family involvement are intimately connected. When both are present, they mutually reinforce one another, while their absence can be detrimental. We recommend greater emphasis on family- as well as child-centered services. This should go beyond allowing the involvement of the family in the child's development and education to fully *enable* them to be involved, to make informed decisions, and to play a healthy, positive role in their child's life. Structures and procedures that place the burden on the family to participate must be modified, such as the referral process for early intervention programs. The onus must be upon the state, the doctors, the schools, the teachers, and the service providers. To achieve the goal of high student proficiency for B/VI and D/HH students, the state must take full advantage of the considerable potential of family members as educators and full partners.

In addition, family oriented services must be on-going and not cease at the time the child enters school. Continuing parental support, education, and training should be provided throughout the child's education. For instance, one important resource for B/VI children and their families is the Hadley School of Illinois, which provides distance learning services for B/VI children and their families. This resource could complement and augment other parent support services in Kentucky, and would be especially beneficial in rural areas of the state.

This recommendation regarding family involvement and the prior recommendation regarding the importance of quality statewide early intervention services lead to the next recommendation regarding the need for some type of cooperative services among local school districts to create a broader range of options for B/VI and D/HH children.

The link between the importance of family involvement and the need for a broader set of high quality program alternatives for B/VI and D/HH children across the state is well summarized by

Dr. Philip Hatlen, an advisor to this project and the Superintendent of the Texas School for the Blind and Visually Impaired. He writes:

*I have taken the position that blind and visually impaired students in Texas should be provided appropriate educational services in their local schools, in their home communities. They should be able to live at home with their families, and receive an education that is as good as that provided to their sighted age-mates. In the few cases where this might not be possible, the school for the blind is ready and eager to serve students. (Hatlen, 2000)*

While this perspective must be altered somewhat in consideration of the needs of D/HH children, many of the underlying principles hold. The state's overall system of educational options for B/VI and D/HH students should maximize opportunities for strong linkages among these students, their families, and home communities. Such a system can only come about if strong service alternatives exist throughout the state. While it would be prohibitively costly and inefficient to try to establish strong services for B/VI and D/HH children in every school district in the state, more viable service options could be created for B/VI and D/HH students wherever they live through the formation of some form of cooperative services across districts. Cooperative services are vital, not just to foster the greatest possible linkages among children, their parents, and home communities, but also because no service model, including the current one, envisions all B/VI and D/HH children, and especially not very young B/VI and D/HH children, attending the state schools. No matter how inclusive the state schools become—and we believe they should become less inclusive and more targeted toward students with the greatest needs—strengthened local service networks are needed for B/VI and D/HH children not attending the two state schools.

### **SECTION III. Extending High Quality Local Options through Cooperative Structures**

In order to have effective early intervention programs, increased family involvement, and viable services for children with B/VI and D/HH of all ages, appropriate service alternatives must be brought closer to where these children reside. To their credit, KSB and KSD have already acknowledged the importance of this need by establishing regional alternatives in some sections of the state. Such programs can be the means of providing services in a more local setting, enabling families to support their children in the home.

We propose that such local cooperative programs be further developed to possibly provide service options for all ages, birth to 21. In short, these programs will focus on bringing services to the students at an early age within a family setting and continue as appropriate through the school years, perhaps in center-based programs.

It is important to emphasize that this recommendation does not suggest that regional programs be established in lieu of the two schools. This recommendation is made to expand the continuum of services available to B/VI and D/HH children, not to contract it. It is also important to note that we are not suggesting that the types of services offered in each region should mirror one another. The regions of Kentucky are very different in terms of overall population, density of population, and the availability of qualified service providers. While the last of these factors could, and should, be affected by the state, the first two cannot. For this reason, while a center-based program might be a viable option in some areas, sparse population may render it as not a viable option in others. At

the same time, as pointed out by an expert advisor to this project, Dr. Robert Davila of the National Technical Institute for the Deaf, “the type of services, their quality and scope, should mirror each other in the regions. A sparsely populated setting does not, and should not, determine placement.”

