

Report on

Evaluation of Educational Services to Students
with Hearing and Visual Impairments

Session Law 2007-323, Section 10.20.(a) and (b)

April 15, 2008

Office of Education Services
Dwight Pearson, Ph. D., Superintendent
NC Department of Health and Human Services
Dempsey Benton, Secretary

Exceptional Children Division
Mary N. Watson, Director
NC Department of Public Instruction
June S. Atkinson, Ed.D., State Superintendent

TABLE OF CONTENTS

Executive Summary	page 1
Professional Development	page 3
Curriculum	page 15
Assistive Technology	page 20
Conclusions and Recommendations	page 22
Appendix: Report from the University of North Carolina at Chapel Hill School of Government	page 24

Executive Summary

In 2006, the General Assembly directed its Fiscal Research Division to complete a Zero-Based Budget analysis of five state divisions. Among the divisions chosen was the Office of Education Services in the Department of Health and Human Services. The analysis focused on the three residential schools, managed by the Office of Education Services, serving students who have hearing and/or visual impairments. The Fiscal Research report suggested moving the governance of the residential schools for the deaf and blind to the North Carolina Department of Public Instruction and developing a plan to reduce institutional capacity in those schools.

Both the Department of Health and Human Services and the Department of Public Instruction were given the opportunity to respond to the report from the Fiscal Research Division. One of the recommendations by the Department of Health and Human Services was that further study be conducted to evaluate the entire state delivery model for serving students with visual impairments and those who are deaf or hard of hearing. Subsequent legislation reflected this recommendation and included provisions requiring a review of "the training needs of professional staff, access to assistive technology and curriculum content."

Session Law 2007-323, Section 10.20 directed the Department of Health and Human Services and the Department of Public Instruction to collaborate in an evaluation of the service delivery model for deaf and blind students, including special needs of the students resulting from additional disabilities other than hearing and visual impairments, the training needs of professional staff, access to assistive technology, and curriculum content. The legislation further required the Departments to determine the appropriate administrative management of the State's schools for the deaf and blind and develop a plan to reduce institutional capacity. The Office of Education Services and the Exceptional Children Division in the Department of Public Instruction were charged with this task.

Staff from the Office of Education Services and the Exceptional Children Division worked together to research and summarize the information gathered on professional development, curriculum content, and assistive technology. However, an in-depth analysis of the topics is needed to determine where all the resources are housed, how they are used, and the emerging technologies that need to be made available to hearing and visually impaired students in North Carolina.

To accomplish the evaluation of the service delivery model for deaf and blind students, the two Offices established the following framework:

- (1) A neutral third party would be selected to conduct the evaluation to ensure that an unbiased review of the service continua for hearing and visually impaired students would be conducted in the time allotted.
- (2) A steering committee, consisting of representation from both Offices would be established to guide the evaluation process.

The Office of Education Services and the Exceptional Children Division contracted with the School of Government at the University of North Carolina at Chapel Hill to conduct the evaluation. After execution of a contract, the necessary research for the project ensued in late November 2007 and concluded in January 2008.

Based on the Departments' research, the following are the joint recommendations:

1. DHHS and DPI should establish a task force, with a one-year reporting date, to examine how a free appropriate public education is ensured for deaf and hard of hearing, deaf-blind and visually impaired children throughout North Carolina. This committee should determine whether other organizational considerations would be more responsive to the continuing educational needs of these populations. Also, efforts in North Carolina relative to the National Agenda for the Education of Children and Youths with Visual Impairments, Including Those with Multiple Disabilities and National Agenda: Moving Forward on Achieving Educational Goals for Deaf and Hard of Hearing Students should inform the deliberations of this committee.
2. DHHS and DPI should establish an administrative committee to examine and make recommendations to the two departments regarding the issue of administration of the State's schools for the deaf and blind.

Professional Development

This section analyzes some of the professional development opportunities and service support available in North Carolina to teachers of students with hearing and visual impairments; other professionals and paraprofessionals working with these students, and families of these students. A collaborative effort was made between representatives of the Exceptional Children Division of the Department of Public Instruction and the Office of Education Services of the Department of Health and Human Services to collect data on these activities. Participants selected to provide input included representatives from the Department of Public Instruction, the Office of Education Services, institutes of higher education/university programs with teacher preparation programs in the related disability areas, local education agencies including charter schools, professional organizations and consumers, adult agencies and division services, and private education/developmental day centers. The initial collection was comprised of two parts: a spreadsheet indicating the various professional development opportunities that are currently available and a comment section for perceived gaps in comparison with professional needs and suggestions for improvement.

Each participant was asked to provide information on the type of professional development opportunities and service support their agency provided in the area of hearing and visual impairment. They were further asked to report if the professional development opportunities provided are global (i.e., designed for professionals in various educational fields) or primarily designed for professionals serving students who are deaf/hard of hearing and visually impaired and/or for families/parents of students with hearing and visual impairments.

Results

Initial analysis of the results shows that only a portion of the professional development offerings have been identified. Responses were not received from Local Education Agencies (LEAs), private educational agencies or adult agencies. The lack of responses necessitates additional and more thorough study.

Input received on professional development opportunities on a global level for participants includes an annual statewide conference addressing all areas of exceptional children education; other various education conferences (e.g., curriculum reform, accountability, etc.); topic-specific training opportunities (e.g., research-based reading and math instruction, Positive Behavior Supports, governing policies, etc.), and course and certification opportunities in special education program in North Carolina colleges and universities. These opportunities are offered primarily by the Department of Public Instruction and institutes of higher education, but some important contributions are also made by the Office of Education Services for its employees and by professional and national organizations.

Professional development opportunities designed for professionals serving students who are deaf or hard of hearing reflect available opportunities by numerous participating agencies, a significant number of opportunities provided by the Department of Public Instruction, the Office of Education Services, professional organizations/consumer groups, and adult agencies according to results. Some opportunities include training for interpreters, on-site training and mentoring for teachers and speech-language pathologist, development of teacher standards, regional leadership team services, visual phonics, mandated learning practices, the Annual NC Early Hearing Detection and Intervention Convention, and support through state and National Agenda efforts and organizations. In addition, the state has three

teacher preparation programs in deaf and hard of hearing in the state (i.e., Barton College, UNC Greensboro, and Lenoir-Rhyne College).

Professional development opportunities designed for professionals serving students who are visually impaired are scattered among the participating agencies. Most reported opportunities come from the Office of Education Services through the Governor Morehead School Outreach and Preschool Programs. Covered topics include assistive technology, functional low vision trainings, assessments, infants and toddlers with low vision, using visual enhancements, eye disorders, and emergent literacy activities. Other agencies include development support through summer institutes and sharing information on products available in the field. Collaboration was reflected for some professional development opportunities. The Department of Public Instruction and the Office of Education Services coordinate some workshops and the annual VI Conference is jointly sponsored by the Office of Education Services, the Department of Public Instruction, the Division of Services for the Blind, visually impaired professional organizations such as NCAER, and North Carolina Central University. North Carolina Central University has the only program for training teachers of the visually impaired in the state and offers numerous courses toward teacher licensure in Visual Impairment and master's degrees in Visual Impairment and Orientation and Mobility. The Visual Impairment program at North Carolina Central University also offers courses for personal and professional development in Visual Impairment and Orientation and Mobility. The courses are taken by family members and professionals seeking additional knowledge or working on recertification. North Carolina Central University faculty provides in-service training as requested throughout the state.

Deaf-blind professional development opportunities are far less available in North Carolina than those for visual impairment and hearing impairment, according to participant response. However, collaboration between the Department of Public Instruction and East Carolina University on developing a national teacher training model for deaf-blind is underway. The Department of Public Instruction provides training through an annual severe disability institute, and the Office of Education Services provides more direct service through screenings and assessments. The Department of Public Instruction has a contractual arrangement with several university programs to provide technical assistance onsite to various Local Education Agencies. Also, the Deaf-Blind Grant (managed by The Department of Public Instruction) directly sponsors numerous teachers of students with deaf-blindness to attend various pertinent professional development activities throughout the state. Although there is not a training program for teachers established yet in deaf-blindness, East Carolina University continues to provide courses in preparing interveners and others working with students who are deaf-blind.

Development opportunities designed for parents and families of children with hearing and, visual impairment were limited. Support for families is available through the Department of Public Instruction, the Office of Education Services, and professional/consumer groups. These trainings include the Annual Conference for Families and Teachers of Deaf-Blind, Braille Boot Camp, sign language classes at regional locations, and the Exceptional Children's Assistance Center Conference. In addition, the State Deaf-Blind Grant provides onsite technical assistance to families through the use of four regional Family Outreach Specialists and has established an extremely successful working relationship the statewide parent organization for deaf-blind. Again, offerings specific to particular school systems have yet to be submitted.

Table 1 reflects professional development opportunities available by agencies and the professionals and other stakeholders for whom these opportunities are primarily designed. This information will be updated for use by professionals and families in the state as information from other agencies and organizations is received.

Training Needs

The most obvious gap identified through this process is the lack of reported professional development opportunities offered by Local Education Agencies, private education agencies, and adult agencies. These important stakeholders may already have significant contributions in place. As these capacities are made known, they can be communicated with professionals throughout the state through conduits such as list serves and professional organizations.

Gaps in the design for professional development are evident in each disability area, based on the data currently available. The gap that was evident in most areas was the inability for professionals to attend trainings and development opportunities that are offered across the state. Possible strategies for addressing professional participation are the availability of more conferences, and more distance learning experiences through audio streaming, podcasting and web conferencing. In regard to global topics, there is limited documented continuing education outside of what the Department of Public Instruction directly offers or sponsors to professionals in the state or what is available through a college/university program.

Gaps in deaf and hard of hearing professional development were not as apparent as in other areas, but little collaboration between statewide agencies was found. Professional development in deaf and hard of hearing seems to have a strong national influence and standard. Suggested strategies include increased on-site trainings and mentoring at the state level. Although statewide professional development opportunities are available in the visually impaired field through the Department of Public Instruction, the Office of Education Services and the universities, there is little reference from the national level and standard. A gap is also apparent in the collaboration with Local Education Agencies and private and professional organizations associated with this field. The most significant gap, however, is reflected in the area of deaf-blindness. With no university teacher preparation program in this area, it may be difficult to continue building educational awareness and produce qualified teachers.

As agencies continue to focus on providing professional development opportunities across the state, they may want to consider overlapping more of the disability categories as we continue to see an increasing population of children with multiple disabilities and children from Hispanic/Latino families. Also, we can continue to build resources and partnerships statewide as we bridge national best practice methodologies. Utilizing the resources of the universities and supporting the development of teacher preparation programs may help improve recruitment and retention efforts and use research that guides professional development further in North Carolina.

Table 1: Professional Development Opportunities in North Carolina

	GLOBAL (designed for multiple fields or could be of benefit to fields/groups in other columns on this sheet)	Primarily Designed for Professionals Serving Students Who are DEAF/HARD OF HEARING	Primarily Designed for Professionals Serving Students with VISUAL IMPAIRMENTS	Primarily Designed for Professionals Serving Students with DEAFBLINDNESS	Primarily Designed for FAMILIES/PARENTS of Students with Hearing and Visual Impairment
NC Department of Public Instruction (Exceptional Children Division and other Divisions)	Annual Conference on Exceptional Children with 110 instructional sessions and 7 post-conference institutes on a variety of topics, including VI, Deaf/Hard of Hearing, Deaf blindness, among others	Training for educational interpreters and cued language transliterators	Functional Vision Assessment workshops (in coordination with GMS Outreach)	Deaf-Blind/Severe Disabilities Institute at the annual Conference on Exceptional Children	21st Annual Conference for Families & Teachers of Deaf-Blind
NC Department of Public Instruction	Raising Achievement/Closing Gaps Conference	Summer institute for interpreters and transliterators.	Statewide Summer Institute on varied topics (Learning Media Assessments in July 2007); available to all professionals, including those in LEAs and at GMS		
NC Department of Public Instruction	Accountability Conference	Development of teacher standards for American Sign Language.	Training in use of Recording for the Blind & Dyslexic products		
NC Department of Public Instruction	Curriculum & School Reform Conference	Development of Educational Interpreter Handbook and regional training in using the handbook	Statewide Conference on Visual Impairments and Blindness		

	GLOBAL	Professionals Serving DEAF and HARD OF HEARING students	Professionals Serving students with VISUAL IMPAIRMENTS	Professional Serving students with DEAF BLINDNESS	FAMILIES
NC Department of Public Instruction	Training opportunities throughout the state and year on dozens of topics related to exceptional children (e.g., research-based reading and math instruction, Positive Behavior Supports, State Policies Governing Services to Students with Disabilities, augmentative alternative communication for students with multiple disabilities, Literacy Institutes to serve students with severe disabilities, etc.)	Language, learning and deafness symposium. A conference for parents and professionals of children with hearing loss.			
NC Department of Public Instruction		Summer institutes for instructional staff with a focus on literacy and best practices.			
NC Department of Public Instruction		Regional Leadership Team for Deaf and Hard of Hearing Services collects information about state and regional staff development needs and help coordinate workshops and in-services for professionals working with children with hearing loss within their region. Collects information about human resources needs within the individual LEAs.			
NC Department of Public Instruction		Development of teacher standards for HI teachers			

	GLOBAL	Professionals Serving DEAF and HARD OF HEARING students	Professionals Serving students with VISUAL IMPAIRMENTS	Professional Serving students with DEAF BLINDNESS	FAMILIES
NC Department of Public Instruction		Development of teacher standards for Educational Audiologist			
NC Department of Public Instruction		Currently developing position description for Language Facilitator with training to follow			
NC Department of Public Instruction		Work with the NC Educational Audiology Association in producing the annual Audiology Roundtable			
NC Department of Public Instruction		Host a seminar for any professionals in the field of deaf education within the state that will address best practices as outlined by the National Association of State Directors of Special Education document: "Meeting the needs of students who are deaf or hard of hearing"			
NC Department of Public Instruction		Specific technical assistance to individual LEAs for staff and program development.			

	GLOBAL	Professionals Serving DEAF and HARD OF HEARING students	Professionals Serving students with VISUAL IMPAIRMENTS	Professional Serving students with DEAF BLINDNESS	FAMILIES
NC Department of Public Instruction		NC National Agenda Task Force, including all state agencies, organizations, teachers and parents from both public schools and state operated programs. This task force addresses specific staff development needs for professionals who work with children with hearing loss across a wide spectrum of issues related to this population.			
Office of Education Services (Part of the Department of Health and Human Services)	OES Summer Institute, Thinking Maps, Write from the Beginning, Write for the Future, Person-Centered Planning, Wilson reading Program	Resource Support Program Mentoring for public school personnel	Assistive Technology & the IEP	Provide Usher screenings at 3 schools and support public schools	Braille Boot Camp
Office of Education Services	RESA	Visual Phonics	Fundamentals of the LVE	Present at statewide conferences	Learning with Low Vision
Office of Education Services	Northwest Regional Education Service Alliance (NW RESA)	Cued Speech	Braille n Speak	Direct service to DB children and families	Braille Technology
Office of Education Services		Language Facilitator Training	Make & Take Literacy	DB resource library at ENCSD	VR Day component for families, job fair day at NCSD
Office of Education Services		Bloom & Lahey Model of Normal Language Development	JAWS, MAGic		ENCSD Parent Learning Day
Office of Education Services		Modules from the Auditory Verbal International Standardized Curriculum	PacMate, OpenBook		NCSD Family Learning Day
Office of Education Services		Summer Institutes	Parent Open Houses: AT, Braille, Having a Blind Youngster		

	GLOBAL	Professionals Serving DEAF and HARD OF HEARING students	Professionals Serving students with VISUAL IMPAIRMENTS	Professional Serving students with DEAF BLINDNESS	FAMILIES
Office of Education Services		Optimizing Learning for Children with Cochlear Implants	Effective Use of Vision Assessment Tools		
Office of Education Services		Scholar/Apprentice Signing Program	Low Vision Assessment Tools (follow up)		
Office of Education Services		Sign language classes for staff and students at NCSD	What's New in AT for Young Children with VI		Sign Language Classes at regional locations
Office of Education Services		Mediated Learning Practices	Switch Adapted Software for Young Children with VI		
Office of Education Services		SIP II Reading Grant for research based practices in literacy	Clinical Low Vision Assessments for Infants and Toddlers with Low Vision		
Office of Education Services		Assistive Technology & the IEP	Low Vision Training		
Office of Education Services		NCSD practicum site for SLPs, OTs, interpreters & pre- service teachers	Getting Ready for Braille		
Office of Education Services		Instrumental Enrichment, Vocational Rehabilitation Day for VR counselors at NCSD	Rooms and Routines: Meeting Sensory, Self-Care, and Movement Needs in the Home		
Office of Education Services			Communication & Emergent Literacy for Infants and Toddlers with Visual Impairments		
Office of Education Services			Multimedia Resources for Personnel Preparation		
Office of Education Services			Opportunities for All: Creating Communication & Literacy Rich Environments for Infants & Toddlers with Disabilities		
Office of Education Services			Visual Conditions in Infants and Toddlers		

	GLOBAL	Professionals Serving DEAF and HARD OF HEARING students	Professionals Serving students with VISUAL IMPAIRMENTS	Professional Serving students with DEAF BLINDNESS	FAMILIES
Office of Education Services			I Love Technology: Using Technology in Early Childhood Education		
Office of Education Services			Using Visual Enhancements: Do You See What I See?		
Office of Education Services			Functional Vision Assessment and Developmentally Appropriate Learning Media Assessments		
Office of Education Services			The Course Starts Here: Emergent Literacy Activities for Young Children with Visual Impairments		
Office of Education Services			Workshops/In- service Programs for GMS Residential Life Staff, including the following topics: Communication and Feeding for VI and Multi Handicapped Clients, MR & Blind Multi-Handicapped, Sexuality Awareness, Basic Spanish Word, Low Vision Aides, Medical Signs and Symptoms, Behavior Interventions, Personal Hygiene, Eye Disorders, Guide Dog Sessions, "Critical Incidents: What to do in the first twenty minutes"		
Office of Education Services			Division of Services for the Blind Day at GMS		

	GLOBAL	Professionals Serving DEAF and HARD OF HEARING students	Professionals Serving students with VISUAL IMPAIRMENTS	Professional Serving students with DEAF BLINDNESS	FAMILIES
Institutes of Higher Education (North Carolina colleges, universities and community colleges)	Numerous college/university programs in special education, including: Appalachian State University; Barton College; East Carolina University; Elizabeth City State University; Elon University; Fayetteville State University; Greensboro College; High Point University; Methodist College; North Carolina A & T State University; North Carolina Central University; North Carolina State University; Pfeiffer University; Salem College; Shaw University; UNC Charlotte; UNC Chapel Hill; UNC Greensboro; UNC Pembroke; UNC Wilmington; Western Carolina University; Winston-Salem State University	Barton College; Program for the Preparation of Teachers of the Deaf and Hard of Hearing	North Carolina Central University's Visual Impairment Training Program, offering courses toward licensure for teachers of students with visual impairments and Master's degree programs in VI Teaching and Orientation & Mobility	East Carolina University; courses in preparing interveners and others working with students with deaf blindness	Offers courses to family members and other interested personnel for information related VI
Institutes of Higher Education		UNC Greensboro; Program for the Preparation of Teachers of the Deaf and Hard of Hearing; Program in Auditory-Oral Training; Program for Educational Interpreters	Statewide super conference on visual impairments and blindness that is collaborative with other state agencies (THE DEPARTMENT OF PUBLIC INSTRUCTION, OES, DSB)		

	GLOBAL	Professionals Serving DEAF and HARD OF HEARING students	Professionals Serving students with VISUAL IMPAIRMENTS	Professional Serving students with DEAF BLINDNESS	FAMILIES
Institutes of Higher Education		Lenoir-Rhyne College; Program in Deaf and Hard of Hearing Education	Literary Braille refresher workshops, Nemeth Code refresher workshops, eye medical introductions and updates		
Institutes of Higher Education		Lenoir-Rhyne is developing a Master's level program in Deaf Education	Consultation to LEAs, agencies, and families related to Vi services, including O&M, and LV.		
Local Education Agencies, including Charter Schools	Information not available at this time	Information not available at this time	Information not available at this time	Information not available at this time	Information not available at this time
Professional Organizations, National Organizations and Consumer Groups	Exceptional Children's Assistance Center conference (co- sponsored by NCTHE DEPARTMENT OF PUBLIC INSTRUCTION)	NC AG Bell & UNC- CH Carolina Children's Communicative Disorders Program Annual Conference	North Carolina Conference on Visual Impairments & Blindness (co- sponsored by various agencies)		Exceptional Children's Assistance Center conference (co- sponsored by NCTHE DEPARTMENT OF PUBLIC INSTRUCTION)
	North Carolina Assistive Technology EXPO (co-sponsored by NCTHE DEPARTMENT OF PUBLIC INSTRUCTION)	Biennial National AG Bell Convention	NFB conference		
	North Carolina Augmentative & Alternative Communication Association Conference (co- sponsored by NCTHE DEPARTMENT OF PUBLIC INSTRUCTION)	Biennial National Hearing Detection & Intervention Conference	ACB conference		
		Annual NC Early Hearing Detection & Intervention Convention	AER international conference and biannual		
		American Speech & Hearing Association Annual Convention	Getting in Touch with literary conference		

	GLOBAL	Professionals Serving DEAF and HARD OF HEARING students	Professionals Serving students with VISUAL IMPAIRMENTS	Professional Serving students with DEAF BLINDNESS	FAMILIES
Professional Organizations, National Organizations and Consumer Groups		National Association of the Deaf Conference	CEC international		
		North Carolina Association of the Deaf			
		American Sign Language Teacher Association Conference			
		Council for Exceptional Children International Conference			
		Council for Educational Administrators of Schools for the Deaf Conference			
Adult Agencies (e.g., Division of Services for the Blind, Division of Services for the Deaf and Hard of Hearing, Division of Vocational Rehabilitation, etc.)	Information not available at this time	Information not available at this time	Information not available at this time	Information not available at this time	Information not available at this time
Private Education Agencies/Developmental Day Centers	Information not available at this time	Information not available at this time	Information not available at this time	Information not available at this time	Information not available at this time

Curriculum

Local Education Agencies

Students with hearing and visual impairments in the local educational agencies (LEAs), follow the North Carolina Standard Course of Study, just as all other students do. All the same requirements for progress in regular content, participation in statewide assessments and ABCs accountability measures, successful completion of courses toward graduation and local additional requirements apply to these students. When an Individualized Education Program (IEP) is developed for a particular student, participation in the general curriculum is identified and specified. Annual goals are established to address skills necessary to promote progress in this curriculum. Some students with hearing and visual impairments loss also have significant cognitive disabilities and receive instruction in the Extended Content Standards that serve as an alternate to the regular standards. For all students with IEPs, other annual goals are often established to address functional performance, that is, skills and knowledge that are not necessarily academic in nature but are nevertheless required for successful student outcomes. For students with hearing loss, these may involve improved communication or language skills or use of specific technology. For students with visual impairments, these are summarized in an a nationally-recognized resource, the Expanded Core Curriculum, which includes independent living skills, orientation and mobility, social interaction skills, compensatory academics (e.g., Braille) and other areas. For deaf-blind students, IEPs may include functional goals from each of these areas and additional goals that are unique to that population or student. The intent of all of these goals is to educate each and every student to become a productive and responsible citizen.

Department of Health and Human Services Residential Schools General and Specialized Curricula

Per GS §143B-146.2, students who attend the NC Schools for the Deaf and the Governor Morehead School for the Blind participate in the ABCs of Public Education. This means that all students, to the extent that it is determined by their IEP Team, are instructed in the North Carolina Standard Course of Study. Students participate in the accountability program and take the same assessments as students in other North Carolina school systems: end of grade and end of course tests; Extend I and II assessments; the computer skills test, and the fourth, seventh, and tenth grade writing tests. Students are not only assessed using the standardized assessments, but all students in these schools are exceptional children and have IEP goals in academic, related service, social, and recreational areas which they must meet. In addition, the schools receive a No Child Left Behind report card, measuring their Adequate Yearly Progress.

Students who attend the residential schools, just as students in charter schools and other school systems, follow the same pathways to the North Carolina High School diploma: Career Prep, College/Tech Prep, College/University, and the Occupational Course of Study. As in all school systems, the Office of Education Services has adopted graduation requirements that go beyond the minimum required by the State Board of Education to receive a diploma. As in all school systems, all first-time freshmen in the residential schools in 2006-2007 will need to show proficiency in the End of Course tests in English I, Algebra I, Biology, Civics and Economics, and United States History as well as successfully complete a Graduation Project in order to be granted a diploma. Students with multiple handicaps and/or a variety of disabilities who exit the

residential school programs when they age out of services earn a certificate, which is based on completing the minimum coursework and the goals on their IEPs.

What are the Unique Curricular Needs of the Visually Impaired Learner?

Visually impaired learners are significantly affected by three areas of the learning experience: core curriculum, primarily academic skills which are addressed through the Standard Course of Study; compensatory skills, as an alternative way to access the core curriculum, and the Expanded Core Curriculum (ECC), designed to meet the unique needs of persons who are visually impaired (Hatlen, 1996). Compensatory skills are typically integrated into the expanded core by the teacher of the visually impaired.

In the reauthorization of Individuals with Disabilities Education Act, 2004, functional outcomes, or the Expanded Core Curriculum content areas, were added as a requirement for all students who have an IEP. This has moved the field from a philosophical discussion about the value of the Expanded Core Curriculum to a federal mandate. The Expanded Core Curriculum is designed to go beyond the core components of math, reading, writing, and science to address essential areas and experiences unique to persons who are visually impaired (Pugh & Erin, 1999). These areas should be taught in addition to the core curriculum because they are specific to the disability of blindness. However, if appropriately aligned, some research suggests that the Expanded Core Curriculum can successfully be integrated into some of the core curriculum (Lohmeier, 2001, 2003).

The nine areas of the Expanded Core Curriculum are typically learned incidentally and through modeling for persons who are sighted. For those with visual loss there is little or no opportunity to learn these skills. Through sequential systematic instruction by a knowledgeable person, visually impaired persons have the opportunity to acquire these skills that are necessary to be successful. The Expanded Core Curriculum is designed to construct community concept development for blind individuals. The nine areas identified within the Expanded Core Curriculum are Compensatory or Access skills, Social Interaction Skills, Recreation and Leisure, Orientation and Mobility, Independent Living skills, Assistive Technology and Technology, Career Education, Visual (sensory) Efficiency, recently renamed sensory efficiency and includes tactual and auditory skills as well as visual, and Self Determination skills (Hatlen, 1996, 2003). These skill sets are a longitudinal process that requires instruction by a person who is knowledgeable about these exceptionalities. Table 2 below reflects the Expanded Core Curriculum content areas, its definition, and examples of skills that need to be developed in these areas.

Table 2: Expanded Core Curriculum for Visually Impaired Learner

<i>Expanded Core Area</i>	<i>Points of Interest (Hatlen, 1996, 2003)</i>	<i>Examples (Lohmeier & Blankenship)</i>
Compensatory Access Skills	Those skills that students who are blind or visually impaired need to access all areas of core curriculum. Mastery of compensatory skills usually means that the student has access to learning in a manner equal to that of sighted peers	Concept Development, Communication Modes (Calendar systems, Braille, print, other), Organizational Skills Needed accommodations

<i>Expanded Core Area</i>	<i>Points of Interest (Hatlen, 1996, 2003)</i>	<i>Examples (Lohmeier & Blankenship)</i>
Social Interaction Skills	Individuals who are blind or visually impaired cannot learn skills of social interaction in a casual and incidental fashion. They learn them through sequential teaching and modeling.	Social concepts, physical skills, social integration, parallel & group play, eye contact & tone of voice
Recreation & Leisure	These skills must be deliberately planned and taught to students who are blind or visually impaired and should focus on the development of life-long skills	Hobbies, sports, games, orientation, physical fitness
Assistive Technology (AT) & Technology	AT devices provide access to the general learning environment. Technology enhances communication and learning and expands the world of persons who are blind or visually impaired in many ways. It makes information that is typically inaccessible readily available.	Technical concepts, selection of appropriate assistive devices, media needs, accessibility to Information
Orientation & Mobility	Emphasizes the fundamental need and basic right of people who are visually impaired to travel as independently as possible, enjoying and learning to the greatest extent possible from the environment through which they are passing	Body image, travel, spatial awareness, safety, directionality
Independent Living Skills	This area, often referred to as daily living skills, consists of all the tasks and functions people perform, according to their abilities, in order to live as independently as possible. As with the skills of social interaction, students who are blind or visually impaired cannot learn these skills without direct, sequential instruction.	Hygiene, food preparation/retrieval, money management, time monitoring, dressing
Career Education	Career education is vital because here, too, general instruction assumes a basic knowledge of the world of work based on prior visual experiences.	Explore interests, areas of strength, job awareness, planning, preparation, placement, work ethic
Visual (Sensory) Efficiency Skills	Systematically training students to use their remaining functional vision, tactual, and auditory senses better and more efficiently.	Usage of optical devices; visual, auditory, and tactual, cues, environmental awareness, personal attributes, sensory attributes
Self Determination	This area is based on the premise that students who are visually impaired must acquire specific knowledge and skills and have many opportunities to practice them to become successful.	Sense of self, decision making, problem solving, goal setting, personal advocacy, self control, assertiveness training

What are the Unique Curricular Needs of the Hearing Impaired Learner?

As with students who are visually impaired, students who are deaf or hard of hearing also require special curricular needs. Children as a rule learn from watching and listening to their parents, interacting with them and others. Children with a hearing impairment of any degree have missed out on a great deal of that type of incidental learning. These children do not have a language or communication system set up at those critical language development years; therefore, these children are starting at a deficit when compared to their non-disabled peers.

"The National Agenda, a coalition of consumer, professional, and parent groups calls for a quality and diverse communication and language-driven educational delivery system for deaf and hard of hearing children. We ask for that which all other children in this nation simply take for granted—the right of a deaf or hard of hearing child to develop communication and language, to communicate, to become literate, and therefore to learn. We call for action so that our children start school with communication and language and are therefore ready to learn, and when they graduate, then they are ready to confidently stride into the world." (The National Agenda: Moving Forward on Achieving Educational Equality for Deaf and Hard of Hearing Students, April 2005.)

The National Agenda calls for a change in the educational delivery model for students who are deaf and hard of hearing. The educational delivery model must be communication driven. These children are very visual because this is their only functioning distance sense. Their language (American Sign Language) is a visual language. Therefore, all of the curriculum must be presented in a visual and conceptual manner first to insure complete understanding of the material being taught.

The National Agenda addresses eight (8) goals for re-making the educational delivery system for the deaf and hard of hearing students, which will allow them a free and appropriate education. Table 3 below lists the goals stated in The National Agenda along with some of the objectives and examples or suggestions to carry out the goals.

The last two (2) goals discuss the need for highly qualified teachers for the deaf or hard of hearing and research. They do not deal with curriculum so are not included in this report.

