This document presents a national strategic plan for preparing capable and qualified personnel to educate students who have visual impairments. The plan focuses on three main goals: (1) to increase the number and diversity of qualified personnel to serve students with visual impairments; (2) to increase the number and diversity of qualified leadership personnel in the education of children with visual impairments; and (3) to increase the number and diversity of high-quality applicants to and graduates from personnel preparation programs serving all areas of education of students with visual impairments. Section 1 provides background information on the project. Section 2 discusses the needs assessment designed to assist the strategic plan, estimates of children to be served, and recommendations for more reasonable caseloads. Section 3 presents the most critical goals, objectives, and strategies needed to address the shortage of direct service personnel who serve students with visual impairments. It includes a description of the planning process and the recommended implementation plan. Tables provide funding requirements, potential partners, and performance indicators for each implementation strategy. The final section discusses the anticipated impact of implementation of the plan and its costs. Appendices include supporting research and data. (Contains 25 references.) (CR)
NATIONAL PLAN
FOR TRAINING PERSONNEL
TO SERVE CHILDREN
WITH BLINDNESS AND LOW VISION

January 2000

Project Partners Include:
Association for the Education and Rehabilitation of the Blind and Visually Impaired, Div. 17
American Foundation for the Blind
Division on Visual Impairments, CEC
NATIONAL PLAN
FOR TRAINING PERSONNEL
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WITH BLINDNESS AND LOW VISION

January 2000

Developed under Project No. H029K73005,
Funded by the Office of Special Education Programs
U.S. Department of Education

Christine Mason & Roseanna Davidson, Co-Principal Investigators
Colleen McNerney, Project Coordinator

Project Partners Include:

Association for Education and Rehabilitation of the Blind and Visually Impaired, Division 17
American Foundation for the Blind
Division on Visual Impairments, CEC
The Council for Exceptional Children National Plan for Training Personnel
to Serve Children with Blindness and Low Vision
Acknowledgments

We wish to thank the Office of Special Education Programs (OSEP), and particularly Glinda Hill, Charlie Freeman, and Lou Danielson, for realizing the value of this project and for their support, encouragement, and assistance. In addition, we want to thank all of our strategic planning participants. Their insights, time, and dedication have contributed significantly to developing a document that should guide many personnel preparation activities in blindness and low vision during the next decade.

To Marianne Hughes of the Interaction Institute for Social Change who led us through scenario-based planning (see Appendix B), thank you for your wonderful way of ensuring that we stayed in the “problem space,” moved into the “problem-solving space,” and finally arrived at what we believe to be realistic and robust solutions. To Susan Spungin of the American Foundation for the Blind (AFB), your knowledge of the field and your support were invaluable. Corinne Kirchner and Sara Diament also at AFB, your facilitation of the data collection process provided a firm foundation in many activities. To Colleen McNerney, project coordinator, and Lea French Davis, administrative assistant, thank you for staying on top of the many tasks and for the superb organizational skills you brought to this project. To Debbie Perry, thanks for being a superb recorder at our meetings. To Donor Lion and Dorothy Jessop, our consultants, your work added depth and insight regarding implementation structures. To Sandy Stillerman and Doug Mitchell, your assistance with final edits under tight time lines was essential. To the November Working Group, thank you for devoting one more weekend to strengthening this document. And, in particular, Kay Ferrell and Anne Corn provided a researcher’s logic and attention to detail, not only during that weekend, but for several long distance follow-up sessions.

Finally, we want to thank The Council for Exceptional Children, the host organization, for its critical role in advising and facilitating this activity, AFB and the Association for Education and Rehabilitation of the Blind and Visually Impaired (AER) for opening doors to discussion at national meetings, and the National Association of State Directors of Special Education for the assistance provided by Project FORUM.

Christine Mason and Roseanna Davidson
Co-Principal Investigators

January 2000
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Definition of Terms

Used in the National Plan

Approved national standards - AER - Division 9 and Division 17 have developed standards for personnel preparation programs in O&M and VI teaching. The VI standards are based on teaching competencies developed by CEC-DVI and CEC (CEC, 1998).

Blindness - The inability to see; the absence or severe reduction of vision (see also Legal Blindness and Visual Impairment).

Children with blindness and low vision - Children (including infants, toddlers, and youth through the age of 21) who are blind, those who have visual impairments that require specialized accommodations, and those who are deafblind. Some of these children also have other disabilities and may be classified for funding purposes as having multiple disabilities according to another disability label. All of the children have impairments that result in their entitlement to special services according to the Individuals with Disabilities Education Act Amendments of 1997.

Collaboration - Joint work toward a common goal, and resource sharing between two or more organizations.

Complementary goals - Additional goals that enhance and support the three main goals but do not directly reflect the OSEP mandate to address only the personnel shortage.

Comprehensive System of Personnel Development (CSPD) - Federally funded state plans and programs to develop personnel to meet educational and related needs of students in special education.

Consensus - Majority agreement, not necessarily total agreement, among stakeholders.

Deafblindness - Concomitant hearing and visual impairments, the combination of which can create unique communication, developmental, social, emotional, physical, and learning needs.

Direct service personnel - Those who work with children who have visual impairments, in this document specifically: Teachers of the Visually Impaired (TVI), Teachers of the Deafblind (TDB) and Certified Orientation and Mobility Specialists (COMS).

Distance education - Preservice or inservice education which does not involve students physically attending a specific classroom. Forms of distance education include Web-based or satellite-based classes, and classes being taught at alternate sites.

Diversity - Individuals with varying ethnic, linguistic, and cultural backgrounds. Individuals with varying abilities and disabilities.

Driving forces - Economic, social, political, and educational factors that will affect a future situation, as used in the scenario-based strategic planning process of the NPTP project.

Emergency credentialing - Temporary issuance of a teaching license. Most emergency credentialing systems require the teacher to be simultaneously pursuing professional certification and specify a time frame in which the full credential must be obtained. The requirements for emergency credentialing vary from state to state.

Field - Parents, consumers, and professionals in vision education and rehabilitation who advocate, provide direct service, train specialized personnel, and administer specialized programs for students with visual impairments.
Itinerant teacher – A direct service provider who travels from student to student in the same or neighboring schools or districts, provides specialized instructional programs, and coordinates with the students’ classroom teachers.

Leadership – People who work in the forefront within all levels of the field, ranging from the grassroots community to university training/research endeavors and federal and state agencies. Also used to refer to professionals who hold scholarly research and university teaching positions of the field.

Leadership Development Institute in Blindness and Low Vision – A center that will facilitate mentoring, career ladders, and innovations. The Institute is a recommendation of the NPTP project.

Legal blindness – A statutory definition establishing eligibility for certain benefits and services. The Federal definition refers to visual acuity of 20/200 or less in the better eye with best correction, or a visual field of 20 degrees or less.

Low incidence – A disability that occurs infrequently in the general population. About 10% of children in the U.S. have disabilities. A low incidence disability occurs in fewer than 5% of the children with disabilities.

Low vision – A vision impairment severe enough after best correction to interfere with the ability to perform everyday activities but permits the individual to use vision as his/her primary channel for learning.

Multiple disabilities – Any educationally relevant impairments occurring in conjunction with blindness or low vision.

National Personnel Preparation Coordinating Council in Blindness and Low Vision – A coordinating alliance that will guide and monitor the implementation of the National Plan. The Council is a recommendation of the NPTP project.

National Research to Practice Institute in Blindness and Low Vision – A center that will initiate research and data acquisition activities to gain an accurate count of personnel and students with blindness and low vision and further personnel preparation in this field. This center will work toward cooperative goals with the Personnel Preparation Technical Assistance Network. It is an initiative of the NPTP project.

National standards – (See “Approved national standards”)

Orientation and Mobility (O&M) – The profession that deals with peoples’ ability to use the senses to establish their position and relationship to significant objects in their environments and their ability to move safely and independently within these environments.

Paraeducator – The preferred term for a person who provides educational or related services to children with disabilities and/or their parents, without university credentials, and working under the supervision of teachers or other professional staff with those credentials who have ultimate responsibility for the services provided (often called “paraprofessionals”).

Personnel preparation – University training to enter the workforce of professions in education, here used to refer to specialized educational and related services for children who are blind, deafblind or have low vision (see also “Leadership”).
Personnel Preparation Technical Assistance Network in Blindness and Low Vision – A consortium of universities, still to be organized and funded, that will facilitate collaboration through the sharing of existing information, knowledge, strategies, and research relevant to personnel preparation in education of children who are blind or have low vision. The Network is a recommendation of the NPTP Project.

Primary disability – For students who have more than one educationally relevant impairment, the impairment that is designated by the service delivery system (e.g., school district) to be primary.

Professional development – The training that is provided to professionals throughout their careers to expand and enhance their initial level of training.

Reciprocity agreements – Reciprocal acceptance of certification credentials between two states.

Recruitment & Retention Project – A project to work collaboratively with other ongoing efforts within OSEP to recruit direct service personnel, targeting individuals from culturally diverse backgrounds as a key element, into the blindness and low vision field. The Recruitment and Retention Project is a recommendation of the NPTP Project.

Scenario-based planning – By creating various scenarios, this planning method takes into account not only current trends, comprised of “driving forces” (see definition), but also the potential impact of these forces on a range of possible futures. This project used the system described by Schwartz (1996). (See Appendix B.)

Scenarios – Narrative accounts of possible futures in which we may have to live (according to the strategic planning system used by the NPTP Project).

Stakeholders – Those who will be affected by the results of the National Plan, including children with visual impairments, their families, direct service personnel, personnel preparation programs, and government administrators.

State Improvement Grants (SIGs) – Federal grants competitively awarded to some states to support personnel development for students with special education needs.

State vision consultant – Within state education agencies, an individual with state level responsibilities in the area of visual impairments.

Steering Management Committee – The ten-member team with representation from CEC-DVI, AER - Division 17, CEC and AFB that guided the project.

Strategic plan – The coordinated set of recommendations from this project designed to alleviate the shortage of direct service personnel.

Strategic planning stakeholders – Stakeholders who participated in the three main strategic planning sessions (January, March, and July 1999), and who were subsequently given the opportunity to review and comment on resulting draft documents.

Strategies – Solutions for achieving the vision.

Visual impairment – Including blindness, means an impairment in vision that, even with correction, adversely affects a child's educational performance. (See IDEA Regulation §300.7(c)(13).)
**List of Acronyms**

*Used in the National Plan*

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>AER</td>
<td>Association for Education and Rehabilitation of the Blind and Visually Impaired</td>
</tr>
<tr>
<td>AFB</td>
<td>American Foundation for the Blind</td>
</tr>
<tr>
<td>APH</td>
<td>American Printing House for the Blind</td>
</tr>
<tr>
<td>CEC</td>
<td>The Council for Exceptional Children</td>
</tr>
<tr>
<td>CSPD</td>
<td>Comprehensive System of Personnel Development</td>
</tr>
<tr>
<td>DB</td>
<td>Deafblind</td>
</tr>
<tr>
<td>DVI</td>
<td>Division on Visual Impairments (of CEC)</td>
</tr>
<tr>
<td>FTE</td>
<td>Full Time Equivalent</td>
</tr>
<tr>
<td>GPRA</td>
<td>Government Performance Results Act</td>
</tr>
<tr>
<td>IHE</td>
<td>Institution of Higher Education</td>
</tr>
<tr>
<td>IDEA</td>
<td>Individuals with Disabilities Education Act</td>
</tr>
<tr>
<td>LEA</td>
<td>Local Education Agency</td>
</tr>
<tr>
<td>NASDSE</td>
<td>National Association of State Directors of Special Education</td>
</tr>
<tr>
<td>NCATE</td>
<td>National Council for Accreditation of Teacher Education</td>
</tr>
<tr>
<td>NCES</td>
<td>National Center for Education Statistics</td>
</tr>
<tr>
<td>NPPCC</td>
<td>National Personnel Preparation Coordinating Council in Blindness and Low Vision</td>
</tr>
<tr>
<td>NPTP</td>
<td>National Plan for Training Personnel To Serve Children with Blindness and Low Vision</td>
</tr>
<tr>
<td>NTAC</td>
<td>National Technical Assistance Consortium for Children and Young Adults Who Are Deafblind</td>
</tr>
<tr>
<td>O&amp;M</td>
<td>Orientation and Mobility</td>
</tr>
<tr>
<td>OSEP</td>
<td>Office of Special Education Programs, U.S. Department of Education</td>
</tr>
<tr>
<td>PDS</td>
<td>Professional Development School</td>
</tr>
<tr>
<td>PPTAN</td>
<td>Personnel Preparation Technical Assistance Network in Blindness and Low Vision</td>
</tr>
<tr>
<td>RFP</td>
<td>Request for Proposal</td>
</tr>
<tr>
<td>RSA</td>
<td>Rehabilitation Services Administration</td>
</tr>
<tr>
<td>SEA</td>
<td>State Education Agency</td>
</tr>
<tr>
<td>SIG</td>
<td>State Improvement Grant</td>
</tr>
<tr>
<td>SIP</td>
<td>State Improvement Plan</td>
</tr>
<tr>
<td>TA&amp;D</td>
<td>Technical Assistance &amp; Dissemination</td>
</tr>
<tr>
<td>TDB</td>
<td>Teacher of Students with Deafblindness</td>
</tr>
<tr>
<td>TVI</td>
<td>Teacher of Students with Visual Impairments</td>
</tr>
<tr>
<td>VI</td>
<td>Visual Impairment</td>
</tr>
</tbody>
</table>
Preface

The spirit of the 2 years of intensive strategic planning that culminated in the National Plan for Training Personnel to Serve Children with Blindness and Low Vision reflects first and foremost a strong underlying commitment to individuals with blindness and low vision. That dedication is conveyed in this excerpt from the vision statement produced by the stakeholders who developed this Plan:

We envision a future world in which each individual is valued by society...