The need for some type of a regionalized service system for B/VI and D/HH students was heard in many of our interviews with parents and local service providers. However, this type of general recommendation generates a number of related questions. What are the components of a high quality cooperative program? How should a program be structured, administered, and staffed appropriately, particularly given the service provider shortage? Should the programs be situated in satellite/magnet schools with career clusters that might be appropriate for B/VI and D/HH children? Should the programs provide direct services to the students, place consultants in the field, or both? There is also a need to identify and support appropriate transportation services.

As described above, we believe that these regional alternatives should vary from one locale to another based on local needs and capabilities. We also believe that expertise in hearing and vision loss will need to be made available to all regions of the state if this is to successfully occur, as described below. In addition, the current funding system for students with disabilities will need to be altered to better allow for some of the supplemental costs associated with sending a child to a state school to stay with the child when they remain in their home communities to receive services.

We believe that the current district cooperative structure found across the state may provide the best vehicle for creating regional service options. The fact that the boards of the cooperatives are comprised of the superintendents of the participating districts seems to make sense in regard to the delivery of instructional services.

Thus, we believe that the cooperatives should decide among themselves about the configuration of services to best meet the needs of their B/VI and D/HH children. If the supplemental funding for B/VI and D/HH students is redesigned to better follow the child, more resources should be available locally to allow this to happen. Further recommendations will be made about dispersing a wider array of qualified B/VI and D/HH service providers across the state. We also make recommendations regarding KSB and KSD as state resources. As such, their general expertise could be made available to the regions. In regard to direct services, cooperatives might contract with the two schools, if so desired by both parties, or may opt to employ the needed resources and provide these services themselves.

Overall responsibility for ensuring high quality instructional services for all B/VI and D/HH students wherever they live in the state will continue to reside with KDE, as it does now. Below, however, we make further recommendations about bolstering the capacity of the KDE to oversee and ensure quality services statewide for B/VI and D/HH students. As the state further conceptualizes this organization, it will be important to evolve into a single public school system, rather than a system of schools. The new emphasis should be placed on best meeting the needs of children, wherever they reside, rather than maintaining a competing set of educational alternatives.

#### **SECTION IV. KSB and KSD as Statewide Resources**

KSB and KSD have been designated as statewide resources with responsibility for the provision of appropriate services throughout the state. As described in Chapter Three, both KSB and KSD are mandated by House Bill 237 (1998) to serve as statewide educational resource centers on

blindness and deafness, respectively. However, this is a relatively new charge for these schools, and as yet, not fully defined.

In this area as well, the writing of Dr. Hatlen provides guidance to help clarify what might be meant by a statewide resource, as it refers to his own school:

*(We) are committed to providing services, as needed, to all blind and visually impaired students in the state. For the more than 6,500 students in Texas that are identified as visually impaired, (we) must provide a variety of services. This is a responsibility we assume when we consider ourselves the “hub” of education for visually impaired and blind students in the state. (Hatlen, 2000).*

Dr. Hatlen goes on to describe eight sets of on-campus and nine off-campus services. This clear delineation of responsibility for all B/VI and D/HH students in the state and the types of services the two schools will provide statewide, is the type of proactivity that will be needed in identifying problematic areas, tracking B/VI and D/HH children, anticipating and assessing their needs, and assisting the state to ensure that their needs are met—whether it is in the local school, a regional program, or on their campuses. This would allow these schools to become advocates for all parents of B/VI and D/HH children within the system, regardless of philosophical approaches to services (i.e., residential, inclusion, language). In addition, KSB and KSD should work in conjunction with First Steps and KDE to maintain databases of all B/VI and D/HH children in the state, all B/VI and D/HH teachers (as KSB now does, in the case of B/VI), and longitudinal transition rates for all B/VI and D/HH public school graduates.

With this redefined role, consideration needs to be given to the appropriate administrative structure and organization of the state schools, which we describe below.

## **SECTION V. Clearer Philosophy of Service and Purpose for State Schools**

The roles of KSB and KSD must be redefined within the context of the following questions:

- Who goes to the state schools? Is the decision primarily the parents’ or primarily based upon student need?
- For what purpose do students attend KSB and KSD?
- For what duration would students normally be expected to attend the state schools?
- Under what circumstances and for what duration should students be in full-time residence at the schools? Should these criteria differ for remote as opposed to local students?