Table 3: The National Agenda: Moving Forward on Achieving Educational Equality for Deaf and Hard of Hearing Students

Goals	Objectives (The National Agenda, April, 2005)	Examples/Suggestions
Early Identification and Intervention	Parents must have newborn screening, follow-up services, and early intervention services. These services would include information on hearing loss, communication, and the relationship between communication development and educational growth	Early detection and screenings in the hospital, Use of Project Child Find, Early Intervention Program, and education of the parents and family.
Communication, Language, and Literacy	Deaf and Hard of Hearing children must be provided with full communication and language clearly and consistently in all educational environments and with peers, professionals and family. The development of age-appropriate communication and language skills for deaf and hard of hearing children requires that their educational programs teach social and pragmatic functions. Developing literacy in deaf and hard of hearing students should provide creative and visual means to teach reading and writing.	Total immersion into sign language All staff and professionals working with the child must sign. Students must have opportunities to socialize with peers in sign language. Parents need to be given opportunities to learn sign language. Use of career exploration and character education programs starting in Kindergarten. Develop expressive and receptive vocabulary skills

Goals	Objectives (The National Agenda, April, 2005)	Examples/Suggestions
Collaborative Partnerships	The establishment of a seamless, complete, and cross-institutional collaborative system will ensure the smooth transition from one developmental/educational stage to the next. This system needs to service the family and deaf or hard of hearing child from birth through high school. The success of each transition depends on collaboration and partnership among diverse agencies in the coordination of a variety of services.	Early Intervention and IFSP collaborates with the Pre-school system. Pre-school collaborates with the school system. The continuation of language and communication is key to the deaf or hard of hearing child's success and development. Gaps in the process will cause the developmental delay of the child.
Accountability, High Stakes Testing and Assessment	Assessments of deaf and hard of hearing students must take into account and reflect the child's communication and language preference, need, and expressive and receptive skill levels.	Collaboration of teachers of the deaf and other professionals knowledgeable in sign language to create uniformed signs and procedures for explaining the concept in a way the student will understand.
Placement and Programs	As required under IDEA the provision of a full continuum of placement options and the further requirement that a child be placed in the "least restrictive environment", shall mean for a deaf or hard of hearing students those environments that can address the student's communication, linguistic, and educational needs. LRE must be based on where the child is able to directly communicate with age and language peers and communicate directly and most easily with staff.	Students must be placed where they have the opportunity to speak with their teachers and socialize with peers in their mode of communication.
Technology	Educational programs, instructional, and informational technologies used in teaching deaf or hard of hearing students must be accessible and appropriate for each individual child.	Closed Captioning, Video Relay, Visual signaling and alert systems, Smartboards, LCD information displays, etc.

Assistive Technology

Federal regulations and North Carolina Policies require assistive technology to be considered for all students with an IEP. This includes both assistive technology devices and assistive technology services. Assistive technology devices can help a student access the educational curriculum and perform functional skills such as self-care, eating, traveling or controlling the environment in some way. Assistive technology services also are required to ensure that students have access to devices they need and use them fully. These areas of emphasis are listed in IEP goals and the associated devices are to be provided to the student, with the responsibility for this at the LEA or residential school level. It is expected that students will use assistive technology to access and use standard tools, complete educational tasks, and successfully participate with non-disabled peers at home and in the community.

Local Education Agencies (LEAs)

LEAs throughout the state provide a wide range of assistive technology devices for students with hearing and visual impairment similar to the items mentioned above. There is extensive investment by all LEAs in specific devices needed by individual students. Some LEAs have even invested in assistive technology systems (e.g., sound fields for deaf students, screen-reading software for visually impaired students, etc.) that provide additional benefit to the entire classroom, including those students without disabilities.

High quality, individualized assessment is often necessary to determine the devices required to help students to be as independent as possible. The Department of Public Instruction maintains a website with resources for assistive technology assessments. However, access to assessment continues to be a growing need within North Carolina. Other assistive technology services include, but are not limited to, procuring, fitting, customizing, training on, repairing and replacing devices. These are provided in LEAs through a variety of personnel, including teachers, related service personnel (e.g., orientation and mobility specialists, audiologists, occupational therapists, speech-language pathologists, etc.) and assistive technology specialists. Many LEAs have established assistive technology teams to address needs throughout the school system. Several LEAs have assistive technology centers where various items are available for loan or for trial periods in the decision-making process for an individual student.

Local school systems and the Department of Public Instruction access numerous fiscal and human resources to provide necessary assistive technology devices and services. Federal and state special education funds are accessed for this procurement. In addition to purchasing devices, LEAs can access some assistive technology through the American Printing House for the Blind with Federal Quota Funds (around \$260 per student; close to \$300,000 per year) provided for students with qualifying visual impairments. Students with print disabilities in all LEAs have access to high quality recorded textbooks through the Department of Public Instruction-sponsored memberships with Recordings for the Blind and Dyslexic, Inc. The Department of Public Instruction works closely with the North Carolina Assistive Technology Program to provide assistance to LEAs and to students. The Exceptional Children Division at the Department of Public Instruction also provides consultation and additional resources through its Consultants for Visually Impaired/Assistive Technology, Deaf and Hard of Hearing, Deaf-Blind, Autism/Multiple Disabilities, and related service areas to give assistance to LEAs in identifying, procuring and utilizing appropriate assistive technology for individual students.

Department of Health and Human Services Residential Schools

Students at the Governor Morehead School for the Blind (GMS) require a number of assistive technologies in order to achieve their greatest level of success. Students who are Braille readers use refreshable Braille displays, Bookports readers, Tiger embossers, pac-mates, Braille note takers, and various software packages which read what is on the computer monitor to blind students. All of the students at GMS are visually impaired. This means that they also require special technologies designed to enhance their residual vision. Such technologies include Zoom Text, a software package that enlarges text on the computer screen; close circuit televisions; adapted lighting; extra large computer monitors, and large print books facilitate the delivery of instruction to these students. GMS strives to keep its technology as up-to-date as possible. Using Braille and electronic travel devices for orientation and mobility instruction allows all students to learn strong, independent travel skills. Auditory sports equipment and music notation for computers allow students to participate fully in a variety of elective courses. For visually impaired students with special needs, augmentative communication devices are used to facilitate self-advocacy. Students have access to computer labs in the school building as well as in the residence halls. Every classroom at GMS has at least one computer for student use. A low vision specialist helps students and teachers learn more about the magnification devices, lighting needs, and other environmental modifications for students with low vision, thus enabling those students to access as much of their vision as possible.

Assistive technology at the NC Schools for the Deaf is used to help deaf and hard of hearing students communicate more effectively in class as well as outside of the school. Classrooms are equipped with Smart Boards to allow students the opportunity to use technology interactively during class time; this is in addition to the computers available in every classroom. Both schools have multiple computer labs in the classroom buildings and residence halls to ensure that students have as much exposure and access to technology as possible. Students use web cams and video relay to communicate with family members, friends, and other deaf and hard of hearing students from across the country. Students still use TTYs, but they also learn to use Relay operators as a more reliable form of communication with employers, health care professionals, and other businesses. Augmentative devices are also used with those deaf and hard of hearing students with special needs; these devices enable students who are unable to learn alternative form of expression that is more concrete than signed communication. Partnerships with East Carolina University in Greenville and Baptist Hospital in Winston-Salem support students, and in some cases community members, who have cochlear implants. In addition, staff audiologists provide students with ear molds for up-to-date hearing aids and FM systems to access their usable hearing.

Conclusions and Recommendations

Based on the information provided by the research presented in this report, the following are the joint conclusions and recommendations from the Department of Health and Human Services and the Department of Public Instruction.

Conclusions: DHHS and DPI have come to the following conclusions regarding the administration of the residential schools:

- The driving force in making any decision about administration should be the assurance that all students with visual and/or hearing impairments would have access to the educational services they need. This is especially true in light of the Leandro decision highlighting the requirement for all students to receive a sound, basic education.
- Resources dedicated for students with visual and/or hearing impairments should be flexible enough to follow these students to whatever educational placement determined necessary.
- Most schools for the deaf and schools for the blind throughout the country have some formal relationship with their state education agency. Some are directly under the stated education agency's administration; others report directly to their state's board of education. Only Illinois has been identified as having its schools for the deaf and blind under its human services agency (i.e., Illinois Department of Human Resources).
- DPI, while following the direction of the General Assembly and the State Board of Education, traditionally has not directly operated schools and is not currently configured to perform such a task. The Department's role with schools throughout North Carolina has been to establish policies and regulations, monitor school districts and charter schools, and offer assistance to these schools.
- It may not be wise for the agency that governs, monitors and makes policies for public schools throughout North Carolina also to be given the authority to implement these policies in the administration of individual schools.
- Transference of the administration of the residential schools would not necessarily reduce the administrative costs of operating these programs.
- However, DPI should have a greater role in monitoring and providing assistance to the residential schools to ensure that services are provided in an efficient and effective manner.
- Determining exactly what this role should be will require additional time to more fully explore.

Recommendations: Considering the conclusions note above, DHHS and DPI make the following recommendations.

- DHHS and DPI should establish a task force, with a one-year reporting date, to examine how a free and appropriate public education is ensured for hearing and visually impaired children throughout North Carolina. This committee should determine whether other organizational considerations would be more responsive to the continuing educational needs of these populations. Also, efforts in North Carolina relative to the National Agenda for the Education of Children and Youths with Visual Impairments, Including Those with Multiple Disabilities and National Agenda: Moving Forward on Achieving Educational Goals for Deaf and Hard of Hearing Students should inform the deliberations

of this committee. Considerations in this examination should include, but not be limited to, the following.

- To recognize the State's schools for the deaf and blind as viable and necessary components in the continuum of placement options for serving these students;
 - To establish an Local Education Agency-hosted and Local Educational Agency-administered consortium model for regional service delivery through which a fuller continuum of placement options could be considered and provided in regions where this continuum and services are not readily available;
 - To more clearly recognize that all educational placement options are inherently short-term in nature and should be thoroughly and frequently reviewed by the Individualized Education Plan team;
 - To review the admissions processes at the State's schools for the deaf and blind schools so they are transparent and obvious to all concerned parties and fully involve Local Education Agencies and parents;
 - To assess whether these and/or other considerations, if implemented, would satisfy the legislative mandate to develop a plan to reduce institutional capacity to an appropriate level for meeting the needs of these students.
- DHHS and DPI recommend establishing an administrative committee to examine and make recommendations to the two departments regarding the issue of administration of the State's schools for the deaf and blind. Considerations in this examination should include, but not be limited to, the following:
 - To change the administrative structure of the State's schools for the deaf and blind to that of a single independent Local Education Agency functioning as charter schools currently do, including providing yearly reports to DPI and the State Board of Education.
 - To determine how other non-residential and non-day school programs currently affiliated with the State's schools for the deaf and blind (e.g., Outreach, Preschool, etc.) can continue to be provided in an effective and efficient manner.

Appendix

Report from the University of North Carolina at Chapel Hill School of Government

The Office of Education Services and the Exceptional Children Division contracted with the School of Government at the University of North Carolina at Chapel Hill to conduct the evaluation under the leadership of Dr. Maureen Berner. In October 2007, Dr. Berner and the steering committee established to guide the evaluation held a series of meetings to create a scope of work for the project. After execution of a contract, the necessary research for the project ensued in late November 2007 and concluded in January 2008. The scope of work included the following:

- A review of federal and state legal mandates for the education of deaf and blind children in North Carolina;
- A delineation of the current service delivery model for hearing and visually impaired education provided in North Carolina by local educational agencies and the Office of Education Services;
- An overview of national best practices in hearing impaired education and visually impaired education with a comparison of these practices to the model used in North Carolina; and
- A definition of a successful education for visually impaired as well as hearing impaired children in North Carolina as described by stakeholders (completed using surveys and focus groups).

It should be noted that time was insufficient to allow for objective research to be completed to examine service delivery options provided in every school system in North Carolina.

The evaluative team from the School of Government worked to gather and tabulate data and seek as much feedback from as many stakeholders as time allowed. They were asked to make an objective assessment of the existing model used for the education of children with visual and hearing impairments in North Carolina. However, they were not asked to make recommendations related to governance or institutional capacity.



School of Government
The University of North Carolina at Chapel Hill

Final Report

North Carolina's Educational Service Delivery Model for Children with Hearing or Visual Impairments

MARCH 17, 2008

AUTHORS:

Paul Caldwell, MPA
Owen Franklin, MPA
Sarah J. Waterman, MPA Candidate

CO-AUTHORS:

Maureen Berner, PhD, Associate Professor
Ann McColl, JD, Visiting Associate Professor
Abby Parcell, MPA
Emily Anderson, MPA Candidate



Overview	1
A brief introduction to the report and our observations, followed by our recommendations for future performance evaluation efforts.	
Introduction	5
A full introduction and explanation of the background of the report, followed by a brief review of our methodology, its limitations, and some basic statistical information.	
Federal and State Legal Mandates	14
A review of the federal and state laws relating to North Carolina’s educational service delivery model for students with hearing or visual impairments. This section focuses primarily on educational standards but also reviews governance law.	
North Carolina’s Current Service Delivery Model	33
A review of how North Carolina’s current model actually functions in the field, based on site visits conducted at regular and residential public schools across the state and meetings with state officials, medical personnel, and other specialists. Site visits consisted of separate meetings with school administrators, school teachers and other line personnel, parents, and students. This section includes a visual representation of the current model.	
National and Professional Best Practices and Philosophies	50
A review of national and professional best practices and philosophies relating to the education of people with hearing or visual impairments. This section includes a review of the National Agendas for the Deaf and Blind.	
North Carolina Stakeholder Definitions of Success	64
A review of how different groups of North Carolina stakeholders define a successful educational service delivery model. Stakeholder groups include state officials, school administrators, school teachers, and parents.	
Appendixes	77
A – Terminology	78
B – Public Comment	83
C – National / Professional Sources	112
D – All Focus Group Definitions of Success	116
E – Online Parent Survey	126
F – Focus Group Exercises	130

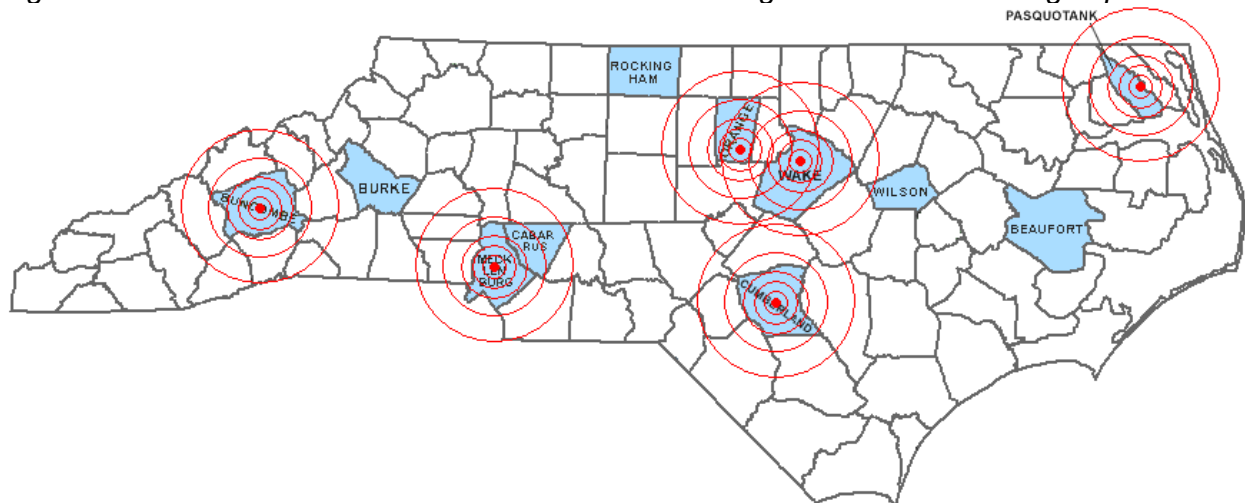
Overview

In August 2007 the North Carolina General Assembly requested the Departments of Public Instruction (DPI) and Health and Human Services (DHHS) provide an evaluation of the education service delivery model for students with hearing and/or visual impairments in North Carolina. DHHS and DPI contracted with the University of North Carolina at Chapel Hill School of Government (SOG) to assist in conducting the first part of that evaluation. As an independent, objective organization, we served as outside observers. In November 2007 a team of two associate professors, two full-time staff, and a current graduate student from the SOG agreed to conduct research in four areas:

1. Federal and state legal mandates
2. North Carolina's current model as observed in the field
3. National/professional best practices and models
4. Stakeholder definitions of success

We reviewed pertinent federal and state laws, meet with 184 administrators, teachers, parents and students during site visits to four local school districts and three residential schools for the deaf and blind (in blue counties), and conducted a series of six regional focus groups (blue counties with red points) that included 114 state agency officials, school administrators, teachers, and parents.

Figure 1 – North Carolina Cities and Counties visited during site visits and focus groups.



In addition, 43 national and professional sources (universities, think tanks, national agendas, national associations, etc.) were consulted, 174 parents responded to an online survey, and several other experts recommended by DHHS and DPI were contacted.

However, this report is not a performance evaluation. Given the amount of time (three months) and data available, we were unable to perform a comprehensive, in-depth, outcome-based evaluation. Instead, this report focuses on what North Carolina must do (the legal framework), what we are doing (the North Carolina model in practice), what others are doing (national perspectives) and what local stakeholders would like to achieve (local perspectives on success), based on conversations with administrators, practitioners, and beneficiaries statewide. We also include a list of several areas that could be the focus of future performance evaluation efforts may wish to focus.

The North Carolina Model, National Goals and Stakeholder Definitions of Success

While information provided during our site visits leads us to believe that North Carolina's current model fulfills federal and state legal mandates, there may be gaps between the type and quality of services provided by the current model and what national advocates identify as goals. There also appear to be gaps between the current model and what some local stakeholders have identified as a successful model. In particular, based on comments made by administrators, teachers, parents and students during site visits, focus groups, and in online surveys, the following concerns were consistently raised:

- According to our research, there is a significant interest in social and life skills development for these children. The current model, particularly in light of the academic focus of No Child Left Behind (NCLB), does not seem to satisfy the parties and organizations with whom we spoke in this regard.
- We cannot comment here on the quality of national or state professional standards or their implementation or enforcement. However, questions about the qualifications of teachers, staff, and specialists were consistently raised during our site visits and other interviews. In addition, qualified professionals were a key aspect of a successful model as identified by our focus groups.
- According to our research, current, timely access to technology and other educational resources, including qualified personnel, is an important factor to the success of the model. As noted during our site visits and in public comments and other interviews, these resources may not be readily available or adequate in North Carolina.
- During our site visits and local interviews, concerns were raised about how the legal concept of Least Restrictive Environment should be interpreted and/or implemented. This is also a national concern.

Possible Areas of Focus for Future Performance Evaluation Efforts

Our primary recommendation is to conduct a complete, in-depth, outcome-based (broadly defined) performance evaluation. This would potentially require a multi-year effort working with numerous specialists, experts and leaders in the field. Based on our observations, if such an evaluation is to be conducted, we recommend the following:

- Consider the degree to which social and life skills development is addressed by North Carolina's current service delivery model. In particular, examine the shift in focus that occurs when a student moves from an Individualized Family Service Plan (where the emphasis is on the family) to an Individualized Education Program (where the focus is on the individual student).
- Consider increasing the planning for and focus on professional development issues for interpreters, teachers, and other professionals and paraprofessionals who work with these students.
- Consider how appropriate resources might be made more accessible across the state. In particular, explore collaboration options between all types of schools.
- Consider how Least Restrictive Environment (LRE) is and should be implemented across North Carolina.

In addition, we did not address issues specific to the deaf/blind student population in North Carolina. We feel more research is needed on services for these students.

Introduction

In late 2007 the North Carolina General Assembly (GA) requested that the Department of Public Instruction and the Department of Health and Human Services provide an evaluation of the education service delivery model for students with hearing and/or visual impairments in North Carolina, with a final report due back to the GA by April 1, 2008. Specifically, House Bill 1473, Section 10.20(a), of the 2007 North Carolina General Assembly legislative session requires the Department of Health and Human Services (DHHS), in conjunction with the Department of Public Instruction (DPI), "collaborate in an evaluation of the State's entire delivery model for students with hearing and/or visual impairments. This includes the special needs of students resulting from additional disabilities other than hearing and visual impairments, the training needs of professional staff, access to assistive technology, and curriculum content."

Contract discussions began in early October. In mid-November, DHHS and DPI contracted with the University of North Carolina at Chapel Hill School of Government (SOG) to assist in conducting the first part of the evaluation. We focused on the service delivery model, covering the other specific areas as they touch on the model. We did not assess or audit the individual performance of the departments or of any school, administrator, teacher, or student.

We did not assess or audit the individual performance of the departments or of any school, administrator, teacher, or student.

The first step in our process involved understanding what we could do, given the deadline of an April 1 report delivery to the GA. With our advisors from DPI and DHHS, we reviewed various ways in which a program evaluation could be done in such a short time frame. We decided an evaluation that truly measured the quality of the educational service delivery model in a scientifically rigorous fashion was not possible in three months. Instead, we focused on four areas that are the necessary foundations of such a thorough study. With this information, we felt that the GA would have a good basis on which to move forward with further work if it so chose.

We proceeded with four main parts simultaneously from late November through January:

- 1) We tried to understand the legal history and framework for how North Carolina provides services to children with hearing and/or visual impairments.
- 2) We tried to gain a clear understanding of the current educational service delivery model for these students. We gathered information from DPI and DHHS, visited the residential state schools and a semi-random selection of Local Education Agencies (LEAs) across the state, and met with medical, educational, and practitioner experts. In our visits we spoke with administrators, teachers, parents, and students.
- 3) We researched national professional standards and possible best practice models that could inform the North Carolina effort.

- 4) Through focus groups, we spoke with people throughout the state about what they would view as a ‘successful’ public education system serving this population. Many interested parents were not able to attend the focus groups, so in early January we provided an online survey, in English and Spanish, that mirrored the questions asked in the focus groups.

Transparency, access and inclusion were strong emphases for our research. Our methodology highlighted geographic coverage. Through our advisors in DPI and DHHS, who in turn used various listservs, meetings, and other means of spreading the word, we solicited online, telephone or written comments from anyone in the educational community (parents, teachers, administrators, interest groups, organizations, or community members) throughout the length of the study. We were especially interested in obtaining comments that would not be gathered through our other research means.

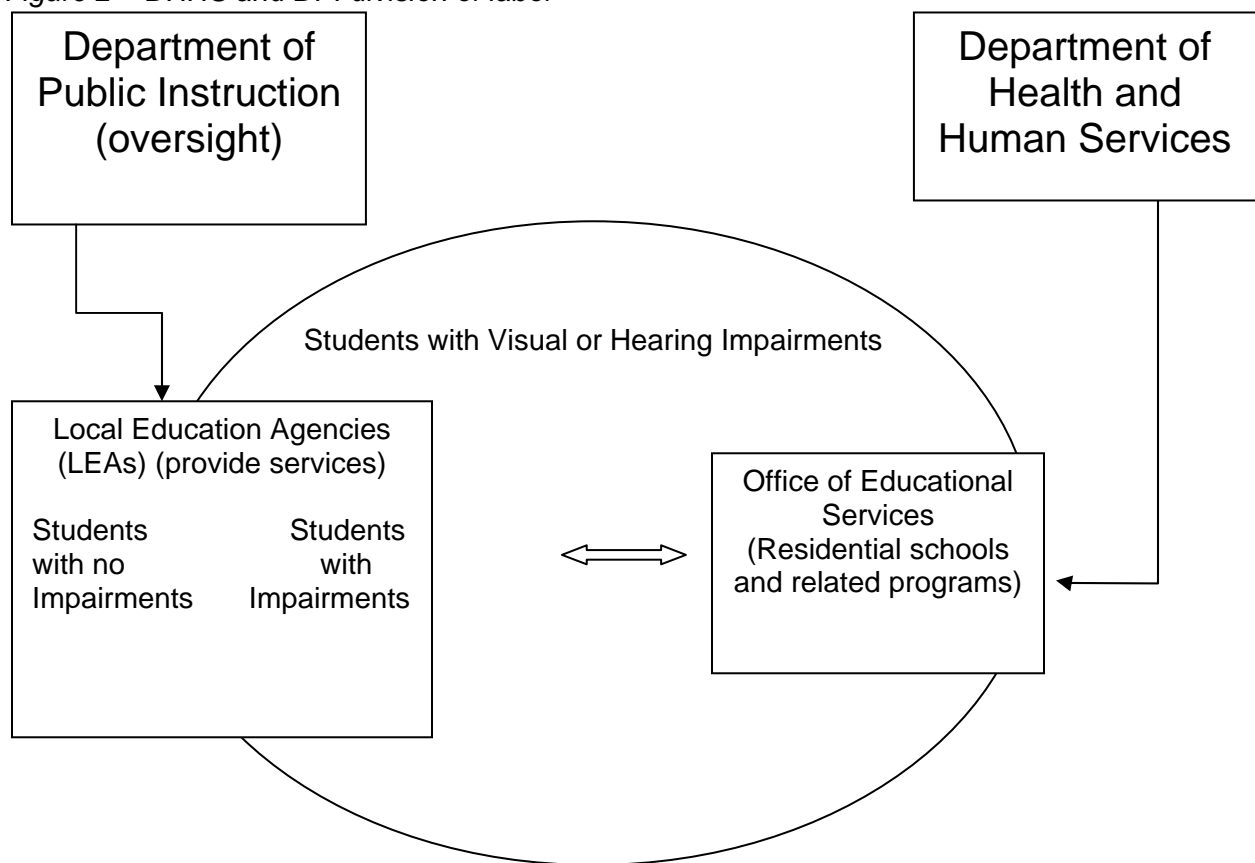
Meetings of the SOG team and our departmental advisors and related experts took place every two weeks to track progress. We also provided a briefing about the report and answered questions from individual parents, parent groups, community members, and staff at each of the residential schools, and the North Carolina Council of the Deaf and Hard of Hearing. Our draft report was posted online for public comment on February 20, 2008. Revisions were made in response to the comments and a final draft was delivered to DPI and DHHS at the beginning of March for internal department review.

Another emphasis of the project was to purposely avoid distinctions between residential schools and LEAs in terms of the overall model. In assessing how students receive services, we did not want to introduce a potentially false distinction. We were gratified, as is covered in the rest of the report, to find that the model itself, and stakeholders’ opinions about the model, did not seem to support a distinction either.

The primary research staff on the report have all been trained and certified in human research subject ethics. In addition, while not required to, we adhered to University of North Carolina Institutional Review Board philosophies regarding protection of human subjects. In our interviews, we did not record individuals’ names or track specific comments to specific individuals. None of the comments from focus groups have been tracked to individuals. We felt this would maximize the ability of stakeholders to speak truthfully, without hesitation or fear of retribution.

The diagram below shows the general scope of our work. We are examining the educational service delivery model for children who have visual or hearing impairments. These services are overseen through two different departments, primarily for historical reasons. Some services are provided through each LEA, which ultimately falls under the jurisdiction of the State Board of Education and the Department of Public Instruction. Other services, primarily the residential schools and services for infants and preschool age children, are provided through the Office of Educational Services (OES) under the Department of Health and Human Services. Students will likely work with one or both departments as they grow up and as their service needs change. LEAs and OES each work to serve these students. The graphic below demonstrates that LEAs serve both students with and without impairments. OES services focus on children with impairments. As a population, these children fall under two separate state departments.

Figure 2 – DHHS and DPI division of labor



Methodology

Federal law, the North Carolina Constitution, and North Carolina law were reviewed and interpreted to provide an understanding of the legal environment. Site visits to LEAs and residential schools were conducted to understand how North Carolina's model functioned in the field. Web research and telephone and email interviews were conducted to understand national and professional educational philosophies and focus areas, and a combination of focus groups and a web survey were used to obtain definitions of success from major stakeholder groups.

Limitations

The scope of this report is primarily limited by the timeframe and season in which research was conducted. We began work on November 12, 2007; the draft report was due twelve weeks later; and the majority of our research had to be conducted between Thanksgiving and Christmas. We used the best methods given the time and resources available. However, we were not able to use random, representative samples.

In addition, as noted above, we did not record individuals' names or track specific comments to specific individuals during our interviews. None of the comments from focus groups have been tracked to individuals. As a result, we are not able to provide direct counts of particular responses by particular categories of people. This limits our ability to provide exact percentages in terms of our observations. Our assessments are based on our observations, our qualitative analysis, and ultimately our judgment.

Finally, we attempted to provide some basic statistical information on the number of students with hearing or visual impairments, as well as some data on the number of specialized staff who assist in their education (see below). Unfortunately, the information in the Student Data table below only shows only those students who have Individualized Education Programs (IEPs) and whose *primary* classification is Deaf-Blind (DB), Hearing Impaired (HI), or Visually Impaired (VI). The Other column shows the number of students with some other primary classification. Therefore, if a student is primarily classified as autistic but has a secondary classification as hearing impaired, that student will show up in the Other column and not the HI column. In addition, students with mild impairments and no IEP are counted in the Total column with non-disabled students. Due to these limitations, we were unable to acquire the *total* number of students with any of these impairments. To highlight the discrepancy, the data provided below shows that there were 34 students primarily classified as Deaf-Blind in LEAs and charter schools during the 2006-07 school year. However, Dec. 1, 2006 census data provided by DPI shows that there were 373 Deaf-Blind students age 0-21¹.

¹ The National Consortium on Deaf-Blindness, The 2006 National Child Count of Children and Youth who are Deaf-Blind, <http://nationaldb.org/documents/products/2006-Census-Tables.pdf>

Basic Statistical Information

To provide context for our study, two tables follow. The first shows the total number of students and the number of students *primarily* classified as Deaf-Blind (DB), Hearing Impaired (HI), or Visually Impaired (VI) in each LEA and all charter schools during the 2006-07 school year and at the North Carolina School for the Deaf (NCSD), the Eastern North Carolina School for the Deaf (ENCSD), and the Governor Morehead School for the Blind (GMS) as of January 31, 2008.