In this environment, individuals who are blind and visually impaired enjoy access to high-quality, comprehensive programs and services. Appropriately trained professionals support early education, education from kindergarten through grade 12, and lifelong learning...

In this world, individuals who are blind or visually impaired are working with others at the local, state, and national levels not only to improve conditions for themselves but also to contribute to the betterment of all.

In developing the National Plan, a group of stakeholders met many times both at formal meetings for strategic planning purposes and at their own leadership conferences and seminars. The group reflected on the future for individuals with blindness or low vision and dialogued about the pros and cons of various options for addressing the significant shortage of qualified personnel in the field of blindness and low vision. This included options such as regionalization of training, distance education, adherence to national standards, virtual learning, alternative certification, and strengthened collaboration. While many alternatives were explored, we narrowed the final recommendations to those approaches that appeared to show the greatest promise. What emerged was a renewed and strengthened investment in promoting collaboration, leadership development, and technical assistance, and in finding the means to achieve the vision embraced by the group.

As readers examine our National Plan, we ask that they also consider how technology will expand all of our capabilities. For example, Ray Kurzweil characterizes the new millennium in his best seller, The Age of Spiritual Machines (Kurzweil, 1999), as an era of great transformation resulting in the merger of human thinking with artificial intelligence and greatly enhanced capabilities for individuals with disabilities. Johns Hopkins University recently announced success in early phases of using electrodes attached to external microchips to simulate seeing. These types of technological advances are changing the very nature of many jobs, including those of teachers and orientation and mobility specialists. The exciting opportunities of the 21st century will demand a dramatic expansion in the number of trained leaders and direct service personnel.

Strategic Planning

The entire strategic planning process was highly collaborative. The views and actions of key constituents drove many of our discussions and activities over the past 2 years. In actuality, the
strategic planning stakeholders (representing the divergent needs of many professionals and consumers from across America) contributed substantial leadership to this project. To arrive at this final National Plan, the stakeholders were supported by a Steering Management Committee comprised of representatives from the Association for Education and Rehabilitation of the Blind and Visually Impaired (AER) Division 17- Personnel Preparation Division, The Council for Exceptional Children (CEC) Division on Visual Impairments (DVI) and staff from the American Foundation for the Blind (AFB) and CEC. This team met often over a 2-year period via conference calls, logging endless hours in communicating, planning, organizing, implementing, and evaluating how best to achieve consensus and develop a viable plan among a group of leaders with varying ideas, needs, and visions.

The National Plan: Audience and Intent

As readers approach this National Plan, it may be helpful to keep in mind our attempt to present a plan to be used by three distinct audiences:

1. Key stakeholders (e.g., parents, consumers, faculty at institutions of higher education (IHEs), local education agencies, university students, administrators, schools for the blind, and direct service personnel).

2. The broader community of stakeholders (e.g., state directors of special education; the general and special education personnel preparation programs; deans of schools of education; chancellors, presidents, and provosts of IHEs; educational associations; school districts; related service providers such as rehabilitation specialists and other adult service providers; researchers; state certification personnel; special educational task forces).

3. The Office of Special Education Programs (OSEP) at the U.S. Department of Education.

The interests and needs of the stakeholders are straightforward and require no explanation. The support of the broader community is imperative for successful implementation of the National Plan.

OSEP is a key audience for this report both because it was the original funding source for our activities and because we are requesting that OSEP implement specific initiatives during the next 5 years to address the substantial personnel shortage that exists.

We are interested in a broad dissemination for two reasons. First, we will need the support and collaboration of the larger community to achieve the highest degree of success. Also, others may find our strategies for designing this Plan and our outcomes useful as they engage in related planning.
Executive Summary

Mission and Focus of the National Plan

To overcome past and current deficiencies both in providing quality services to students and maintaining an adequate supply of qualified personnel to provide those services to children with blindness and low vision, in 1997 the U.S. Department of Education’s Office of Special Education Programs (OSEP) funded a 2-year planning process. The resulting National Plan for Training Personnel to Serve Children with Blindness and Low Vision that is presented here incorporates findings from that project’s intensive needs assessment and strategic planning process.

The efforts of OSEP and leaders within the field of blindness and low vision have been and continue to be directed toward an ultimate purpose of expanding and enhancing services to children with blindness and low vision. While the delivery systems face many challenges, OSEP and leaders in educating students with blindness and low vision agree that the National Plan must target the personnel shortage as a primary, critical area of focus. To alleviate the critical shortage of personnel who provide essential services to children with blindness and low vision in educational settings, the project called upon a group of key stakeholders. Those stakeholders—representing parents, consumers, university programs, researchers, schools for the blind, administrators, and related service personnel—explored dreams, knowledge and concerns during the 2 years of the project. As the plan targeting personnel shortages unfolded, three key goals and related priority objectives emerged in these areas:

2. Leadership development.
3. Recruitment and retention.

In addition, stakeholders identified three complementary goals that supplement and support the main goals. While relevant and important, the complementary goals extend beyond the central focus on personnel shortages. The three complementary goals address:

- Consumer partnerships.
- Human resource development.
- Enhanced services to children.

See Appendix C of the full text version of the National Plan (CEC, 2000) for a detailed description of the complementary goals.

1 The term children with blindness and low vision will be used in this report to include infants, toddlers, and youth through the age of 21 who are blind, those who have visual impairments that require specialized accommodations, and those who are deafblind. Some of these children also have other disabilities and may also be classified for funding purposes as having multiple disabilities according to another disability label. All of the children have impairments that result in their entitlement to special services according to the Individuals with Disabilities Education Act Amendments of 1997.

2 Hereafter referred to as the National Plan, or the Plan.

3 The field refers to parents, consumers, and professionals in vision education and rehabilitation who advocate, provide direct service, train specialized personnel, and administer programs for students with visual impairments.
Project Origin

Personnel who teach students with visual impairments require specialized training to meet the unique needs of these students. In the 1950s and 1960s, the federal government initiated discretionary funding programs to encourage universities to develop and provide specialized training to prospective teachers of students with visual impairments. However, as changes were made in requirements for OSEP-funded proposals, some programs lost funding, and, for a number of reasons, it became more difficult to attract students into the remaining programs. This impacted the number of direct service personnel entering the field and contributed to the shortage of direct service personnel.

To turn the tide, a broad coalition of stakeholders banded together in 1994 in the creation of eight national goals for improving the education of students with blindness and low vision (Corn, Hatlen, Huebner, Ryan, & Siller, 1995). One of the eight goals focused on the preparation of a sufficient number of personnel to serve students with blindness and low vision throughout the United States. A preferred course of action was discussed at a policy forum conducted by the National Association of State Directors of Special Education (NASDSE). Subsequently, key stakeholders met and approached OSEP with their concerns and recommendations. OSEP issued a request for proposals to develop a national plan, and the National Plan for Training Personnel to Serve Children with Blindness and Low Vision (the NPTP Project) was funded in the fall of 1997.

Problem Statement and Vision

Through activities coordinated by the NPTP Project, a group of 57 stakeholders met over the course of the past two years to develop a National Plan to increase the number of personnel to meet the needs of children with blindness and low vision. One of their first activities was to agree upon the problem to be addressed in the National Plan.
The Problem

Children with blindness, low vision, and deafblindness are entitled to appropriate educational services that prepare them for optimum functioning as adults. A large number of these students, however, never acquire the knowledge and skills essential for productive citizenship. Several factors contribute to this problem. To begin, students are underidentified and geographically dispersed, making it difficult to quantify and then address their actual needs.

Direct service personnel are in critically short supply, while current recruitment and retention strategies fail to adequately address the shortage. Further, the programs designed to prepare these professionals are underfunded, and the number of leaders to sustain the programs is insufficient to meet the demand. The complacency and lack of accountability within the economic, political, advocacy, and educational systems that influence the services offered to students with visual impairments exacerbate the problem. Even more significant is evidence pointing to inadequate recognition or awareness of what “quality” services mean.

Finally, fiscal constraints and conflicting educational philosophies, rather than the best educational interests of the students, often drive the structure and methods of educational services. Improving services for students with visual impairment will not only enhance their quality of life, but will also benefit the whole of society. If individuals who are visually impaired receive appropriate educational services as infants and children, they will flourish into independent adults with an increased capacity to contribute to their community and beyond.

A Vision of the Future

To respond to the identified problem, the strategic planning stakeholders developed a vision that stressed values, services and programs, use of technology, and involvement of all levels of government (i.e., local, state, and federal).

We envision a future world in which each individual is valued by society. In this society, the needs of each individual are respected and addressed. Individuals from diverse language, cultural, ethnic, and disability backgrounds are perceived and see themselves as contributing members of society. They have high expectations for leading fulfilling lives.

In this environment, individuals who are blind or visually impaired enjoy access to high-quality, comprehensive programs and services. Appropriately trained professionals support early education, education from kindergarten through grade 12, and lifelong learning. Collaborative partnerships, continuing research, and a wide array of nationally accredited personnel preparation programs ensure high standards in preparing personnel to serve students with blindness or low vision. Technological advances support independence, learning, and overall quality of life.

As educational reform and societal changes unfold, collaborations at the federal, state, and local levels ensure political, fiscal, and legislative support for persons with blindness, low vision, and deafblindness. In such a society, complacency and lack of accountability have vanished. Resources to meet the needs of children and youth are distributed equitably through a broad and shared network of services. In this world, individuals who are blind or visually impaired are working with others at the local, state, and national levels not only to improve conditions for themselves but also to contribute to the betterment of all.

...flourish into independent adults with an increased capacity to contribute to their community and beyond.
Goals

In the summer of 1999, the strategic planning stakeholders agreed to focus their final planning around three goal areas: personnel preparation, leadership development, and recruitment and retention. At a meeting held at the headquarters of The Council for Exceptional Children, they fleshed out descriptions of these goals and priority objectives in each area. Table 1 presents the central core of the National Plan.