We pose these questions because interviews with district directors and state school staff indicate that the decision to place children at the state schools appears to lie almost exclusively with parents. As a result, these decisions may not always be entirely need-driven nor based on whether the school district can provide appropriate services for the child. While supporting the concept of a continuum of placement options, and recognizing the importance of parental input, situations in which placement at KSD and KSB may or may not be appropriate must be more fully considered. Based on our interview findings and the data shown in the previous chapter, we find the criteria for determining admission to the state schools to be vague.

We also see evidence that the considerable resources available at the state schools are currently less likely to be made available to students with multiple disabilities, and those with deaf-blindness than what generally appears to be the case across the nation. This raises questions as to what type of students the schools should be targeted to serve, for what purpose, and for what duration.

For example, should the school attempt to serve children of all ages? Is there an age that is too young to reside at a state school? In attempting to target services for all ages, the schools limit their abilities to provide the specialized services that some age groups may require. For example, KSD lacks independent living services. The Texas School for the Blind and Visually Impaired, for example, generally does not admit children for residential services below the age of eight.

Another aspect of the schools' philosophy and purpose is whether they are in competition with other schools throughout the state, or rather are a resource along the continuum of services. Although we would expect the latter to be the appropriate goal, local administrators and parents sometimes cited competition as a concern. In addition, what should be the prevailing philosophy of the school in regard to mainstreaming children in regular schools close to the state schools or in returning them to their home communities when they are ready to transition back? We believe that successful mainstreaming and being able to successfully return students to their home communities (when and where appropriate supports await them) should be considered a desired outcome for the two schools when appropriate to the needs of the student as well as an indicator of a successful program. As described by Dr. Kenneth Randall, Superintendent of the Arizona School for the Deaf and Blind, "Program success should be viewed as student progress."

As described by Dr. Hatlen (2000), "If there are areas of learning that might be better achieved at the school for the blind, we are prepared to provide intensive, specific, short-term programs." While what is short or long term should be dependent on the needs of the child, the philosophy that the child comes to the school for a specific purpose and that when this purpose or specific educational objective is met the child should be prepared to return to the home community is important. Of course, this is contingent on the availability of appropriate services in the community. It may seem like a subtle distinction of philosophy, but it can also be seen as pivotal in terms of defining an appropriate mission for the school. Children are placed in the least restrictive environment along a continuum of placement alternatives based on their needs. When the student's needs that resulted in a placement at a state school are met, it is appropriate that they return home. Successful transition to the home community, when appropriate, should be a prominent indicator of success for KSB and KSD.

While the residential setting may be the least restrictive and appropriate placement for some students, some underlying principles for guiding this decision would be helpful. Should students whose families live in the local community be residents and if so, for what reasons, and under what circumstances? Are residential settings appropriate for all ages? By adding high quality local services as options, it is possible for younger children to be kept closer to their families, reinforcing family involvement and interaction.

While the philosophy of purpose and service may differ somewhat for KSB compared to KSD, the emphasis on family and the ability to realize success in the local community, as well as in the state school, must be emphasized. Interviews conducted in conjunction with this study revealed several critical incidents in which students who successfully transitioned from KSD were looked upon and treated as having "deserted" the school. Such perceptions suggest that successful transition may not be valued or considered a valid educational objective. The philosophical orientation regarding the role of the two schools in relation to their students and students'

placement within their home communities must be more clearly drawn and communicated to all staff if timely and successful transition is to be realized for all students for whom it is appropriate.

## **SECTION VI. Children with Complex Needs**

We recommend that one of the two schools develop specialized services for deaf-blind students. It makes little sense that the two state centers of specialized service for students with visual impairments and hearing loss do not have specific services designed to serve this population.

In addition, as the needs of the student population at each state school become generally more complex, the current model of services and teacher credentials may not be appropriate. If it is agreed that the two schools should serve a more complex and diverse population, a careful evaluation will be required of the skills and services necessary to address the needs of these students, and how to provide them. Approximately 15 percent of all students at KSD are classified as having multiple disabilities (MD), while nearly 32 percent of all KSB students have MD. Teachers' skill-sets to educate this evolving state school population need to include expertise in disabilities in addition to B/VI and D/HH given the significant percentage of students with multiple disabilities. Additionally, increased mental health services may be necessary.