Student Data

Table 1 – Student Data from DPI (for 2006-07 school year) and DHHS-OES (as of 1/31/08)²

	Total	DB	HI	VI	Other
Alamance -Burlington	22,431		41	9	3,133
Alexander	5,694		12	2	764
Alleghany	1,569		2		286
Anson	4,187		6	1	723
Ashe	3,307		3	1	533
Avery	2,319		4	1	345
Beaufort	7,116		11	13	1,187
Bertie	3,150				429
Bladen	5,541		8	3	704
Brunswick	11,691		19	4	1,324
Buncombe	25,682		33	8	3,295
Asheville City	3,818		1	2	487
Burke	14,215		26	9	2,428
Cabarrus	25,656		46	3	3,465
Kannapolis City	4,859		8	3	587
Caldwell	13,112	1	13	8	1,428
Camden	1,874			1	257
Carteret	8,272	2	18	5	1,305
Caswell	3,303		5	5	432
Catawba	17,525		20	8	2,399
Hickory City	4,518		4		477
Newton-Conover City	2,954		4	1	341
Chatham	7,648		11	4	1,001
Cherokee	3,669		1	4	513
Edenton / Chowan	2,527		1	2	344
Clay	1,373			1	196
Cleveland	17,001		26	8	2,244
Columbus	7,020		6	4	919
Whiteville City	2,542		2		285
Craven	14,756		17	9	1,601
Cumberland	53,079	1	117	27	7,342
Currituck	4,070		2	1	499
Dare	4,882		12	2	578

² North Carolina Public Schools Statistical Profile 2007

	Total	DB	HI	VI	Other
Davidson	20,629	1	37	9	2,294
<i>Lexington City</i>	3,109		4	2	458
<i>Thomasville City</i>	2,609		3		235
Davie	6,557		13	2	790
Duplin	8,990		13	3	957
Durham	31,666	2	89	22	3,932
Edgecombe	7,511		14	6	862
Winston-Salem / Forsyth	50,708		71	26	7,148
Franklin	8,282	1	6	1	708
Gaston	32,494	1	49	10	3,778
Gates	2,066		3		333
Graham	1,236		1		144
Granville	8,917		15	7	985
Greene	3,272		7		486
Guilford	70,380	4	116	24	10,325
Halifax	4,824	1	5	4	687
<i>Roanoke Rapids City</i>	2,978		3	4	337
<i>Weldon City</i>	1,010				
Harnett	18,179		54	15	2,529
Haywood	7,950		9	4	1,113
Henderson	13,090		15	3	1,477
Hertford	3,443		1		571
Hoke	7,259		10	2	1,028
Hyde	652				130
Iredell-Statesville	20,991	1	24	18	2,548
<i>Mooresville City</i>	5,246		7	3	630
Jackson	3,662	1	3	4	578
Johnston	29,121		62	13	4,436
Jones	1,284		4	3	205
Lee	9,395		15	2	1,027
Lenoir	9,786		8	7	1,390
Lincoln	12,075	1	15	7	1,692
Macon	4,327		2	2	716
Madison	2,646		2	3	378
Martin	4,185	1	9		606
McDowell	6,490	1	8	5	937
Charlotte- Mecklenburg	129,009	2	221	69	14,210
Mitchell	2,213	1	6		341
Montgomery	4,547		10	8	570
Moore	12,274		19	17	1,503
Nash -Rocky Mount	18,203		43	6	2,137
New Hanover	24,089	1	18	6	3,152
Northampton	2,985		2		320
Onslow	23,129	3	46	6	2,772
Orange	6,863		12	8	1,054
<i>Chapel Hill-Carrboro</i>	11,107	1	7	5	1,045
Pamlico	1,542		5	2	311
Elizabeth City / Pasquotank	6,229		3	4	910
Pender	7,715		5	3	890

	Total	DB	HI	VI	Other
Perquimans	1,739				237
Person	5,665		6	6	924
Pitt	22,597		45	9	3,051
Polk	2,425		5	1	377
Randolph	18,949		32	5	2,041
<i>Asheboro City</i>	4,470		11	3	498
Richmond	8,179		11	3	1,012
Robeson	24,213	1	28	8	4,335
Rockingham	14,438		23	9	2,047
Rowan-Salisbury	20,983	2	19	13	2,749
Rutherford	10,060		6	5	1,529
Sampson	8,133	1	10	4	1,020
<i>Clinton City</i>	3,210		7		275
Scotland	6,871		11	4	1,053
Stanly	9,660		29	5	1,706
Stokes	7,339		7	2	1,231
Surry	8,723		15		1,372
<i>Elkin City</i>	1,217		3		123
<i>Mount Airy City</i>	1,744		1		283
Swain	1,842		1	1	306
Transylvania	3,813		10	3	430
Tyrrell	614		4		89
Union	34,240	2	33	13	3,792
Vance	7,901		3	4	1,034
Wake	128,072	1	181	63	17,961
Warren	2,817		1	1	415
Washington	2,072		2		368
Watauga	4,545		9		737
Wayne	19,398		57	7	2,793
Wilkes	10,105		16	13	1,308
Wilson	12,600		13	7	1,273
Yadkin	6,201		14	4	989
Yancey	2,575		2	1	419
Total LEAs (2006-07 School Year)	1,405,694	34 0.002%	2,188 0.16%	688 0.05%	185,293 13.18%
Charter Schools (2006-07 School Year)	28,180	0 0.000%	19 0.07%	3 0.01%	3,322 11.79%
GMS	76	0	0	62	14
NCSD	105	4	81	0	20
ENCSD	104	3	75	0	26
Total (as of 1/31/08)	285	7	156	62	60

The second table, Staff Data, shows the number of special staff personnel at the three residential schools for the deaf or blind. This information for LEA and Charter School staff was unavailable at the time of this report.

Staff Data

Table 2 – DHHS-OES Staff Data for NCSD, ENCSD, and GMS³

	NCSD	ENCSD	GMS
Audiologist	1	1	
HI Teacher	41	43	
Orientation & Mobility			3
School Counselor	3	2	2
Sign Language Interpreter		5	3
Spanish Language Interpreter	1	1	
Speech Language Pathologist	3	2	1
VI Teacher			39

Terminology

Many different terms are used throughout this report. A full list of terms appears in [Appendix A](#). However, we wish to make a special note of terms relating to hearing impairments and people with hearing impairments. Some people with a hearing impairment may refer to themselves as deaf or hard of hearing and many consider themselves part of a Deaf community, which has its own communication modes and culture. The terms *hearing impaired*, *deaf*, and *hard of hearing* are technically synonyms but carry different levels of acceptability in the Deaf community. In general, *Deaf* (with a capital *D*) is a culture, *deaf* or *hard of hearing* is a condition, and *hearing impairment* is legal language found in many government documents.

³ Kathy Rhoades, NC Department of Health & Human Services, Office of Education Services (DHHS-OES)

Federal and State Legal Mandates

Introduction

This section of the report highlights the legal standards that are most important in addressing the needs of students who have visual and/or hearing impairments and provides some possible performance measures.

This analysis also pays attention to legal requirements for governance. The North Carolina Constitution requires the State Board of Education to administer the system of free public schools and federal law mandates that one agency be in charge of implementing the federal law. This section will describe how these mandates are met through the framework of laws and point out where there may be some discrepancies in laws that apply to residential schools and LEAs.

Federal law establishes a complex system for serving children with disabilities that establishes both procedural requirements and outcomes. The 2004 reauthorization of Individuals with Disabilities Education Act (IDEA) sets higher expectations for both academic and functional goals, although laws still are better viewed as creating a floor rather than a ceiling. The greatest source of friction between the law and some stakeholder expectations is with the least restrictive environment requirement. Placement decisions are required to be made within the context of an individual student's academic and functional goals. For students with hearing and/or visual impairments, this includes goals related to language. While this is intended to assure that decisions are individualized, the law's presumption that a setting with non-disabled peers is better may not be in accord with the beliefs of some educators and parents.

At a state level, local educational agencies follow laws in Chapter 115C of the North Carolina General Statutes (hereafter G.S.), which includes laws specific to children with disabilities as well as other laws that complete a system of governance. Residential schools follow some of these laws and then there are other laws that apply only to schools that are under the supervision of DHHS. This creates a patchwork of laws that may create some unintended gaps and inconsistencies.

Methodology

This review considers the North Carolina Constitution as interpreted by the North Carolina Supreme Court along with legal standards in the federal and state laws and regulations for serving students with disabilities.

The federal law is cited unless detail or expansion of a provision in North Carolina law is being discussed.

Limitations on Methodology

This analysis does not include a review of court opinions interpreting these federal and state laws. Further, the laws addressing the needs of students with disabilities are detailed and complex. This analysis does not attempt to capture all of the detail in these laws. This analysis also emphasizes the laws that relate to children ages 3 through 21. At the state level, it emphasizes state law and legally-required State Board of Education policies that are part of the State's plan for meeting federal requirements. It does not include an analysis of DHHS or DPI policies and procedures.

Sources of laws

Because of the complex overlay of federal and state laws and regulations, the following serves as a brief introduction to the laws included in this analysis. We do not discuss the law's intent or motive; we sought only to explain what the current laws say in common language.

IDEA and related laws and regulations

Many of the laws included in this report are connected to the federal law guiding education for children with disabilities, IDEA. In this law, Part B addresses the needs of children ages 3 through 21. Part C addresses care for children from birth to age two. To provide more guidance to the states, the United States Department of Education has issued regulations for implementing IDEA. By accepting federal funding, North Carolina has agreed to the many requirements in the federal law and regulations, including the requirement to establish its own laws and rules as necessary to ensure compliance with the federal law. North Carolina has met these requirements through laws codified in G.S. Chapters 115C and 143B and by providing more detailed guidance in the State Board of Education's Policies Governing Services for Children with Disabilities.

State standards and preferences for students with disabilities

IDEA requires states to inform local educational agencies when they create laws or rules that exceed federal mandates.⁴ North Carolina has been in the process of revising its policies for the past couple of years and the policies were approved by the State Board of Education in November 2007. North Carolina has not yet identified where higher standards or additional requirements have been established, but this report will attempt to highlight those standards and requirements that relate to students with hearing and/or visual impairments.

In 2006 the GA shifted policy positions to more closely align itself with federal standards. These changes were made in an extensive rewriting of the public school laws in Article 9 of G.S. Chapter 115C. These laws affect residential schools as well as schools in local educational agencies. The result is that North Carolina is now much more aligned with federal standards rather than setting higher standards or additional requirements.

⁴ 20 U.S.C. 1407(a)(2)

G.S. Chapter 143B, which sets requirements for the Department of Health and Human Services and residential schools, was only slightly modified in 2006, so that it continues to express some state standards that are higher than federal standards. For example, in G.S. 143B-216.41 the state encourages the “best educational conditions.” In addition, personnel who provide direct services to children in the state schools for the deaf must become proficient in sign language within two years.⁵ G.S. Chapter 143B also includes specific requirements for the residential schools that are not part of the federal scheme.

Other federal laws

In addition to IDEA, there are other federal laws that set standards that states must address in their education systems. The most significant other legislation is NCLB, which directly affects students with disabilities in the areas of accountability, testing, and teacher qualifications. North Carolina has responded to these laws as well by enacting laws and policies that demonstrate compliance with the federal law.

Other state laws related to public schools

G.S. Chapter 115C establishes an extensive framework of public school laws that affect all students and schools within local school administrative units. The Department of Health and Human Services is treated as an LEA only in the laws in Article 9 of G.S. Chapter 115C related to education of students with disabilities. This means that laws that establish duties for local boards in all other parts of G.S. Chapter 115C do not apply to DHHS and residential schools. While some laws, such as the Basic Education Program, specifically identify all public school students, others do not. This sets up some differences in governance and possible differences in student rights between DHHS schools and LEA schools.

Education Standards

This section of the report highlights key legal requirements with an emphasis on those likely to be especially important in considering the needs of students with visual and hearing impairments. Most of the legal requirements are set at the level of the individual student. That is, they set up expectations for how the needs of an individual student will be met. This report does not purport to describe how well individual students’ needs have been met, nor are we able to comment on how well each legal standard is being met. Instead, this section outlines the key legal standards that apply to the North Carolina educational model for students with hearing and/or visual impairments and lists possible indicators of a successful system.

⁵ G.S. 143B-146.21

1. Free Appropriate Public Education (FAPE) in the Least Restrictive Environment (LRE)

- a. Students receive individualized programs that address both academic and functional goals.

Explanation

The individualized education program (IEP) is the foundation for meeting the needs of students with disabilities. The 2004 reauthorization of IDEA makes clear that all students must have individualized academic and functional goals as well as a description of how progress toward those goals will be measured. Academic success is further stressed by requiring participation in the general education curriculum and in the state's standardized testing of core academic subjects.⁶

IDEA and NCLB set out detailed requirements for testing accommodations and determining when it is appropriate to use alternative tests for students.⁷

Possible Indicators of Success

- Use of the Standard Course of Study so that those with disabilities have access to the same curriculum as their non-disabled peers
- Professional development for administrators and IEP Team members on academic and functional goals
- Flexibility to address individual needs, such as providing extended school year services when needed
- Academic and functional goals and clear measures of meeting those goals for all students
- Meeting outcome-based measures for the system, including increasing graduation rates, post-secondary education and employment rates, and reduced dropout rates

⁶ 20 U.S.C. 1414(d)(1)(A)

⁷ 20 U.S.C. 1412(a)(16), 20 U.S.C. 6311

- b. Students receive the related services and supplementary aids necessary to help them achieve their academic and functional goals.

Explanation

Federal law mandates that students receive related services that will enable them to receive a free and appropriate education as provided for in the child's IEP. "Related services" is a broad category and is not limited to any specific list, although it can include occupational therapy, physical therapy, speech-language therapy, and counseling services. For students with hearing and/or visual impairments, interpreting and/or transliterating and audiology services could be related services. For visually impaired students, a related service could include orientation and mobility services.⁸

Federal law also mandates that students have access to assistive technology devices and services that may be important for students with visual and/or hearing impairments. Related services also can include checking hearing aids or external components and providing training to the child and family members on using the devices. While the law does not require the best equipment, it must be adequate for the educational needs of the child.⁹

Making a determination of needed services and technology also factors into placement decisions. If supplementary aids and services will allow a child to remain in the regular educational environment, then they must be provided.¹⁰

North Carolina law expresses a preference for a higher standard than the federal standard for assistive technology at residential schools for the deaf. It states that the Department of Health and Human Services "shall encourage the State to provide classrooms with modern auditory training equipment, audiovisual media equipment, and any other special equipment to provide the best educational conditions for the deaf and deaf/multi-disabled."¹¹

Possible Indicators of Success

- Related services are available along the full continuum of placements.
- Whatever devices are needed for the child to make progress are available and the child and parent understand how to use the device.
- The system enables students to have access to related services so that they can stay in the regular educational environment if possible.

⁸ 20 U.S.C. 1401(26)

⁹ 20 U.S.C. 1401(1), (2), 1401(26)

¹⁰ 20 U.S.C. 1412(a)(5)(A)

¹¹ G.S. 143B-216.41(c)

- If the GA mandates a higher standard for technology devices in the residential schools, then the system will in fact show that students attending residential schools have access to equipment that exceeds the federal standard.
- c. Hearing and visually-impaired students have access to the same kinds of diplomas and merits of achievement as other public school students.

Explanation

Federal regulations require school officials to inform parents if a child will be taking modified or alternative assessments. The law does not explicitly require the LEA to make clear to parents any consequence that participation in alternative or modified testing may have regarding a child's diplomas. The United States Department of Education's commentary to the regulations explains that since the states and LEAs are now required to be clear about testing options, this should enable parents to understand implications for graduation.¹²

Absent individual circumstances that prevent a child from reaching state standards, denying a child a diploma also could be considered an element of North Carolina's constitutional right to an equal opportunity to a sound, basic education.¹³

The State Board of Education sets minimum graduation requirements and LEAs can exceed those standards. DHHS may "confer such diplomas or marks of achievement upon its graduates as it may deem appropriate to encourage merit."¹⁴

Possible Indicators of Success

- IEP guidelines and forms enable IEP teams to carefully, and with the parent's participation, consider testing that is most appropriate for that child.
- Parents understand choices that affect diplomas.
- Students with disabilities are not unnecessarily deprived of the opportunity for a diploma.
- Effective guidelines are in place to help guide decisions on testing and curriculum modifications.
- Teams, including parents, understand options and their implications.

¹² 34 C.F.R. 200.1(f)(1)(iii), (iv), May 7, 2007 Commentary page 17756

¹³ *Leandro v. State*, 1997, *Hoke County Board of Educ. v. State*, 2004

¹⁴ 16 NCAC 6D.0503/HSP-N-004, HSP-L-001, G.S. 143B-164.15

- A child with hearing and/or visual impairments has access to the same kinds of diplomas or other recognition of achievement as do non-disabled children, regardless of the child's placement.
- d. Students with hearing and/or visual impairments receive transition services to enable them to effectively progress in employment, further learning, and independent life skills.

Explanation

By the time a child turns 14, the IEP team must begin considering what kinds of transition services are needed to help smooth the path to college, employment and independent living. A wide range of possible transition services could be appropriate, depending on the particular child, the severity of the impairment, and any other disabilities or conditions. The IEP team includes the child, when possible, as well as agency representatives who will be involved in providing transition services (if the parent consents).¹⁵

Possible Indicators of Success

- The system is able to draw on other agencies' resources to tailor a program to the needs of different children, whether the child is served by the LEA or a residential school.
 - The full range of transition services are available to assist a child with visual and/or hearing impairments.
- e. The more complex needs of children with multiple disabilities are met.

Explanation

Federal law makes no distinction between children with one or multiple disabilities. A child is considered to have a disability if he or she has at least one. Since the law focuses on meeting the individual needs of a child, it is the child who is being served, rather than separate disabilities being addressed. The law does not recognize a "primary" disability: all suspected disabilities must be evaluated and taken into account.¹⁶

Cost is not a factor in whether all disabilities or complex situations are addressed. Federal law allows states to determine how to allocate funds. In North Carolina, LEAs essentially receive the same funding for each child, regardless of the number or severity of disabilities of a particular child. There are limited

¹⁵ 20 U.S.C. 1414(d)(1)(A)(i)(VIII), NC 1503-4.1(b), 1503-4.2(b)

¹⁶ 20 U.S.C. 1401(3)(A), 20 U.S.C. 1414(b)(3)(B)

additional resources that can be applied in certain circumstances. According to DPI, some LEAs receive more funds if they have larger Exceptional Children (EC) populations.¹⁷

Possible Indicators of Success

- The system creates academic and functional goals for each child with strategies and services that take into account whatever conditions exist.
 - The system provides sufficient resources for serving children with complex needs, regardless of the placement.
- f. The system supports placing each child in the least restrictive environment for making progress toward individualized goals.

Explanation

The law makes a clear presumption in favor of the regular educational environment: “To the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are not disabled, and special classes, separate schooling, or other removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability of a child is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily.”¹⁸

In developing the IEP for students with a hearing impairment, the team must consider the child’s communication and language needs, including “opportunities for direct communications with peers and professional personnel in the child’s language and communication mode, academic level, and full range of needs, including opportunities for direct instruction in the child’s language and communication mode.” There is a similar requirement for considering Braille instruction and a learning media assessment for visually impaired students.¹⁹

Placement is considered near the end of the IEP. The team determines the least restrictive environment in which the child can make progress towards academic and functional goals. Because decisions must be made on an individual basis, the system must provide the full continuum of regular and special classes, special schools, home instruction and instruction in hospitals and institutions.²⁰

¹⁷ 20 U.S.C. 1411(e)

¹⁸ 20 U.S.C. 1412 (a)(5)(A)

¹⁹ Commentary to the Regulations, page 46586, Conf. Rpt, note 89).20 U.S.C. 1414(d)(3)(B)(iii), (iv), NC 1503-5.1(a)(2)(iii), (iv)

²⁰ 20 U.S.C. 1412(a)(5), 34 C.F.R. 300.115

Possible Indicators of Success

- Placement decisions take into account where communication needs can be met in the least restrictive environment. As an individualized determination, the system will support placements in LEAs and residential schools dependent upon the LRE for that child.
- The system provides the full continuum.
- The system does not make determinations in advance by disability category.
- State funding mechanisms do not create incentives or disincentives for certain placement decisions.

2. Evaluation

- a. Students with visual or hearing impairments are appropriately evaluated as it relates to these impairments as well as other disabilities.

Explanation

The processes for identification and evaluation are intended to ensure that all children with disabilities are appropriately identified and their disabilities evaluated so that an effective plan can be put into place.²¹ If the severity or nature of the disability is misdiagnosed or other disabilities are not identified, the IEP team will not have the information needed to develop the IEP or make appropriate placement decisions.

Federal law mandates reevaluation at least every three years unless the LEA and parent agree it is not necessary.²²

Possible Indicators of Success

- The system has an evaluation process and qualified personnel in place to accurately evaluate all disabilities.
- Reevaluation is emphasized since hearing and/or visual impairments may change or other conditions may be diagnosed as disabilities.
- Funding and resources are allocated to allow reevaluation, including reevaluations of complex conditions.

²¹ 20 U.S.C. 1414(a), (b), (c)

²² 20 U.S.C. 1414(a)(2)

- IEPs reflect changes in assistive technology or related services, revisions in the IEP goals and strategies, or even changes in placement based upon changes in the child's disability.

3. Other Needs of Students with Visual and/or Hearing Impairments

- a. The system meets other medical needs of students with visual and/or hearing impairments that are not related to their disabilities.

Explanation

Students with disabilities may need medical services not related to disabilities. State law requires LEAs to have plans to respond to the needs of students with asthma and diabetes. Chapter 115C more broadly describes the duties of teachers to provide some medical care. None of these apply to residential schools, although they may have their own plans in place.²³

Possible Indicator of Success

- The system has resources and plans to address the medical needs of students.
- b. The system addressed the needs of students with visual and hearing impairments who are academically gifted.

Explanation

Some students are “double-identified” as having a disability and as being academically or intellectually gifted. Federal law on disabilities does not address giftedness. State law requires LEAs to develop a plan for serving academically and intellectually gifted (AIG) students. LEAs submit the plans for review to the State Board and must have service plans in place for students. This law does not apply to residential schools.²⁴

Possible Indicator of Success

- The school structure accommodates meeting needs based on disabilities as well as giftedness, including through use of materials and content and class scheduling.

²³ G.S. 115C-375.2 and -375.3, 115C-307

²⁴ G.S. 115C, Art. 9B, -150.5-150.8

4. Constitutional Right to a Sound, Basic Education

- a. The system provides an equal opportunity to a sound, basic education to each student with a hearing and/or visual impairment.

Explanation

Like all other children, students with disabilities, including hearing or visual impairments have a constitutional right to education. The North Carolina Supreme Court has defined this right in a four-part definition:

1. Sufficient ability to read, write, and speak the English language and a sufficient knowledge of fundamental mathematics and physical science to enable the student to function in a complex and rapidly changing society;
2. Sufficient fundamental knowledge of geography, history, and basic economic and political systems to enable the student to make informed choices with regard to issues that affect the student personally or affect the student's community, state, and nation;
3. Sufficient academic and vocational skills to enable the student to successfully engage in post-secondary education or vocational training; and
4. Sufficient academic and vocational skills to enable the student to compete on an equal basis with others in further formal education or gainful employment in contemporary society.²⁵

Possible Indicators of Success

Through the litigation, the district court created indicators of whether this definition is met. The North Carolina Supreme Court affirmed the standards.

- The “output” indicators include grade level proficiency, indicators of students being prepared for work or further education, and graduation rates.
- The “input” indicators include qualified teachers in each classroom and effective administrators for each school along with sufficient instructional resources. These measures are for all students, regardless of disability or placement.

²⁵ *Leandro v. State, 1997, Hoke County Board of Educ. v. State, 2004*

5. Teacher Quality

- a. Students with visual and hearing impairments are being taught by “high quality teachers.”

Explanation

NCLB and IDEA require states to set licensure requirements so that teachers will be “highly qualified” in special education and core academic subjects. States also must ensure that LEAs take measures to recruit, hire, train, and retain highly qualified personnel to provide special education and related services.²⁶

Possible Indicators of Success

- Teachers of children with disabilities meet all licensure requirements for highly qualified teachers.
 - LEAs (including DHHS) have systems in place for recruiting, hiring, training and retaining high quality teachers.
- b. Personnel in DHHS schools who work with children with hearing impairments are proficient in sign language.

Explanation

State law requires that staff at DHHS schools with direct services to children with hearing impairments must be proficient in sign language within two years.²⁷

Possible Indicator of Success

- There would be evidence of compliance with this requirement and evidence that the requirement helps meet the needs of students.

²⁶ 20 U.S.C. 1401(10), 20 U.S.C. 7801

²⁷ G.S. 143B-146.21

6. Parent Rights

- a. The system enables parents to be involved in their child's education.

Explanation

IDEA requires states to ensure that parents have procedural rights related to their child's education. They have the right to consent or withhold consent to evaluate their child and if the child is identified as having a disability, then parents have the right to participate in IEP team meetings about their child. Recent changes in federal law provide more flexibility in how meetings are held and in decisions that can be made outside of meetings.²⁸

Possible Indicator of Success

- The system enables parents to participate by holding meetings at a convenient time and making use of flexibility as needed to accommodate parents' schedules.

- b. The system enables parents to utilize the different methods for resolving disputes.

Explanation

Parents have a right to dispute decisions made by the IEP team through administrative processes that include mediation or resolution. They also can seek redress through a legal process that begins with an impartial due process hearing before an administrative law judge and can lead to a legal challenge in the courts. North Carolina law describes this process in detail with even further elaboration in the State Board policies.²⁹

North Carolina law indicates that the State Board of Education could allow DHHS to develop alternate procedures that are substantially equivalent.³⁰

Possible Indicators of Success

- The system enables parents to have the same rights to procedural due process, regardless of placement.
- Programs are in place to support mediation and resolution.

²⁸ 20 U.S.C. 1415, 1414(d)(1)(C)

²⁹ 20 U.S.C. 1415, 1411, G.S. 115C-109.1 – 109.9, NC 1401-1.1 to 1.21

³⁰ G.S. 115C-108.1

- c. Parents have access to training to assist them in working with their child and the school.

Explanation

Parents have a right to receive training that is needed in order to work with the school in meeting the child's needs. This includes counseling and information on child development and the disability, as well as training to develop the necessary skills to implement the IEP.³¹

Possible Indicator of Success

- Regardless of placement, the system makes training on devices for hearing and/or visual impairments available to parents as needed.

7. Accountability System

- a. The state accountability system works to ensure accountability for student performance for students with hearing and/or visual impairments.

Explanation

State law requires residential schools as well as LEAs to participate in North Carolina's accountability system. This includes the testing program, school improvement plans, safe school plans, and interventions if performance standards are not being met.³²

Possible Indicator of Success

- There is evidence that the accountability tools have been utilized and student performance for students with disabilities is meeting standards set by the ABCs accountability model and NCLB state plan.

³¹ 34 C.F.R. 300.34(a), (c)(5), (c)(8)

³² G.S. 143B-146.2-146.9, 115C, Art. 8B, -105.20 et. seq.

Governance

The previous section provides explanations and examples of ways in which residential schools are governed differently than LEAs. Part of the explanation for why residential schools are separate from other public schools rests in the culture of the 1800s. Public schools were for “normal” children and children with impairments were a charitable cause – a moral obligation of society and the state. This distinction was grafted into the state constitution in 1868: the system for free public schools was established in Article IX, “Education”, and specifically limited attendance in public schools to those of “sufficient mental and physical ability.”³³ Schools for the blind and deaf were included in Article XI, “Punishments, Penal Institutions and Public Charities” and were to be operated by a newly required Board of Public Charities.

Not only did this make the cultural split a constitutional one, but it led to different educational standards. In 1868 both education within the free public schools and the care of the blind and deaf were constitutional mandates. But in 1880 voters approved a constitutional amendment to reduce “shall” to “may” care for “all the deaf mutes, the blind, and the insane of the State.”³⁴ This changed the alignment from one with the education system to one among charities: the standard for meeting the needs of the blind and deaf was now more similar to the less stringent requirement for the “legislature, as soon as practicable, to devise means for the education of idiots and inebrates.”³⁵

This separation persisted in the North Carolina Constitution until it was rewritten and approved by voters in 1970. The Constitution of 1971 (so called for its effective date) removed references to the blind and deaf in the charities article. Because there is no longer any reference to it in this article, the education of children with hearing and visual impairments must fall within Article IX. These children now have the same constitutional rights to education as any children in the state. And yet, as a reminder of these changes, the “sufficient mental and physical ability” provision lingers.

State law has been revised to place the State Board in final control of all public school education, including programs administered by the Department of Health and Human Services. This is constitutionally required by Article IX of the North Carolina Constitution. With only a few possible exceptions, the laws as they are written meet this constitutional mandate.

³³ N.C. Const., Art. IX, sec. 17, 1868

³⁴ N.C. Const., Art. XI, sec. 10, 1868

³⁵ N.C. Const., Art. XI, sec. 9, 1868

Current Issues in Governance

In compliance with the North Carolina Constitution, state law gives the State Board of Education authority over LEAs as well as residential schools. Given the development of the system of education for children who have visual and/or hearing impairments, it is not surprising to find some differences in the laws that apply generally to LEAs and those that apply to DHHS residential schools. Some of those differences may still be intentional, but others may be vestiges of the separate systems. The chart below identifies some of the differences in the laws. This is a review only of the laws as written; it is not a review of the implementation of laws or of related practices.

Table 3 – Governance requirements that apply only to LEAs, Residential Schools, or both

Requirements Applying to LEAs and Residential Schools	Requirements Only for LEAs (G.S. Chapter 115C)	Requirements Only for Residential Schools (G.S. Chapter 115C, Article 9A and G.S. Chapter 143B)
Assistive Technology Federal standards apply to LEAs and residential schools.	LEAs are required to comply with federal mandates for assistive technology and access to instructional materials. ³⁶	DHHS schools also must meet federal mandates. In addition, DHHS “shall encourage the State to provide classrooms with modern auditory training equipment, audiovisual media equipment, and any other special equipment to provide the best educational conditions for the deaf and deaf/multi-disabled.” ³⁷
Graduation Requirements There are no requirements that apply to both LEAs and residential schools.	The State Board of Education sets minimum graduation requirements and LEAs can exceed those standards. ³⁸	Graduation requirements are considered part of the Basic Education Program ³⁹ and therefore should apply to all public school students, although North Carolina law and State Board of Education policy does not specifically address graduation requirements at residential schools. An 1881 law simply states that DHHS may “confer such diplomas or marks of achievement upon its graduates as it may deem appropriate to encourage merit.” ⁴⁰

³⁶ G.S. 115C-107.6

³⁷ G.S. 143B-216.41

³⁸ G.S. 115C-81(b)(4), 16 NCAC 6D.0503

³⁹ G.S. 115C-81(b)(4)

⁴⁰ G.S. 143B-164.15

Requirements Applying to LEAs and Residential Schools	Requirements Only for LEAs (G.S. Chapter 115C)	Requirements Only for Residential Schools (G.S. Chapter 115C, Article 9A and G.S. Chapter 143B)
Procedural Protections Federal law has stringent requirements for rule making and submission of state plans to the federal Department of Education. North Carolina law requires the State Board of Education to adopt rules through the administrative rule-making processes (the APA) for requirements that are a “rule.”	North Carolina law describes the procedural protections, including those for mediation, resolution, and due process hearings, that comply with the requirements of IDEA. More detail is provided in the State Board of Education policies. ⁴¹	North Carolina law states that the State Board of Education could allow DHHS to develop alternate procedures that are substantially equivalent. ⁴²
Personnel Standards Licensure requirements apply to all teachers of public schools. ⁴³	G.S. Chapter 115C establishes an extensive framework for teacher duties and rights. ⁴⁴	G.S. Chapter 143B provides that the State Board of Education, in consultation with the DHHS Secretary, must create professional standards for certificated personnel. ⁴⁵
Medical Needs LEAs and residential schools are required to comply with federal law for meeting medical needs related to disabilities.	LEAs must have plans to respond to the needs of students with asthma and diabetes (115C-375.2 and -375.3). G.S. Chapter 115C more broadly describes the duties of teachers to provide some medical care. ⁴⁶	There are no comparable laws for residential schools.
Academically or Intellectually Gifted Students There are no federal requirements for addressing giftedness.	Local boards are required to develop plans for identifying and providing appropriate education services for academically or intellectually gifted students. Students with disabilities are included in LEA plans for serving students who are academically gifted. ⁴⁷	There are no residential school laws that address giftedness.

⁴¹ G.S. 115C-109.1-109.9, NC 1504-1.1 to 1.21

⁴² G.S. 115C-108.1

⁴³ G.S. 115C-295

⁴⁴ For example, see G.S. 115C, Art. 20, 23

⁴⁵ G.S. 143B-146.10

⁴⁶ G.S. 115C-307

⁴⁷ G.S. 115C, Article 9B, G.S. 115C-150.5 *et. seq.*

Requirements Applying to LEAs and Residential Schools	Requirements Only for LEAs (G.S. Chapter 115C)	Requirements Only for Residential Schools (G.S. Chapter 115C, Article 9A and G.S. Chapter 143B)
<p>Student Rights Federal law establishes requirements for student records and procedural protections for students with disabilities. Constitutional due process (such as in disciplinary suspensions) and other constitutional rights apply for all students.</p>	<p>G.S. Chapter 115C provides an extensive framework for addressing student issues, including student discipline.⁴⁸</p>	<p>G.S. Chapter 143B does not provide comparable detail on these issues.</p>

⁴⁸ For example, see G.S. 115C, Art. 27

North Carolina's Current Service Delivery Model

Introduction

This section of our report seeks to present the perception of how North Carolina's model actually functions in the field. What follows is a brief review of which sites were visited, who participated, how meetings were conducted, additional sources used to understand the model, and some limitations of this effort. It includes a visual representation of the hearing impaired and visually impaired models side by side and a description of each step in the process, as well as a series of findings based on the site visits and other meetings.