Table 1. Main Goals and Priority Objectives of the National Plan

<table>
<thead>
<tr>
<th>Goal 1: Personnel Preparation and Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>To increase the number and diversity of qualified personnel to serve students with visual impairments.</td>
</tr>
<tr>
<td>1.1 To provide technical assistance that will stabilize and build capacity of current personnel preparation efforts to ensure preparation of a sufficient number of qualified personnel.</td>
</tr>
<tr>
<td>1.2 To establish models of collaborative relationships and alliances among personnel preparation professionals, SEAs, LEAs, CSPDs, SIPs, schools for the blind, parents, consumers, and industry representatives.</td>
</tr>
<tr>
<td>1.3 To stabilize personnel preparation programs and build capacity through federal (OSEP) funding policies.</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Goal 2: Leadership Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>To increase the number and diversity of qualified leadership personnel in the education of children with visual impairments.</td>
</tr>
<tr>
<td>2.1 To provide innovative and collaborative leadership development opportunities at all career levels.</td>
</tr>
<tr>
<td>2.2 To initiate national research and data acquisition activities to increase the capacity of the field of blindness and low vision to maintain an accurate count of personnel and students.</td>
</tr>
<tr>
<td>2.3 To coordinate research related to personnel, services delivery, and student outcomes.</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Goal 3: Recruitment and Retention</th>
</tr>
</thead>
<tbody>
<tr>
<td>To increase the number and diversity of high-quality applicants to and graduates from personnel preparation programs serving all areas of education of students with visual impairments.</td>
</tr>
<tr>
<td>3.1 To launch a comprehensive, sustained national public relations/marketing campaign focused on career opportunities in the field of educating students with visual impairments.</td>
</tr>
<tr>
<td>3.2 To create an information and referral service that supports recruitment and retention activities.</td>
</tr>
</tbody>
</table>

Note. SEA, state education agency; LEA, local education agency; CSPD, Comprehensive Systems of Personnel Development; SIP, State Improvement Plan; OSEP, Office of Special Education Programs, U.S. Department of Education.

Key Challenges

Currently five significant challenges need to be overcome for the proposed National Plan to be successful. The National Plan includes components addressing these challenges.

- **Funding.** Clearly, resources are needed to achieve the vision, goals, and objectives outlined in this Plan. Funding needs to come from diverse sources, including all levels of government as well as private and corporate sources.

- **Research.** The lack of information and research to inform the strategic planning process posed a challenge that was partially met through making rough estimates based upon the collection of needs data. However, to continue to address the personnel shortage and to achieve the vision as outlined, research must be valued, supported, and ongoing.

- **Diversity.** The diverse needs of students and personnel in the field, including individuals from ethnically, linguistically, and culturally diverse backgrounds and
individuals with disabilities, must be addressed at all levels to achieve the vision and assure relevant instruction for all segments of the population.

- **Collaboration.** To address adequately the current personnel crisis and needs of students with blindness and low vision, well-planned, efficient, and effective collaboration is essential. Collaboration must be inclusive of all groups.

- **Governmental/Nongovernmental Coordination.** Just as collaboration among all stakeholders is needed to achieve the vision, coordination among different levels of government (i.e., federal, state, local) and between government and private sectors is also essential. Intersector coordination is increasingly important with the emergence of charter schools and the involvement of business as a major stakeholder in education.

### Proposed Implementation

To provide for an adequate supply of direct service personnel and address the three goals identified by the strategic planning participants, eight objectives were identified. These objectives form the basis for major components to implement the National Plan.

#### Goal 1
**Personnel Preparation Technical Assistance Network in Blindness and Low Vision**
The Personnel Preparation Technical Assistance Network (PPTAN) is intended to facilitate and support collaboration that meets the personnel preparation needs of the nation, facilitate the application of national program standards, and provide technical assistance to new and existing programs. (Objectives 1.1 and 1.2)

**OSEP Funding Policies**
The impact of OSEP-funded personnel preparation projects will be strengthened, and programs stabilized, by extending project periods to five years and increasing the size of these awards. (Objective 1.3)

#### Goal 2
**Leadership Development Institute in Blindness and Low Vision**
The Leadership Development Institute will develop mechanisms and programs to support the professional development of present and future leaders in the field of blindness and visual impairment. This Institute and related OSEP-funded projects to prepare doctoral students will enhance mentoring and collaboration among doctoral students in the field of blindness and visual impairment. (Objective 2.1)

**Research to Practice Institute in Blindness and Low Vision**
The Research to Practice Institute will design, collect, analyze, and disseminate data affecting personnel needs in blindness and visual impairment. This Institute will ensure coordinated efforts in utilizing research to validate practices and to enable transfer of this information to the professional development community. Activities will include empirical studies of program methodologies, analysis of educational outcomes for students, and contribution to an annual count of children and service providers. (Objectives 2.2 and 2.3)

#### Goal 3
**Recruitment and Retention Project**
The Recruitment and Retention Project is intended to ensure appropriate special education and related services by developing a comprehensive, cohesive recruitment campaign to increase the number of personnel serving infants, children, and youth with blindness and low vision. (Objectives 3.1 and 3.2)
A Cross-Goal Initiative

National Personnel Preparation
Coordinating Council
To strengthen outcomes of the National Plan as it is implemented, a National Personnel Preparation Coordinating Council (NPPCC) is recommended. The Council will be composed of representatives from each of the other components depicted in Figure 1 (on page 13) as well as other organizations and stakeholders in the field of blindness and visual impairment. The NPPCC is charged with guiding and providing formative evaluation to facilitate implementation and outcomes of the National Plan. (This Council will work with external evaluators to provide advice on how to strengthen the impact of the Plan, but will not have compliance monitoring responsibilities.)

Figure 1 depicts the relationship of these components to other key elements that provide services benefiting students with blindness and low vision.
Collaborative Model for Implementation
of the National Plan for Training Personnel To Serve Children with Blindness and Low Vision

Parents and families of infants, children, and youth with blindness and low vision

• College and university programs

• Local education agencies

• Schools for the blind

Faculty at IHEs deliver the primary training for direct service personnel, conduct research, and provide significant leadership.

U.S. Dept. of Education Office of Special Education and Rehabilitative Services

Professional organizations

State education agencies

Consumer organizations

National Personnel Preparation Coordinating Council

Research to Practice Institute

Leadership Development Institute

Recruitment and Retention Project

Personnel Preparation Technical Assistance Network

Figure 1
Impact and Funding

While the proposed National Plan is most dependent upon funding from OSEP, it will only be successful if others share in its implementation and contribute resources in its support. For maximum effectiveness, federal, state, and local governments must coordinate efforts, each assuming responsibility for different levels of activity. Furthermore, partner alliances among professional and consumer organizations, specialized schools for the blind, and agencies outside of the U.S. Department of Education can strengthen a diversified funding base.

On a macro level, productivity, efficiency, and accountability will be key to the outcomes obtained with the proposed National Plan. To ensure improvements in the supply of qualified personnel, funding priority must be given to quality programs that prepare significant numbers of personnel, prepare personnel from diverse backgrounds, or prepare personnel to serve in areas of highest need.

While this National Plan was designed to be implemented over a 5-year period, participants realized that total solutions to the problem of supplying personnel will not be achieved within 5 years. However, the National Plan was designed to be realistic, and calculations indicate that it is realistic to anticipate a 36-55% reduction in the shortage within 5 years after its implementation. The lower rate factors in an annual 7.3% attrition rate (Smith-Davis & Billingsley, 1993); at 5% attrition, the shortage would be reduced by 41%; the 55% reduction does not factor in attrition.

Based on discussions and activities with strategic planning stakeholders, as well as data on supply and demand for direct service personnel, a conceptual model for implementation was developed. (See Figure 2 on page 15.)
There is a high degree of goal-directed interdependence and collaboration among the key components.

Legend: □ Project Component Initiated □ Significant Impact Realized

Although all initiatives begin in 2002, the impact of some will be more immediate. The greatest impact will occur after 2006 when more faculty are available to prepare personnel.
The Plan includes six major national components. Five of the six components address Goals 1-3 through overlapping spheres of influence: the Recruitment and Retention Project, the National Technical Assistance Network, strengthening Personnel Preparation Programs, the Leadership Development Institute, and the Research to Practice Institute. The National Coordinating Council, the sixth component, provides a mechanism to facilitate implementation of the National Plan across the three goal areas. However, the impact of these components is interdependent. For example,

- Recruitment of students into certification and degree programs is a key linchpin upon which the effective resolution of personnel shortages rests.

- More individuals from culturally diverse backgrounds are needed at all levels of personnel serving individuals with blindness and low vision. Targeting specific recruitment strategies to diverse populations should be a key factor in achieving the goal of more diversified personnel. Additionally, the stakeholders recommended that OSEP strengthen its support for preparing personnel from underrepresented groups.

- For the total number of personnel to be increased, the number of individuals graduating with doctorates must increase. The Leadership Development Institute will provide an avenue for encouraging professionals to enter doctoral programs. Realizing how critical an increase in individuals with doctorates is to the field, it must be emphasized that the primary impact of all initiatives will only occur once a class of doctoral candidates graduates, four years after the beginning of these initiatives.

Based on the model in Figure 2 (page 15) and the analysis of the interrelationship of components, an approach was designed to portray the impact of initiatives implemented between Project Years 2002 and 2006 (see Figure 3 right and Figure 4 on next page). To provide for an analysis of trends, these data are graphed on a logarithmic chart. Figure 3 displays the projected increase in personnel by category. Figure 4 depicts the projected cumulative impact on personnel under three conditions: no attrition, an attrition rate of 5%, and an attrition rate of 7.3%.

Several differing sets of data regarding trends in faculty, training, research, and funding served as the basis for making projections. Differences in the data sets reflect such differences as focusing only on OSEP-funded training programs, only on AER-approved programs, a larger set of training programs that include programs which are not AER-approved, or data including Masters degree programs versus undergraduate programs.

The starting point for projections in Figures 3 and 4 is the number of individuals recruited into programs. Given that no data are available on the number of recruitments in the field of blindness and low vision, that number is based on an extrapolation from the average number of students receiving degrees or certification from IHEs in 1998-1999.

![Fig. 3: Projected Increase in Personnel](image-url)
The projections in Figures 3 and 4 were also based on the following assumptions:

- The incidence of blindness and low vision will remain constant. While conflicting projections have been made, no firm, reliable evidence is available to support either an increase or decrease in prevalence (Kirchner, 1999).

- No intervention is expected to produce a significant change until the first year of implementation by OSEP in 2002. Implementation will not begin until 2002 because of the amount of lead time needed by OSEP for developing new initiatives.

- The number of individuals recruited each future year will at least equal the number of individuals receiving certification or degrees. (This number is used for calculations in the absence of any other data.)

- The number of training programs will gradually increase beginning in 2002.

- The greatest impact will only begin to be realized after one year of implementation of the recruitment campaign and the National Technical Assistance Network, at which time sharing course materials and distance education modules will facilitate expansion of programs and the ability of each IHE to instruct a larger number of students.

- A sufficient number of faculty will be retained to prepare direct service personnel over the next 7 years, and over the next few years leadership initiatives will result in an increase in individuals preparing to teach at IHEs.

- All graduates are expected to assume full time positions with full caseloads.

Furthermore, current and historical information also provided some rationale for additional assumptions. These key assumptions follow:

- A minimum of 33 programs in visual impairments (Corn & Silberman, 1999) will be sustained.

- The percentage of individuals certified or receiving degrees in each area (TVI, O&M, TDB, dual, and doctorate) will remain constant with the relationship found in 1998-99: 70% combined TVIs and TDB, 20% O&M specialists, 9% dual certificates, and 1% doctoral candidates.
The data have been presented two ways: with and without consideration of attrition. If attrition is not considered, then a total of 5,015 personnel should be added to the pool of existing 8,000 direct service personnel, resulting in 13,015 direct service personnel.

If attrition is factored in, the overall number of direct service personnel should reach 9,691 by 2006. An attrition rate of 5% was used based on the following information:

- The number of new professionals entering the field has been approximately 400 a year (Ferrell, 1999).
- The total number of professionals in the field has remained relatively constant over the past few years at 8,000.
- The ratio of new professionals to total number of professionals has been 400 to 8,000, or 5% (or 8 per state). The annual entry of an additional 400 professionals appears to just offset the number leaving the field each year.

In checking these assumptions and determining an overall impact statement, project staff were not able to locate specific data on attrition in the field of blindness and low vision. However, the most recent data from the National Center for Educational Statistics (U.S. Department of Education, 1999) on attrition for full-time teachers included an overall attrition rate of 6% for public school teachers. When considering the impact of attrition, it is important to note that the greatest attrition for teachers in general (31-32%) was reported for teachers over the age of 60, when retirement is the primary source of attrition. Furthermore, data from 1987 to 1995 documented an increase in the percentage of teachers retiring from 27% to 31%, indicating an accelerating trend towards a greater number of retirements.