As described above, a clearer philosophy and statement of purpose for the school, as well as the charge to assist in meeting the needs of all B/VI and D/HH students in the state, may further increase the numbers of students with complex needs enrolled at these schools. There also may be some need to clarify current state procedures for reporting students with "multiple disabilities." In reviewing the statistics presented from the two schools, both Dr. Randall and Dr. Hatlan noted that most other schools for the blind or deaf report having significantly higher enrollments of students with complex learning needs than are found at KSB and KSD. This observation also appears supported by the national data on the placement of children with multiple disabilities and deaf-blindness shown in Chapter Four.

## **SECTION VII. B/VI and D/HH Service Provider Shortage**

The shortage of service providers is not unique to Kentucky. It is recognized as a problem throughout the nation, particularly with the pending retirement of much of the workforce. An important issue with which to contend is the geographic disproportion of certified teachers in the state. In other words, it is an issue of both supply and distribution. It is no surprise that urban areas have higher numbers of providers due to larger student populations. In addition, rural areas may be less appealing for service providers. As seen from the student:teacher ratios in Chapter 4, Region 1 and 7 exhibit relatively high numbers of B/VI and D/HH students per service provider.

Given national trends, it seems unrealistic for Kentucky to look to other states to fill this already severe provider shortage in some regions, which is increasing due to aging. Kentucky will need to bolster what it is currently doing in regard to training these professionals, retaining them in the field, and attracting them to areas in which shortages are the greatest.

These circumstances suggest that this is not the best time to be raising standards for some of these professions, e.g. as is being done for sign language interpreters with the state's new certification requirement. While high standards are always desirable, and may especially be needed to raise the quality of interpretation services throughout the state, these measures cannot be taken with the idea that they are improving services for all children without considering the likely impact on areas of the state already experiencing dire shortages. It seems likely that ameliorating these

shortages will only be accomplished through a combination of incentives and other steps to identify likely candidates, to make it as easy as possible for these candidates to obtain the training they need, and to provide fiscal incentives to keep them in the field (especially in historically difficult-to-staff locations). Ease of meeting the training needs of these professions could be accomplished by bringing the training to the personnel, rather than forcing them to come to the training. As an example, increased use of university extension courses may be needed. Once good candidates for training are identified, incentives may need to be added to encourage them to actually obtain training. One possibility is to pay stipends with the requirement that recipients provide services for B/VI and D/HH students for a specified number of years.

Beyond this, providers with service credentials for serving B/VI and D/HH students may need to be paid a stipend or receive some form of supplemental pay. This is already being accomplished for some employees of the two state schools, who are paid Jefferson County wages regardless of where they are located. While this may create tension with local teachers, in fact this program may need to be expanded to all teachers with appropriate B/VI and D/HH credentials to encourage them to continue to work in this field and also to encourage new trainees to become teachers of B/VI and D/HH students.

## **SECTION VIII. Investment in Technology and Vocational Training Programs**

We propose that the state make increased, or redirected, investment in technology and vocational training programs. Sensory-impaired students rely heavily upon new, often expensive, technology, and the current KETS program does not recognize the unique and costly needs of these two special populations. While KETS is a well-intended program, it cannot be relied upon to be the only source of funding for technology at KSB and KSD. With allocations of \$18 per student for 2002, the state schools—with their small enrollments and great demand for rapidly changing, expensive technology—face a great challenge. We recommended that supplemental funds be made available to the state schools to bolster and maintain technology for their special needs populations.

In regards to vocational training programs, Kentucky Department of Education data on the transition for state school graduates vary substantially by year. However, the nine-year average for both schools shows that approximately 50 percent of graduates transition successfully. Unfortunately, the downfall to these data is that they are collected at a single point in time, November 1 following graduation. There is no follow-up data collection in place to track these students over time. We recommend that the graduates be tracked at the 6-month, 2- and 5-year point to provide for a more accurate understanding of transition rates.

The number of unsuccessful graduates and high unemployment rates are concerns at both schools. Schools need to equip students with the vocational skills necessary to compete in the workforce. This requires a consideration of how other goals should relate to the academic achievement goals for B/VI and D/HH students—for example, living and employment success following school completion. We do not endorse different academic standards for these children, but must recognize that they may be leaving the school context without the skills necessary to be successful. In the push towards higher academic scores, the emphasis and investment in vocational programs may be downsized. We call for a renewed look at the need for high quality vocational programs and for further support of programs designed to assist B/VI and D/HH students in transitioning to adulthood. We suggest that each state school have a job coach and establish strong ties with the state's Community Based Work Transition Project.