Methodology

In order to gain an understanding of how North Carolina's educational model for students with hearing or visual impairments actually functioned, we selected seven sites for visits. The selected sites included North Carolina's two residential schools for the deaf, the residential school for the blind, and four Local Education Agencies (LEAs). The sites included (in order of visitation) were:

- North Carolina School for the Deaf (NCSD), Morganton
- Rockingham County Schools, Reidsville
- Eastern North Carolina School for the Deaf (ENCSD), Wilson
- Beaufort County Schools, Washington
- Governor Morehead School for the Blind (GMS), Raleigh
- Kannapolis City Schools, Kannapolis
- Wake County Schools, Raleigh

During each visit we conducted three meetings, one with administrators, a second with teachers and other line staff, and a third with parents and students. Each meeting lasted from one to two hours. The number of meeting participants varied from 1 to 35. All participants were invited to participate by either the residential school director, LEA Exceptional Children director, or their staff. A total of 184 people participated in the site visits, including:

- 27 Administrators
- 71 Teachers/Line Staff
- 35 Parents
- 51 Students

In each site visit meeting, participants were asked to explain, based on their personal experience, the structure of the model and how it functions. Below is a sample site visit agenda based on our visit at the North Carolina School for the Deaf in Morganton.

Tuesday, November 27

- 8:00 Arrive at NCSD's Main Building
- 8:10 Tour of Elementary, Middle, and High Schools
- 9:15 Interview/Discussion with six line staff including a variety of teachers and/or assistant teachers from all levels, specialist staff, and paraprofessionals
- 11:15 Lunch in Main Building Dining Room
- 11:45 Tour of Dorm
- 1:00 Interview/Discussion with four representatives of school administration.
- 4:00 Interview/Discussion with three sets of parents (only one of each couple may attend) with children if parent would like.

NCSD provided two sign language interpreters for each interview/discussion. Each interview/discussion generally lasted two hours. Schedules varied according to site.












In addition to the site visits, six additional meetings were held with staff members of the DHHS Office of Education Services (OES) and the DPI Exceptional Children Division (ECD), Beginnings for Parents of Children Who Are Deaf or Hard of Hearing, Inc. (hereafter Beginnings), medical professionals, and select practitioners recommended by members of the Steering Committee. The purpose of these meetings was to get more specific information about certain parts of the model.

Limitations of the Methodology

We visited only four out of 115 LEAs.⁴⁹ The number of site visits to LEAs was limited by the amount of time and the season in which the site visits had to occur. We attempted to visit representative LEAs. Meeting participants were selected by primary points of contact within each school, not by random sampling. Each site provided sign language and Spanish interpreters as needed; thus there was no internal control on the quality of interpretation. However, it must be noted that the LEAs visited were large and small and from the western, central, and eastern parts of the state, and that the resulting descriptions of the model did not vary between the LEAs or residential schools.

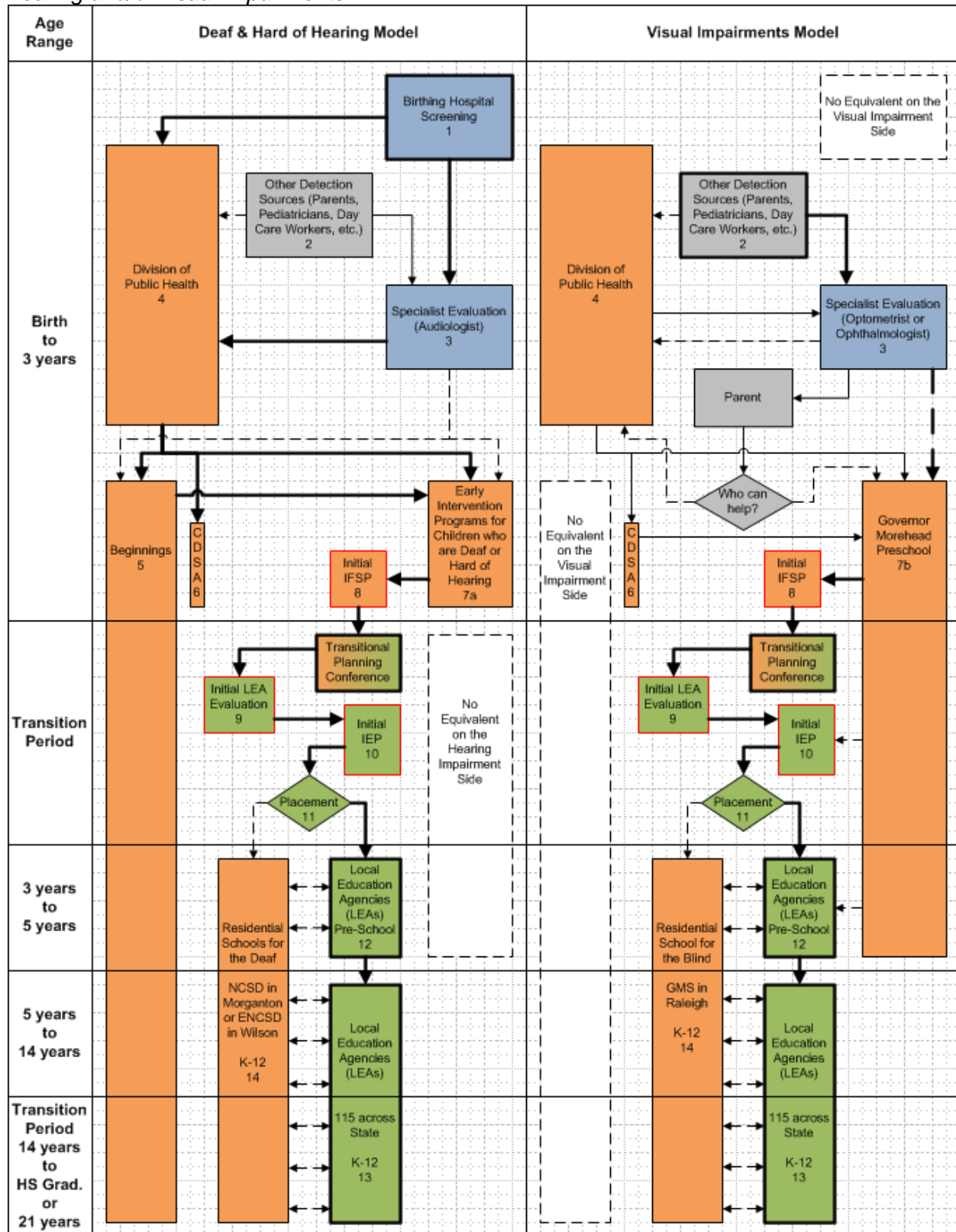
⁴⁹ None of the 98 charter schools were visited.

Model Key

Primary Step		Medical	
Regular Step		DHHS	
Recurring Step		DPI/LEA/Charter	
Primary Flow		Other	
Regular Flow		No Equivalent	
Occasional Flow			

PLEASE NOTE: Size of shapes does not signify importance. Figure is not to scale relative to time. Space allocations are driven by the number of steps during a given age range and the need to make connections clear.

Figure 3 – Side-by-side comparison of service delivery model for children and students with hearing and/or visual impairments



Model Description

1. Birthing Hospital Screenings

Based on 2006-07 data provided by the NC Department of Public Instruction, approximately 0.15 percent of all students enrolled in an LEA or charter school had a hearing impairment, 0.05 percent had a visual impairment, and 0.002 percent were designated as Deaf-Blind.

Hearing Impairments

Since October 1999, every birthing hospital in the state has been required to perform a basic hearing screen on every newborn. The hearing screen only tests for detection of sound at 35db, which is the average volume of speech. The test consists of a pair of earphones placed over the baby's ears and three sensor pads, one placed on the top of the head, one placed on the back of the neck/spinal column, and the ground line placed on the shoulder. Sound is emitted from the earphones and the sensors on the brain and neck attempt to detect a reaction to the sound.

The DHHS Public Health Division is notified of the result of every hearing screen performed at the birthing hospitals. If the screen is passed, Public Health is notified and the child is sent home. If the screen is not passed, it will be performed one or two additional times. Collectively, these are considered the first screen. If none of the screens are passed, Public Health will be notified of the results of each screen and the child will be referred to a specialist (usually an audiologist) for a thorough evaluation. The family may refuse to follow up on the referral, but most agree to the audiologist evaluation.

Visual Impairments

There are no mandatory visual screens performed on newborn babies. However, at-risk (premature) babies usually have more tests, including vision tests, performed before they leave the hospital. Birthing hospitals are not required to notify Public Health of the results of vision tests performed on at-risk newborn babies. Birthing hospitals may refer families to an ophthalmologist or optometrist, but there is no legal requirement to do so.

2. Other Detection Sources

Not all hearing or visual impairments are present or detectable at birth. When hearing or visual impairments are not present or detected by the birthing hospital, the next most likely sources of detection are parents, pediatricians, and day care workers. When this occurs, the typical course of action seems to be a visit to a pediatrician and then a referral to a specialist.

3. Specialist Evaluation

Evaluation

Specialists perform thorough evaluations to determine the full extent of the impairment. The comprehensive audiological screening for hearing impairments includes the following:

- Immittance Audiometry: a battery of tests that measures the extent that energy flows freely through the outer and middle ear function. This test is used to determine if hearing loss may be due to problems within the middle ear,
- Pure-tone Audiometry: a test that determines the threshold of hearing sensitivity. Depending on the developmental age of the child this may be done using visual reinforcement audiometry, conditioned play audiometry or conventional audiometry. This test is used to determine hearing sensitivity in both the middle and inner ear,
- Speech Audiometry: a series of tests that include speech recognition threshold and speech recognition ability with and without amplification.

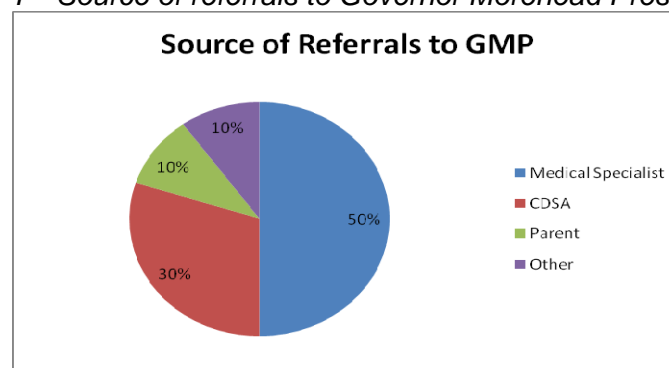
The evaluation for visual impairments examines detection of light, color, depth, and motion. Also measured are the ability to see at varied distances and visual fields. The retina and pupil are examined, particularly for glaucoma, cataracts, and diseases. Another test involves paddles with black and white lines of different widths next to each other. The specialist will raise one paddle that is pure grey and another paddle with black and white lines. By repeating this process, the specialist can determine if the child can see the pattern of different lines or when the lines become so narrow that the child sees only solid grey. In addition, MRI or CAT scans are sometimes performed to help determine if the problem is with the eye, the nervous system, or the brain. Genetic tests are sometimes performed as well.

Reporting

On the hearing impairment side, the specialist (usually an audiologist) is legally obligated to provide the results of the evaluation to Public Health. It also seems they regularly notify Beginnings and the two early intervention programs (Early Intervention Programs for Children who are Deaf or Hard of Hearing and Governor Morehead Preschool) as well (see below).

On the visual impairment side however, there does not seem to be a robust reporting relationship between specialists (ophthalmologists and optometrists) and Public Health. Approximately 50 percent of Governor Morehead Preschool's (GMP), referrals come from specialists. Thus, the other 50 percent of specialist evaluations on the visual impairment side may go only to the parent who must make the next move to trigger any services from DHHS. GMP stated that, in addition to the 50 percent of referrals from specialists, another 30 percent come from the Children's Development Services Agencies (CDSA) and 10 percent from parents. Well informed and proactive specialists may be aware of the array of services provided by DHHS and may recommend that the parent contact them, but it seems that a significant number of families turn to friends or the web for guidance on what to do next. This lack of automatic reporting can cause delays of weeks or months before treatment can begin.

Figure 4 – Source of referrals to Governor Morehead Preschool



Within 24 hours of referral to GMP, a follow-up referral is made to the appropriate CDSA. There are strong partnerships at the local level between the CDSAs and GMP, who work closely together to ensure that all identified and eligible children are receiving all services to which they are entitled. There is sometimes a delay in the delivery of vision services due to one of the following:

1. An inability to obtain a documenting ophthalmological or neurological report
2. A parent's wishes in implementing any additional programming (can be for child health reasons, parent needs, etc.)
3. Staff vacancies due to the unavailability of qualified and trained professionals

4. Division of Public Health

On the hearing impairment side, the DHHS Division of Public Health (hereafter Public Health) is notified of the results of each hearing screen performed on newborn babies by birthing hospitals. They are also notified of the results of the evaluations performed by audiologists. When an audiologist has determined that a child has a significant hearing impairment, the notification to Public Health triggers a response from Beginnings, the CDSA, and the early intervention programs (see below).

On the visual impairment side, Public Health is not automatically notified of the results of any vision tests performed by birthing hospitals or specialists. They *may* be notified by doctors and may then pursue the family, or the family may pursue Public Health on the advice of doctors, friends, or after web research. While there is no equivalent of Beginnings (see below) on the visual impairments side (perhaps because there is relative agreement on the methods to employ based on the severity of the visual impairment), CDSA and GMP do provide case management and direct services, respectively, to children with visual impairments.

5. Beginnings

Beginnings is an independent nonprofit organization under contract with DHHS.⁵⁰ Beginnings has a main office in Raleigh and a secondary office in Charlotte. Beginnings provides services only to families with children with a hearing impairment. They have two primary responsibilities:

- a) Provide grief counseling to parents
- b) Provide parents with unbiased information about the many different kinds of communication modalities and assistive technology available in general and in their area of the state.

Services usually entail a single visit with families in their home, but Beginnings may provide additional services through age 22 at the family's request. For example, if requested, Beginnings representatives may participate on IEP Teams. Parents will choose a communication mode based on information provided by Beginnings. Communication modes include:

- **Auditory Verbal**, which focuses on learning to speak by listening and does not include signing, lip reading, or body language.
- **Auditory Oral**, which also focuses on learning how to speak by listening and *can* include lip reading and body language, but does not include signing.
- **Total Communication**, an educational philosophy that advocates the right of every person with a hearing loss to have access to a full range of communication methods, depending upon the needs of the person and the situation. TC includes: use of residual hearing, speech reading, facial expressions, body language, gestures, finger spelling, sign language, written form and Cued Speech.
- **Cued Speech**, a visual communication system using eight hand shapes and five positions around the face in combination with the natural mouth movements of speech to clarify spoken language
- **Signing**, which does not require any ability to hear and does not include any attempt to teach someone how to speak. There are four sign languages/systems in use in NC:

⁵⁰ <http://www.beginningssvcs.com/>

- ASL = American Sign Language. Focuses on communicating through the expression of concepts and ideas. Since it's not English, there are sometimes translation issues between knowing ASL and knowing how to read and write in English.
- SEE = Signed Exact English. Focuses on communication through literal translations of English. While this language presents no conflicts with writing or reading English, it takes longer to communicate the same information relative to ASL.
- SE = Signed English. Similar to SEE but sentences may not include every word. For example, "Let's go to the park." may be translated as "We go park."
- PSE = Pigeon Signed English. This is not a fixed language. It is instead a conglomeration of ASL, SEE, and self-determined signs for words or ideas.

6. CDSA

CDSA is primarily charged with case management. For example, CDSA will help families coordinate related services like occupational therapy (OT), physical therapy (PT), transportation, etc. from birth through 3. On the hearing impairment side, CDSA handles all case management services. On the visual impairment side, CDSA handles case management for children with more than just a visual impairment while the GMS handles case management for children with only a visual impairment.

7. Early Intervention

- a. Early Intervention Programs for Children who are Deaf or Hard of Hearing
- b. Governor Morehead Preschool

Early intervention (EI) is a function provided by two different DHHS programs operated by OES. They provide direct service delivery to children with hearing or visual impairments. Services are delivered through a network of regional offices that act as bases for itinerant service providers. The itinerant service providers travel throughout the state to deliver services primarily in the home, but also at other sites if the home or other natural environments in the community are not suitable for the types of services provided.

On the hearing impairment side, Early Intervention Program for Children who are Deaf or Hard of Hearing serves children from birth through age three and primarily provides instruction in the communication modality the family chose in consultation with Beginnings. Services usually consist of one to three visits per week.

On the visual impairment side, the Governor Morehead Preschool serves children from birth through age five and addresses all areas of development focusing on teaching children how to compensate for their vision loss (pre-Braille, pre-Orientation and Mobility (O&M), concept and language development, etc.). Services usually consist of one visit per week.

8. Initial IFSP

Every family receiving services from one or both of the early intervention programs must draft and update an Individualized Family Service Plan (IFSP). The IFSP is the precursor to the Individualized Education Program (IEP) that is first developed when the child is or will soon turn three years old. The IFSP includes the following nine sections:

1. IFSP Information – This section contains basic information about the child and contact information for all IFSP Team members.
2. Family's Concerns, Priorities, and Resources – An optional section that asks parents why they are interested in receiving help for their child and what the parents want the IFSP Team to know (likes/dislikes, effect of disability on family, current concerns, etc.) about their child.
3. Summary of Child's Present Abilities and Strengths – An optional section in which information can be provided by members of the IFSP team in five areas:
 - a. Adaptive/self-help skills (bathing, feeding, dressing, etc.)
 - b. Cognitive skills (thinking, reasoning, learning)
 - c. Communication skills (responding, understanding, and using language)
 - d. Physical development (vision, hearing, motor, and current health status)
 - e. Social/emotional skills (feelings, playing, interacting)
4. IFSP Outcomes – This section includes the family's concerns, priorities, and resources, the child's abilities and needs, specific outcomes designed to achieve those needs, specific activities that will occur to meet those outcomes, and identification of who is responsible for each activity.
5. IFSP Service Delivery Plan – This section outlines each service the child will receive, who will provide that service, when it will start and end, where it will occur, how often it will occur, and the cost to the family.

6. Natural Environment/Setting – This section is only necessary if any services will not be provided in a natural environment, which is described in the IFSP document as “the home and community settings where children without disabilities participate.” If any services will be provided outside a natural environment, this section must explain why those services can only be provided in an unnatural environment. It also includes information on how those services will be incorporated into the family’s daily routines and potential steps to move the service to a natural environment.
7. Transitional Planning – This section covers all the steps involved in educating parents about the transition out of the early intervention program(s) and to their LEA. In particular, this section requires a transitional planning conference that includes the parents, LEA representative, evaluation agency representative, and anyone else who may be able to support and develop the transition plan.
8. IFSP Agreement – This section is where parents can express any lingering concerns and where everyone involved signs the IFSP.
9. IFSP Review – This section is where the results of an IFSP review are recorded and participants sign.

9. Initial LEA Evaluation

Each Local Education Agency (LEA, synonymous with school district/system) will conduct its own evaluation of a student with a hearing or visual impairment to determine if the condition is significant enough to affect a child’s ability to learn and function safely and independently in the school setting. Such conditions warrant specially designed instruction (that is, special education). The first evaluation occurs when the child is two and will turn three during the upcoming school year. If it is determined that the child is eligible for special services, an IEP will be developed (see below). Reevaluations for students who receive special services must be considered by the IEP team at least once every three years. They can decide to re-evaluate students or decide no additional evaluations need be performed at that time.

10. Initial IEP

The IEP is similar to the IFSP mentioned above and fills the role from age three on that the IFSP fulfilled from birth to three years of age. IEPs include the following eight sections:

1. A statement of the child’s present level of academic and functional performance
2. A statement of measurable annual goals
3. A description of how the child’s progress towards these goals will be measured.
4. A statement of the special education, related services, and supplementary aids and services to be provided and the supports for school personnel.

5. An explanation of the extent to which the child will not participate with nondisabled children in the regular classroom.
6. Information on the child's participation in state-wide and district-wide assessments.
7. The projected date for the beginning of services and modifications.
8. Transition services beginning no later than the first IEP to be in effect when the child turns 14 or at a younger age if appropriate.

IEP teams must include a designated LEA representative. This is usually the school principal, assistant principal, or their designee, but it could also be the LEA superintendent or Exceptional Children director. There must also be a special education teacher and a regular education teacher. Parents must be invited to participate, but can decline the invitation or refuse to respond. The IEP team can continue without the parent after two or three attempts to contact the parent. However, this seems to be a rare occurrence. At least one of the parents usually participates.

Once the student is 13 going on 14, he or she must also be invited to participate because it is at this age that the transition portion of the IEP is must occur. Students are welcome to participate at younger ages too. As with parents, the student must be invited but can decline the invitation or fail to respond. An unlimited number of other people may participate as well. The LEA can invite whomever they like (perhaps an audiologist, physical therapist, etc.) but they must include their invitees in the invitation to the parents. The parents can also bring their own advocates.

IEPs must be reviewed at least once a year, but they can be performed at any time before that by request of any member of the prior IEP team. There is standard IEP form, though each LEA can create its own. Some use paper forms, some use computer-based forms. They must all include the same core pieces, but the wording of each section and the order of topics can change.

11. Placement

The majority of children with hearing or visual impairments are placed with their LEA. This is especially true when the impairment is relatively minor as it is much more likely that even small and/or less-wealthy LEAs will be able to meet the needs of such students. Referrals to residential schools are supposed to occur only when the LEA cannot provide necessary services in regular classrooms, resource rooms, or itinerant services. Neither the cost to the LEA of providing necessary services nor parental preferences are supposed to be driving forces in referrals to residential schools.

12. LEA Preschool

Services provided by the LEA between the ages of three and five can vary widely. They may consist of full inclusion with regular preschool classes, a mix of inclusion and itinerant services, or full itinerant services. Itinerant services could consist of a single visit per week or daily visits each week. The type, frequency, and location of services are all determined in the IEP.

For children who have a visual impairment, the majority of the LEAs collaborate with GMP, establishing and maintaining a service delivery model whereby GMP continues to provide the vision-related services while the LEA provides all other necessary services (classroom placement, related services, transportation, etc.). There are no longer preschool programs at the two residential schools for the deaf and therefore a lesser degree of support and cooperation between the residential schools for the deaf and the LEAs.

13. LEA K-12

LEAs are responsible for providing a wide array of services to students with hearing or visual impairments. The quantity and type vary based on the needs of each individual student. Since hearing and visual impairments are low incidence disabilities, many LEAs have very few students with either impairment. The students with hearing or visual impairments will also be spread out across age ranges. For example, an LEA might have:

- An elementary student with a mild hearing impairment who, with the help of some assistive technology such as a hearing aid or auditory trainer, can participate in all regular classes.
- A middle school student with a moderate visual impairment that requires large print books for all classes, a laptop with special software to read back online information, and some time in a resource room for one class a day.
- A high school student with a severe hearing impairment, who only communicates through sign language. The student's native language is Spanish, and the family chose ASL as the primary mode of communication. The student requires an ASL trainer to teach him ASL and an interpreter to accompany him to every class and translate the instruction. Because ASL is not English, the student also requires ESL instruction, which involves regular removal from regular classes.

A significant number of children with hearing or visual impairments also have other disabilities (cognitive, behavioral, physical, etc.), so that addressing their needs is much more complicated. On the hearing impairment side, up to 40 percent of children have other disabilities or impairments.⁵¹ On the visual impairment side, approximately 65-70 percent have other disabilities or impairments.⁵² When the student is about to turn 14, the transition portion of their IEP is included. Like the transition portion of the IFSP, this section focuses on what kinds of services the student will need to transition out of high school. This section of his or her IEP can be introduced when the student is about to turn 14, but it cannot be introduced any later.

14. Residential Schools

North Carolina has two residential schools for the deaf and one for the blind. The North Carolina School for the Deaf (NCSD) is in Morganton and serves students referred and accepted from 47 western counties. The Eastern North Carolina School for the Deaf (ENCSD) is in Wilson and serves students referred and accepted from 53 eastern counties. The Governor Morehead School for the Blind (GMS) is in Raleigh and serves all students referred and accepted within the state. None of the schools serve students from outside North Carolina. All three residential schools are operated directly by OES and are part of the DHHS school system.

Families may not apply directly to the residential schools. In order to be enrolled in one of the residential schools, a student must:

1. Enroll in their LEA.
2. Be evaluated to determine if they are eligible to receive special education services from their LEA.
3. Be approved to receive special support via their LEA's Exceptional Children Division.
4. Have at least one IEP developed.
5. Have a determination by the IEP Team, in the placement section of the IEP, that placement in one of the residential schools is the least restrictive environment to meet the student's educational needs.
6. Be referred to the appropriate residential school.
7. Be accepted for enrollment by the residential schools. Please note that the residential schools do not have to accept all students referred to them. The residential schools can deny admission.

⁵¹ Parrish & Roush, When hearing loss occurs with other disabilities, *Volta Voices* 2004; 11(7):20-21

⁵² Barbria Bacon, Director, Governor Morehead School for the Blind, Raleigh, NC

The majority of students are referred to residential schools when they are in middle school. It seems that relatively few students who attend residential schools return to their LEA. All course and graduation requirements at the residential schools are the same as in their LEA counterparts.

Deaf-Blind

There is no separate model for children who are deaf *and* blind. The hearing impaired and visually impaired models are actually the same model that functions differently depending on the number of impairments and the severity of each. A child who is Deaf-Blind will access different resources within that model based on the severity of the child's needs at different stages of development. Over three-fourths of students designated as Deaf-Blind attend their LEA.⁵³

Comments on the Current Model

In addition to explaining their views on how the model worked, administrators, teachers, parents, and students also commented often about what they thought the model did well and not as well. While the timeframe of this effort did not allow us the opportunity to test the veracity of the following statements, they are presented here to ensure that readers are at least aware of these perceptions and concerns. It should be noted again that we guaranteed confidentiality to all of our interviewees and did not record conversations in order to maximize the likelihood of candid, honest answers. We can report, however, that a total of 184 people participated in the site visits, including 27 Administrators, 71 Teachers/Line Staff, and 86 Parents/Students.

- About one-third of parents expressed significant levels of satisfaction with the services they received from the DHHS Early Intervention Programs for Children who are Deaf or Hard of Hearing and the Governor Morehead Preschool. None expressed a lack of satisfaction with those services.
- We estimate about two-thirds of the students, half of the parents, and one-fourth of the administrators and teachers expressed concern about the development of social and life skills development. Students often talked about their ability to interact with classmates and participate in extracurricular activities. Students and parents often expressed concern about the students' ability to be independent after graduation from high school. Administrators and teachers often expressed concern that the current programs in place to help students develop these skills are not sufficient to meet the desires of parents and students.

⁵³ Based on 2006-07 LEA/Charter data from DPI and 1/31/08 residential school data from DHHS.

- Approximately one-fourth of the parents of students with a hearing impairment expressed concern about the ability of school staff to properly maintain hearing aids, auditory trainers, and other assistive technology. About half of the parents expressed concern about the knowledge and experience of their school's teachers of the hearing or visually impaired and translators. The comments usually focused on a perceived lack of knowledge about current advances in the field and new technology. Greater levels of concern were usually expressed by parents whose children have significant impairments. In general, the less severe the impairment, the less concern expressed about professional qualifications.
- Approximately half of the administrators said that one of their major concerns was the difficulty of finding qualified applicants for teachers of the hearing or visually impaired and translator vacancies. These concerns were more often expressed in places far from major urban centers. Difficulties in attracting highly educated professionals to more rural settings were often cited as one of the main causes for long-running vacancies.
- About half of the parents and a third of the students expressed concern about the availability of modern technology and resources. For students with hearing impairments, the concerns usually focused on modern hearing aids and auditory trainers. For students with visual impairments, concerns usually focused on timely delivery of large print books and Braille texts (especially those not on the state list of approved texts) and laptop computers.
- About half of the parents, particularly those of children with a hearing impairment, were concerned with how LRE was implemented. LRE was often raised in tandem with concerns about social skills development. A common sentiment was that the least restrictive environment should be the environment that has the fewest restrictions on students' ability to develop academically and socially. Students who attended the residential schools for the deaf more often expressed high levels of satisfaction with their ability to develop social skills and relationships.

National and Professional Best Practices and Philosophies

Introduction

The purpose of this section is to provide a national context for deaf/hard of hearing and blind/visually impaired issues, identify and articulate best practices and summarize the key tenets of *National Agenda: Moving Forward on Achieving Educational Equality for Deaf/Hard of Hearing Students* and the *National Agenda for the Education of Children and Youths with Visual Impairments, Including Those with Multiple Disabilities*.

This section includes a discussion of the methodology employed, limitations of the methodology, background and individual discussions of highly pertinent issues in both the Deaf/Hard of Hearing and Blind/ Visually Impaired communities.

Methodology

A comprehensive literature review, beginning with the initial list of recommended resources provided by this project's Steering Committee, yielded a wealth of information regarding core values, areas of focus for best practice and national priorities as expressed in the respective National Agendas. The review enabled us to produce a matrix tracking the number of times a resource was mentioned. Resources with significant mentions form the cornerstones of this report. A full list of resources is included in [Appendix C](#).

Limitations of Methodology

Because educational approaches vary greatly, myriad opinions about best practice exist. We contacted and considered as many resources as time permitted; however, time constraints meant that an exhaustive study of all resources was impossible.

Background

The education of persons with low incidence disabilities, such as hearing or visual impairments, has well over a century of history. From the inception of educational efforts for low incidence disabilities in the early nineteenth century to the present, there have been perennial challenges. In recent years, combined national efforts have addressed the perpetually low achievement of students with hearing and/or visual impairments. Questions of best practice are similarly perennial, but in short, no one best practice approach exists. However, there is consensus that we can and must do better.

In short, no one best practice approach exists. However, there is consensus that we can and must do better.

North Carolina is not alone in its current effort to evaluate the service delivery models for the education of visually impaired and hearing impaired students. In the past few years, Texas, Colorado, New Mexico, California, Arkansas, Washington, Indiana, Pennsylvania, Wisconsin, Georgia, and Kansas have all undertaken similar efforts.⁵⁴ These undertakings have had differing levels of success, but all of the outcomes indicate a national trend that ensures the best education for students with these low incidence disabilities.

Although often grouped together because of their low incidence, visual and hearing impairments share few similarities. Approaches to educating students with either type of impairment do share core values informed by similar best practices that offer an array of placement options. There is also the challenge of providing services for students with multiple impairments.

A discussion of each type of impairment follows the discussion of similarities. These breakout sections include a summary of main issues, a timeline of major milestones, areas of national focus, and a brief discussion of the respective National Agendas. The areas of national focus are issues identified by the majority of references as areas in need of improvement and attention. Many of these areas are included in the National Agendas but merit additional mention because they further illuminate ideas for best practice.

Core Values Informing Best Practice

As with the education of all children, debates rage about best practices for instruction. These debates are particularly heated in the case of children with low incidence disabilities. Common ground exists, however, in terms of the following four core values:⁵⁵

- *Individuality*: Every child with a visual or hearing impairment has unique challenges and strengths. The best practice for that child is one that fits the education to the child, not the child to the education.
- *Independence*: A tendency to overprotect a child with a visual or hearing impairment can impede the child's ability to learn, adapt, and achieve his or her potential. The best practice encourages maximum independence appropriate for each child.
- *High Expectations*: Often, children with visual or hearing impairments are not held to high standards because of an underestimation of ability and potential. Best practice approaches maintain high expectations for all students with hearing and/or visual impairments.
- *Flexibility*: The education of a child with a vision or hearing impairment is not a fixed process but rather a process requiring consistent reevaluation and flexibility. The decision to enroll in a residential school at age five may be the least restrictive environment for that child at that time, but at age eight, a regular classroom with accommodations may become the least restrictive environment.