Other data (Smith-Davis & Billingsley, 1993) have indicated an attrition rate of 7.3% for the overall special education field. Because of the lack of specific information on either attrition or retirement in the field of blindness and low vision, no specific formulas have been used to factor in an anticipated impact in preparing projections in Figure 4. Figure 4 has been designed to indicate the projected impact with no attrition, attrition rates of 5%, and attrition rates of 7.3%.

According to the projections made, if the National Plan is implemented as recommended over the next 7 years (until 2006), it is anticipated that the number of TVIs will increase from 273 to 715, the number of O&M specialists will increase from 77 to 202, the number of dually certified professionals will increase from 38 to 90, and the number of doctoral candidates will increase from 5 to 13. (These figures do not reflect attrition rates.)

**Limitations**

In proposing the National Plan and estimating its cost benefits, stakeholders and project staff have been limited by factors that are common to most such futures planning. A primary limitation has been the lack of current and historical data on a number of factors that may impact outcomes of the project. Included in this realm are such key information items as the current number of personnel from culturally diverse backgrounds, the number of training stipends that remain unused due to failure to recruit students, the number of individuals recruited into personnel preparation programs each year, and the total number of individuals trained through non-IHE programs annually.

The projections are also limited by uncertainties related to cost of living, competing activities, and the efficiency and effectiveness of the proposed initiatives. This Plan will also be either supported or impeded by factors such as:
• The effectiveness of collaborative efforts with professionals outside the field of blindness and low vision.

• The response of others such as state directors of education to the National Plan.

• The systemic capability to create the number of positions needed in individual school districts to reach recommended caseloads.

And, finally, as is often the case, the interrelationships of the initiatives will have a significant impact on the effectiveness of each. Failure to recruit an adequate number of individuals into the field of blindness and low vision, for example, will reduce the overall effectiveness of the other initiatives. Similarly, a skillful blending of traditional on-campus programming with distance education, successful program mentoring, and successful grant applications will all increase the overall impact of the proposed Plan.

**Note on Methodology**

To arrive at this National Plan, the NPTP Project has been guided by the collaborative efforts of the Steering Management Committee composed of representatives of The Council for Exceptional Children's Division on Visual Impairment (CEC-DVI) and the Association for Education and Rehabilitation of the Blind and Visually Impaired (AER Division 17 - Personnel Preparation Division), and staff from CEC and the American Foundation for the Blind (AFB). A multifaceted research approach included interviews and surveys with state vision consultants\(^4\), university faculty and direct service personnel, formal focus groups with key stakeholders, a series of national stakeholder dialogues, a 17-state survey of key stakeholders, a survey of the 50 state directors of special education, and case studies of individual state training delivery models (Project FORUM, in press).

The NPTP strategic planning process was undertaken by 57 leaders from all key stakeholder groups, with additional input from an economist and the project evaluator. The process used scenario-based planning (Schwartz, 1996) and relied upon scenarios—stories about possible futures in which we may have to live. The planning process, facilitated by Marianne Hughes, Executive Director of the Interaction Institute for Social Change, was implemented over a 10-month period of time. The facilitator led the group from a discussion of problems to visioning outcomes and obstacles under alternative future scenarios, discussing promising solutions, and developing consensus recommendations. A strength of this planning process is that it leads to strategic conversations about multiple futures and supports the identification of strategies that are robust because they are responsive to several possible futures.

**Summary**

For more complete information on the proposed National Plan the reader is referred to the National Plan for Training Personnel to Serve Children with Blindness and Low Vision (The Council for Exceptional Children, 2000). Paraphrasing the poet John Donne from the 16th-17th century, “no person is an island, entire of itself.” Throughout the strategic planning process, the vision community has rallied together and has reached out to dialogue with others as well. Through those activities, awareness and understanding grew. Just as collaboration was essential to developing this Plan, collaboration will be key to its implementation and its ultimate effectiveness.

\(^4\) State vision consultants refers to professionals who work for state departments of education or other entities having statewide responsibilities in the areas of blindness and low vision. The actual job titles for these professionals vary from state to state.
References


Providing adequate and meaningful educational services to children with blindness or low vision is a challenging activity undertaken by dedicated personnel. Ensuring an adequate supply of qualified professionals to enable students with blindness or low vision to reach their full potential and participate fully in their communities is equally challenging. Certainly, the many unique characteristics and needs of children with blindness or low vision require that direct service personnel receive specialized training and offer specialized services. Furthermore, the provision of quality education services for these children requires not only rigorous initial preparation but also ongoing professional development throughout one's career.

Today, personnel shortages in educating children with blindness or low vision (hereafter referred to as the field of blindness and low vision, or simply the "field") exist in many states. Positions for teachers of students with blindness or low vision, as well as orientation and mobility (O&M) specialists, go unfilled. School districts, teachers in general education, administrators, and schools of education are absorbed with a host of dilemmas that impact a broader spectrum of the school-aged population.

... requires not only rigorous initial preparation but also ongoing professional development throughout one's career.

1 The term children with blindness and low vision will be used in this report to refer to infants, toddlers, and youth through the age of 21 who are blind, those who have visual impairments that require specialized accommodations, and those who are deafblind. Some of these children also have other disabilities and may also be classified for funding purposes as having multiple disabilities according to another disability label. All of the children have impairments that result in their entitlement to special services according to the Individuals with Disabilities Education Act Amendments of 1997. See also Definition of Terms.

2 Direct service personnel refers to teachers of students with visual impairments (TVIs), teachers of students with deafblindness (TDBs), and orientation and mobility (O&M) specialists.

3 The field refers to parents, consumers, and professionals in vision education and rehabilitation who advocate, provide direct service, train specialized personnel, and administer programs for students with visual impairments.
Since persons with blindness or low vision comprise only about 0.1% of the U.S. population (Wenger, Kay, & LaPlante, 1996), most educators have no impetus for obtaining a greater understanding of the issues, needs, and solutions pertaining to this group. However, the majority of children with blindness or low vision are educated in general education classrooms and receive scheduled itinerant (one-on-one) specialized services. The general educators who are their primary teachers often have little knowledge of how to provide appropriate instruction to meet their unique needs.

Given the overall lack of knowledge about effective accommodations and unique learning needs of students with blindness or low vision by general educators, and given the percentage of time these children spend in general education classrooms, the stakeholders must first arrive at solutions that ensure an adequate number of direct service personnel. Secondly, solutions are needed that support collaboration. The challenge faced by the dedicated professionals in the field of blindness and low vision is one of securing sufficient understanding and adequate funding so that specialized services are strengthened at the same time that greater collaboration—including joint planning, teaching, and service delivery—occurs.

**Project Origin**

To overcome past and current deficiencies in providing quality services to students and maintaining an adequate supply of qualified personnel in the field of blindness and low vision, the U.S. Department of Education’s Office of Special Education Programs (OSEP), in 1997 provided funding for a 2-year planning process. The resulting National Plan that is presented here incorporates findings from both an intensive needs assessment and a strategic planning process.

Personnel who teach students with visual impairments require specialized training to meet the unique needs of these students. In the 1950s and 1960s, the federal government initiated discretionary funding programs to encourage universities to develop and provide specialized training to prospective teachers of students with visual impairments. However, changes were made in requirements for OSEP-funded proposals, some programs lost funding, and, for a number of reasons, it became more difficult to attract students into the remaining programs. This impacted the number of direct service personnel entering the field of blindness and low vision and contributed to the shortage of direct service personnel.

In 1994, a national initiative was created in response to the many issues involving the quality of education of children with visual impairments, including the increasingly serious shortage of direct service personnel. That year, a group of the nation’s leading educators in the field of blindness and low vision met with parents and consumers attending the Josephine L. Taylor Leadership Institute. Informal discussions led to the formation of a broad-based coalition that subsequently developed *The National Agenda for the Education of Children and Youths with Visual Impairments, Including those with Multiple Disabilities* (Corn, Hatlen, Huebner, Ryan, & Siller 1995). As part of that National Agenda, eight goals were established to create a plan to improve the education systems and services for students with visual impairments in the United States. The current project addresses an outcome of Goal 3: “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” (p. 7).

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4 The Josephine L. Taylor Leadership Institute is an annual conference conducted by the American Foundation for the Blind (AFB). Participants are national leaders representing all areas of vision-related services.
Shortly thereafter the Association for Education and Rehabilitation of the Blind and Visually Impaired AER - Division 17 assumed responsibility for Goal 3. Representatives from that organization met with officials at OSEP to discuss the shortage of personnel and the needs of personnel preparation programs. This led to an OSEP-funded policy forum focusing on personnel issues conducted by the National Association of State Directors of Special Education (NASDSE). Recommendations from that meeting influenced OSEP to fund a 2-year Project of National Significance to develop a National Plan for training personnel to serve children with blindness or low vision. A request for proposals (RFP) was released in 1997.

A consortium with representatives from The Council for Exceptional Children Division on Visual Impairments (CEC-DVI), AER - Division 17, The Council for Exceptional Children (CEC), and the American Foundation for the Blind (AFB) responded to the RFP and subsequently received the award to develop a National Plan. In the fall of 1997, that consortium began a process that has included a national needs assessment, close collaboration with a wide range of stakeholders, and a strategic planning process, resulting ultimately in this National Plan.

**Project Purpose and Goals**

The purpose of the project initiated by the consortium of CEC-DVI, AER, CEC and AFB—the National Plan for Training Personnel to Serve Children with Blindness and Low Vision (NPTP)—was to develop a comprehensive national strategic plan for preparing capable and qualified personnel to educate students who have visual impairments. The National Plan was intended to identify procedures for increasing the supply of qualified personnel, resulting in enhancements in the quality of education and literacy of students.

To develop the National Plan, the NPTP Project was organized around the following five goals:

1. To conduct a systemic and systematic needs assessment of the personnel shortage in the United States.
2. To identify activities for developing a comprehensive approach to serving students with blindness, deafblindness, and low vision.
3. To improve the quality of personnel preparation programs that recruit and prepare teachers and related personnel to instruct students who are blind, deafblind, or have low vision.
4. To identify successful models of preparing personnel who teach the low-incidence population of students with visual impairments.
5. To develop a National Plan based on a general consensus of the major stakeholder groups in the field of blindness and low vision.

Information obtained from completion of the first four goals has been used in developing this National Plan (Goal 5). While highlights from the needs assessment activities and results are presented in Chapter II, Needs Assessment, a full report is being finalized and will be available in the near future. In regard to the other goals, Goal 2 activities were completed as a part of the scenario-based planning approach used with this project (see Appendix B). To address Goal 4, dialogues have been held with stakeholders (summaries from those dialogues are included in the separate Needs Assessment Report). Additionally, a report on case studies of the models and outcomes of alternative certification approaches was conducted as a joint activity with NASDSE. That report is also in draft form at this time and will be published soon in the QTA (Quick Turn Around) newsletter for Project FORUM. A final report that briefly describes the full array of activities completed over the course of the project will also be available from The Council for Exceptional Children.
The NPTP Needs Assessment was designed to assist the strategic planning process. The Needs Assessment had two broad thrusts, each covering several distinct activities. The first broad category encompassed what might be considered the literature review, although the compilation and analysis of existing information included unpublished as well as published materials. The second broad category encompassed varied new data collection activities, including both qualitative and quantitative approaches.

The final set of research activities represented a consensus derived from varying perspectives within the project management. Given scarce resources of time and funds and the differing views about the most critical data needs, the Steering Management Committee considered several alternative approaches. A primary issue involved whether qualitative data collection, including in-depth case studies of a strategically selected sample of states, would suffice, or whether it was also necessary to undertake some type of random sample procedure in order to permit generalization of quantitative estimates. As will be seen, the latter approach to selecting states was used to establish national estimates of students and direct service personnel. However, within the individual states, rather than using the cost-prohibitive approach of sampling individuals to obtain information, NPTP researchers relied on interviews and surveys of specified expert informants.