## **SECTION IX. Need for Extended Curriculum and Extended time**

The learning requirements for B/VI and D/HH students clearly exceed those of their fully sighted and hearing counterparts. For example, students with severe B/VI must learn to read tactually, have added challenges in subjects with strong visual components such as geometry and geography, and require supplemental training in areas such as orientation and mobility. Among other challenges, deaf and hard of hearing students must learn facility with reading, writing, and sometimes speaking English, even though their primary mode of communication may be in another language (i.e., American Sign Language). In addition, supplemental living, vocational, and socialization skills training for B/VI and D/HH children is often needed.

There is also the question of what criteria for success should be used for B/VI and D/HH students. There is general agreement that these students should be held to the same standards as those in public schools, but they may not necessarily be accomplished in the *same timeframe or at the same pace*. In addition, if success in life is the goal, as it should be, serious consideration needs to be given to broadening these criteria. For example, if we say that geometry, orientation and mobility, life skills, and vocational training are all important for a B/VI child, but we only measure and hold schools accountable for their test scores in a few academic areas, we may be emphasizing one important skill at the expense of others that could be equally, if not more important, to successful transition into adult life.

Recognizing the supplemental learning needs of these students and the need to hold them and their schools to a broader range of education objectives, an extended-academic year, extended day, or additional years of public schooling options must be seriously considered. It seems unrealistic to expect B/VI and D/HH students to meet all core and extended curriculum requirements on the same academic schedule as their non-disabled peers. In addition, given the heightened academic and other achievement goals for B/VI and D/HH students, the allocation of time spent in class for core academic subjects vis a vis those spent on related services, and on sports and social activities should be carefully considered and more closely specified.

## **SECTION X. An Appropriate Administrative Structure for Statewide Services for B/VI and D/HH Children**

It is recommended that a director overseeing the services for all B/VI and D/HH students statewide, ages birth to 21, is needed to provide guidance to KSB and KSD in regard to the added responsibilities and redefined roles described above, and to fortify the responsibility of the KDE to ensuring high quality services to B/VI and D/HH children in all regions of the state. This person, who would report directly to the Associate Commissioner, Office of Special Instructional Services within the KDE, would have overall responsibility for all services for B/VI and D/HH children and would work with the schools to explore fully what support activities currently housed there (i.e., business functions, physical plant maintenance, personnel, transportation services) might best be consolidated. Overall, however, this position would not be an administrator of programs, but would deal with high-level policy, legislative funding, oversight, accountability, and direction. This new director position should also free up the two schools to provide instructional leadership and serve as statewide resources for all B/VI and D/HH students. The Director would also work closely with the two schools to fully empower them, as well as provide oversight, to meet the new statewide vision for B/VI and D/HH students.

The roles of the instructional leaders of KSB and KSD as a resource and advocate for every B/VI and D/HH student in the state would be bolstered. As such, they should work directly with the

new Director of B/VI and D/HH services regarding the establishment of regional B/VI and D/HH service configurations throughout the state. They should be seen as integral to the creation of a seamless set and full continuum of services. In this broader capacity, they should be indifferent to the placement of an individual B/VI and D/HH child other than that this placement is determined by the needs of the child. When children come to the state schools, the reasons should be clear and the goals well understood. The success of the school should be measured by the degree to which these goals are met and by preparing children for successful transition back to their home communities and adult life. The instructional leaders at the two schools should also be empowered to advocate for appropriate services being available to students locally as they transition home. In regard to student achievement, they should be placed in a position to affect, and to have some responsibility for, the academic outcomes of all B/VI and D/HH students across the state.

The establishment of this position does not imply a desire to combine the schools. Rather, the goal is to create a structure that will tie the schools more closely to the KDE and to each other, to improve the quality and comprehensiveness of infant and toddler and school-age services, to bolster current efforts toward the provision of regional services, and to provide a clear context for establishing the role of the two schools as statewide resources.