⁵⁴ National Deaf Education Project, www.ndepnow.org, March 16, 2008.

⁵⁵ Although all sources mentioned them, these philosophies are best exemplified by the respective national agendas

Array of Placement Options

Under Part B of IDEA, students with disabilities are entitled to a free appropriate public education (FAPE) in the least restrictive environment.⁵⁶ More details on IDEA can be found in the federal and state legal mandates section above (see page 16), but LRE requirement establishes that a variety of placements must be available to students with disabilities. IDEA § 300.551 states:

“Each public agency shall ensure that a continuum of alternative placements is available to meet the needs of children with disabilities for special education and related services.”

These placements can be broken into eight major categories. All of these placement options have unique benefits and drawbacks. Table 18 illustrates the options for a child with a visual or hearing impairment.

Table 4 – Placement Options⁵⁷

Placement	Details
Regular Setting	Majority of education received with nondisabled children; not out of classroom more than 21% of day
Resource Setting	Special education provided out of classroom for 21-60% of day
Separate Setting	Special education provided out of classroom for 60%+ of day
Public Separate School Facility	50%+ of day in separate facility (day school)
Private Separate School Facility	50%+ of day in separate private facility
Public Residential Facility	50%+ of day at Public Residential Facility
Private Residential Facility	50%+ of day at Private Residential Facility
Hospital / Homebound Setting	Special education provided in hospital or homebound setting

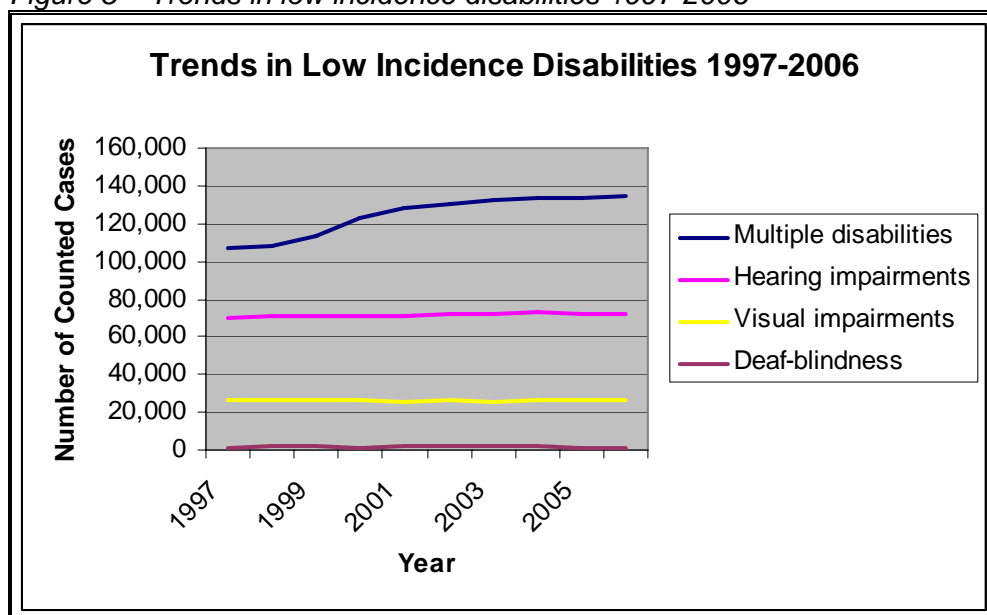
⁵⁶ Deaf Students Education Services, U.S. Department of Education, <http://www.ed.gov/about/offices/list/ocr/docs/hq9806.html>.

⁵⁷ North Carolina Department of Public Instruction, 2004 Procedures Governing Programs and Services for Children with Disabilities

Multiple Impairments

As live birth rates increase and medical advancements enable the survival of infants with severe complications, the number of students with multiple impairments has dramatically increased.⁵⁸ According to the IDEAdata.org and Project Forum reports, an increase in the number of students with multiple impairments makes service delivery significantly more complex. The graph below illustrates the past decade of reported multiple, hearing, visual, and deaf-blind disabilities. While rates of visual and hearing impairments and deaf-blindness have remained relatively the same, rates of multiple disabilities have greatly increased.⁵⁹ Determining what educational approaches are most effective for each student's unique needs presents a complex challenge. A greater challenge, however, is establishing the best way to count students with multiple impairments. For example, a student with multiple impairments may be counted as something other than visually or hearing impaired but may still need extensive support in that area.

Figure 5 – Trends in low incidence disabilities 1997-2006



⁵⁸ Ferrell, K.A.

⁵⁹ www.IDEAdata.org/arc_toc8.asp#partbCC, Table 1-11, March 16, 2008.

Deaf and Hard of Hearing

Summary

Educating children who are deaf or hard of hearing has over a century of history. From the first residential school in the early nineteenth century to the drafting of the National Agenda in 2005, the education of persons with hearing impairments has garnered national attention. Efforts to improve education for children who are deaf or hard of hearing are ongoing.

Communication and language development remains the most prominent issue.⁶⁰ Children often experience isolation when peers, classroom teachers, and even parents cannot effectively use their mode of communication. Current national efforts attempt to address this issue in a number of ways. Although disagreements about modes of communication abound, an overwhelming agreement exists that every effort should be made to open the lines of communication between children who are deaf or hard of hearing and their peers and communities.

Areas of National Focus

While there are no commonly accepted best practices, a review of national organizations indicates wide agreement on the need to focus on the following key areas:

- *Language Rich Environment*: From birth to age 21, the overwhelming emphasis is on the development and mastery of language and communication, in whatever mode is chosen by the parents. Indeed, the National Deaf Education Project Statement of Principle, the forerunner of the National Agenda, states: “All education options for deaf and hard of hearing children must be communication and language driven.”⁶¹
- *Guidance and Support for Parents*: One commonly cited challenge is the inability of parents to communicate with their child in the communication mode used by the child.⁶²
- *Range of Educational Settings*: As required by law, a range of placements must be available to all students with disabilities. According to Gilliam and Easterbrooks (1997), residential life provides some unique benefits including a natural initiation into deaf culture, improved socialization, and a way for deaf heritage to be passed through generations of students who are deaf. Drawbacks include alienation from the family, learned dependency, and a lack of parent participation.

60. Seigel, L. Statement of Principle, 2001, www.ndepnow.org, March 16, 2008.]

⁶¹ *Ibid.*

⁶² www.beginningssvcs.com, www.HandsandVoices.org, March 16, 2008.

Advocating for the inclusion of visually and/or hearing impaired students in a regular classroom, Nowell and Innes (1997) discuss the benefits and drawbacks. The benefits include participation at home and in the community, inclusion in the hearing world, and wider availability of academic programs. Drawbacks include potential isolation, limited direct instruction, limited interaction with peers and support staff, and the lack of qualified support staff. A statement issued in 1992 by the U.S. Department of Education cautioned against overemphasizing inclusion: “Any setting, including a regular classroom, that prevents a child who is deaf from receiving an appropriate education that meets his or her needs, including communication needs, is not the LRE for that individual child.”⁶³

Some general questions surround the selection of a setting that is best for each child:

- Is there full communication access? Full information access?
- Are there qualified teachers, support staff and interpreters available?
- How much time will the teacher be able to dedicate to direct instruction?
- Is the student socially and emotionally mature?
- What opportunities for peer interaction exist?
- What opportunities for participation in extracurricular activities exist?

Currently, the answers to these questions for many areas are negative. The implication of this is that attempts at best practice fail immediately because of a current lack of capacity.

- *Adapted Classroom*: Size, lighting, flooring for acoustics, use of amplification devices, elimination of background noise
- *Modes of Communication*: Auditory-Verbal, Auditory-Oral, Cued Speech, English Based Sign Systems, Bilingual-bicultural philosophy, Total Communication⁶⁴
- *Social, Emotional, and Cultural Needs*: Opportunities for direct interaction with peers, both hearing and non-hearing, are paramount to the development of students who are deaf or hard of hearing.
- *Expanded Core Curriculum (ECC)*: A curriculum that goes beyond the state-mandated curriculum requirements to address additional needs of students who are deaf or hard of hearing. The ECC includes language and vocabulary development, use of an interpreter, use of auditory technology, deaf studies, communication resources, communication skills for families, social skills instruction, and self-advocacy instruction.⁶⁵

⁶³ U.S. Department of Education, Deaf Students Educational Services, Federal Register, Volume 57, No. 211

⁶⁴ Beginnings, www.beginnings.org, March 16, 2008.

⁶⁵ Schweitzer and Burmaster, 2003, Florida School for the Deaf and the Blind.

- *Early Identification and Referral*: The earlier a child can be identified as having a hearing impairment, the earlier appropriate services can begin. Infant screenings have improved identification extensively. Improvement is still needed in collaborations between screeners, medical providers, intervention specialists and educators. The identification of a hearing impairment should trigger a process similar to the one detailed in the Current Model Section. The emphasis on this aspect, however, indicates that in practice, this process can experience major breakdowns.
- *Equal Opportunity*: Students who are deaf or hard of hearing should have the same learning opportunities as students who are hearing.

National Agenda: Moving Forward on Achieving Educational Goals for Deaf and Hard of Hearing Students

The National Agenda represents a previously unparalleled cooperative effort. Drawn from the example provided on the Visual Impairment side, the National Agenda was adopted in April of 2005 and continues to be developed and adjusted to achieve the umbrella goals of a communication and language-driven educational delivery system.

Table 5 – National Agenda goals (HI)

Goal	Details	Desired Outcome
Early Identification and Intervention	Identification at birth triggers a comprehensive service delivery system that assures the best chance of success	Yields Individual Family Service Plan
Language and Communication Access	The ability to effectively communicate with both the hearing and hearing impaired community is a major priority	-Regular access to peers, role models and staff who communicate in child's chosen communication mode
Collaborative Partnerships	Integration in service delivery, particularly at major transitions, is paramount to successful education	A smooth, coordinated delivery of services appropriately tailored for each child at various milestones birth to 21
Accountability, High Stakes Testing and Standards-Based Environments	Students who are deaf or hard of hearing are not always evaluated with valid assessments	-Child centered assessments -Valid assessments (measuring content knowledge rather than English proficiency) -State evaluations of LEA performance
Placement and Programs	A focus on LRE can result in an inappropriate placement in a regular classroom that ignores significant needs of the student	-Provide information about a continuum of options
Technology	Technology can help a student who is deaf or hard of hearing participate more fully	-Incorporate instructional and assistive technologies
Professional Standards and Personnel Preparation	A collaborative approach is necessary to prepare, recruit, retain and develop enough teachers, administrators and support staff	-Link all states so that they align with Council on the Education of the Deaf national standards
Research	Research is needed to inform teaching methods and develop a best practices education system	-Important areas of research include all of the above goals

Blind and Visually Impaired

Summary

According to the American Foundation for the Blind, the education of people with visual impairments has a legacy of employing best practice standards. Education for visually impaired students began in the early nineteenth century. Currently, the majority of students with visual impairments are enrolled in traditional LEAs. Concern is mounting, however, that these students are not receiving an education that enables them to compete with sighted peers.

There is great emphasis on flexibility of service provision. As clearly detailed in the National Agenda, a student's needs shift throughout life. Whereas younger students may benefit from placement in a residential school while they learn Braille, older students can benefit from inclusion. Conversely, a younger child may benefit from enrollment at the neighborhood school at age five, but a residential school may be more appropriate as the child gets older. No one best model exists that will be successful for every student throughout his or her life. Instead, a best practices model provides the most appropriate education at each period in a student's life. With this in mind, the National Agenda seeks to establish best practices.

Areas of National Focus

While there are no commonly accepted best practices, a review of national organizations and expert opinions indicates wide agreement on the need to focus on the following key areas:

- Expanded Core Curriculum (ECC): Children who are visually impaired have unique needs not met by the general curriculum. The ECC strives to meet those needs and includes skills such as social interaction instruction, orientation and mobility, and transition planning to ease the stress of major changes in a child's education.
- Higher Expectations: An assumption pervades that students who are visually impaired have lower achievement potential. Thus it is imperative that expectations be set as high as appropriate for the child.
- Courtesy: Because students who are visually impaired rely heavily on hearing and other senses to interact and learn, techniques exist to help students with visual impairments succeed in the classroom. These include:⁶⁶
 - Speaking to the class when entering or exiting
 - Calling the student by name
 - Describing occurrences during a learning activity

⁶⁶ West Virginia University, Strategies for Teaching Students with Vision Impairments

- Describing changes in the environment
- Identifying oneself by name
- *Accurate Assumptions about Prior Learning*: According to Dr. Lewis (2008), students with visual impairments often lack basic skills. Inappropriate assumptions about the mastery of these basic skills result in frustration during instruction in content areas that build on these basic skills.
- *Personnel Development*: The majority of veteran teachers are reaching retirement. Simultaneously, too few teachers are being prepared to replace them. This problem is compounded because many of the current teachers, trained in the 1960s and 1970s, apply a different philosophy than recommended by the Expanded Core Curriculum (ECC) and the National Agenda. Because of this, the integration of the ECC and the National Agenda continues to present challenges.⁶⁷
- *Direct Instruction*: Because learning is so heavily based on observation, students who have visual impairments need and benefit greatly from direct instruction
- *Timely Access to Adapted Materials*: A recent Project Forum report found that timely access to adapted materials was highly significant to all people interviewed for the project.⁶⁸ These materials, specifically designed for students with visual impairments to improve access to the core curriculum, can take a long time to procure, inhibiting the student's ability to learn and fully participate.
- *Full Array of Placement Options Available*: The overemphasis in the 1980s on the LRE as the regular classroom had an adverse impact on some students. According to Huebner, Garber and Wormsley (2006), "the overriding emphasis on LRE focused on placement decisions for students with special needs—the where' of LRE—versus the 'how' of the instruction they should be taught."⁶⁹ Because of the heterogeneous population of students with visual impairments, a variety of placement options is most effective.⁷⁰
- *Orientation and Mobility*: Visual impairments make navigating the environment difficult. A balance exists, however, between a safe environment and overprotection. Direct instruction in orientation and mobility opens up the world for students with visual impairments.

⁶⁷ Interview, Dr. Lewis

⁶⁸ Project Forum report, Blind and Visual Impairments: State Infrastructures

⁶⁹ Huebner, Garber and Wormsley, 3.

⁷⁰ *Ibid.*, Individual interviews, Hatlen, P, www.ndepnow.org, March 16, 2008.

National Agenda

In 1994 the *National Agenda for the Education of Children and Youths with Visual Impairments, Including Those with Multiple Disabilities* was released. The National Agenda strove to reform educational efforts and break the cycle of low expectations and low achievement for students with visual impairments by creating partnerships among all people involved in educating students with visual impairments. Reform efforts centered on challenging standards, comprehensive state and local plans, professional development, and whole school reform efforts. In 2004 two more goals were added to the original eight, reflecting the organic approach to reform embraced by experts in the visually impaired community.⁷¹

Table 6 – National Agenda goals (VI)⁷²

Goal	Details	Desired Outcome
Referral	Students and their families will be referred to an appropriate education program within 30 days of identification of a suspected visual impairment.	A single document addressing identification, referral and service delivery needs, identification of state level parent coordinators and collaboration between service providers to improve referral framework
Parent Participation	Policies and procedures will be implemented to ensure the right of all parents to full participation and equal partnership in the education process.	Establish an advisory committee within NAPVI, form training centers for parents, create and distribute resources for parents, nurture positive relationships between parents and service providers and include strategies for parent participation in professional development
Personnel Preparation	Universities, with a minimum of one full-time faculty member in the area of visual impairment, will prepare a sufficient number of educators of students with visual impairments to meet personnel needs throughout the country.	Develop a model of excellence for personnel preparation, establish a national research center and develop a national recruitment plan

⁷¹ American Foundation for the Blind, National Agenda for Education, www.afb.org, March 16, 2008.

⁷² Overview of the National Agenda, TSBVI, <http://www.tsbvi.edu/programs/agenda-overview.htm>

Goal	Details	Desired Outcome
Provision of Educational Services	Service providers will determine caseloads based on the needs of students and will require ongoing professional development for all teachers and orientation and mobility specialists.	Write and distribute a position paper on appropriate caseload size and publicize innovative practices for managing changing class demographics
Array of Services	Local education programs will ensure that all students have access to a full array of placement options.	Work with OSEPS, SEAs, parent organizations and advocacy organizations to disseminate information and promote a wide range of placement options
Assessment	Assessment of students will be conducted, in collaboration with parents, by personnel having expertise in the education of students with visual impairments.	Using the ECC to create a better assessment, ensure that assessors are familiar with the content and create a national database of information pertaining to assessment and students with visual impairments
Access to Instructional Materials	Access to developmental and educational services will include an assurance that instructional materials are available to students in the appropriate media and at the same time as their sighted peers.	Improve awareness about sources of adapted materials, pass legislation requiring materials to be available before instruction begins and work with service providers to increase understanding of the potential materials
Core Curriculum	Educational and developmental goals, including instruction, will reflect the assessed needs of each student in all areas of academic and disability specific core curricula.	Include all areas from both curriculums during the IEP process, work towards a national adoption of the ECC and educate service providers in the ECC

Goal	Details	Desired Outcome
Transition	Transition services will address developmental and educational needs (birth through high school) to assist students and their families in setting goals and implementing strategies through the life continuum commensurate with the student's aptitudes, interests, and abilities.	Identify resources for transitions, identify state contact persons for transitions services and disseminate information about successful transition services nationwide
Professional Development	To improve student learning, service providers will engage in ongoing local, state, and national professional development.	Center staff development around identified "standards of effective practice" and integrate into all development opportunities

Conclusion

The current national approach focuses more on outcomes than on process. That is, it focuses on the student who will be an adult at the end of service delivery. This represents a shift from the emphasis on legal mandates and the current service delivery model as seen in North Carolina, which are more focused on the logistics of service delivery. The legal mandates provide a framework to ensure equal treatment, but because of the individualized nature of special education, they are often too vague to provide real guidance. The National Agendas seek to supplement this framework with more concrete recommendations of specific means to improve service to populations who are deaf, hard of hearing, blind, and visually impaired.

North Carolina Stakeholder Definitions of Success

Introduction

This section summarizes findings of a two-pronged research effort that attempted to articulate definitions of success for education services for students with hearing and/or visual impairments. This research effort entailed a series of focus groups of educational stakeholders across North Carolina and a survey of parents of children with hearing and/or visual impairments. The research produced a definition of success for four different segments of education stakeholders: state agency officials, school administrators, educators, and parents. Individual definitions were synthesized for each stakeholder segment in order to compare findings across all segments.

This research found consistencies across stakeholder segments' definitions of success, which included emphases on employment preparation for students, enabling student independence, the integration of students into communities, parental involvement, resource provision, and the development of social skills. While the different stakeholder segments expressed similar concepts in their definitions of success, the segments that are closest to policy setting articulated these concepts in far broader terms than did segments that are more distanced from policy setting. Ultimately, definitions embodying greater specificity provide for a more rigorous test of service quality than do broader definitions.

Methodology

The primary tool used in this research effort was a series of focus groups convened across North Carolina. A secondary tool was a survey that was administered to parents of children with hearing and/or visual impairments.

Focus Groups

Participants

Focus groups included representatives from four segments of the education community. Descriptions of each segment appear below, along with the total number of participants from each focus group segment.

State Agency Officials (22 participants): Employees of DPI and DHHS

Administrators (24 participants): Administrators from both LEAs and residential schools specializing in services for students with hearing and/or visual impairments

Educators (58 participants): Educators specializing in serving students with hearing and/or visual impairments. These educators served both residential schools and LEAs and served students of various ages and grade levels

Parents (15 participants): Parents of students with hearing and/or visual impairments. This fourth group included parents of students diverse in age, disability, grade level, and placement

Timeline and Geography

Focus groups took place between November 28, 2007 and January 17, 2008. Focus groups were convened across North Carolina to capture potential differences in stakeholder opinion by geographic region. Focus groups were convened in the following locations, listed in chronological order:

- Raleigh (State Agency Officials)
- Chapel Hill (Administrators, Educators)
- Fayetteville (Administrators, Educators)
- Asheville (Administrators, Educators)
- Elizabeth City (Administrators, Educators, Parents)
- Charlotte (Administrators, Educators, Parents)

Participant Involvement and Recruitment

Focus groups were designed to host participants from one segment of the education community, exclusively, to provide participants with a comfortable environment in which they could express their opinions. The methodology planned 17 focus groups (two for state agency officials, five for administrators, five for educators, and five for parents). Three of the focus groups intended for parents yielded zero participants, and 14 of the intended 17 focus groups were completed.

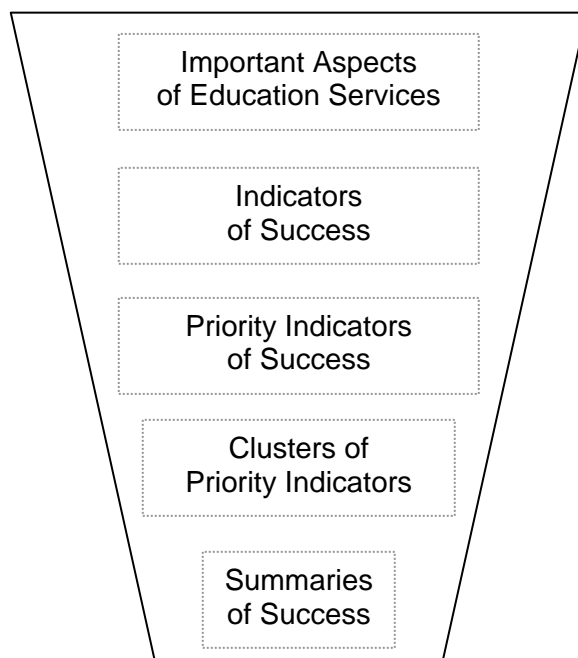
DPI and DHHS recruited participants for all focus groups with assistance from the evaluation team. This recruitment stemmed primarily from a survey, disseminated electronically and via hard copy, that asked education stakeholders to indicate a willingness to participate.

Exercises and Outputs

All focus groups employed the same exercises. The exercises facilitated conversations about success in education service delivery. Participants identified important aspects of education services (for example “accurate assessments of student impairments and abilities”) and envisioned indicators of success along these aspects (for example “assessments are conducted by evaluators trained in the disability”). Participants selected indicators they perceived to be most important and grouped these priority indicators into categories. Participants labeled each category and referred to these labels to write summaries of successful education service delivery. Some participants authored summaries independently while others co-authored summaries with another participant.

These summaries of successful education service delivery are the raw qualitative data included in this analysis.

Figure 6 – Focus Group Exercises



Survey

A survey was distributed to parents in early January after three parent focus groups yielded zero participants. The survey asked respondents to describe aspects of education service delivery that underpinned their personal definition of successful education. The survey was distributed online and via hard copy to parents of students with hearing and/or visual impairments. DPI, DHHS, and school administrators disseminated this survey to parents.

As of the time of final report preparation, 174 parents had responded to the on-line survey. While not all responses could be included in our in-depth analysis, all responses will all be passed on to DPI and DHHS for their consideration. In terms of demographics of total respondents, we can report the following regarding their children (percentages are rounded):

Impairment

- 33 percent have a visual impairment
- 47 percent have a hearing impairment
- 10 percent have both a hearing and a visual impairment
- 9 percent did not specify

Age Range

- 20 percent are birth to pre-kindergarten
- 38 percent are in elementary school
- 17 percent are in middle school
- 21 percent are in high school
- 4 percent did not specify

Placement

- 12 percent attend residential schools
- 68 percent attend typical schools
- 21 percent attend other schools or did not specify

The data from these parent responses were included with the definitions of success provided by the 15 parents who participated in focus groups. This provided a total of 51 parents whose information was analyzed in this study.

Data Analysis

Evaluators identified the basic components of each summary of success. Summaries of success contained between three and 28 basic components. Evaluators identified common themes of these basic components and used these themes to design definitions of success for each segment of the education community. Data from the parent survey was included with the parent summaries of success to design the definition of success for parents.

The summaries of success provided in this report are based on the following number of basic components for each segment of the education community:

State Agency Officials: 37 basic components of success

Administrators: 78 basic components of success

Educators: 292 basic components of success

Parents: 515 basic components of success

Limitations of Methodology

The primary limitations of this study are as follows:

Recruitment: The self-selection of focus group participants and survey respondents could mean that opinions held by individuals unwilling or unable to participate might not be included in this study's findings.

Focus group size: Small participation at several focus groups limited the potential breadth of the data collection effort.

Demographics: Focus group recruitment and survey dissemination did not attempt to solicit input from respondents who were representative of the demographics of the total population of education stakeholders. Potential differences in opinions based on such factors as disability, child age, number of children, socio-economic status, race, and ethnicity have not been identified in this research.

Focus group participants: Two participants who attended the State Agency Official focus group attended a later focus group of administrators. Two educators attended a parent focus group. In the former case, these participants were school administrators whom DHHS had invited to the State Agency Official focus group. In the latter case, the educators did not know which date they were to attend. This participation did not materially alter the focus group exercises or findings.

Definitions of Success

State Agency Officials

Successful education for students with hearing and/or visual impairments requires a well-planned educational system that provides accessible, integrated instruction that is guided by policies that empower families. This system should provide services that are tailored to students' individual learning needs and actualize students' potential.

The provision of successful education services requires adequate resources which include qualified and trained professionals who deliver high quality instruction. These instructors should work in concert with parents, guardians, school administrators, and community representatives.

This system should produce students who are integrated citizens of the communities in which they live. This integration requires development of social skills and meaningful social relationships during a student's matriculation. Students should complete their education prepared for employment opportunities and independent living that match their potential.

Basis for definition

The table below provides information on the analysis of state agency officials' summaries of success. The table lists each theme that occurred across summaries as well as the number and percentage of summaries that expressed each theme.

Table 7 – State agency officials' summaries of success

Theme	Summaries Addressing Theme	
	#	%
Well planned educational system that provides accessible, integrated instruction guided by policies that empower families	5	71%
Education and placement are tailored to each student's individual needs and abilities	5	71%
Become citizens of a community in which they are integrated and to which they have access	4	57%
Student is prepared for employment opportunities that match their potential	4	57%
Provides for social competence and fosters meaningful social relationships	4	57%
Adequate resources including qualified and trained professionals who deliver high quality instruction	2	29%
Education enables independence	2	29%
Includes involvement from parents, families, schools and community	2	29%

Administrators

Successful education for students with hearing and/or visual impairments requires services that are tailored to students' unique learning needs and actualize students' unique potential. This requires education plans guided by comprehensive assessments that are conducted by knowledgeable and credentialed staff. Parental input should influence their child's education.

The provision of successful education services requires resources including qualified specialists and generalists, appropriate support services and current technology. Legislation that provides for appropriate resources should guide education service delivery.

Education services should ultimately provide for the highest possible quality of life for the student. Students should be educated about and exercising their rights to access services in their school and their community. Education services should enable student independence and provide for lifelong skills that will support the child as an adult.

This system should produce students who are integrated citizens of communities in which they choose to live. This integration requires development of social skills and meaningful social relationships during a student's matriculation. The education system should help ensure that communities are supportive environments.

Basis for definition

The table below provides information on the analysis of administrators' summaries of success. The table lists each theme that occurred across summaries as well as the number and percentage of summaries that expressed each theme.

Table 8 – Administrators' summaries of success

Theme	Summaries Addressing Theme	
	#	%
Education is tailored to serve the unique learning needs and actualize the full potential of the student	7	64%
Enables the highest possible quality of life	7	64%
Student is aware of and exercises his or her right to access services in the school and community	6	55%
Appropriate resources including qualified specialists and generalists, support services, and technology	6	55%
Student is integrated and supported in his or her communities	6	55%
Enables independence	5	45%
Supports social development and provides for social relationships	5	45%
Provides for lifelong skills that will support the child as an adult	4	36%
Influenced by parental input	3	27%
Include comprehensive assessments conducted by knowledgeable and credentialed staff	3	27%
Guided by legislation that enables the provision of appropriate services	2	18%
Student has support in a community of his or her choosing	2	18%

Teachers

Successful education for students with hearing and/or visual impairments requires services that are tailored to students' unique learning needs and actualize students' unique potential. This individualized education must be based on appropriate, ongoing, and comprehensive evaluations. These evaluations should determine placements that are appropriate for the student and that can be changed throughout the student's education. Evaluations and their resulting interventions should begin early in each child's life to ensure that the child receives the highest quality of education that is possible and obtains appropriate academic skills.

Parents, instructors and school administrators should work in concert to support and determine a child's education. Each member of this team must participate in the child's education and must collaborate with open communication. When the student reaches an appropriate age, he or she should have input in the decisions that affect his or her education.

The provision of successful education services requires resources that are available and accessible. These resources include qualified staff and current technology. Educators should be supported with the professional training and resources that are needed to provide quality education services.

Students should learn skills that enable adult lives that are as independent, successful, well rounded and happy as possible. The education of functioning skills and language are important to achieving this independence. Students should be prepared for employment opportunities that match their potential and ultimately enjoy lives that are as productive and meaningful as possible.

Education services should support social skill development and provide for social relationships. Education service providers should help ensure that students have access to supportive communities.

Educators should be held accountable to reasonable policies that are free of political agenda.

Basis for definition

The table below provides information on the analysis of teachers' summaries of success. The table lists each theme that occurred across summaries as well as the number and percentage of summaries that expressed each theme.

Table 9 – Teachers' summaries of success

Theme	Summaries Addressing Theme	
	#	%
Includes a team of parents, school, and teachers that collaborates with open communication and involvement of all participants	19	59%
Appropriate, ongoing, and comprehensive evaluations guide placements that are fluid and appropriate for the student	19	59%
Education is tailored to the individual needs and potential of the student	18	56%
Includes available and accessible resources	16	50%
Includes qualified staff who are supported with training and resources needed to provide quality services	16	50%
Teachers are supported with training and resources needed to provide quality services	16	50%
Provides for lives that are productive, employed, and meaningful	11	34%
Early intervention	11	34%
Provides for successful adults	10	31%
Provides for well rounded students who are successful and happy	9	28%

Provides for social development and fosters social relationships	8	25%
Live as independently as possible	8	25%
Quality education	8	25%
Educators are held accountable to reasonable policies that are free of political agenda	6	19%
Access to a community that supports them	6	19%
Student is actively engaged in his or her education and helps determine its services	5	16%
Appropriate academic skills	5	16%
Emphasis on language	4	13%

Parents

Successful education of students with hearing and/or visual impairments requires the best possible services available which are tailored to the student's unique learning needs and actualize the student's unique potential. These individualized services should be based on assessments that are complete, accurate, appropriately modified for the individual child, conducted by qualified evaluators, and that identify the student's abilities relative to typical peers and to peers with similar disabilities. These evaluations should determine placements that are supportive and personable environments that staff can manage, that are flexible, can meet the child's needs, and are able to make appropriate accommodations to enable complete access to the student. These placements and the services they host should be the best possible, and should be determined by assessments exclusively and not by the availability of resources. These placements and the services they host should be flexible, as assessments should provide a constant means of establishing student goals, identifying challenges, and recommending interventions to keep the child on track.

Parents, instructors, and school administrators should work in concert to support and determine a child's education. Each member of this team must participate in the child's education and must collaborate with open communication. Parents should be provided with supports that facilitate their involvement with their child's education and their access to the education system.

Each child should be mainstreamed with typical peers in his or her local school district when possible. Each student should be integrated socially in the classroom and have complete access to the curriculum. While education parity with typical peers should be maintained whenever possible, the education system should recognize that students with hearing and/or visual impairments cannot be held comprehensively to the same tests and standards of academic performance of typical students.