Thanks to a generous offer of staff assistance and other resources from NASDSE’s OSEP-funded Project FORUM, project staff and researchers collaborated with NASDSE in designing a survey mailed to all state directors of special education and later used data from that survey in planning. The needs assessment was also strengthened by NASDSE’s Project FORUM’s involvement in the development and analysis of a few state-based case studies about alternative certification procedures.
The remainder of this chapter will provide an overall summary of the research methodology and highlights of the findings. Appendix A provides additional findings that will be described more fully in the forthcoming separate final report of the Needs Assessment.

Methodology

The NPTP Project began with an extensive literature review, including unpublished materials collected under the aegis of the National Agenda (Corn et al., 1995). The literature review resulted in two products: an annotated working bibliography and a series of source sheets. The latter summarized the state of knowledge in key areas that would be necessary to address in any plan attempting to deal with the shortage of service providers (e.g., current supply and demand factors affecting teaching personnel). It was primarily from the summaries in the source sheets that some data crucial to supporting the Plan were synthesized. Equally important, the source sheets pinpointed gaps in knowledge and became a major basis for prioritizing NPTP's data collection needs.

Beginning early in the project and continuing over subsequent months, a series of five open invitation meetings called Dialogues with Stakeholders were held. Attached to various national conferences that drew both leaders and direct service personnel in the field of blindness and low vision, these dialogues were intended partly to publicize the project widely. Secondarily, they qualified as a research tool, building on (a) geographic and professional role diversity of the attendees, (b) standardized presentation of the issues and objectives, (c) neutral leadership of discussion, and (d) relatively detailed notes. To a lesser degree than the source sheets, the notes from the dialogues fed into the research design both by providing information and highlighting knowledge gaps. The primary research effort was designed to address the most serious gaps in quantitative estimates of the number of children being served and the existing number of specialized personnel serving them.

Thus, the proposed research required a sampling approach that would permit national projections. To that end, a geographically-stratified random sample of 17 states, a multi-state sample survey, was conducted with telephone interviews and/or written surveys with state vision consultants, faculty in specialized personnel preparation programs, superintendents of schools for the blind, and parent representatives.

Subsequently, key findings from the multi-state sample survey became the basis for gathering systematic information from state directors of special education, using a written survey of the entire group rather than a sample (Project FORUM, 1999).

Parallel to those quantitatively-oriented approaches, a qualitative approach was pursued through four focus groups. One group each was conducted with parents and university faculty, and two groups with direct service personnel. Finally, case studies of six individual state delivery models were conducted through telephone interviews with one or two informed participants within each state (Project FORUM, in press). See the final report of the Needs Assessment (Kirchner & Diament, 1999c) for (a) bibliographic references that support key assertions throughout this section, (b) additional findings, (c) a more detailed description of the methodology, and (d) copies of the data collection instruments.

Results

Quantitative Components of the Strategic Plan

The foundation for the proposed National Plan depended on well-informed assumptions about the present and the near future concerning (a) the number of children requiring services, (b) the standard of service quality desired, (c) the need for additional direct service personnel, and (d)
the ability of personnel preparation programs to prepare an adequate number of direct service personnel. Well-informed assumptions is a realistic description of this set of requisite data, rather than any description that might suggest a definitive knowledge base, given that the nation lacks an organized, well-monitored ongoing federal or other national data collection system on those topics. (See Recommendation for the Research to Practice Institute, Chapter III, which addresses this conclusion.) Relevant information on these components follows.

Problems with Prior Estimates of Number of Children to be Served

For several decades, estimates of the number of students who require specialized vision-related education have been subject to question. Before NPTP available estimates came mainly from two independent annual special education administrative datasets with vastly different criteria and conditions for obtaining reports. Those two administrative datasets are the OSEP child count and the American Printing House for the Blind (APH) register. Secondarily, estimates came from periodic federal sample surveys [the National Health Interview Survey’s Disability Supplement (1998), and the Bureau of the Census’ Survey of Income and Program Participation (1995)]. The surveys bear only loose resemblance to the eligibility procedures for special education research. Given the differing methods, it is appropriate that the resulting estimates varied enormously.

However, the disparity between the two special education administrative datasets is especially problematic because of the contradictions that surface when the respective definitions and the datasets are reviewed. To be specific, APH’s register refers to legally blind students only (which is a narrow definition of severe visual impairment), and its 1996 count of children was 44,196 (APH, 1998). That number is more than 1.4 times larger than that of nearly the same period for the child count that states report to OSEP, as defined by the broader IDEA definition.

IDEA defines visual impairment and deafblindness much more broadly than legal blindness, referring to educationally significant functional vision problems; the latest available national report of children served by local and state education departments shows 28,900 children as visually impaired and 1,300 as deafblind (figures rounded; U.S. Department of Education, 1998). OSEP has long recognized that this state-reported deafblind count is too low, and has sponsored an alternative count via the Deafblind Census. The number of deafblind children listed in this count is 10,800 (Baldwin & Hembree, 1998).

Analysts have pointed out the logical inconsistency between the APH and OSEP data sources and have offered several explanations. Most important is the fact that OSEP’s count is unduplicated; that is, children with multiple impairments are counted only once, often under another impairment category. APH, however, counts legally blind children whatever their other impairment status. Table 1 (next page) presents information on the range of estimates from seven data sources. Note that the NPTP estimate (next section) falls between the high and low estimates.
Table 1. Range of Estimates of Severely Visually Impaired Children: US; Various Years

<table>
<thead>
<tr>
<th>Source</th>
<th>Age</th>
<th>Description</th>
<th>Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Department of Education (1998)</td>
<td>0-18</td>
<td>Visually Impaired and Deafblind</td>
<td>30,186</td>
</tr>
<tr>
<td>U.S. Bureau of the Census (1995)</td>
<td>6-17</td>
<td>Severe Functional Limitation in Seeing (not able to see words and letters in ordinary newsprint at all)</td>
<td>75,000</td>
</tr>
<tr>
<td>Jones &amp; Collins (1966)</td>
<td>0-19</td>
<td>Visually Impaired</td>
<td>76,400</td>
</tr>
<tr>
<td>Wenger, Kaye &amp; LaPlante (1996)</td>
<td>0-18</td>
<td>Visually Impaired</td>
<td>83,000*</td>
</tr>
<tr>
<td>NPTP</td>
<td>0-21</td>
<td>Visually Impaired and Deafblind</td>
<td>93,600</td>
</tr>
<tr>
<td>Nelson &amp; Dimitrova (1990)</td>
<td>0-19</td>
<td>Visually Impaired</td>
<td>95,400</td>
</tr>
<tr>
<td>Based on National Health Interview Survey (1977 &amp; 1984) and Census (1990)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Health Interview Survey on Disability (1998)</td>
<td>0-20</td>
<td>Visually Impaired (difficulty seeing expected to last at least 12 months or legally blind)</td>
<td>300,100</td>
</tr>
</tbody>
</table>

**NPTP’s Estimate of Children to be Served**

Issues regarding child count estimates have been most recently reviewed in the *Journal of Visual Impairment and Blindness* (Kirchner & Diament, 1999a). That source explains the methodology and presents the primary results of NPTP’s research resulting in an estimate of 93,600 students with educationally significant visual impairment in special education. That figure includes 32,700 children with visual impairments; 50,100 with at least one disability besides visual impairment, except for deafblindness; and 10,800 students with deafblindness (based on the Deafblind Census; Baldwin & Hembree, 1998).

**Current Caseloads**

Estimating current caseloads as a component of the planning process was even more challenging than estimating the number of children. In part this occurred because fewer benchmarks existed against which to assess the NPTP research-based estimates; in part this occurred because the caseload component involves a question of consensus on the standard of adequacy, a judgment that goes beyond the factual question of what currently exists.

NPTP’s needs assessment results related to the current specialized teacher and O&M workforce have also been published in the *Journal of Visual Impairment and Blindness* (Kirchner & Diament, 1999b). According to Kirchner’s and Diament’s analysis, currently 6,700 full time equivalent (FTE) teachers and 1,300 FTE O&M specialists are estimated to be employed in the instruction of students with blindness or low vision, including deafblindness. While the current number of O&M specialists appears to be remarkably low, the estimate is consistent with the lack of specific reference to that related service in the IDEA legislation until the recent issuance of regulations supporting the 1997 Amendments to the Act (IDEA ’97). (Related services are defined as services “required for students to benefit from special education,” §300.24 [b].)

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*This includes children with visual impairments. To avoid a duplicative count, project staff did not include statistics from Wenger et al. on children with eye diseases and disorders.*
Given the estimate of 93,600 children requiring specialized services and the number of FTE specialized teachers for those children (6,700), the resulting estimate for the current average caseload is 14 children per teacher. Making the same mathematical calculation regarding O&M specialists is a straightforward matter that yields a ratio of 72 children per FTE specialist. While some specialists have caseloads that high, the most obvious conclusion from that ratio is that most children are receiving no O&M services.

There is greater question about how to evaluate the O&M ratio than the TVI ratio. The relative uncertainty in how to interpret the findings is in part due to insufficient documentation. It is difficult to ascertain what portion of students with visual impairments require O&M services of a given frequency and intensity to achieve positive results.

In other words, when evaluating the reasonableness of caseloads of 14 students to 1 educator, and trying to determine reasonable caseloads for O&M specialists, the varying needs of students must be considered. Difficulties in setting standards for caseloads for both educators and O&M specialists arise partly because of the differences in service needs of students whose only disability is blindness or low vision versus those with multiple impairments. Currently, children who are blind, as well as those with less severe vision problems, may be served by itinerant staff who provide only intermittent specialized instruction and consultative supports to general education teachers. For some that may be sufficient. However, students requiring instruction in braille, children acquiring initial concepts, and students experiencing learning difficulties are examples of those who need more intensive supports, at least at particular times in their lives. The distance an itinerant teacher must travel, the number of schools covered, personnel requiring support, and even climatic and geographic conditions should be factored in when determining an appropriate caseload for an individual direct service provider.

In terms of caseloads for O&M specialists, such factors as the age and developmental needs of the child are of utmost importance. It is also relevant that O&M services must be provided on a one-to-one basis, whereas teaching other skills may be done in group settings, assuming there are groups of children in one locale whose needs are at the same level. In general, it is expected that the recent attention focused on O&M services in the regulations supporting IDEA ’97 legislation, and recent developments revealing the important role of O&M for children with low vision as well as blindness, will produce an increased demand for these services.

**Recommended National Average Specialized Service Student-to-Provider Ratios**

Recommendations for more reasonable caseloads for all direct service personnel in the field of blindness and low vision are supported by many, including not only educators, but also consumers and parents (Goal 4 of the National Agenda for the Education of Children and Youths with Visual Impairments, Including those with Multiple Disabilities; Corn et al. 1995).

For this national planning process, NPTP staff consulted with the National Plan stakeholder participants about average ratios—emphasizing that these are not recommended caseloads, but rather the expected national average of reasonable caseloads. Two subgroups were formed with primary expertise in teaching and O&M services respectively. With regard to teacher recommendation, the NPTP stakeholders concurred that an 8:1 ratio is a reasonable (not necessarily ideal) average recommended ratio of students to teachers. The participants indicated that at the individual teacher caseload level, the ratio must vary with the students’ needs and settings (e.g., itinerant services, inclusive setting, or specialized school).

However, because of the need for research on benefits of varying intensity, frequency, and duration of specialized teacher and O&M services, professionals in the field of blindness...
and low vision agree that recommendations for the national average service provider to student ratios are highly speculative, and provide little guidance for specific caseload criteria. The paucity of research of this type is particularly significant regarding O&M services.

**Vacancies**

Based on data obtained for the NPTP Project (Kirchner & Diament, 1999c), the number of funded vacancies in 1998 was 290 for teachers of students with visual impairments (TVIs) and 90 for O&M specialists. The operative word in that summary is funded. While many districts know they have children who need teachers and O&M instructors, they may be reluctant to fund positions when trained personnel are not available. Clearly, the need for additional direct service personnel is much larger when consideration is given to the need to reduce caseload size of both TVIs and O&M specialists, the anticipated near-term spike in the number of direct service personnel who will be retiring, and the estimated impact of vacancies.