## **SECTION XI. State Funding for B/VI and D/HH Students Should be Revised to be Placement Neutral**

In some instances, the current special education funding system for the state may be creating fiscal incentives for LEAs to send B/VI and D/HH children to the state schools, discouraging LEAs from forming more cooperative services locally, and seriously under funding some children who are being served in their local communities. Under the state weighted pupil funding system, children with low incidence disabilities receive the same base level funding as all students as well as a supplemental weighting factor of 2.35. Given the base funding level in the current year of \$3,066, a child with a low incidence disability such as deafness or blindness generates 3.35 times base funding of \$3,066, equaling \$10,271 of funding for the current school year.

A national study of special education spending that has just been released shows an average expenditure across the nation for all special education children of \$12,474. (Chambers, Parrish, and Harr, 2002) Average spending estimates by category of disability have not yet been published. However, given the fact that the majority of special education students are in relatively high incidence lower cost categories such as Specific Learning Disability and Speech and Language Impairment, soon to be released national spending estimates for B/VI and D/HH children are likely to be considerably higher than this overall average. As an example, the expenditure estimates in this report show average spending for day students at KSB and KSD to be about \$27,000 and \$23,000, respectively.

Given these estimates, the revenues that children with primary categories of disability of HI, VI, MD, and DB generate for local districts appear low. However, while these revenue amounts apply to all low incidence children, irrespective of need, the spending amounts shown above are averages. Expenditures for some of the children included in this average are much higher than others. Overall, we know from prior national analyses of this type that the amount of variation in spending on children within disabilities is greater than the averages across disabilities.

We do not have an estimate, or know the range of variation, of spending for B/VI and D/HH children served in local schools in Kentucky. However, in relation to the average revenues

districts receive if they serve these children themselves (\$10,271), the state funds children at the two state schools at a rate of about \$25,000 for day students and about \$43,000 for residential students. If a student's needs are sufficiently complex to require \$25,000 per year in services, a local district can either send the child to the state school at no cost or attempt to provide these services locally. If they choose to provide services locally but attempt to limit the cost of services to the amount of support provided by that state, the services will be woefully inadequate. On the other hand, providing more complete services has the potential of providing a substantial drain on other programs at a local cost in the range of \$15,000 to \$25,000 per year, as compared to revenues of about \$10,000.

In addition, the cost estimates of \$25,000 to \$43,000 for sending a child to the state school are low. They do not include what are often the substantial costs of transportation, which are initially borne by districts, but then reimbursed by the state.

Some school districts reported that they could provide very solid programs for low incidence populations based on the current levels of funding available from the state, \$10,271 per low incidence student. As described by the special education director for Jefferson County, "Our philosophy is to keep our kids in the district. We have lots of certified staff and lots of options available." However, few of the smaller districts of the state can make such claims. This emphasizes the importance of economies of scale and further reinforces the importance of forming collaborative services to allow the addition of local high quality alternatives. An example of an effort of this type is found in the Northern Kentucky Cooperative, which is provided in conjunction with KSD. As described by the regional director, they "are charting new ground." Currently, they have a center-based program, which projections suggest could be maintained until 5<sup>th</sup> grade. He also points out, however, that they are located in a very compact area, with a highly sophisticated transportation system, and that this type of cooperative program may not be easily duplicated in other parts of the state.

The transferability of a program of this type would be more viable, however, if the funds needed to appropriately serve B/VI and D/HH children were better able to follow them to their most appropriate placement. This will help assure that appropriate services across the continuum can be developed for these students statewide and that placement decisions will be increasingly governed by the needs of the child. Several options for achieving this are for the state 1) to add an additional, higher weight to the current funding system for very low incidence high cost children, 2) to provide additional funds to the state schools to work more closely with and contribute resources to collaboratives interested in creating local program options, or perhaps 3) apply some form of funding adjustment to local districts in sparsely populated areas.

## **SECTION XII. Alterations/Disposition of Physical Plant**

A general observation regarding the physical plant at KSD and KSB is that both sites have excess capacity. It appears that both schools had buildings constructed to serve a student body composition somewhat different than current enrollment. Changes in student body composition, demographics, and parental expectations have clearly altered the utilization of the buildings for the current, as well as the future, roles of the schools.