Transitions from one educational endeavor to another should include careful planning, proper communication, and appropriate resources in order to ensure that a student's education is seamless and cumulative. Each transition should consider the long-term education goals of the student.

The provision of successful education services requires resources that are available, accessible, and advertised to their consumers. These resources include qualified staffs who receive ongoing training and current technology including Braille books and acoustic modifications. Resources should be managed by personnel who can ensure these resources are used properly and consistently.

Students should learn skills that enable adult lives that are independent, successful, confident, and fulfilling. The education of academic and functioning skills and language are important to achieving this independence. Students should be prepared for post-secondary education or employment opportunities that match their potential.

Education services should support social skill development and provide for social relationships. Education service providers should help ensure that students can interact with and engage in communities that are supportive, informed, accepting, and providing of the resources that are needed to meet the students' needs.

State education officials, school administrators, and IEP team members should be held accountable to IEP benchmarks. Competent management and organization within the education system should provide for the interagency collaboration that successful education services require.

Basis for definition

The table below provides information on the analysis of parents' summaries of success. The table lists each theme that occurred across summaries as well as the number and percentage of summaries that expressed each theme.

Table 10 – Parents' summaries of success

Theme	Summaries Addressing Theme	
	#	%
Qualified staff that receives training	34	69%
Assessment, not resources, determines a placement and education services that are the best possible to educate the child based on his or her individual needs	30	61%
Academic outcomes are equally important as non-academic outcomes such as confidence, self-worth, self-advocacy and functioning skills	29	59%
Student can interact and engage with supportive, informed, and accepting communities that provide resources to meet the student's needs	27	55%
Assessments are complete, accurate, conducted by relevant specialists, and modified to suit the individual needs of the child. These assessments establish a child's abilities relative to typical children and children with similar disabilities	26	53%
Child is placed in a supportive and personable environment that staff can manage, that is flexible, can meet the child's needs, and is able to make appropriate accommodations	24	49%

Available, accessible, well advertised, and appropriate resources such as technology, acoustic modifications, and Braille books as well as personnel who can ensure these resources are used properly and consistently	24	49%
Assessment provides constant means of establishing goals, identifying challenges, and recommending interventions to keep child on track	23	47%
Education is a team effort where parental input is encouraged, supported, and accommodated and parents recognize and honor their responsibility	23	47%
Learn social skills and develop social relationships	18	37%
Transitions include careful planning and proper communication in order to ensure smooth succession from one stage to another	17	35%
Children are mainstreamed as much as possible	14	29%
Parity with typical students, but not held to same standards	13	27%
Sound organization and interagency collaboration	13	27%
Child gains independence	11	22%
State, school, and IEP team is accountable to assessment directives	11	22%
Child completes education and is able to seek further education or employment	7	14%
Transitions keep future goals in mind	6	12%
Child is integrated into the classroom and the curriculum	4	8%
Transitions are afforded appropriate resources	4	8%

Conclusion

Our research found consistencies across stakeholder segments' definitions of success, which included emphases on employment preparation for students, enabling student independence, the integration of students into communities, parental involvement, resource provision, and the development of social skills. While these themes were not expressed in every participant's individual definition of success, they were expressed by multiple individuals within each stakeholder segment and, as such, were incorporated into the synthesized definitions of success. Critical themes expressed across all synthesized definitions:

Employment preparation: Education services should prepare students for employment opportunities that match their interests and potential.

Independence: Education services should enable each student to achieve the highest possible level of independence.

Individualization: Education services should be tailored to the unique needs and potential of each student regardless of resource implications.

Integration in communities: Schools should help to ensure that students are integrated members of the communities in which they live, both during and after matriculation.

Parental Involvement: Parents should influence the decisions that affect their child's education

Resources: The education system should provide the resources necessary for a student's education, including staff, staff training, materials, and technology.

Social development: Education services should help students develop social skills and provide opportunities for social relationships

While the different stakeholder segments expressed similar concepts in their definitions of success, the segments closest to policy setting articulated these concepts in far broader and less specific terms than did segments that are more distanced from policy setting.

The difference in expectation specificity is important because these synthesized definitions provide a test for measuring service quality. In this case, the more specific expectations provide for more rigorous tests of service quality. While the broad expectations allow for a high level of service quality, they can be satisfied by a level of service quality that does not meet the specific requirements enumerated in the more specific expectations. Ultimately, the difference in specificity may enable one stakeholder segment to perceive a level of service as successful while another stakeholder segment perceives that level of service as a failure.

This research did not investigate why the different definitions of success varied in their levels of specificity. Two potential causes, however, are worth noting. First, definitions that expressed greater specificity reconciled input from more individuals than did broader definitions. If this is the exclusive cause, then the difference is a product of the methodology. A second potential cause is that the broader definitions were articulated by stakeholder segments that were closer to policy setting than were the stakeholder segments that articulated the more specific definitions. Individuals who are familiar with and understand policy language and intent might express definitions that mirror the broad parameters set forth in education policy.

Appendixes

APPENDIX A – Terminology

Assessment / Evaluation / Screen

In the context of this report, *assessment*, *evaluation*, and *screen* are all terms used to refer to different kinds of tests performed on students with hearing or visual impairments. Screen is the term often used in relation to hearing tests performed on newborn babies in birthing hospitals. Screen in this case connotes a relatively cursory level of testing. Evaluation is often used in relation with more thorough hearing, vision, and other tests usually performed by medical specialists to gauge the range of impairment, particularly as it relates to a student's ability to interact in a normal classroom environment and absorb information. Assessment usually refers to academic tests, particularly End of Grade (EOG) and End of Course (EOC) tests associated with No Child Left Behind (NCLB).

Assistive Technology Device

Assistive technology device means any item, piece of equipment, or product system, whether acquired commercially off-the-shelf, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of a child with a disability. The term does not include a medical device that is surgically implanted, or the replacement of such a device.

Assistive Technology Service

Assistive technology service means any service that directly assists a child with a disability in the selection, acquisition, or use of an assistive technology device. The term includes:

- The evaluation of the needs of such child, including a functional evaluation of the child in the child's customary environment;
- Purchasing, leasing, or otherwise providing for the acquisition of assistive technology devices by such child;
- Selecting, designing, fitting, customizing, adapting, applying, maintaining, repairing, or replacing assistive technology devices;
- Coordinating and using other therapies, interventions, or services with assistive technology devices, such as those associated with existing education and rehabilitation plans and programs;
- Training or technical assistance for such child, or, where appropriate, the family of such child; and

- Training or technical assistance for professionals (including individuals providing education and rehabilitation services), employers, or other individuals who provide services to, employ, or are otherwise substantially involved in the major life functions of such child.

Core Curriculum / Standard Course of Study

According to the American Foundation for the Blind, educators define *core curriculum* as the knowledge and skills expected to be learned by a student by high school graduation. Generally, the core curriculum consists of knowledge and skills related to academic subjects. Mastery of the core curriculum is what both parents and teachers stress as essential for academic success in school and later in life. In most states, opportunities are provided for students to meet other criteria in cases where those students cannot meet the academic demands of the core curriculum. There are many versions of the core curriculum. In our country, each state assumes responsibility for minimum standards for high school graduation. This core curriculum becomes the foundation for almost all learning, from kindergarten through high school.

Deaf-Blind (DB)

For children age 0-2, the federal definition of *deaf-blind* is “concomitant hearing and vision impairments or delays, the combination of which causes such severe communication and other developmental and intervention needs that specialized early intervention services are needed.” For children age 3-21, the federal definition is “concomitant hearing and vision impairments, the combination of which causes such severe communication and other developmental and educational needs that they cannot be accommodated in special education programs solely for children with deafness or children with blindness.”

Direct Services

In this report, *direct services* include, but are not limited to, instruction in signing, lip reading, Braille reading, and navigation.

Functional / Life Skills

In this report, *functional/life skills* refers to skills such as navigating public transportation systems, food shopping, laundry, dressing, personal hygiene, household budgeting, etc.

Hearing Impairment (HI)

Hearing impairments can range from mild (able to hear, though some difficulty hearing/understanding conversational speech) to profound (unable to hear, mostly reliant on sign language). Some people with a hearing impairment may refer to themselves as deaf or hard of hearing and many consider themselves part of a Deaf community, which has its own communication modes and culture. The terms *hearing impaired*, *deaf*, and *hard of hearing* are technically synonyms but carry different levels of acceptability in the Deaf community. In general, *Deaf* (with a capital *D*) is a culture, *deaf* or *hard of hearing* is a condition, and *hearing impairment* is legal language found in many government documents.

Individuals with Disabilities Education Act (IDEA)

The Individuals with Disabilities Education Act (IDEA) is a federal law initially enacted in 1975 and reauthorized most recently in 2006. IDEA lays out fundamental policy positions on the educational rights of individuals with disabilities. It is the basis for most state laws in this area. It is the source of the Least Restrictive Environment (LRE) requirement and the Individual Education Program (IEP).

Individualized Education Program (IEP)

The Individualized Education Program (IEP), federally mandated by IDEA, is a program of action for the types of services that will be provided to children with special needs. It takes over from the IFSP when the child is about to turn three. The program is developed by parents and LEA personnel and is used between the ages of 3 and 21. The program includes a transitional section that discusses how the transition from services provided by the LEAs to post-primary school life and possibly the services provided by the DHHS Divisions of Services for the Deaf or Blind.

Individualized Family Service Plan (IFSP)

The Individualized Family Service Plan (IFSP), federally mandated by IDEA, is a plan developed (in North Carolina's case) by early intervention program staff, in conjunction with the parent(s) of a child with a disability. It is essentially a plan of action for the types of services that will be provided to families with children with special needs. The plan is developed by parents and early intervention personnel and is only used between the ages of 0-3. The plan includes a transitional section that discusses how the transition from services provided by DHHS to those provided by the LEAs will occur.

Least Restrictive Environment (LRE)

Originating in IDEA, Least Restrictive Environment (LRE) refers to the environment that has the least restrictions from nondisabled peers. It is one of the considerations in placement decisions within IEPs and IFSPs.

Mode / Modality

A communication *mode* or *modality* is a form of visual communication that is not in itself a language but rather a representation of a language. For example, signing is a modality, but American Sign Language (ASL) is a language, not a modality.

National Agendas

At the national level, stakeholder groups have joined to develop *national agendas*, or sets of goals, for improving the lives of people with hearing or visual impairments.

No Child Left Behind (NCLB)

The No Child Left Behind Act of 2001 (NCLB) was signed into law by George W. Bush in 2002. It is not a new law but rather a reauthorization of the Elementary and Secondary Education Act (ESEA) of 1965. The goal of NCLB is to have all students achieving at a proficient level, as defined by each state, by the 2013-14 school year. The three main requirements of NCLB are:

1. Closing the achievement gap for low-income students, minority students and students with disabilities
2. Holding schools accountable for all students performing at a high level
3. Having a highly qualified teacher in all classrooms

Orientation and Mobility (O&M)

Services provided to children with blindness or visual impairment by qualified personnel to enable those students to attain systematic orientation to and safe movement within their environments in school, home, and community; and includes teaching students the following, as appropriate:

- Spatial and environmental concepts and use of information received by the senses (such as sound, temperature and vibrations) to establish, maintain, or regain orientation and line of travel (for example, using sound at a traffic light to cross the street)
- To use the long cane or a service animal to supplement visual travel skills or as a tool for safely negotiating the environment for students with no available travel vision
- To understand and use remaining vision and distance low vision aids
- Other concepts, techniques, and tools

Placement

In this report, *placement* refers to decisions about which learning environment is best suited to a student's learning needs. For example, placement may refer to full inclusion in regular classes, partial inclusion in regular classes with some pull-out to special classrooms for particular types of instruction, or referral to one of the residential schools.

Related Services

The term *related services* refers to transportation and such developmental, corrective, and other supportive services as are required to help a child with a disability to benefit from special education. They include speech-language pathology and audiology services, interpreting services; psychological services; physical and occupational therapy, recreation, including therapeutic recreation; early identification and assessment of disabilities in children; counseling services, including rehabilitation counseling; orientation and mobility services; and medical services for diagnostic or evaluation purposes. Related services also include school health services and school nurse services, social work services in schools, and parent counseling and training.

Transition

In this report, *transition* most often refers to portions of the IFSP and IEP that deal with transitioning children with hearing or visual impairments from one source of services to another and/or from one stage of their lives to another. For example, the transition section of an IFSP, which relates to children age 0-3, focuses on the transitional needs of children who will no longer be eligible to receive services from the early intervention programs and will soon have to pursue services from the DPI Exceptional Children Division, provided through LEAs. The transition portion of the IEP focuses on the transitional needs of students who are about to graduate from high school and move on to work or higher education, and possibly also transition from the services provided by their LEA to those provided by the DHHS Divisions of Services for the Deaf or Blind.

Visual Impairment (VI)

Visual impairment, including blindness, means an impairment in vision that, even with correction, adversely affects a child's educational performance. The term includes low vision and blindness.

APPENDIX B – Public Comment

Transparency, access and inclusion were strong emphases for our research. Our methodology highlighted geographic coverage. Through our advisors in DPI and DHHS, who in turn used various listservs, meetings and other means of spreading the word, we solicited online, telephone or written comments from anyone in the educational community (parents, teachers, administrators, interest groups, organizations, or community members) throughout the time of the study. We were especially interested in obtaining comments that would not be gathered through our other research means.

Although every effort was made to be accessible, relatively few independent comments were provided outside of the site visit, focus group and survey context. The comments that were provided focused on four general themes:

- 1) The importance of early educational services
- 2) Lack of qualified staff
- 3) The logistical and staffing difficulties presented by being in less densely populated areas of the state
- 4) Parents' fear about transition points

This appendix provides a summary of verbal comments and verbatim comments (if submitted in written form). In order to provide confidentiality, we are not identifying individuals by name. At times, for brevity or for confidentiality, we have paraphrased comments.

One woman, with extensive classroom experience in both the residential schools and LEAs, commented:

“My concerns are the need for services for young, preschool deaf children, the need for a strong plan for serving students who come from non English speaking homes, the need for transition to post secondary education or employment. NCSD has the capacity to be a strong regional resource center for students, parents and area schools.”

A gentleman from one of the residential schools for the deaf commented:

“I have been a special education teacher for many years and have worked in two county school systems. Until I transitioned to the North Carolina School for the Deaf, I never knew that teaching could be an enjoyable and loving experience. I truly feel as if I have found my home and love in teaching.

There are positive and negative idiosyncrasies in every job; however, teaching in ... has taken those negative aspects out of my equation and made me the most effective and positive teacher, in my opinion, that I have ever been... I pray that you are able to give

our school the recognition that it deserves and allow me to continue to do what I love because I love what I do.”

A director of Special Education programs commented,

“I’ll be brief. (We need) good DPI personnel to provide support to LEA’s. Main problem I have as a small school system is providing quality services to scattered students. When school for the deaf was in our backyard, students could get some good language skills before they returned to public school. Now either it is residential or they are the only deaf (or blind) student at their school without peers. I have no students in my system of the same age who could be grouped or taught together. So, if I could dream, some satellite classes available on regional basis.”

One parent took the time to communicate the story of her two daughters. We have removed specific names, but note that the family lives in the western part of the state.

“I’m sending the following additional comments because I was asked to submit something before I got the survey. I hope these are useful and I would be willing to testify to anyone, anywhere about the services that are needed for children who are hard of hearing.

Our Journey with Hearing Loss

A disclaimer – I am writing this without pulling out 7 years of records and files. It is too overwhelming and frankly, too depressing, to give more specifics. I trust the general story will be enough to help inform people of the need for appropriate educational services for children who are deaf or hard of hearing.

X was born in 1997. She was perfect and beautiful and she failed her hearing screening twice. I remember calling my friend, a family practice doctor, from the hospital. I was hysterical; I didn’t know what it meant. The nurses said she would need more testing. No one could tell me the likelihood if my daughter was deaf or not. Several more trips to three different ENTs and audiologists didn’t tell me much more. A frequent problem was that the audiologists didn’t have the correct size equipment or ear plugs for the infant testing.

In the mean time, Y was hospitalized twice within two weeks of birth and she had a heart murmur and blood in her stools. I spent my entire maternity leave in the offices of different specialists. Hearing loss seemed to be the least life threatening so when we finally got another hearing screening at about 4 months and were told that her hearing was normal but that she had fluid in her ears, we breathed a sigh of relief. However, we continued to worry about bloody stools and gaining weight and sleeping for more than a three-hour stretch.

X started to talk and seemed to be developing normally. When X was 2 years and 9 months old, her sister, Y was born. When Y also failed her hearing screening, my

husband and our family doctor friend, realized that it probably wasn't a coincidence. Also, after almost three years, there were better protocols in place and we were in touch with an Early Intervention social worker before we left the hospital.

Not particularly impressed with any of the audiologists that we had seen earlier, we jumped at the chance when a friend ... offered to test the girls at ... X was diagnosed with a moderate hearing loss (not simply fluid in her ears, as we had been told earlier) and Y a severe hearing loss. With the diagnosis and test results in hand, we went back to an ENT who seemed unconvinced that hearing aids would help our girls. He said we could "try" them if we wanted to...

With ...'s assistance, we found ..., an audiologist at ..., who was willing to take on the girls. Fortunately, we got X's hearing aids ordered through the state's CCCDP program before X turned three. Each set of hearing aids costs about \$5000 and insurance doesn't cover any of it. The state provides free hearing aids for children only up to the age of three – tough luck if you are diagnosed after that age. I had left my non-profit job to raise the girls and my husband teaches at ... – we desperately needed the state assistance.

In order to further qualify for some state services, we had to travel all the way to Chapel Hill for testing for the girls and for "Real Ear Measurements," a type of testing that wasn't available in Asheville at the time. We found out through the "Real Ear Measurements" that both girl's aids needed to be re-programmed and we returned home.

In order to work with an auditory verbal therapist, I traveled to Morganton weekly for over two years to receive services for Y. There was no AV therapist West of Charlotte to serve children. The girls also received bi-weekly speech therapy at home.

When X transitioned to kindergarten, we were fortunate to have the volunteer advice of ... who was still serving Y with early intervention services. She helped me evaluate different magnet school options and attended any meeting that I asked her to.

We chose ... Elementary School primarily because the principal was the only one who would meet with us and expressed any concern or interest in addressing our daughter's special needs. Indeed, after choosing the school, the principal recommended a particular teacher and classroom to visits to see if we thought it would be a good match. It was the last day of classes and the teacher was packing up the classroom. She was very receptive to our visit and immediately expressed a desire to do whatever she could to help our daughter in the classroom and for me to give her anything that she could read or learn over the summer. I explained that we were planning on attending an AG Bell Conference in Baltimore and that on our return I would send her copies of information or meet with her. She immediately asked if she could attend the conference and in less than 24 hours the principal both approved her request and found funding to send X's future teacher to the three-day conference! We couldn't have asked for a better teacher or principal to work with! The same was not true of the school system.

Since ... has so few students with hearing loss, they do not have their own audiological services and initially contracted for those services from ... County. At our first meeting with the County Audiologist to address equipment and acoustic needs for X's kindergarten classroom, the audiologist told us that she was, **"not authorized to recommend anything that would cost money."** When the principal, teacher, speech therapist and I all advocated for a pass around microphone for X's peers to use so she could better hear her classmates, the three professionals were reprimanded by the head of Exceptional Services and told that they were not to advocate for students.

Needless to say it was a multi-year battle to get an fm system and pass around microphone working properly in my daughter's classroom...

Both ... and ... have been pleasant to work with. However, it continues to take constant monitoring on our part to make sure that the equipment is functioning and being used properly. On recent observations from state specialists, both ... and ... concurred that the equipment was not being used consistently or properly on separate visits to my daughters' classrooms.

During my older daughter's 5 years in ... Schools, only last year did we have a school audiologist who knew anything about classroom acoustics and fm systems (... who initially diagnosed my girls when the local ENT's failed to). When she could no longer serve the school, we fell back on our new audiologist at ... who graciously has stepped in although he has never been a school audiologist and is not a pediatric specialist. Despite his best efforts, he is not able to comply with the 504 plan to be in the classroom every two weeks to assess the equipment and usage until the teacher's are using it appropriately.

Although X, our 10 year old in 4th grade, reads well and is in the AIG program, she continues to struggle terribly with spelling and has made little progress despite various interventions and constant monitoring since 2nd grade. I am convinced that losing almost three years of formative speech development without hearing aids has led to a specific learning disability in spelling and writing. Her teacher agrees that there is a significant delay and he tutors her twice a week for 45 minutes in the Orten Gillingham method. (Once again the teacher going above and beyond the call of duty!)

After attending a Conference this past fall for children who are hard of hearing, I became more aware of the range of services that are not available to my daughters because they are in the ... School System. For example, they do not receive services from an itinerant teacher for the deaf and hard of hearing. The schools rely on me as a parent to tell them what needs to be done, and quite frankly, I don't know what I don't know. I am a parent, not a hearing specialist!

One important example of this is that when X transitioned to kindergarten, she received testing from an AV therapist and it was noted that there was a discrepancy between her receptive and expressive language. There was some comment about needing better "phonemic awareness." Not being a professional, and getting caught up in the battle to get

an FM system and better classroom acoustics, the little note in her file went unaddressed. It is clear, now, that she needs specific services to address that issue and it would have been far more beneficial to get them in kindergarten than in 4th grade when she can barely spell anything.

At the Conference in Greensboro, I also realized that the girls need to be recertified for IEP's because it is not likely that X's learning disability will be recognized and addressed under her current 504 Plan. My younger daughter, Y, is in first grade and I don't know yet if she has the same struggles as her older sister. I certainly would like to catch them early and prevent the heartache that her older sister goes through.

We are currently starting the testing process to get my girls on an IEP again. During the most recent meeting, the head of Special Exceptional Children's Services did not want to use the expertise of ... until I practically insisted. As two middle-income professionals who have the wherewithal to advocate for our daughters, it continues to be a struggle to get and continue services for the girls. I can only imagine how difficult it would be if I were a single parent, or low income, or if I didn't have a background in advocacy as a former Nonprofit Executive Director. Children who are hard of hearing in Western Carolina desperately need a pediatric ENT, a pediatric audiologist, an auditory verbal therapist, and a school audiologist."

A parent-infant educator in the Early Intervention Program submitted these comments:

"First, in my opinion, there are several areas in the service delivery plan for deaf and hard of hearing children, birth to 21 that are in need improvement. Among these are:

1. In the Early Intervention Program we are currently using a model that calls for parents to provide the audition/speech/language instruction of their infants and toddlers. This approach calls for weekly Parent Participation Sessions with the parent and child lead by a teacher in the Early Intervention Program for Children who are Deaf or Hard of Hearing. This works fine for parents who are not working outside the home. For children who are in daycare settings (because parents are working or in college/school) it tends **not** to work. This is because many of these parents cannot manage to schedule these weekly sessions with us, even if they can they cannot manage to put into their schedules the 5 hours of daily input for their child, and in the daycare setting the providers are responsible for a significant number of other children thus making it impossible for them to provide daily individual sessions for the child with the hearing loss and to feed in approximately 4 additional daily hours of language input needed by the child. In addition, the daycare settings are usually acoustically unfit for the child with the hearing loss, the childcare providers poorly manage the FM equipment that would make audition more possible, the childcare providers cannot attend the weekly sessions with our teachers so they do not know what to work on with the child even if they could find the time to do so, the childcare providers do not have the skills needed to provide proper instruction to the child with a hearing loss, the childcare providers do not have the sign language knowledge and skill required for those children needing sign language or baby signs for the child's development of receptive and/or expressive communication using American Sign Language (ASL) or Simultaneous Communication (signs and spoken language provided simultaneously).
2. Some parents who do stay at home with their children do not seem to be capable, for a combination of reasons, to provide the instruction needed for their children to maximally develop audition, speech, communication and language skills. Among these reasons may be parental limitations, socio-economic and family factors, chaos... Programmatically, there seems to be no recognition of, nor mechanism for providing for the communication needs of these children. These children, therefore, have ever increasing language delays. Instead of the gap between chronological age and language age staying the same or decreasing, it increases and the children become more and more delayed in their language development.

3. There seems to be awareness in the program and at the state level, Office of Education Services - DHHS, that Language Facilitators could provide the language/audition/speech/sign input which is needed for children in childcare settings and that the purpose of these Language Facilitators would be to feed in language in meaningful situations. The Language Facilitators then could meet with Early Intervention teachers in the Caregiver Participation Sessions weekly (or bi-weekly alternating with parents, possibly) and, therefore, gain knowledge regarding appropriate skill development activities for the child for that week/two week period. Currently, in the western region there is only one Language Facilitator employed in the Charlotte area who can work with a maximum of 2 children out of our over 100 child caseload in approximately 35 counties. The other children in childcare settings generally do not have access to Language Facilitators and, therefore, develop ever increasing language delays, which are extremely detrimental to school readiness.
4. For reasons listed above and others preschool age children leave our programs with great communication/language needs which the schools seem even less able to remediate. They don't seem to understand the need or the role of Language Facilitators for these children and for the most part we certainly do not present a good model for them to follow regarding this.
5. Children who have had excellent parental involvement in Early Intervention / Parent Participation Sessions and instruction by their parents at preschool age (3 years old) generally enter schools that do not have staff trained to continue the Parent Participation model or for some reason that model is not accepted. In order for these children to be school ready at age 5 they will need continued intense feed-in of language in order to keep up with the monumental language growth that hearing children exhibit between the ages of 3 and 5.

6. The services provided to school age children in most of the western counties are abysmal. A very few of them even have teachers trained to work with children who have hearing loss. They have staff members who have no idea of the magnitude of the needs and strategies for working with these children attempting to provide adequate services. This sad state of affairs is, at least partly, due to DHHS and DPI not putting a plan into place that would adequately support the smaller counties with very few children (or perhaps only one child) enrolled with a hearing loss. In order to meet the needs of these smaller counties we had provided preschool classrooms in several locations throughout the region. These classrooms often pulled from 2 or more counties in order to have enough children to justify hiring one or more teachers and provide appropriate programming. DHHS and DPI did not encourage LEAs with too few children with hearing losses to justify hiring a licensed teacher of the deaf to join together in order to provide appropriate services. Instead the mistaken notion was (probably because the only accepted input was from the more densely populated areas, Charlotte being the only one in the western region) that each of the 100 plus LEAs in North Carolina would hire a licensed teacher or appropriately train existing staff. OES (then Division of Early Intervention and Education) higher level staff thought there would be "a certified Auditory-Verbal Therapist" (AVT) in each of the LEAs in 10 years. Those of us working in most of the western counties were aware that it would be practically incomprehensible for there to be a DPI licensed teacher of the deaf in each of the LEAs in 10 years! There are after 10 years less than 20 Auditory-Verbal Therapists in the whole state. Even if we had accomplished the goal of an AVT in every LEA that would have not adequately met the needs of the hearing impaired students in the counties since all parents do not pick that communication mode, nor can every child learn language adequately with it. It does not take into consideration those families who choose some use of signs (American Sign Language, Total Communication, Simultaneous Communication...) for educating their children with hearing losses.
7. The idea of putting an interpreter or a "language facilitator" in a classroom with a young hearing impaired child who does not have a language base commensurate to that of his hearing peers in the class and expecting the child with the hearing loss to be successful, or even worse to put a hearing impaired child with minimal language skills into a classroom with hearing children and expecting that child to be academically successful and maintain a positive sense of self esteem, is ludicrous. Unfortunately this has been a common practice in North Carolina since ... when I began working in the program by which I am currently employed.

8. The heavy emphasis on inclusion has been detrimental for otherwise typical children with hearing losses. Because of it children with inadequate language (adequate being language levels typically expected of a 5 year old hearing child) have been put into kindergarten classrooms and not had the benefit of Language Facilitators providing intensive feed-in of language. Therefore the gaps between their chronological age and language age have continued to grow making them increasingly unprepared for academic work as they got older and were promoted to higher grades. It is well known that for children with hearing loss to be successful in an academic setting they must have a language base that is within one to two years of that in the classrooms in which they are educated **and** that intensive work is needed to keep that gap from growing. Additionally, the standard should be to close the gap which takes even more intense work with licensed, trained professionals.
10. It is not surprising that more and more children with hearing losses placed at the 4th grade level and above of functioning far below those grade level placements and that the Office of Education Services western and eastern North Carolina Schools for the Deaf are being requested to admit these older children. Many of these children were capable at younger ages of developing adequate language which would allow them to be successfully mainstreamed when appropriately placed in classrooms in which they could achieve the academic requirements of the grades in which they were placed. The impact of inclusion on the majority of these otherwise typical children with hearing loss and inadequate language levels for academic success is devastating and a sad legacy of North Carolina educational policy.
11. Pediatric audiology is largely unavailable to children in the western region of the state. Many of our families (if able) travel to receive services through the UNC Hospitals ENT-Audiology Clinic (Neurosciences Hospital, Chapel Hill). This often requires an overnight stay for the families since the drive one way is usually 4 or more hours. Trained pediatric audiologists who are committed to this population, up to date in testing procedures and not bound by the restraints of private practice is a great need. Testing infants, toddlers and young children takes a completely different set of skills than those needed to test adults. Having the appropriate equipment is just one important small step in this process. Regional centers with trained pediatric audiologists, not bound by the constraints of private practice in ENT or audiology offices, are necessary in order to adequately serve this population.
12. There are no preschool services available statewide for children whose families have chosen American Sign Language as the child's communication mode.
13. Inadequate attention is given to the input of those who live outside the large metropolitan areas and to meeting the, perhaps different, needs in these lesser populated counties.

There are some things that have been and are currently being done well. Among them are:

1. Teachers in the Early Intervention Program for Children who are Deaf or Hard of Hearing have received excellent training in Auditory-Verbal and Auditory Based instruction. Several of the principles and strategies of this training have been transferable to the other communication modes used with children we serve.
2. A system of workshops has been developed and is available free of charge to teachers and Speech-Language Therapists working for LEAs throughout the state. This has been accomplished through the collaboration of the DHHS - Office of Education Services (OES), Beginnings for Parents of Children with Hearing Losses and the Department of Public Instruction! Having DHHS - OES and DPI Exceptional Children's Program working together to serve this population is a wonderful accomplishment, one that will, hopefully, continue indefinitely.
3. A testing program has been put into place for children in the Early Intervention program which allows us to appropriately track the language development of the children served.
4. A pilot study was begun involving the collaboration of Beginnings and OES following the language levels of children leaving our program through 8 years of age.
5. The OES Resource Support Program (RSP) is available to supplement the work done by the DPI Consultant for the Hearing Impaired and can assist in testing children served by LEAs, making educational recommendations for them and training staff.
6. Because the OES RSP staff has been able to go into schools throughout the state and provide training on a one to one and continuing basis they have gotten a good idea about the achievement levels of children with hearing losses in LEAs. A drawback in what OES RSP staff and the DPI Consultant for the Hearing Impaired offer is that they must be invited in to consult by the LEAs. There are many LEAs that do not invite them in for consultation. Children in those LEAs are often at the mercy of inadequately trained personnel who mean well but are not prepared to provide what is needed.
7. It is wonderful that the entire spectrum of educational services in North Carolina for children with hearing losses is being carefully scrutinized in the effort to provide for this population services that will allow them to become productive citizens.

I appreciate this opportunity to share my thoughts about the needs of children with hearing losses in our state and wish you much success in your efforts to provide the legislature with the information they need to improve services to this population.”