**The Twentieth Annual Report to Congress (U.S. Department of Education, 1998)** shows that only 28 states (56%) even reported the number of TVIs in their states. These states reported a total of only 48 vacant teaching positions. If that estimate were proportionate, (i.e., if it represented 56% of the national total), then the national projection would be only 86 funded vacancies, as compared to the 290 reached by NPTP’s research and estimating process. The U.S. Department of Education report appears to underestimate significantly the number of vacancies, a conclusion supported by “0” reported vacancies in positions for teachers of the deafblind (TDB) in 1998. While NPTP provides a more accurate national estimate of vacancies, a critical need remains for state-specific estimates of vacancies, not currently available given the sampling strategy that the project found affordable.

**Current Capacity of Institutions of Higher Education (IHE) Personnel Preparation Programs**

The total number of new professionals entering the field of blindness and low vision has fluctuated from 365 in 1995-1996 to 416 in 1996-1997, 383 in 1997-1998, and 375 in 1998-99 (Ferrell, 1999). According to Ferrell’s most recent data, 33 programs graduated an average of 11.24 students in 1998-1999. (Note that only a subgroup of those programs had one full-time faculty in vision.) Consistent with data from the previous 2 years, in 1998-99, 50 vision-related Bachelors degrees were awarded: 36 for TVIs, 9 for O&M specialists, and 5 dual TVI and O&M degrees. In 1998-99, 175 Masters degrees were awarded: 106 for TVIs, 35 for O&M specialists, and 3.5 for dual TVI and O&M degrees. In 1998-99, an average of 4.9 teachers, 1.6 O&M specialists, and .9 dually certified personnel were prepared for each state (Ferrell, 1999).

**Estimated National Need for Direct Service Personnel**

Based on the recommended ratio of 8 students to 1 educator, a total of 11,700 FTE teachers (both TVIs and TDBs) and the same number of O&M specialists are recommended. This will require hiring an additional 5,000 FTE teachers of the visually impaired and over 10,000 O&M specialists, at today’s level of staffing. Although most additional hires in both categories must be newly recruited and trained, it is also clear that there is room for drawing upon an existing pool of trained personnel who either are currently working only part-time and might increase their involvement (especially among O&M specialists), are out of the labor force presumably temporarily (e.g., full-time homemakers), or have shifted to other fields of employment and might become motivated to return.

**Diversity**

As in most fields of education, the field of blindness and low vision must find solutions to enhance the recruitment, preparation, and hiring of individuals with culturally, linguistically, and ethnically diverse backgrounds. Moreover, leaders must be developed from these groups.
Another diversity concern in the field of blindness and low vision is the preparation of individuals with disabilities (visual impairment and/or other impairments) as direct service personnel. According to the NPTP multi-state sample survey (Kirchner & Diament, 1999c), among the 17 states surveyed, only 4 reported having more than a few teachers with disabilities.

**Other Selected Results from NPTP Research**

As documented in the preceding sections, the key findings of the NPTP needs assessment activities were first-ever estimates of the current teaching force and a well-supported current estimate of the number of children identified with educationally relevant visual impairments. Beyond those highlights, the NPTP’s other quantitative and qualitative data served to give explanatory clues to the interpretation of the statistics on the shortage, and helped to support findings from other researchers.

Qualitative interviews with faculty from personnel preparation programs in the multi-state sample survey (Kirchner & Diament, 1999c) indicated that:

- Some states would be more inclined to categorize children as having visual impairments if they had more teachers.
- Some states reported a need to improve recruitment activities.
- All states reported a need for greater ethnic diversity among teachers.
- Of the programs for the VI and O&M instructors meeting AER standards, 33% reported collaboration with other personnel preparation programs in using distance education or other course offerings.

Interviews and surveys with state vision consultants from the NPTP multi-state sample survey (Kirchner & Diament, 1999c) indicated that:

- There were shortages of direct service personnel (in 1998 there were 290 funded vacancies for TVIs and 90 funded O&M instructor vacancies).
- Of those interviewed, 53% characterized the personnel shortage as severe.
- About 40% reported that rural areas were most impacted by shortages.
- Credentialing was a concern of 27% of the respondents.
- Almost 30% reported that they did no recruiting in other states.
- Their state’s teacher population was characterized as aging by 50% of the vision consultants.

A survey of all state directors of special education (Project FORUM, 1999) confirmed that:

- The vast majority (75%) of the responding 45 state directors placed a high priority on combating the shortage.
- Of the responding state directors, 95% predicted that the priority placed on the need for additional personnel in these areas will stay the same or increase within the next 1 to 3 years.
- A total of 84% agreed that having a specialized training program at an IHE helped to alleviate the shortage.

Furthermore, according to the state director survey (Project FORUM, 1999):

- At least 27 states employ personnel with emergency licenses or certificates to meet staffing needs.
- Of the state directors who responded, 51% indicated that their state’s efforts to minimize the shortage are satisfactory.

Although state directors did not find any significant ameliorating factors to solve the shortage of qualified personnel, nonetheless they
were able to identify several emerging practices that they believe are valuable in reducing the shortages. Some of the most frequently mentioned practices are designed to attract individuals to the field of blindness and low vision, improve the ease of access to training, or enhance funding for programs for TVIs. Specifically, the approaches noted by the state directors include distance education, stipends, scholarships and tuition reimbursements, inclusion in state improvement plans, prioritization of low incidence personnel through IDEA' 97 Part B traineeship funds, U.S. Department of Education support of university personnel preparation programs, and collaborative programming and funding activities among IHEs.

In addition to the interviews and surveys, five dialogue sessions were held with stakeholders involving IHE faculty in vision programs, parents, paraeducators, consumers, administrators, superintendents of schools for the blind, teachers, and O&M specialists. Results from those sessions corroborate information from other sources, including recommendations to:

- Increase use of the schools for the blind for training programs.
- Monitor systems to ensure the quality of programs.
- Stabilize IHE programs through longer funding cycles.
- Ensure judicious use of distance education approaches so that practica and traditional coursework continue to be offered when they are necessary.
- Improve public relations; obtain assistance with recruitment.
- Develop caseload guidelines.
- Increase mentorship opportunities and experiences.
- Address the urgent need to plan for replacement of aging faculty.
- Carefully consider the best use of paraeducators.
The National Plan

Overview of the National Plan

The most critical goals, objectives, and strategies needed to address the shortage of direct service personnel who serve infants, toddlers, children, and youth with blindness or low vision are contained in this narrative. Also included are the following sections:

- A description of the strategic planning process; and
- The recommended implementation plan, including proposed strategies for coordinated efforts in the field of blindness and low vision, among education agencies, and as guided by OSEP. It outlines the short-term actions that we recommend be taken by OSEP and the field of blindness and low vision to address the personnel shortage.

The Strategic Planning Process

The NPTP strategic planning process involved 57 leaders from all key stakeholder groups (see previous chapters) and additional input from an economist and project evaluator. The process used scenario-based planning (Schwartz, 1996), and relied upon scenarios—stories about possible futures in which we may have to live. Marianne Hughes, Executive Director of the Interaction Institute for Social Change, facilitated the planning process over a 10-month period. In multiple sessions, Ms. Hughes led the group from a discussion of problems to visioning outcomes and obstacles under alternative future scenarios, to discussion of promising solutions. Consensus on recommendations was achieved through the dissemination of multiple draft versions of the National Plan. Stakeholder input refined the National Plan step-by-step over a period of 5 months.
In November 1999, a working group comprised of representatives from the Steering Management Committee and key researchers in the field of blindness and low vision met together one final time to review the implementation plan, recommended initiatives, and anticipated impact. Their input greatly assisted in the creation of the final Plan that was then circulated to a representative stakeholder group. This final version reflects the intent and the recommendations of the primary group of stakeholders, as well as the refinements of a smaller, representative group. (See Appendix B for further description of the scenario-based planning process.)

Problem Statement

One of the early activities of the stakeholders was the development of a problem statement. The following problem statement identifies key components of the current problem related to the personnel shortage in the field of blindness and low vision.

Children with blindness, low vision, or deafblindness are entitled to appropriate educational services that will prepare them for optimum functioning as adults. A large number of these students, however, never acquire the knowledge and skills essential for productive citizenship. Several factors contribute to this problem. To begin, students are underidentified and geographically dispersed, making it difficult to quantify and then address their actual needs.

Direct service personnel as well as knowledgeable supervisors and administrators are in critically short supply, while current recruitment and retention strategies fail to adequately address the shortage. Further, the programs designed to prepare these professionals are underfunded, and the number of leaders to sustain the programs is insufficient to meet the demand. The complacency and lack of accountability within the economic, political, advocacy, and educational systems that influence the services offered to students with visual impairments exacerbate the problem. Even more significant is evidence pointing to inadequate recognition or awareness of what “quality” services and education programs actually mean.

Finally, fiscal constraints and conflicting educational philosophies, rather than the best educational interests of the students, often drive the structure and methods of educational services. Improving services for students with visual impairments will not only enhance their quality of life, but it will also benefit all of society. If individuals who are visually impaired receive appropriate educational services as infants and children, they will flourish into independent adults with an increased capacity to contribute to their local community and beyond.

A Vision of the Future

To respond to the identified problem, the strategic planning stakeholders developed a vision that stressed values, services and programs, use of technology, and involvement of all levels of government (i.e., local, state, and federal). The vision statement, which follows, suggests a desired future that OSEP and the field of blindness and low vision should strive to attain:

We envision a future world in which each individual is valued by society. In this society, the needs of each individual are respected and addressed. Individuals from diverse language, cultural, ethnic, and disability backgrounds are perceived and see themselves as contributing members of society. They have high expectations for leading fulfilling lives.

In this environment, individuals who are blind or visually impaired enjoy access to high-quality, comprehensive programs and services. Appropriately trained professionals support early education, education from kindergarten through grade 12, and lifelong learning. Collaborative partnerships, continuing research, and a wide array of nationally accredited personnel preparation programs ensure high standards in educating children with blindness or low vision. Technological advances support independence, learning, and overall quality of life.
As educational reform and societal changes unfold, collaborations at the federal, state, and local levels ensure political, fiscal, and legislative support for persons with blindness, low vision, and deafblindness. In such a society, complacency and lack of accountability have vanished. Resources to meet the needs of children and youth are distributed equitably through a broad and shared network of services. In this world, individuals who are blind or visually impaired are working with others at the local, state, and national levels not only to improve conditions for themselves, but also to contribute to the betterment of all.

OSEP Mandate and Focus of the National Plan

The efforts of both OSEP and leaders within the field of blindness and low vision have been and continue to be directed toward an ultimate purpose of expanding and enhancing services to children with blindness or low vision. While these delivery systems face many challenges, OSEP and leaders in the field of blindness and low vision agree that the National Plan must target the personnel shortage as a primary, critical area of focus. Moreover, they agree that the primary focus must address the shortage that exists for all direct service personnel. Because of the strong interrelationship among the recruitment practices, leadership, the number and qualifications of university instructors, and the number of direct service personnel, the strategic planning stakeholders structured the National Plan to address these related components. Another area targeted by stakeholders as a high priority focused on the critical need for accurate child count data and research concerning effective personnel preparation strategies and related innovations.

Certainly, OSEP and leaders in the field of blindness and low vision recognize that it is impractical to construct a plan that seeks to remedy every problem and address every need related to the education of children with visual impairments. Accordingly, OSEP requested that the plan:

- Focus on the personnel shortage issue.
- Develop goals, objectives, and strategies required to reduce and, ultimately, to eliminate the shortage.
- Direct specific recommendations to OSEP and to the field of blindness and low vision.

As the NPTP strategic planning process unfolded, three main goals areas—all targeting personnel shortages—emerged. The three goal areas are:

2. Leadership development.
3. Recruitment and retention.

In addition to the three goals that are the focus of the National Plan, the strategic planning process yielded three complementary goals that supplement and support the main goals (Appendix C). The complementary goals do not directly reflect the OSEP mandate to address only the personnel shortage. In this Plan, the initial preparation of personnel (Goal 1) has been emphasized; however, professional development activities are included in this goal area as well as under the complementary goal of “human resource development.”