KSB appears to have many "state of the art" facilities that do not currently seem to require extensive renovation. However, alteration of facility usage should be consistent with the anticipated role of the school. Consideration should be given to the potential consolidation of

space to provide for the needs of the current, site-based enrollment, as well as the demands being placed upon the school to serve as a resource center for the state.

While both sites appear to have excess capacity. KSD has a unique set of challenges. The KSD campus is divided by Second Street. On the east side of this street is an expansive secondary school instructional facility that is currently closed due to mold and several residence facilities that need renovation if they are to be utilized. This side of the campus also has a fairly extensive instructional facility originally constructed to serve children with more complex multiple disabilities. This building is virtually unused for instructional purposes, but does house secondary school girls in downstairs rooms due the closure of the residential facilities described above. In addition, one of the buildings on this side of the road houses an alternative school, which is run by Boyle County and has little connection to KSD.

On the west side of the street is the original school (Jacobs Hall), which predates the Civil War and clearly needs continued maintenance by the state as a historic structure. Currently this expansive building serves as a central administrative office for the campus, but actually houses less than three full-time equivalent employees. The elementary school, a gym, and several obsolete buildings are also located on this side of Second Street.

The elementary school provides both residential and instructional space for students. In the opinion of the study team, the residential facilities at this school are unsuitable for young children (or any other age for that matter). The residential wing of this building and the rooms are barracks-like, rather than home-like, with about eight beds in a room and a desk in the middle. The residence appears maintained more by a warden than a care giver. During site visits, few to no toys or personal items were in evidence, and almost nothing on the walls or anything else about the rooms would suggest that they constitute living quarters for young children. If young children are to reside on campus, we strongly recommend that suitable, home-like housing be constructed. We recommend that the state consider visiting Challenger School, outside Laramie, Wyoming, a residential school for D/HH children visited by the study team for another project. We believe that this school provides a perfect model of the kind of setting in which almost any parent would be comfortable having their child reside.

Overall, the campus seriously suffers from the lack of a clear vision and plan for the physical plant of the school. The amount of space clearly exceeds what is needed or economical to maintain. We believe that the state should determine what is needed, maintain this well, and tear down the rest or convert it to other uses.

Based on the vision for KSD described in this report, we recommend the following:

Because the overall grounds and building space well exceeds that needed by current, and anticipated, enrollment at the school, and because the existing layout divides the limited number of children enrolled in the school by a moderately busy road, we recommend consolidation of the campus on the east side of Second Street. This consolidation would move the children in closer proximity to each other and such centralized services such as food, and would move the elementary children away from this road. It also allows for the fact that many of the buildings on the east side of the street are less suitable for continued use by the school, and that the space and the buildings that are salvageable are likely to be of interest to the neighboring hospital. For example, there may be interest in converting the current elementary school to alternative use, while the gymnasium and some of the other storage buildings on this side of the street (Old Lee Hall, Cowan Hall, and Rogers Hall) should be removed. Of course, the original school is of

substantial historic value and should be maintained and used in accordance with this status by some entity other than KSD.

Based on more technical than educational considerations, we also recommend that the current maintenance building, which houses the boiler room, be torn down. As a \$1 million project restoring steam lines has just been completed, however, new construction would be needed to house a new boiler room. In addition, if the other buildings mentioned above were removed, some substitute storage space for the school would be needed. Given the status of the current storage buildings, however, it is likely to be less expensive over time to replace existing structures badly in need of repair with a new smaller storage structure.

On the east side of the Second Street, we recommend that the high school be renovated and restored to instructional use for middle and high school students, while the building they are currently using could be converted to elementary school use. The currently empty residential structures should be renovated and converted to the extent possible to family-style, residential use. This would allow the girls to be moved from temporary housing in this building, which was originally built to house children with multiple disabilities. The disposition of this building may best be determined based on the extent that the mission of KSD is broadened to increasingly house and serve children with multiple disabilities that include serious hearing loss. It appears that many state residential schools are increasingly serving students with more complex needs. As discussed in Chapter Four, this is a population that the state appears much less likely to serve in a residential setting than other states. KSD is also serving children with more complex needs than it did five years ago. If this trend continues, and if the school increasingly serves the most complex children with hearing loss into the future, this building may be well suited to this purpose and should be retained, or modified as needed, to meet the current requirements of this population.

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