Another early intervention educator also emphasized the importance of education of young children, as well as perceived lack of qualified staff in teaching and assessment, and lack of parental education:

“Generally it seems that there are not enough Deaf Educators in the LEAs. This means that our D/HH children are being treated as “Special Education” students without any additional expertise in the area of hearing loss. Public Schools seem to need additional training in the area of Auditory-based teaching. There is a service gap for 3-5 year olds. Deaf families feel they need signing preschool classrooms. Families who use AVT need parent-participation sessions so they can continue to take the lead in working on listening, language and speech with their children. Continuity of assessment instruments from IT-P through Preschool and into elementary would be helpful when instruments can be found that cover ages 0 – 8 or so (CASSLS is potentially one instrument for auditory based students—and our program is discussing using it for this reason). We also lack good ASL assessments for tracking progress. Language facilitators and training for them could help public school programs better include students with hearing loss who have a language delay of a year or so. Students who have more significant language delays need more intense services.”

Another itinerant infant-parent educator reinforced some of these points:

“In some counties such as ..., the services are wonderful. The administrators have experience themselves working with children with hearing loss and over the last several years their self-contained classes for children with hearing loss have changed from ones where sign language was taught to classes where almost all the students have cochlear implants and the classes are using an auditory oral approach. As the needs of the children have changed with new technology, the district has sought out trained professionals and even is hosting trainings that other professionals can attend. They have created inclusion classes that have typical developing children for language models. Such classrooms provide a ‘natural environment’ and are a benefit to all children lucky enough to live in this county.

I understand that many districts have a smaller number of children with hearing loss and may not be able to provide a self-contained classroom with a teacher of the deaf who has been trained to work with the new technology, but there are many districts who have no qualified staff or have an itinerant teacher of the deaf / hard of hearing that was trained 20 or 30 years ago when cochlear implants were just a dream.

In the district of ..., we have been working to encourage the administrators to use the free services provided by the Resource Support Program with ... and her team. The district has refused such services even when requested by a parent and has stated openly that their staff is properly trained and they will decide about any in service training needed. The students' needs are not being met and the children are experiencing very poor outcomes.

One agency you may want to contact is ...please be aware that they are a cochlear implant team following many of the young students for whom you are seeking to improve services. They test the children's language progress from year to year and can see a huge difference in outcomes depending on which school district provides services after the students turn three.

I'm sure that elsewhere in the state we have neighboring counties like ... and ... that offer excellent and very poor services to our children with hearing loss. Thank you for your efforts to improve the current services."

A university professor offered the following comment about the state's ability to produce qualified staff:

I trust it is not too late to offer some comments regarding the provision of services to children/students who are deaf or hard of hearing in NC. I offer my comments based upon over 35 years of service to individuals who are deaf or hard of hearing as well as my service as a university faculty member at

- The title of the DPI license for teachers of deaf or hard of hearing students is "K-12 Hearing Impaired". This is not respectful of Deaf culture in that it implies that individuals with hearing loss are impaired. It would be more appropriate for DPI to consider changing the title of the license with input from a group of Deaf/hard of hearing as well as hearing professionals and family members.
- DPI and the Office of Early Intervention Services should collaborate in developing a separate license for individuals who serve the birth-kindergarten population of infants and toddlers and young children with hearing loss and their families. At present, the UNCG Auditory/Oral Birth-Kindergarten program is required by DPI to develop curricula (coursework and field experiences) so that graduates meet the requirements of BOTH K-12 Hearing Impaired and Birth-Kindergarten. Consequently, students who wish to pursue a career in early intervention with children who are deaf or hard of hearing and their families must spend 5 years in school at the undergraduate level to be considered qualified in both early intervention AND elementary-high school "deaf education". This discourages many prospective students from pursuing a career in early intervention and deafness, at a time when there exists a shortage of qualified early intervention services focused on infants and toddlers who are deaf or hard of hearing and their families.

- With the above points in mind, DPI and OES in conjunction with the university general administration system should consider the possibility of securing funding for faculty resources to offer a master's degree and licensure in early intervention focused on deafness. Students who wish to pursue such preparation currently have to attend out-of-state institutions of higher education, which prohibits many talented professionals from pursuing advanced preparation in early intervention and deafness.

Several verbal comments were received in interview or phone calls:

- A parent whose child was mainstreamed was concerned because a teacher that might have had training to help with her child missed over 100 days of school. The substitutes were not able to communicate with the child. In response, the parent worked with a tutor in a different county three times a week, entailing a 45 minute drive each way. The parent wanted to send the child to the residential school, but couldn't bear to part with her. The parent felt many other parents were unwilling to push the school system for fear the children would not receive any services. There was also the general concern that any major delays like this resulted in the child falling further and further behind.
- An interpreter was concerned about the qualifications for interpreters, particularly if interpreters are allowed to retain certification under older criteria, and particularly the qualifications of those working free lance as part of the public school staff. This person was also very concerned about the lack of education for parents – and therefore the lack of communication between parent and child. There is a strong concern over children being isolated in their home.
- Two parents contacted with team with concerns about children needing services when the families moved into the state. According to these calls, there is very little information on what services to access, and how to access them. According to one parent, the Beginnings program was not available because the child was not born in North Carolina. The family felt very isolated. The parents mentioned how in another state, she had gone through “Parent-infant camp” where all early intervention kids and families came together for a day, child care was provided, early intervention staff were there, and a community was formed. Both parents emphasized the potential lack of expertise of the staff in their area. “An early intervention staff member came to our house but didn't know what to do – she said she had never worked with a deaf child before.” The second parent had a more positive experience with Beginnings and Early Intervention. Both parents were very concerned over the lack of services between age 3 and 5. One parent said she was “terrified” over what would happen in those “gap” years. She feared her child would fall behind. She also wanted to continue her own sign language training so she would continue with her child, but there would be no more training available through the programs, and there were no other offerings in her area.

- A different parent's view of the qualifications of assessment staff for her deaf and blind child was so negative that she had taken the child to New York State for an independent assessment. She will no longer allow the school system to assess the child. She was a working mother, and would have to drive two hours each way for some services.

Some personal comments were passed on to the team in various meetings and site visits, outside of the formal interview or survey or focus group process. Most of these focused on the ability of the children – how, with proper and timely assistance, they would excel. However, there was also the recognition that delays at an early age compounded over time, making challenges even greater in the long-run. Early education and education of the family were stressed. The strongest theme, however, was a concern over access to qualified staff.

The following comments come from members of the public who read and replied to our draft report posted to the web on February 20, 2008. First, a letter from an alum of the North Carolina School for the Deaf.

Dear Dr. Maureen Berner:

Thank you for sharing your reports with us.

I want to let you know that I am very proud to be Deaf citizen of NC. I know many Deaf people here in NC, we are very rich in our Deaf community, Deaf culture, Deaf history, and American Sign Language. We are alumni of NCSD and are proud Deaf parents of Deaf and hearing children.

We prefer to be called Deaf than being called hearing impaired.

We want to have better education for our Deaf babies and children in NC We have the rights to learn our native sign language, ASL as well as for your rights to learn your spoken English or other language.

We want to see more Deaf children of Deaf parents to go to NCSD as they are most great role model for Deaf kids at Deaf school. Yes, we want more Deaf staff and hearing staff with high quality of knowledge of our language and culture to work with our Deaf children.

Deaf children are all children who have different degree of hearing or speech.

We want you to go to Model Secondary School for the Deaf in Washington, DC and see how highly function Deaf children are there because of the full access to ASL and information they receive from the Deaf and hearing staff. The dorm staff are required to have BA degree. The teachers can use ASL very well.

There are 10 High School teenagers from NC who attend at M.S.S.D. That is where I transferred my Deaf son...to M.S.S.D. for better opportunity last fall.

We come from Deaf family, my grandparents, great uncles, parents, brother and I went to NCSD for our schooling.

A ... building was named after my father, ... He served on [the] school board and [was] involved with Deaf organizations.

I have talked with other Deaf parents with Deaf children. We all feel that NCSD need[s] a lot of changes and improvements.

Often Deaf children of Deaf adults are pushed away because we could not use our speech or hearing well. We already had our native ASL language at home that we mastered. Many of us are leaders in our community.

NCSD must recognize ASL and respect Deaf children and Deaf staff.

It is very important for all Deaf children to go to [a] residential school. We learn so much at [the] Deaf schools[s]. We often discuss what if we did not have that experience at NCSD, what would we be like[?]

All parents with Deaf children must be well informed on all options [as] they want the best for their Deaf children. The process must include meeting Deaf mentors, learning ASL and culture, [and] visiting [the] Deaf school[s]. Not just [the] audiology part.

We have met many Deaf children in NC who graduated from mainstreaming school[s], they are withdraw[n] from society and ashamed to be Deaf. Few are successful [even] with help from their families and friends.

I do request that you have Deaf adults working with you to research more on how we can better serve our Deaf children in NC

We as Deaf adults, know what [is] best for our Deaf children. We are Deaf ourselves!

Thank you,

X

This is from a member of the Wake County Federation of the Blind

Dear Dr. Berner,

I really appreciate the opportunity to read the draft of this report [of the delivery of education to the blind and the deaf in North Carolina]. It is evident that a lot of work went into the research and the preparation of it. It was also evident to me that there was much more information on education of the deaf and hard of hearing than there was on

the blind and visually impaired. The blind and visually impaired population is smaller, but their needs are just as great.

I was appalled by the low parent participation in this study. I would have loved to participate in a focus group, however, I don't drive and transportation was an issue. If I had had more than twenty-four hours notice I would have probably been able to find a way to attend. Many parents who have less education and resources may be put off by having to fill out a questionnaire. They already feel overwhelmed by the needs of their child. If some effort was made to seek out parents and meet with them individually there would be more participation. If you conducted an antidotal interview where they could express their difficulties, hopes and fears, as well as what was working well they would participate.

I was horrified to learn that some of the archaic language used in the nineteenth century was still in the state constitution and laws. This language in itself is demeaning and needs to be removed (I am referring to such phrases as "charity" among others). Since the schools for the deaf and the school for the blind aren't "charitable organizations", hospitals or correctional institutions wouldn't it be better if they were under DPI, rather than DH[HS]? It would be easier to insure a continuum of services if all schools were under the same agency.

It would appear that families with deaf and hard of hearing children are identified at birth and the health department is notified. It would be good if the names of families with visually impaired newborns were given to the health department also. This would insure that intervention services could start earlier. This could supplement the work of the GMS preschool, which is already doing an excellent job. Perhaps the blind and visually impaired populations need an organization like Beginnings to serve them.

My big question is how is change going to be implemented? Are we going to leave it to legislators to determine how our deaf, hearing impaired, visually impaired, and blind students are educated or is there going to be a study committee. If there is such a committee I hope ample time is given to coming up with a workable solution and that both parents, teachers and administrators can have input into the Committee to make recommendations?

As a former vision teacher and a current home school mom, I am very interested in seeing that the children in the low incidents population have the best education possible so that they can become a productive member of their community.

Sincerely,

X

From an itinerant infant-parent educator...

Wow!

I scanned the report and it looks very thorough. Thank you for your hard work these past weeks.

I appreciate your non-biased reporting of what stakeholders have reported to you. I saw the comment about highly-qualified staff coming up again and again in the report and I believe this accurately reflects our mandate and challenges.

In your reporting of the service delivery model in NC now, I did not see one point.

I may have overlooked this, but the Resource Support Program is available to train local LEA staff to work with students with hearing impairments. This service is free to schools and some districts have refused to avail themselves of this training, even though it was requested by parents. I do not know how many states offer such a service, but would guess that many school districts around the country must pay precious dollars for such excellent training. Newborn hearing screening and cochlear implants have left some of our LEA staff in need of nearly complete retraining. Even though a staff member may have a master's degree in deaf education from a wonderful college 20 years ago, or they may have a doctoral degree in special education, they cannot be considered 'highly-qualified' to work with a student who may be four years old, but has only had access to sound for 18 months of his / her life. This is how we end up with teachers working on vocabulary such as 'blender' and 'faucet', when the child has not yet learned the words 'chair' or 'table'.

I'll get off my soap box now,

X

From a resident of eastern NC...

The report is excellent. There is hope! Maybe we are not struggling in vain.

Agreement with the needs and recommendations is easy....the feasibility of what parents and teachers are requesting is unlikely given the current state of the general education found in many of the LEA's. I am currently involved with a rural, eastern NC county that is undergoing massive concerns in their general education program. When I question services for the HI students, I frequently receive responses to indicate my concerns are of little or no magnitude in comparison with the overall status of the countywide problems.

Of course, to the individual child and or his/her parents, this makes little or not difference. In addition to this overwhelming situation, is the fact that the majority of my parents are not educated. They are not literate, do not see/understand the concerns for their children, benefit from receiving the SSI check, and they don't want to "rock the boat." Children in this county do not receive direct instruction from HI teachers; (administrators do not think this is important or necessary); until recently there were no audiological services in the county (now under contract); funding is a constant problem because children don't make "the head count" due to staff in the schools being overwhelmed with staffing shortages--EC teachers, speech and language therapists, etc; The turn over in the EC staff is extremely high, problems recruiting qualified EC teachers makes it not feasible to train them regarding hearing impairment--they are learning the general requirements of an EC teacher and IDEA requirements (some of them are lateral entry)... I don't think the lack of support from DPI has ever been adequately addressed by many of the LEA's. (There hasn't been a united support system for teachers of the hearing impaired outside of the residential schools...they tend to be isolated and without resources. This is not true in the major cities and LEA's...but even in some of the more "prominent" school districts...the district is unwilling to seek help from DPI because they don't want DPI to know how limited their services are within their schools and system.

The report mentions highly qualified [teachers]--do you mean EC certification or do you mean HI certification?

In reading the report I did not see reference to Section 504. (Maybe I missed this??) [T]he legal process for hard of hearing students [or] children with unilateral hearing losses [often] starts with the Section 504. Section 504 is an on-going struggle for many counties. Because this issue isn't addressed early on...the children tend to end up with much greater deficits in fourth, fifth and sixth grade than they would have if their needs had been met early on in the educational process. Funding again is the major culprit. Federally mandated but not Federally supported. Staff don't want in-service training or staff development--they have neither the time nor the interest considering the other overwhelming issues of discipline and testing. They simply want a quick fix...and they don't want to do it. Even issues [like] very basic, routine care of equipment goes undone and refusal to wear FM equipment is ignored by school administrators.

From my experiences over the last thirty years (in North Carolina and in three other states), the teachers at the residential schools are held to a much higher standard and receive much more scrutiny and supervision (I never objected as long as they receive the respect, support and acknowledgement they deserve--which has not been the case in North Carolina.)

I have had professional contact in five different LEA's in NC. All of these experiences have been negative. In none of these situations were the needs of the specific child/children being met. In some of the cases, DPI personnel were contacted and questioned.

There seems to be no accountability unless parents are educated and capable of advocating for their children.

X

From a program director at a medical institution...

Hi Maureen,

We just wanted to make one additional comment on the need and status of training availability in NC.

Due to the advancements in hearing technology over the past 20 years (eg; cochlear implants and digital hearing aids), coupled with the implementation of NBHS and appropriate early intervention, the potential for developing spoken language is now a reality for most deaf children, thus allowing them to be fully mainstreamed in regular educational environments. Educators are faced with the challenge of addressing the changing needs of these children. The state is supporting LEA's and EI for D & HH children, through organizations such as OES, Beginnings, CCCDP, CASTLE, and DPI, that provide a variety of training opportunities for NC's hearing-related professionals. The training (through workshops, internships, and mentoring) is available and most is at little or no cost. The key to reducing the critical shortage of trained professionals is for administrators to make it a priority for their teachers and therapists to take advantage of that training.

X

From a medical doctor in NC who focuses on visual impairments...

Dear Dr. Berner,

Thank you for the opportunity to respond to the Draft Report co-authored by yourself and others on North Carolina's Education service delivery Model for children with Hearing or visual Impairments. My comments are from the perspective of someone who has only been in North Carolina for a short time, but also from someone who has been involved in the field of blindness and visual impairment in many areas of the country for over 40 years. I hope this perspective will be helpful to you as you prepare your final draft.

In looking at your four concerns which were mentioned at the beginning of your report, I do have some comments.

1. Interest in social and life skills development of the children.

Particularly with respect to children who are visually impaired, the area of social skills is important. Children who cannot see well do not recognize the nonverbal communication which is such an important part of socialization. Obviously they need to learn the “rules” of socializing through a different means other than vision. This is one of the areas of the Expanded Core Curriculum which you mention in your draft report. In general an IEP will address only a few areas of the Expanded Core Curriculum such as compensatory skills which deal with literacy and communication, visual efficiency, which entails learning to use what vision one has as effectively as possible, orientation and mobility, and career awareness (transition). However, several other areas related to social skills which are of concern for educators of children who are visually impaired and which are part of the Expanded Core Curriculum are recreation and leisure skills, self-determination (self-advocacy) skills, and independent living skills. These areas are seen as educational needs, since students do not acquire these skills incidentally due to their loss of vision.

So I would agree that interest in social and life skills development is a concern, but the other areas of the Expanded Core Curriculum for children with visual impairments are also a concern and need to be addressed in children’s IEPs.

2. Concern about qualification of teachers, staff and specialists.

One of the issues that was not raised by the report is the issue of how teachers receive certification as a teacher of the visually impaired. North Carolina is one of the few states in the Southeast that has a professional preparation program for teachers of children with visual impairments. This program has successfully met all state and NCATE standards for teacher preparation. However, teachers who already have one certification can become certified as a teacher of the visually impaired without going through this program -- simply by passing the current PRAXIS examination on visual impairment.

Passing the PRAXIS examination does not qualify one for teaching visually impaired children. A teacher who has already trained to work with regular education students, or even special education students, might be able to learn enough about the knowledge and skills required through reading textbooks in order to pass the examination. However, the important skills needed to be able to teach this diverse population are more adequately assessed through specific authentic assessments rather than a multiple choice examination. For example, a teacher may be able to pass the PRAXIS examination without even knowing Braille or how to teach it – since the examinee could fail the few multiple choice items related to Braille on the test and still obtain a passing score. The PRAXIS examination cannot test knowledge of the intricacies of the Braille code, or how to help a child learn to move his hands in the correct position over the Braille characters, or how to analyze different types of hand movements a child makes and what they indicate with respect to learning to read.

There are many other areas of preparation which Teachers of the Visually Impaired would receive through a professional preparation program which cannot be adequately measured by the multiple-choice format of the PRAXIS examination. I have listed these below:

Important pedagogical skills for teaching children who are visually impaired [include but are not limited to]:

- Ability to teach Literary Braille and Nemeth Code for mathematics and science
- Ability to teach reading and writing using Braille and a variety of adaptive or assistive technology, including refreshable Braille displays, Braille note-takers, Braille writers, slate and stylus
- Ability to perform a functional vision evaluation
- Ability to perform a learning media assessment
- Ability to teach reading and writing using low vision aids and assistive technology including software such as Zoomtext, JAWS, Kurzweil 1000 or 3000, etc.
- Ability to teach the abacus
- Ability to instruct in and perform assessments of the Expanded Core Curriculum areas, the specialized curriculum for children with visual impairments
- Ability to teach independent living skills to children who cannot see or who need specialized equipment to perform those skills
- Ability to monitor orientation and mobility skills of students with visual impairments in order to communicate to Orientation and Mobility Instructors about the child's competencies in the use of sighted guide or the use of the long cane
- Ability to modify materials tactually for students who cannot see, so that they can participate in the regular education curriculum
- Ability to adapt lessons to include instruction specific to concepts which are difficult to teach without the use of vision (concepts of things that are too far away, too hot, too small, etc.)
- Ability to apply the knowledge of the implications of a child's specific eye condition to assist a child in learning

Prior to moving to North Carolina, I taught in a professional preparation program in Pennsylvania, where the State Board of Education had intended to include the same provision for passing the PRAXIS examination as a means of creating more certified teachers as we now have in North Carolina. Upon being approached by those of us from the field of visual impairment, they rescinded the provision for visual impairment and hearing impairment. Teachers of the visually impaired now have no other avenue for becoming certified in Pennsylvania than to complete a professional preparation program for teachers. While this does not mean that every TVI completing a program is a perfect teacher, their qualifications and abilities are much higher than those who would only pass the PRAXIS examination.

The report makes the comment that “qualified professionals were a key aspect of a successful model as identified by our focus groups.” One of the issues facing this nation as a whole right now is the shortage of teachers for special education in general, and shortage of teachers of the visually impaired specifically. The *National Plan for Training Personnel to Serve Children with Blindness and Low Vision*, published in 2000 by the Council for Exceptional Children, estimated national need for teachers of the visually impaired (TVI's) and certified Orientation and Mobility Specialists (COMS). The report estimated that approximately 5,000 TVIs and over 10,000 COMS would be needed based upon the numbers of children with visual impairments identified, and what would be considered reasonable caseloads to meet IEP needs. (Mason, Davidson, & McNerney, 2000, p. 31.)

One of the problems in providing personnel preparation is that there are few programs available, and the areas surrounding the areas where there are personnel preparation programs tend to be the ones where there is the least need for teachers. School districts, particularly those in rural areas, have difficulty attracting teachers to their locales, and the training programs are often distant from the sites where teachers are needed. North Carolina has a network of tele-classroom sites which permit students from across the state to receive training as TVIs and as COMS. The program permits flexibility in taking coursework, and is currently developing a summer fast-track program for those who can come in to campus for short bursts of time in the summer. The biggest issue facing North Carolina right now is recruitment of qualified students for the program.

Just recently through working with DPI and meeting with EC Directors from around the State, X has been able to convince several EC directors that they can “grow their own” teachers, by placing already certified special education teachers with children with visual impairments, and simultaneously having those teachers take the certification coursework through NCCU. While this is not the best way to educate a child with a visual impairment, it does assure that there will be a TVI available to that student and others in the future and it will help prepare districts for the impending retirement of a large number of TVI’s in North Carolina (The retirement of hundreds of thousands of TVI’s and COMS is not something just affecting North Carolina, but every state in the Nation.)

3. Current timely access to technology and other educational resources including qualified personnel.

One of the difficulties with technology is that it is constantly changing. Each version of Zoomtext includes some new features and new ways to use the software. Each new Braille note-taker has a new twist. Technology for people who are visually impaired has advanced to the extent that it is constantly being updated and improved, and one of the hardest tasks is to keep up with this technology. Teachers who are trained on various types of technology in their professional preparation classes, will find that they constantly need to be updating their skills through professional development in these areas. There is simply no way around the professional development aspect of this.

4. How the legal concept of Least Restrictive Environment should be interpreted or implemented.

I recognize that this is of concern here and across the country. However, one thing I have noticed in North Carolina that I have not experienced in any of the other states in which I have lived is that A LARGE NUMBER OF CHILDREN WHO ARE VISUALLY IMPAIRED ARE NOT BEING SERVED UNDER IEP’S BUT ARE BEING SERVED UNDER 504 PLANS! This issue came up recently on the NCVI listserv managed by DPI, and quite honestly shocked me. The example given on the listserv was of a child who was blind, but who was only on a 504 plan because all she needed was accommodations, not education. As the listserv discussion went on, it was obvious that there were plenty more children across the state who were being served in the same way.

I simply cannot understand, in this day and age, how any child who is visually impaired is not served through an IEP process. This would seem to me to make the state totally out of compliance with IDEA if it were to be examined closely and I think that it is an issue that needs to be addressed quickly. This relates back to the entire referral to special education process which is examined in the report, but the report fails to identify the numbers of children who are not being served as a part of that process but, for whatever misguided reason, fall outside.

I appreciate the opportunity to comment on your report and hope that these comments are useful to you as you prepare your final version. If at any time you feel I can be of assistance to you I would be happy to make myself available to you. I have been in the field of blindness and visual impairment for over 40 years, and have worked in numerous states, and two foreign countries in a variety of capacities.

Sincerely,

X

From an educator at Governor Morehead School...

Reflecting on the data gathered by the NC school of Government I'd like to address these areas of concern: the availability of qualified staff and the need for curriculum teaching to the areas of social and life skills development. As an educator at Governor Morehead School K-12 program I witness and participate in teaching curriculum including the Expanded Core Curriculum addressing the "Life Skills" needs of our students stated in the service delivery study. This curriculum focuses on many areas such as social skills, self determination, independent living skills, and Orientation & Mobility skills promoting safe independent travel. The location of Governor Morehead School in Raleigh, our state capital, offers students access to state government services and cultural services unavailable elsewhere.

Our program offers student's with a low incidence disability the opportunity to be friends with their visually impaired peers. Appropriate social development is vital to the success of the whole child. I am proud to be a part of a school where I have heard new students to our program say, "I like being a part of a school where there are kids like me."

I would like to stress the need for continuing a full array of service delivery models for VI students in North Carolina from "least restrictive environment" (inclusion in the regular education classroom) through to the "most restrictive environment" (full-time attendance in a residential vision specific program). Too often I witness the student new to GMS coming from a rural school district where VI services were scarce at best, entering below grade level due to lack of service, (the school district was unable to locate qualified staff) .

Lastly my hope is this study will bring to the fore once again the need for true research into where we can do better? Where we are truly falling short and where we can swiftly make changes. Looking at successful models of service from leaders in VI education; Texas, and Arizona, are two state examples. Putting adequate money and numbers of staff in the classroom FIRST and reducing duplicated administrative services.

Strengthen and expand the residential service model to make this program into an academic remediation and Expanded Core Curriculum based program where students attend for a full school year or more based on IEP goals, and return to their home LEA upon completion of the goals.

X

From a retired ENCSD educator...

I would like to commend your group on an excellent report. You had such a short time, but covered a lot of ground. If the Legislature mandates a more in-depth study, I hope your team will be allowed to continue.

I have worked with the Deaf for more than 35 years, and retired...years ago from ENCSD. I have also taught persons who are visually impaired for more than 20 years. I taught children who are Deaf-Blind for 12 years. I am currently a VI resource teacher for ... County Schools. So – I've seen the challenges these children face from many different perspectives.

- I totally support the need for a more in-depth study, so you can really evaluate programs.
- I totally support the need for services for preschool children (especially ages 3 – 5), since the program that successfully taught these children was terminated.
- In looking at additional training for teachers and assistants, a study has been conducted here in NC about Interveners (1:1 folks that are trained to be the eyes and ears for Deaf-Blind Children.). Many states are adopting this method of support for children and adults who are Deaf-Blind.
- Administrators (at the State level – OES and at the residential schools) in charge of these programs should have at least basic expertise in Education of the Deaf or Education of the Blind. For too many years, top administrators have administrative experience, but no background in deafness or blindness. They do not understand the disability involved or the unique educational challenges. In the field of Deafness, they can't even communicate.
- If there is an in-depth study, looking at the additional needs and challenges of children who have additional impairments is needed. Many of these children are classified as MU [(multi-handicapped)], and there hearing or vision impairment is overlooked, especially the hearing impairment part. It is assumed there lack of communication is because of the multiple disabilities, when part of it is because of the hearing impairment.
- I think the idea of LEA's sharing resources such as staff is a wonderful idea. Additional resource experts who are readily available are also needed.
- A consistent definition and understanding of LRE is also needed.
- In counties that do not have staff that are "experts" in the disability, should the child be assigned an advocate to protect their rights?

Thank you for undertaking this study. It is a very complicated and emotional topic, especially the communication modes and education of Deaf children. Thank you for all your hard work.

X

From a high school social studies teacher at the Governor Morehead School for the Blind...

I am a young educator with four years of experience in my own classroom. Two years were spent in an ... inner-city high school, and a half of a school year was spent in ... County Public Schools before joining the faculty at The Governor Morehead School for the Blind. Recently I celebrated my ...-year anniversary at GMS by ...

I have finally found my niche in teaching the students at GMS and they have reminded me why I entered the teaching profession in the first place; it is a true joy and pleasure teaching students who are eager to learn. Though I am relatively new to the VI education field, I have learned much in the past ... about providing educational services.

First of all, it [seems] that there is no prime example for a service delivery model. Again, I am still new to this field, but anytime I research expanded core curriculum (ECC), I am constantly finding myself looking at resources from the Texas School for the Blind and Visually Impaired. I have learned that TSBVI is a great example of a school for the visually impaired. So why isn't it considered a prime example by this study?

Speaking of the ECC, I believe it needs to be a vital part of our students' education. One of the reasons I enjoy working at GMS is because we take a holistic approach to education. I don't just teach social studies to my students; I am also involved in teaching them social skills and life skills. The ECC is a great service delivery model to instruct visually impaired students about social skills, independent living skills, self-determination, and orientation and mobility skills. This past year GMS has been conducting ECC intensive weeks and they have largely been a success.

A concern of the study is that there are few qualified VI education professionals, and it is hard to develop and maintain these professionals. Our school needs to be competitive with pay and benefits with other North Carolina school districts to attract the best people. Adequate funding needs to be available to develop the best people.

GMS is a "least restrictive environment" by state and federal standards, but is it really? Visual impairment is a disability with low-occurrence, so there are few school districts with adequately trained professionals in the field of VI education to serve students. Taking students from their home LEAs and placing them at GMS indicates that GMS is not the "least restrictive environment." But GMS offers services that most rural districts cannot afford. Many students that enter our school are behind in their academics and social skills because they were not properly served in their home LEAs. GMS provides an environment where VI students can come to learn and make friends with other VI

students. I empathize with my students; they need to have a community where they fit in with people like them. Having a supportive and caring community helps our students to grow and succeed.

From another teacher at the Governor Morehead School for the Blind...

Ms. Berner,

I am responding in reference to the recent evaluation of the service delivery model for the VI and HI. I am a teacher at Governor Morehead and have been trying to cooperate in many ways so that you can receive as much feedback as possible for you to make the most informed decision. Unfortunately, as you have stated before, the time frame under which you have been operating has not been ideal for either side. That notwithstanding, I did want to offer some feedback about the most recent draft.

I fully agree with you findings that the education provided needs to encompass more aspects of the National Agenda. Unfortunately, even at GMS we have found resistance to this implementation. If this aspect can be emphasized more in the draft it would significantly reinforce those parts of the National Agenda.

The paper seems to read with a preference towards the deaf and hearing impaired. I recognize that this community is larger than blind/VI, but if this paper is to be a fair representation of OES and its model, then it needs to have at least some response from the blind community. In the public comment section ALL of the responses are from the HI community. There is not one response that is tailored to the community that I service. I am not aware how or when these comments were generated, but I know several staff, students and parents who would have readily offered up comments if they had known of the opportunities. The method of delivery at GMS was definitely flawed, which could account for why there are few responses, but I think that this needs to be noted. Students were the method of delivery to get the word home to their parents, and in many cases (despite their best intentions) they forgot. If this paper is to be a representation of the model for both the blind and deaf communities, then there needs to be equal representation. These communities' needs are different and complex and need to be emphasized. The blind and visually impaired communities should not just be lumped in with the hearing impaired without just cause.

I like that you bring up the issue of "least restrictive environment" on p.22, but this could warrant some further discussion, since I don't even fully comprehend the legal ramifications of this portion.

One of the issues you bring up on p. 26 is that personnel in DHHS schools should be proficient in sign language. Again, this plays to the bias of the hearing impaired communities, since there is no reference about having personnel be proficient or attempting to obtain proficiency in Braille.

It might be worth mentioning how most parents were contacted- that their students were expected to take forms home for them to complete or access via the internet. Most students openly admit that as soon as they are given papers to take home they will throw them away. I don't know the method of delivery for the other OES schools, but I personally think that the GMS mode of delivery was inadequate and inefficient.

I know that you are operating under extreme time constraints and I hope that some of these suggestions prove helpful. Ultimately, however, I hope that this report is able to provide a better method for educating for both the VI and HI.

Thank you for all your time and effort.

X

Also from a GMS staff member...

Dear Ms. Berner,

I began work at the Governor Morehead School for the Blind in Raleigh in ... spent my first ... years here working full-time as a school counselor in the field of visual impairment. Since ..., I have worked full-time as a Certified Orientation and Mobility Specialist, after completing the necessary course requirements and internship through NC Central University.