6 Consumer partnerships, human resource development, and improving service to children. The complementary goals provide a road map of actions that are important to the maintenance of a professional labor force to serve children with blindness and low vision, but they do not deal directly with the immediate personnel shortage.
NATIONAL PLAN FOR TRAINING PERSONNEL TO SERVE CHILDREN WITH BLINDNESS AND LOW VISION

Goals

Overview
To alleviate personnel shortages, strategic planning participants recommended that OSEP and leaders in the field of blindness and low vision take immediate action in three areas. The goals which emerged in these areas address preparing new personnel and developing the skills of existing personnel, preparing new leaders to replace those who are leaving or retiring from the field of blindness and low vision, and expanding the capacity to recruit new and retain existing personnel.

In this section, each of the three main goals is presented along with priority objectives that provide implementation strategies for achieving each goal. These implementation strategies include actions for collaboration, stabilizing and diversifying funding, coordinating research, developing leadership capacity, technical assistance, career development, a national public relations campaign, and an information and referral service. (See Table 2 below.)

Interrelationship of Goals
Reducing the personnel shortage in the short term requires that the number and quality of personnel providing a variety of services for students with visual impairments increase at a rate faster than the attrition rate for professionals and the increase in the number of students requiring services. Recruitment must certainly be a key activity to produce the desired results. Without increased recruitment into degree and certification programs, the number of personnel entering the field of blindness and low vision will be limited.

| Table 2. Main Goals and Priority Objectives of the National Plan |
|-------------------------|------------------------------------------------------------------|
| **Goal 1: Personnel Preparation and Development** |
| To increase the number and diversity of qualified personnel to serve students with visual impairments. |
| 1. To provide technical assistance that will stabilize and build capacity of current personnel preparation efforts to ensure preparation of a sufficient number of qualified personnel. |
| 2. To establish models of collaborative relationships and alliances among personnel preparation professionals, SEAs, LEAs, CSPDs, SIPs, schools for the blind, parents, consumers, and industry representatives. |
| 3. To stabilize personnel preparation programs and build capacity through federal (OSEP) funding policies. |

| **Goal 2: Leadership Development** |
| To increase the number and diversity of qualified leadership personnel in the education of children with visual impairments. |
| 1. To provide innovative and collaborative leadership development opportunities at all career levels. |
| 2. To initiate national research and data acquisition activities to increase the capacity of the field of blindness and low vision to maintain an accurate count of personnel and students. |
| 3. To coordinate research related to personnel, services delivery, and student outcomes. |

| **Goal 3: Recruitment and Retention** |
| To increase the number and diversity of high-quality applicants to and graduates from personnel preparation programs serving all areas of education of students with visual impairments. |
| 1. To launch a comprehensive, sustained national public relations/marketing campaign focused on career opportunities in the field of educating students with visual impairments. |
| 2. To create an information and referral service that supports recruitment and retention activities. |

Note. SEA, state education agency; LEA, local education agency; CSPD, Comprehensive Systems of Personnel Development; SIP, State Improvement Plan; OSEP, Office of Special Education Programs, U.S. Department of Education.
A strengthened and expanded leadership core is also necessary to guide stakeholders as they plan for and implement improvements in personnel preparation and development, recruitment and retention, and research initiatives. Leadership in the field of blindness and low vision within IHEs needs to expand to ensure that faculty are available to instruct the increased number of recruits into colleges and universities. The number of professionals who receive certification or Bachelors or Masters degrees is dependent upon an adequate supply of instructors. Stronger leadership is also needed to work with federal, state, and local governments; consumers and advocates; private and not-for-profit organizations; institutions; and the community at-large to increase the use of innovative and collaborative practices. Finally, leadership is needed to ensure an adequate supply of researchers and a pipeline to research that will stabilize the field of blindness and low vision through providing more accurate information on the number of students needing services. An increased emphasis on research will also stimulate implementation of innovations within the field of blindness and low vision.

Proposed Implementation

To provide for an adequate supply of direct service personnel and address the three goals identified by the strategic planning participants, eight objectives were identified. These objectives form the basis for major components to implement the National Plan. A brief description of each follows immediately, with more explicable information later in this chapter.

Goal 1
Personnel Preparation and Development

- Personnel Preparation Technical Assistance Network in Blindness and Low Vision
  The Personnel Preparation Technical Assistance Network (PPTAN) is intended to facilitate and support collaboration that meets the personnel preparation needs of the nation, facilitate the application of national program standards, and provide technical assistance to new and existing programs. (Objectives 1.1 and 1.2)

- OSEP Funding Policies
  The impact of OSEP-funded personnel preparation projects will be strengthened, and programs stabilized, by extending project periods to 5 years and increasing the size of these awards. (Objective 1.3)

Goal 2
Leadership Development

- Leadership Development Institute in Blindness and Low Vision
  The Leadership Development Institute will develop mechanisms and programs to support the professional development of present and future leaders in the field of blindness and low vision. This Institute and related OSEP-funded projects to prepare doctoral students will enhance mentoring and collaboration among doctoral students in the field of blindness and low vision. (Objective 2.1)

- Research to Practice Institute in Blindness and Low Vision
  The Research to Practice Institute will design, collect, analyze, and disseminate data affecting personnel needs in blindness and visual impairment. This Institute will ensure coordinated efforts in utilizing research to validate practices and to enable transfer of this information to the professional development community. Activities will include empirical studies of program methodologies, analysis of educational outcomes for students, and contribution to an annual count of children and service providers. (Objectives 2.2 and 2.3)
Goal 3
Recruitment and Retention
• The Recruitment and Retention Project is intended to ensure appropriate special education and related services by developing a comprehensive, cohesive recruitment campaign to increase the number of personnel serving infants, children, and youth with blindness or low vision. (Objectives 3.1 and 3.2)

A Cross-Goal Initiative
• National Personnel Preparation Coordinating Council. To strengthen outcomes of the National Plan as it is implemented, a National Personnel Preparation Coordinating Council (NPPCC) is recommended. The Council will be composed of representatives from each of the other components depicted in Figure 1 (next page) as well as other organizations and stakeholders in the field of blindness and low vision. The NPPCC is charged with guiding and providing formative evaluation to facilitate implementation and outcomes of the National Plan. (This Council is not intended to have compliance monitoring responsibilities, but rather to work with external evaluators to provide advice on how to strengthen the impact of the Plan.)

Figure 1 depicts the relationship of these components to other key elements that provide services benefitting students with blindness or low vision.
Collaborative Model for Implementation of the National Plan for Training Personnel To Serve Children with Blindness and Low Vision

Parents and families of infants, children, and youth with blindness and low vision

College and university programs

Local education agencies

Schools for the blind

Faculty at IHEs deliver the primary training for direct service personnel, conduct research, and provide significant leadership.

U.S. Dept. of Education Office of Special Education and Rehabilitative Services

Professional organizations

State education agencies

Consumer organizations

National Personnel Preparation Coordinating Council

Leadership Development Institute

Research to Practice Institute

Technical Assistance Network

Figure 1
Relationship of Components to the Three Main Goals and Overall Plan

**Goal 1**
**Personnel Preparation and Development**

Personnel preparation refers to the professional training activities designed to prepare personnel to enter the field of blindness and low vision as direct service personnel, educating students with blindness or low vision. It is the single most important goal of the National Plan. To obtain the recommended 5,000 teachers and unspecified number of O&M specialists who are needed to provide adequate services, the number of current direct service personnel must at least triple.

Personnel training programs in the field of blindness and low vision share two common problems with such programs in other low-incidence areas, including: (1) difficulties universities have in providing cost-effective training with low student enrollment and (2) limited understanding and support within IHE departments of special education and schools of education or other related departments. The result is that many low-incidence training programs are dependent on federal funding. Many vision programs operate with only one faculty member in isolation and rely primarily on other professionals within the field of blindness and low vision for support and resource sharing. Unfortunately, the lack of adequate federal funding for all programs has in turn nurtured competition, rather than cooperation, among IHEs—sometimes decreasing overall collegial support. Moreover, such competition hinders opportunities for new programs to be created or for existing programs to mentor newer programs that may not yet meet national professional standards.

The National Plan addresses strategies for increased collaboration to gain broader support and stabilize funding. The National Plan also includes a recommendation for a technical assistance network. Such a network is viewed as essential for sharing resources and information, including sharing distance education and other course modules, establishing and maintaining a Web-based information center, and furthering new approaches. The Personnel Preparation Technical Assistance Network in Blindness and Low Vision (PPTAN) is designed to foster collaboration; exchange of expertise; and dissemination of information, research, and effective practices among researchers, IHEs, direct service personnel, and others. As an OSEP-funded technical assistance and dissemination (TA&D) project, it will work jointly with OSEP and the other TA&D projects. Moreover, as a result of the NPTP strategic planning process, such a network, guided by a broad-based National Personnel Preparation Coordinating Council, is seen as the most effective vehicle to promote joint planning and outreach in a synergistic manner.

To be comprehensive, the National Plan includes provisions for accountability, cost-effectiveness, and productivity of OSEP-funded programs. Accordingly, stakeholders from the strategic planning process are recommending that OSEP require that sufficient numbers of students complete federally sponsored programs for a program to retain federal funding. A national effort will be made to assist programs so that each program meets national standards and state requirements for teacher competencies.

Furthermore, to address the personnel shortage, university programs that train personnel will have access to comprehensive incentive packages that address diversity issues and the needs of specific geographic areas. Opportunities and incentives to work with historically black colleges and universities, as well as tribal colleges, are recommended as part of the National Plan.

The National Plan also encourages the use of schools for the blind and other special schools to assist in the preparation of personnel, using a professional development school model. Such a model promotes the use of intensive practicum experiences and collaboration among universities.
and schools. Another suggested strategy encourages collaboration between general and special education programs in specific areas of low incidence. New approaches also are needed for reaching out to existing personnel who may lack appropriate training and/or credentials. Provisions for assisting existing personnel to upgrade skills are covered under the National Plan’s complementary goals. (See Appendix C.)

As part of the effort to stabilize personnel preparation programs and build capacity, several distinct funding policies are recommended for OSEP. The strategic planning stakeholders during the design of the National Plan emphasized the need for greater flexibility, reliability, and predictability in federal funding practices. (See description of Objective 1.3 at the end of this section.)

Goal 2
Leadership Development

The need for leadership development is apparent at all levels of the system, including the grassroots community, university training/research endeavors, and the state and federal agencies. To sustain itself and continuously improve services, the field of blindness and low vision must identify leaders, develop their skills and potential, and provide a transparent career progression to ensure their advancement.

Leadership development is increasingly critical given that many of those trained during the 1950s and 1960s, when many training programs and stipend initiatives encouraged students to enter the field of blindness and low vision, are now retiring or leaving the field for other endeavors. Corn and Silberman (1999) reported that nine of the 29 responding IHEs in 1997-1998 reported tenure line faculty vacancies. Furthermore, the number of graduates with doctorates in visual impairment is alarmingly low (Sindelar, Smith, & Wald, 1998). This is exacerbated by the lack of leadership grants in visual impairment, the most recent of which ended in 1996 (Corn & Ferrell, in press).

At the same time the numbers of leaders is declining, the research capacity of the field of blindness and low vision is diminishing. With fewer faculty in positions, the demands to teach are high, and time for research and related grant preparation is reduced. This situation results in a lack of consistent, reliable data related to the number of students and direct service personnel in the field of blindness and low vision coupled with less research related to effective practices and outcomes for students. It also creates a critical need for the two leadership initiatives proposed in the National Plan. Additionally, faculty need training in proposal development and review.

The first initiative proposed in the area of leadership development is the Leadership Development Institute in Blindness and Low Vision. As a national initiative, the Leadership Development Institute will not only increase the number of candidates entering advanced programs of study at the doctoral level, but also will promote collaboration and innovative opportunities for training and study. Working in conjunction with the PPTAN and the NPPCC, the Institute will provide a mechanism for all personnel preparation programs to share resources and talent, offering a richer candidate pool and a broader range of opportunities for future leaders. One of the major activities of the Institute is a national mentoring program for professionals entering the leadership ranks.