First, let me observe that every student I have worked with here in almost ... years has had issues in a public school setting with being teased or laughed at because of being visually impaired. While I realize that teasing is likely part of every person's experience, it is particularly brutal when the blind student is likely the only blind person in the class or even in the whole school. At least here at the residential school for the blind, students can get to know each other in a less intimidating location. This is a good thing because it allows our students time to discover what they have going for themselves instead of constantly being reminded of what they can't do compared to everyone else. Yes, I recognize that our campus residential setting is certainly not the least restrictive environment, but I believe that a placement here can be of tremendous value for many students, whether on a shorter or longer term basis, depending on the student's circumstances.

Here, we are able to teach the traditional classes AND focus on the Expanded Core Curriculum, unlike most public schools that often do not have staff who are specifically trained to work with blind and visually impaired students. At GMS here in Raleigh, this means that our students get to study not only the usual school subjects but also spend some quality time on topics vital to them as students who are either totally blind or who have low vision. Some examples of these topics are social skills, Orientation and Mobility skills to facilitate independent travel to whatever extent is possible for each student, leisure and recreation, independent living, and self determination, to name a few. When you consider that the national unemployment rate among VI and blind adults is between 70-75 %, it is clear that there the usual academic training is not sufficient by itself.

I am thankful that we have the VI program at NCCU, because it is critical that we have staff in N.C. schools who have the training to adequately teach visually impaired and blind students. Not only do we need those staff in many places in NC, but we need to retain them in their positions--VI teachers, Certified O&M Specialists, Braille instructors, and low vision specialists, as a few examples. Many school districts in N. C. simply don't have/can't find teachers trained to work with students who have a visual impairment or are totally blind.

I am proud to be a part of the staff here at GMS. We appreciate anything your study/work may do to help folks get the word on what we can offer here at GMS as one of the options for students who are visually impaired or blind.

Thank you.

APPENDIX C – National / Professional Sources

The following **organizations** were consulted for this study:

1. A.G. Bell Association for Deaf and Hard of Hearing, www.agbell.org
2. Alabama Institute for the Deaf and Blind, www.aidb.org
3. American Annals of the Deaf, <http://gupress.gallaudet.edu/annals/>
4. American Council for the Blind, www.acb.org
5. American Society for Deaf Children, www.deafchildren.org
6. Association of College Educators of Deaf and Hard of Hearing, www.acedhh.org
7. Beginnings, www.beginningssvcs.com
8. Council for Exceptional Children, www.cec.sped.org
9. Council of American Instructors for the Deaf, www.caid.org
10. Florida School for the Deaf and the Blind, <http://www.fsdb.k12.fl.us>
11. Individuals with Disabilities Education Act Data, www.IDEAdata.org
12. Laurent Clerc National Deaf Education Center at Gallaudet University, <http://clerccenter.gallaudet.edu/>
13. National Association for Parents of Children with Visual Impairments, www.spexex.com/napvi
14. National Association of the Deaf, www.nad.org
15. National Deaf Education Project, www.ndepnow.org
16. National Institute of Disability and Rehabilitation Research, <http://www.ed.gov/about/offices/list/osers/nidrr/index.html>
17. Texas School for the Blind and Visually Impaired www.tsbvi.edu
18. Texas School for the Deaf, <http://www.tsd.state.tx.us/>

The following **documents** were consulted for this study:

19. Blind Children's Center. (1993) First Steps: A Handbook for Teaching Young Children who are Visually Impaired. *Blind Children's Center*. EDRS ED 404 838.
20. Division for Early Childhood Intervention Services. (2004). Beyond ECI: Moving On from the Texas Early Childhood Intervention Program! *Department of Assistive and Rehabilitative Services*, <http://www.dars.state.tx.us>
21. DesGeorges, J., DeConde, C., and Stredler Brown, A. Natural Environments: A Call for Policy Guidance. *Resources/Articles, Hands and Voices*, http://www.handsandvoices.org/articles/early_intervention/V10-4_policyGuidance.htm
22. Easterbrooks, S. (1999). Improving Practices for Students with Hearing Impairments. *Exceptional Children*, Vol. 65, 1999.
23. Exceptional Children Division, Public Schools of North Carolina. (2004). Procedures Governing Programs and Services for Children with Disabilities. *Department of Public Instruction*, www.ncpublicschools.org.
24. Exceptional Student Services, Colorado Department of Education. (2004) Colorado Quality Standards: Programs and Services for Students who are Deaf and Hard of Hearing, *Colorado Department of Education*, http://www.cde.state.co.us/cdesped/download/pdf/Colorado_Quality_Standards2004.pdf
25. Ferrell, K.A. Issues in the Field of Blindness and Low Vision. National Center for Low Incidence Disabilities, <http://www.unco.edu/nclid/BVIissues.html>
26. Germano, J., Beams, D, Branch, D. and Olson, S. Services and Supports: A Model Program in Colorado. *Resources/Articles, Hands and Voices*, http://www.handsandvoices.org/articles/early_intervention/V11-1_coloEd.htm
27. Gilliam, Judith and Easterbrooks, Susan. (August 1997). Educating Children who are Deaf or Hard of Hearing: Residential Life, ASL, and Deaf Culture. ERIC Digest #558, <http://www.ericdigests.org/1998-2/life.htm>
28. Hatlen, P. Responsible Inclusion Belongs in an Array of Placement Options. *Texas School for the Blind and Visually Impaired*, <http://www.tsbvi.edu/Education/inclusion.htm>
29. Huebner, K.M., Garber, M., and Wormsley, D.P. (2006) Student-Centered Educational Placement Decisions: The Meaning, Interpretation, and Application of Least Restrictive Environment for Students with Visual Impairments. *Council for Exceptional Children, Division on Visual Impairments*. <http://www.cecdivi.org/positionpapers.html>

30. Heumann, J. (1996) Policy Guidance on Educating Blind and Visually Impaired Students. *Office of Special Education and Rehabilitative Services: US Department of Education*, <http://www.ed.gov/legislation/FedRegister/other/2000-2/060800a.html>
31. Johnson, C.D. (2000) How IDEA Applies to Deaf and Hard of Hearing Students. *Laurent Clerc National Deaf Education Center at Galladett University*, <http://clerccenter.gallaudet.edu/KidsWorldDeafNet/e-docs/IDEA/index.html>
32. Luckner, J. L. Issues: Education of Students who are Deaf or Hard of Hearing. *National Center for Low Incidence Disabilities*, www.unco.edu/nclid/DeafIssues.htm
33. Meeting the Needs of Students Who are Deaf or Hard of Hearing: Educational Service Guidelines. Deaf Education Initiative Project, *National Association of State Directors of Special Education*, www.nasdse.org
34. Muller, Eve. (2006) Blindness and Visual Impairment: State Infrastructures and Programs. *Project Forum: National Association of State Directors of Special Education*, www.projectforum.org
35. Muller, Eve. (2005). Deaf and Hard of Hearing State Infrastructures and Programs. *Project Forum: National Association of State Directors of Special Education*, www.projectforum.org
36. The National Agenda for the Education of Children and Youths with Visual Impairments, Including Those with Multiple Disabilities, <http://www.afb.org/Section.asp?SectionID=56>
37. Nowell, Richard and Innes, Joseph. (August 1997). Educating Children who are Deaf or Hard of Hearing: Inclusion. ERIC Digest #557, http://findarticles.com/p/articles/mi_princ/is_199708/ai_1580910447
38. Schweitzer, Carol and Burmaster, Elizabeth. Students who are Deaf or Hard of Hearing: Eligibility Criteria Guidelines, *Wisconsin Department of Public Instruction*, <http://dpi.state.wi.us/sped/pdf/dhhguide.pdf>
39. Siegel, L. The Educational and Communication Needs of Deaf and Hard of Hearing Students: A Statement of Principle Regarding Fundamental Systemic Educational Changes. (2001). *American Annals of the Deaf*, 145 (2).
40. Texas School for the Deaf. (2006) Report on Customer Service and Customer Service Performance Measures. *Texas School for the Deaf*, <http://www.tsd.state.tx.us/about/compact.html>
41. U.S. Department of Education. (2002). 24th Annual Report to Congress on Implementation of the IDEA act. *U.S. Department of Education*, www.ed.gov/about/reports/annual/osep/2002/execsumm.html

42. West Virginia University. Strategies for Teaching Students with Vision Impairments. *West Virginia University*, <http://www.as.wvu.edu/%7Escidis/vision.html>
43. What Parents Need to Know: School Placement Considerations for Students who are Deaf and Hard of Hearing, *Hands and Voices*, <http://www.handsandvoices.org/needs/placement.htm>

APPENDIX D – All Focus Group Definitions of Success

This section lists all summaries of success that focus group participants articulated. These definitions served as a data source for the synthesized definitions of success for stakeholder segments. Some definitions are from a single author while others represent collaborations between multiple focus group participants. The table provided after the list of summaries of success lists the raw data that the online survey solicited from parents.

State Agency Officials

Successful services are based on an individual child in an appropriate placement that includes planning, extends learning, and meets potential.

Successful services involve school, family, and community, preparing a child for employment and meaningful social relationships. It is geared towards independence serving society as a whole.

Successful service is an educational system that allows the individual to develop to his or her fullest potential personally, socially, and vocationally.

Success is composed of giving the student the tools to reach his/her goals, which could include personal/social relationships, community access (home and play), and employment opportunities.

Success is achieved when a student has access to collaborative, integrated services delivered by qualified and trained individuals. At the conclusion of service delivery, students are law abiding, employed individuals who are successfully integrated into their communities.

Successful education is a vibrant educational community that enables a student to be self-sufficient, independent, and integrated in the community

Successful service is achieved when individualized, high quality and accessible instruction leads to successful academic outcomes and social competence by the provision of services that empower families with federal and state policies and are supported with adequate resources.

Administrators

Education services leading to student success involve student connections, students being connected (engaged) in learning, students being connected to the whole student body/staff; students being connected to the community at large.

Successful educational services exist when supportive environments foster individualized learning and support quality of life through appropriate resources, accessibility, and lifelong skills.

Successful education of a VI/HI student is when the student has a high quality of life with all the skills, resources, and accessibility of the whole community while encompassing the unique learning needs of the student.

A successful education is where the deaf child has full access to educational material, social activities/events, technology, peer group, and adult role model before reaching adulthood and acquiring independence.

Success requires legislation that provides for and ensures appropriate and adequate services to enable all students to receive quality education and preparation for an independent life of the highest quality possible.

With enabling legislation, early intervention, education, and lifelong services, the individual achieves and lives a quality life.

Student success begins when comprehensive evaluations are completed. Once evaluations are completed and student needs are met through the help of regular and special education teachers and specialists within and outside the school community, student success unfolds as the student progresses educationally, socially, and in various community environments of society.

For students with hearing and visual impairments to be successful, we must 1) have access to comprehensive evaluation by credentialed, knowledgeable professionals, and 2) have specialists who provide direct /consultative services, and 3) have resources that include adaptive, technical, and other community support that will allow the student to function as independent as possible.

In order to provide an appropriate education for deaf and hard of hearing individuals, the program should integrate the assessment and parental concerns with a focus on independence, social skills development, and quality of life indications while informing students of their rights to equal access and support.

Successful education of deaf students begins with the parents and the community. Having access and knowledge of resources is a good beginning to start the deaf student on the road to success. When educating deaf students, teaching social skills and independent functioning is important. One thing that NCSD does is provide deaf students with deaf role models. Staffs are able to communicate with students using their preferred mode of communication. NCSD also provides support services - social work, counseling OT/PT, speech and language, etc., to meet the needs of the students. Overall, the goal of NCSD is to provide the students with a high quality of life so they can become self-sufficient productive citizens of whatever community they chose to live in.

A successful education program would provide parents an opportunity to knowledgeably choose their child's placement and along with that placement, a comprehensive curriculum of study. They can pursue a course of study preparing one to complete the educational experience, find a job, and live in an environment of choice with support. The result is a quality of life of his/her own choosing within a community of friends and colleagues.

Teachers

Student success depends upon a team effort. Open and honest communication between family, related staff, and specialized educators is essential in order to provide appropriate assessments of student skills. Access to appropriate services, technology and community resources, a unified vision, and high expectations by the team provide academic and social success. This requires funding for appropriate technology and specialized personnel. Manageable caseloads and administrative support are essential!

Success for the VI student requires access to services that are individualized, appropriate, and based on reliable assessments, involvement including student, family, and team result in educationally sound services. These include: teaching social skills, self advocacy, appropriate academic, O&M, daily living skills, use of technology and integrating transition services. Appropriate student placement ensures best practice procedures, and a unified vision by the team including parents and students, which fosters a variety of service delivery models to meet the individualized needs of a student with a visual impairment.

Students live as independently as possible and are productive members of society.

A successful education must include appropriate assessment, measurable progress, and adequate resources and materials that support the student in becoming a contributing member of society.

Successful education is achieved through adequate, appropriate, and timely resources that provide steps to success such as appropriate and fluid placement, complete assessment, and services proportional to needs producing a citizen who is as independent as possible, well rounded, and a full participant of his or her community and life.

A successful educational experience occurs when there is parental involvement and an effective assessment followed by the best early educational environment to support individual achievement and self-worth. This can be accomplished by reasonable policies to support seamless transitions and community support. To accomplish this, it is important to have available resources and access to those resources.

We are successful in educational services when we start with the student and family, we provide appropriate and early identification, we can access appropriate resources, and we successfully transition the student into the community.

Children are successful in education when: a) schools/agencies and families have an open line of communication so that proper intervention can take place b) money is allocated for proper resources and materials. However, appropriate assessment with proper recommendation/prescriptions should be done prior to money request, i.e. low vision evaluation to see about appropriate equipment for child c) appropriate and ongoing assessment is used and teachers are trained to assess. Documentation is kept and provided to related services d) free ongoing staff development for not only VI/HI teachers but all those working with these students d) students are provided with information about options and are part of their IEP teams at appropriate ages.

Successful education is apparent when a student is eager to attend school and is provided the appropriate services for his or her individual needs based on appropriate assessment and planning. The student will be actively engaged in his or her own educational process and comprehend that his or her efforts are as important as parental support and the school's responsibilities. Successful education includes those choices and efforts aimed toward the individual's participation in mainstream society.

Successful education entails: - a strong family and school intervention program - accountability on the statewide level and separately on the IEP team level - student's social development, which has an effect on their academics - varieties of staff developments offered not only to people in one particular field, but that will also enhance other educator's knowledge - student's views of themselves, how they define success, and how they want to achieve it - materials and resources are available.

Successful education occurs when hearing impaired and visually impaired students are fully able to access the school curriculum with appropriate materials, technology, and special instruction. The special instruction is provided by trained and qualified teachers who are supported by their local system/region with appropriate and relevant staff development. The school works closely with the family and the student's social development is fostered. Each student's success is guaranteed by a comprehensive assessment and an individual education plan with instruction, modification and placement appropriate to that student's needs.

Material resources are only some of the stuff the staff use to develop their accountability. Accountability means the staff use their talents, skills, and knowledge to educate in ways that are great. The staff also need total school and family interaction and intervention to assure positive social development for each and every student's individual success. Successful education means every person achieves to his or her potential. Successful education includes fun and fun involves friendships and recreation with similar peers.

Successful education begins at home where students' health and medical needs are met, education is valued, children are involved in enriching experiences, and they always have access to language. At school, teachers have time for planning and paperwork (documentation) as well as ample time to properly serve the students. We have resources for current, appropriate materials and staff development and meetings with others in the same profession. Students make friends, meet goals, and are active in extracurricular activities where they always have access to language. Students need to be happy, feel good about themselves, and work toward their individual goals.

Successful education services for HI and VI individuals would be politically free. They would include appropriate and accurate assessments, qualified and caring staff, parental involvement, and quality services from birth to death and would result in successful individuals.

Successful education should be driven by the needs of each child and should include: qualified staff and services; politically free instruction, parental involvement, appropriate and accurate assessment, and quality services from birth to death, resulting in successful individuals.

A quality education requires a quality program that is run by qualified staff and results in a happy, well adjusted, independent individual who is self-supporting and a productive member of society.

We are successful in helping each individual be an independent and productive adult.

In order for a successful completion of the educational rehabilitation process, a multi-disciplinary approach inducing parents, students, and professionals is necessary.

Services are successful when there are ongoing comprehensive assessments, quality education services, and appropriate classrooms. The student ends up prepared for adulthood and employed and lives a balanced, productive, and meaningful life.

Successful education includes a balance in expectations and outcomes. This includes realistic expectations for teachers as well as students. Students are more likely to succeed when they are guided by qualified educators who are able to provide needed resources in appropriate classes and classrooms; to provide ongoing evaluations in social and emotional as well as academic areas, and to provide skills for independent living.

Successful education prepares students with the skills and tools necessary to become independent and contributing members of society.

Our services are successful when our students are independent, employable, and prepared for adulthood. In order to reach that goal we must offer quality education in appropriate classrooms driven by appropriate comprehensive evaluations.

Our students are successful when they receive quality education in appropriate classes while being evaluated comprehensively on a regular basis; they can leave schools prepared with the adult skills they need and live and work independently while enjoying an abundant, balanced life.

The goal of a successful education program is to teach our students how to pursue an abundant, balanced life by preparing them for adulthood and independence using ongoing comprehensive evaluations and providing quality education in the most appropriate class settings.

The successful education of deaf/hh students will use ongoing comprehensive evaluations to ensure quality education consisting of highly qualified professionals, parents and community resources to teach students academic, social, and adult living skills in order to ensure all are prepared to transition into the work force or complete higher education to become functional, contributing members of society.

Successful education for hearing impaired students requires 1) identification and intervention, 2) adequate funding for staff, 3) adequate funding for ongoing training for current staff, 4) parent participation throughout school, 5) appropriate standards and assessment to appropriately assess students, and 6) placement in an appropriate setting for each child in order for their child to reach his or her potential as an effective adult in the community.

In order to successfully teach students with HI, the teachers need to have financial and philosophical support within their school system, state, and nation. Materials and resources available to teachers and students need to be standard and norm-referenced for HI students - not just for hearing students. Parents and families need to be advocates for their deaf/hh child. IEPs need to be student focused - not focused only on state requirements for that grade level.

In order to have a successful education, defined by academic, social, and communicative success needed for post-secondary goals, D/HH children must have early, consistent language; properly assessed and developed IEP goals; additional knowledgeable staff; interaction with family and community; and equal access to resources specifically designed for their needs.

Successful education starts at birth. All children must be exposed to language as soon as they are identified as deaf/HH. Also, children must have the following skills SPICE (social, physical, intelligence, communicative education) in order to become successful people in the world after graduation (social, physical, intelligence, communicative, education).

We are successful if we provide early education, proper placements, resources, expertise fields, and have team players in all meetings.

We are successful when the students/parents are given appropriate early intervention and education and there is funding for needs of staff and students, students are educated to their full potential with appropriate curricula and students become independent, successful adults.

In order to successfully educate HI/VI students, families and educators must work together toward short and long term realistic goals with high expectations. Specialized early intervention educators and families must work together to determine communication modes and educational social goals. A complete IEP team, including parents, teachers, and specialists need financial and development support in creating and carrying out each individual's plan.

Parents

Successful education that is needed from the state is proper and mandated testing for students along with mandatory training of school staff. Teachers and staff should be accountable for IEP progress and goals. Funding for special needs should be a first priority for the family and students to promote successful life for the student, and less hardship on the family that deals with it daily. No Child Left Behind should apply and there should be no question about whether the child finishes school or not. They just can't hear.

To get the commonwealth we need, we need more staff to be responsible for the needs of our special needs children, within their social skills with others and the resources we need for our children for more funding, and more services, to give our children what they need for their own well being.

It should be the responsibility of the commonwealth, and staff to secure financial resources and to equip our children with knowledge, technical skills, and social skills. They should start early to ensure social skills that are needed will be instilled in our children along with knowledge and skills to survive on their own after the passing of their families.

In order for our children to be successful in the world today there have to be changes made in this state we live in. Our school system has got to provide the appropriate means needed to educate our HI children. We need to have appropriate staff training for teachers who work with children with disabilities. There needs to be more staff available to help work with HI children - speech and language teacher, PT, OT, etc., available for more than just once a week. They are falling through the cracks and getting farther behind. Social skills are lacking because of the language delays in these children. Unfortunately we see this often. More funding, staff, and staff training would help keep these children from falling behind.

Successful services are met when the student's educational, social, and individual needs are met to help students become the best they can be in society so that they can become productive citizens and respected in the community.

Education services are provided when administrators receive training in specific areas of disabilities (HI/VI) and have to observe the services provided in the classrooms in order to 1) develop a system to monitor whether appropriate services are being provided by teachers to meet the specific needs of HI/VI students and 2) help administrators understand the importance of training teachers in specific disabilities and then accountability for implementing specific strategies/goals for HI/VI students. Educational services are successful with constant interaction/communication among administrators/staff (teachers, facilitators, therapists) and parents. Also, success determined by required training of teachers in specific disability areas of the students they work with and then a system in place to make sure monitoring occurs of strategies/skills put in place in classrooms by teachers.

A comprehensive deaf education is based on sound educational guidelines with staff development, parental support and continuous feedback.

Successful education in North Carolina exists when guidelines, individual assessment, and communication are empowering parents and teachers to provide education for the success of the student.

Successful education of our children is only possible when best practices become the bare minimum; when each and every student is an equal priority and their highest level of achievement is the goal; when all children who are able receive the SCOS along with their typical peers; when all involved are working toward that goal with the same vision and ownership; when parents own their responsibility to educate themselves and be active participants in the education of their children; when competent and qualified individuals are teaching, evaluating, and assessing our children; when the environment, setting, and placement don't hold our children back; when the priority is the need of the child, not the resources of the district, because the resources are there; when our teachers are supported and set up for success rather than failure; when socialization and life skills are taught and modeled as a priority; when school choice is available to all students; when our kids have equal access to the school, the program, the curriculum, and the environment; when all resources are accessed and utilized; when compliance with implementation holds the same weight as compliance with the paperwork; when parents have equal access to the schools as parents of typical students; when the highest level has an understanding of the programs that they run; when schools are held accountable for complying with federal and state laws, such that failure to do so is enforced; or maybe when schools comply when it is the right thing to do, not just because they are forced to.

Components of a successful educational system for HI children should include the child attending the school for which he or she should attend if not impaired to enable successful integration into the community. Their individual needs should be addressed in that school by personnel who are educated in the disability before the child enters the school. The child's needs are identified and accommodations provided per IEPs are monitored on-site, not just by paperwork. Children should be equally educated throughout the state; all counties need to provide an equal quality of service and be mandated to follow DPIs standards and best practices. With the mainstreaming of children in-service on the disability should be mandated for regular classroom teachers. Services should be based on a child's need, not on schedules or funding. All educators and IEP teams, including parents, need to be educated on the IDEA laws. Funding for these low incidence, high cost services needs to be increased to provide appropriate environments, acoustics, sound field systems and other technology which benefit all children. Communication needs throughout the child's classes should be addressed with qualified paraprofessionals to assist with those needs. Priority needs to be given on educating the educators. Early intervention services are providing excellent services to our children; however when they transition to pre-k, the educators are not as knowledgeable and therefore services are not equal or carried over to pre-k

A successful education consists of a number of components: for the public school system the first part begins prior to the child's third birthday. The school system needs to appreciate the value of early intervention. The administration is responsible for supporting a program to meet the child's needs with an educated staff. An educator by his or her degree alone is not sufficient to address the needs of a specific disability. The specialist should be educated in that area, have experience, or be mentored. The school system should have an IEP in place with a thorough, age-appropriate, assessment-appropriate evaluation to base it on. The IEP team should not be intimidating to a parent. The parent should be able to have the support at these meetings by a Beginnings representative for emotional, legal, and educational support. The parent should be involved in the goal making process, school placement, frequency of sessions, modifications and devices. The acoustics in the classrooms are critical. A sound field system in each classroom would not only benefit the HI student, but each student in the classroom. Assessments should be given on a yearly basis in order to see gaps/progress without allowing a significant gap in an area. Parents should be able to choose the type of education appropriate for their child: public, private, home schooled, etc., and still receive services by their local LEA. They still pay taxes. This process should continue through the child's academic career, hopefully reducing to a maintenance level with successful intense early intervention. Each student should ultimately be able to graduate from high school with age-appropriate literacy skills and have a healthy self esteem, confidence, and the ability to pursue secondary education, a career of choice, and a family of his or her own, and be a successful role model for others. The school system has a significant role in a child's life from three years old to graduation. By working with the child's individual needs and parents' goals, it can be a successful partnership.

Successful education of a hard of hearing child requires qualified, experienced professionals in roles interacting with my child. They need to understand the technology, the developmental needs by age and disability, the resources available, etc. Not only must EC teachers be knowledgeable, but so should all teachers and aides coming in contact with my child. Even if each individual is not an expert, the team can be supportive of all members and yield a great result. My child needs appropriate educational options and choice just like other children. Accommodations should be made in programs that match his interests. We should be able to observe programs while they are serving kids to be sure that they fit his needs. Programs need to serve him as a whole person, not just address his disability. In other words, he should explore everything that preschoolers get to explore - not just focus on speech and language. There needs to be a strong relationship between the family and the team. All of our collective knowledge should be used to shape IEP goals and to determine strategies for meeting goals. Our interactions should make all of us more knowledgeable. Services and accommodations should reflect the specific needs of my child. Professionals working with my child need to be accommodated for working on the goals on the IEP and tracking progress on those goals. They should have a caseload that allows them to give children the individual attention they need. Planning of goals should not simply focus on academic outcomes. Children must have self-advocacy and social skills to succeed. While parents are responsible for helping students develop in these ways, our children spend hours in school - thus schools should not have practices that hinder independence and socialization. Finally, school districts should comply with the law in word and in spirit. All children with disabilities need quality support and services, especially children whose parents are less able to advocate on their behalf.

In order for our education to be successful, we need to make sure that several key areas are addressed: child needs to be supported in school placement with qualified staff (i.e., HI staff needs to sign/effectively communicate); educators need to be trained in their area; there needs to be accountability and monitoring done on a random basis to ensure staff is teaching appropriately; there needs to be better communication between parents and teachers, so that the IEP is written together in the child's best interest.

APPENDIX E – Online Parent Survey

Below are screenshots of the online parent survey questions.

Parental Input for HI/VI Study

Education services require many different people, activities, and pieces of information.

We have identified seven important components of education services. We would greatly appreciate it if you could tell us what is MOST IMPORTANT to you about each of these components. Please answer the questions below.

The screenshot displays a web-based survey interface with a light blue background and dark blue horizontal bars. The first question, labeled '1)', asks parents to check all that apply from a list of three options regarding their child's visual or hearing impairments. Below the list is a text box for 'Other (Please Specify)'. The second question, labeled '2)', asks parents to check all that apply from a list of four options regarding their child's school level. Below the list is another text box for 'Other (Please Specify)'. The interface is clean and user-friendly, with clear instructions and checkboxes.

1) Which of the following are true? Please check all that apply:

☐ I have a child who has a visual impairment

☐ I have a child who is deaf or hard of hearing

☐ I have a child who is deaf or hard of hearing who has a visual impairment

Other (Please Specify):

2) Which of the following are true? Please check all that apply:

☐ I have a child who is birth to pre-kindergarten

☐ I have a child in elementary school

☐ I have a child in middle school

☐ I have a child in high school

Other (Please Specify):

3) Which of the following are true? Please check all that apply:

☐ I have a child with a visual impairment who attends a residential school

☐ I have a child who is deaf or hard of hearing who attends a residential school

☐ I have a child with a visual impairment who attends a typical school

☐ I have a child who is deaf or hard of hearing who attends a typical school

Other (Please Specify):

4) Which of the following are true? Please check all that apply:

☐ I have a child who once attended a residential school during the academic year but who NOW attends a typical school

☐ I have a child who once attended a typical school but who NOW attends a residential school during the academic year

Other (Please Specify):

5) ASSESSMENT

The state provides assessment services to students who have visual impairments or who are deaf or hard of hearing. Assessment is conducted to evaluate a student's skill level, identify a student's education needs, establish education goals, and determine which resources should be provided for that student's education. What is most important to you about assessment?

6) PLACEMENT

Each student is placed in an education setting. Some examples of placements are: a residential school that specializes in serving students with visual impairments or who are deaf or hard of hearing, a typical public school that features a resource room for students with impairments, or a typical public school where all students work in the same classroom all the time. What is most important to you about placement?

7) RESOURCES

The state provides resources for each student's education. These resources include staff, technology, buildings, books, training, information, and many other categories. What is most important to you about resources?

8) COMMUNITY

Each student interacts with at least one, and often many, communities on a day-to-day basis. A student interacts with people at school, in their homes, in their neighborhoods, in their jobs, or through their hobbies. What is most important to you about community?

9) OUTCOMES

Education services provide for many outcomes. These outcomes can be academic (a diploma, performance on state mandated tests, knowledge of the required state standards) or nonacademic/functional (social skills, independence, a sense of self determination and advocacy). What is most important to you about outcomes?

10) TRANSITION

The state takes an interest whenever a student transitions from one education level to the next. Examples of transitions include early intervention to pre-kindergarten, pre-kindergarten to elementary school, middle school to high school, and high school to the student's next endeavor, such as college, independent living, or employment. What is most important to you about transition?

11) STRENGTHS / OPPORTUNITIES FOR IMPROVEMENT

Please provide any additional comments you would like to share concerning aspects of education services that you believe are working well or aspects of education services that you believe require improvements.

12) Please provide your contact information. This information will not be shared and your responses will be kept anonymous:

Name	<input type="text"/>
Phone number	<input type="text"/>
Email address	<input type="text"/>

APPENDIX F – Focus Group Exercises

Exercise 1: Stories of Success

Focus group participants created a story that illustrated success in education services for students who had a visual impairment, who were deaf or hard of hearing, or who were deaf/blind. Each participant was given total autonomy in the design of his or her story; the student at the center of the story could be imaginary or real, in school or graduated, male or female, etc.

Participants shared these stories as a group. Participants identified important and common themes across all stories. Facilitators asked probing and clarifying questions and recorded participants' comments on paper cards, which were attached to a large poster board.

Participants placed stickers on the paper cards that recorded the themes that they believed to be most important. Participants were given a small number of stickers to help the group identify priority topics.

Exercise 2: Components of Success

Facilitators presented participants with seven topics that, collectively, captured the various activities entailed in education service provision for students who have a visual impairment, are deaf or hard of hearing, or are deaf/blind. The facilitators identified and defined these seven topics through conversations with expert stakeholders. The seven topics were:

- Assessment: The evaluation of a student's condition and the identification of necessary education services
- Placement: The locating of a student in an educational setting
- Resources: The staff, technology, expertise, training, funding, time, etc. that are provided for a student's education
- Community: The people with which and the places in which a child lives his or her life
- Outcomes: The products of education services
- Transition: The moving of a student who has completed secondary education into a new endeavor
- Compliance: The extent to which education services are in accordance with related policies and standards

Participants discussed indicators of success for each of the seven topics. Facilitators captured these comments on pieces of paper, which were attached to a large poster board. Participants used stickers to identify the indicators that were most important to their definition of success for each of the seven components.

Exercise 3: Summing up Success

Facilitators presented participants with all comments that had received a sticker and, as such, had been identified as a priority aspect of success for at least one participant. Participants reviewed these comments, which were captured on individual pieces of paper. Participants clustered these comments into related categories and labeled each category. Participants used these labels to write a summary of success that addressed the concepts they had covered over the course of the previous two exercises. These summaries of success were the final product for the focus groups and served as the raw data for the qualitative analysis outlined in this report.