The findings and strategic planning results from the 2 years of intensive work on the National Plan also support the need for increased research and data collection activity in the field of blindness and low vision. A second initiative in the area of leadership development is a Research to Practice Institute in Blindness and Low Vision. This broad-based collaboration of researchers will work to ensure accurate data related to student and personnel needs. Activities will focus on trends affecting education and the low incidence population as well as service delivery, personnel preparation, and educational practices. The transfer of research results to the professional
development community will heighten understanding of how such results validate effective practice. The Institute will be coordinated in part by OSEP, with guidance from the NPPCC, and will also demand close cooperation with stakeholders such as the American Printing House for the Blind (APH), the National Center for Education Statistics (NCES), and others.

Planning for personnel preparation in the blindness/low vision specialties has been hampered by the absence of an empirical basis for determining appropriate caseloads. For the purposes of this National Plan, it was necessary to rely on expert opinion. The experts considered an array of variables that substantially alter what is recommended as a reasonably effective caseload size.

Clearly, personnel preparation for this field will be strengthened by research that assesses educational results for children with blindness or low vision. That research must take into account varying conditions in different settings with varying amounts and types of specialized services providers. The complexity of factors that affect educational outcomes—ranging from variations in the children's visual and other disabilities, in their age and other characteristics, to variations in their educational settings and geographic and socio-economic status—requires systematic, long-range, cumulative, and outcome-based research. The dispersion of the relatively small number of children throughout the country means that the research must be collaborative and centrally coordinated, as can be achieved by the proposed national Research Institute.

Goal 3
Recruitment and Retention
Ensuring an adequate supply of qualified professionals not only requires that current vacancies be filled, but also that an adequate number of professionals are attracted to the field of blindness and low vision so that caseloads are maintained at levels that provide adequate services. A related issue, which will need to be addressed through leadership initiatives and collaboration, is how to ensure that an adequate number of positions are created in local communities to provide appropriate services to children with blindness or low vision.

To enhance recruitment, efforts must be made to increase the attractiveness of careers educating students with blindness or low vision. In practical terms this necessitates achieving and maintaining reasonable-sized caseloads and re-examining the best ways to use itinerant and consulting service providers. Efforts such as an information and referral service and a sustained national recruitment campaign will be directed toward middle and high school students, nontraditional populations such as adults seeking second careers, populations representing bilingual and culturally diverse groups, and service providers working in education who may want to pursue careers in the field of blindness and low vision. Such activity will be central to the Recruitment and Retention Project as proposed.

Working in close collaboration with key stakeholders, the Recruitment and Retention Project will interface with OSEP's Ideas that Work publication relations campaign. Efforts will focus on finding ways to attract candidates to this low incidence area by sharing success stories and the benefits of high-quality educational programs. A comprehensive public relations/marketing campaign aimed at recruiting both traditional and nontraditional students into the field of blindness and low vision is needed.

Stakeholders involved in compiling the National Plan recognize that recruitment efforts must be collaborative and shared by consumer and parent groups, professional organizations, and others who touch the field of blindness and low vision.

7 To facilitate implementation of IDEA '97, OSEP is working with a public relations firm to implement a broad communications campaign.
Assistance from professionals in the field of marketing/public relations is also essential. To launch a comprehensive campaign, the Recruitment and Retention Project will work closely with a public relations firm and an entity such as the National Clearinghouse for Professions in Special Education. The National Clearinghouse for Professions in Special Education is an OSEP-funded project that conducts outreach campaigns and nationwide leadership to encourage individuals to pursue careers in special education and related services. A representative from the Clearinghouse participated in the NPTP strategic planning process. The Clearinghouse is interested in a collaborative effort to facilitate recruitment and indicates that, with additional resources, efforts for recruitment of middle and high school students, nontraditional students, and others to the field of blindness and low vision can be improved.

Stabilizing and Enhancing the Impact of OSEP-funded Initiatives

In addition to the new components proposed in the National Plan, one additional objective (Objective 1.3) was promoted by the NPTP strategic planning stakeholders. While this was mentioned under Goal 1, it will be described here in further detail to emphasize the critical nature of this objective as well as its relationship to current OSEP initiatives. This component forms the foundation for personnel training in vision and blindness, enhances ongoing OSEP-funded personnel preparation projects, and reinforces ongoing trends within OSEP. Stakeholders recommended that OSEP-funded personnel preparation projects be strengthened through increasing the period of federally-funded personnel preparation programs to five years, establishing set-asides for priority funding in personnel preparation in blindness and low vision, and increasing support for individuals from diverse cultures and high-needs areas. Stakeholders indicated that these strategies should allow university instructors to shift time and resources from acquiring funds to finding more time for and developing capacity to implement innovations, update materials, and prepare direct service personnel. Stakeholders also supported collaborative strategies for approaching states and requesting greater state-level support. This component assumes that the impact of the related OSEP-funded initiatives will be strengthened as overall support increases.

Furthermore, because of its particular importance to updating staff skills, the shared responsibility for professional development cannot be overstated. Inservice and continuing education professional development activities will be enhanced as state departments of education, universities, and other stakeholders collaborate in sharing concerns and resources. The stakeholders need to turn to state departments of education to ensure that the needs of children with blindness or low vision are considered in developing State Improvement Grants (SIGs) and allocating IDEA Part B funds. Relatively little attention to date has been paid to blindness and low vision in the SIG programs, a major deterrent being the competing needs of programs focusing on high incidence areas. To tap into these existing resources, a preferred strategy would include OSEP intervention to require that states demonstrate accountability for addressing personnel needs in blindness and low vision in their State Improvement Plans (SIPs) and Comprehensive Systems of Personnel Development (CSPD). However, some gains can be realized without direct assistance from OSEP. A primary strategy discussed in the stakeholder strategic planning sessions was the impact of collaboration that strengthens the base of support for requests. Combining collaboration with initiative (i.e., vision stakeholders will need to take the initiative) and persistence will likely result in greater SIG allocations for inservice training for vision professionals.
## The Goals, Objectives, and Key Strategies

The following table, Table 3, presents an overview of the proposed components and strategies to the objectives as identified in Table 2. Also included in Table 3, are proposed levels of funding, potential partners, and the performance indicators for each.

### Table 3: Functions of and Implementation Strategies for the National Plan

<table>
<thead>
<tr>
<th>National Personnel Preparation Coordinating Council in Blindness and Low Vision (Cross-Goal Initiative)</th>
<th>Performance Indicators</th>
<th>Potential Partners</th>
<th>Annual Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Children and families receive appropriate services. (C.1,1 C.1,2, C.1,3, C.2, C.3, C.4)</td>
<td>4. Parent satisfaction increases. (C.3, C.4)</td>
<td>Others</td>
<td>$250,000</td>
</tr>
<tr>
<td>2. Improved services to children and families.</td>
<td>3. Number of appropriately trained and certified teachers increases. (B.7.1, B.7.2, D.3.1, D.3.2)</td>
<td>Parent, consumer, and professional organizations; state education agencies; local education agencies; universities; schools for the blind; public and private agencies; others.</td>
<td></td>
</tr>
<tr>
<td>4. Parent involvement in delivery of services. (B.3, B.3a, B.3c)</td>
<td>5. Improved services to children and families.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Performance Indicators

*Performance indicators are given in brackets.*

#### Annual Funding

| CFDA 8A 335 | Significant Projects of National Priorities of National Goals | $250,000 |

| Strategies for the National Plan |

- Improved services to children and families and parent participation in delivery of services
- Knowledge and skills of administrators and education services
- Consumer partnerships
- Improved services to children and families
- Work with OSEP and all stakeholders to define outcomes
- Provide direction regarding newly developed positions for directly service personnel in school districts
- Identify stakeholders who might work together collaboratively
- Research and Retention Project (goal 3)
<table>
<thead>
<tr>
<th>Sample Functions and Implementation Strategies</th>
<th>Annual Funding Requirements</th>
<th>Potential Partners</th>
<th>Performance Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assist IHE personnel preparation programs to meet state and national standards for the preparation of personnel in VI, O&amp;M, and DB.</td>
<td>$1,500,000 Technical Assistance and Dissemination CFDA 84.326</td>
<td>College and university programs; state education agencies; local education agencies; parent, consumer, and professional organizations; schools for the blind; public and private agencies; business and industry; National Personnel Preparation Coordinating Council (NPPCC).</td>
<td>GPRA Goals B, D:</td>
</tr>
<tr>
<td>Facilitate and sustain collaboration among states, providing skill development, resources, training, and support for preservice training of direct service personnel.</td>
<td></td>
<td></td>
<td>1. Increase in total number of personnel. [B.7.2]</td>
</tr>
<tr>
<td>Provide technical assistance, training, and materials to enhance the use of distance technology in personnel preparation in VI, O&amp;M, and DB.</td>
<td></td>
<td></td>
<td>2. Increase in number of training programs. [D.3.1, D.3.2, D.3.3]</td>
</tr>
<tr>
<td>Provide counsel and support to OSEP specific to this low incidence area as it conducts training and dissemination.</td>
<td></td>
<td></td>
<td>3. Increase in collaboration among training programs. [D.3.1, D.3.2, D.3.3]</td>
</tr>
<tr>
<td>Encourage use of specialized schools for learners who are blind or visually impaired as professional development schools.</td>
<td></td>
<td></td>
<td>4. Increase in number of programs meeting national standards. [B.7.2]</td>
</tr>
<tr>
<td>Disseminate models of effective professional development schools for personnel preparation in blindness and low vision.</td>
<td></td>
<td></td>
<td>5. Increase in use of distance technologies to train personnel. [B.7.2, D.3.1, D.3.2]</td>
</tr>
<tr>
<td>To assist personnel preparation programs in the area of deafblindness in adopting professional standards on a national level.</td>
<td></td>
<td></td>
<td>6. More schools for the blind utilized as professional development schools. [B.7.2, D.4.1]</td>
</tr>
<tr>
<td>Facilitate development of reciprocity agreements for licensure and certification across state lines.</td>
<td></td>
<td></td>
<td>7. More states execute reciprocity agreements for licensure/certification in TVI, O&amp;M, DB. [B.7.1, B.7.2]</td>
</tr>
<tr>
<td>Provide technical assistance to IHEs to prepare successful funding proposals.</td>
<td></td>
<td></td>
<td>8. Training grants awarded to more university personnel preparation programs. [D.4.1]</td>
</tr>
<tr>
<td>Sample Functions and Implementation Strategies</td>
<td>Annual Funding Requirements</td>
<td>Potential Partners</td>
<td>Performance Indicators</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>Provide counsel and support to OSEP specific to this low incidence area as it conducts training and dissemination.</td>
<td>$300,000 Projects of National Significance CFDA 84.325</td>
<td>NPPCC</td>
<td>GPRA Goals B, C, D:</td>
</tr>
<tr>
<td>Increase the number and diversity of qualified administrators in blindness and low vision by targeting funds for professional development that will assist all administrators in understanding quality educational opportunities for students with blindness or low vision.</td>
<td></td>
<td>Professional organizations; state and local education agencies; public and private agencies.</td>
<td>1. Increased number of administrators with knowledge of needs of students with blindness or low vision. [B.4.1, B.4.2, B.4.3, C.3.1, C.3.2, C.4.2, D.5.2]</td>
</tr>
<tr>
<td>Establish a career ladder model for associate, baccalaureate, Masters, and doctoral level that serves as a pathway to leadership throughout the field of blindness and low vision.</td>
<td></td>
<td>Professional organizations.</td>
<td>2. More service providers assume leadership roles.</td>
</tr>
<tr>
<td>Enhance opportunities for all levels of personnel to study issues relating to innovation and future trends in education and personnel preparation, system change, management, and promising leadership practices.</td>
<td></td>
<td>Professional organizations; postdoctoral fellowships; Fulbright scholarships.</td>
<td>3. More professional development activities occur within and across states. [B.7.1, B.7.2, D.5.2]</td>
</tr>
<tr>
<td>Plan and implement an annual symposium bringing leaders of higher education institutions, state education agencies, related services personnel, and other stakeholders to review current supply and demand issues for personnel in blindness and low vision.</td>
<td></td>
<td>State education agencies; public and private agencies; colleges and universities.</td>
<td>4. Supply and demand issues are monitored and discussed.</td>
</tr>
<tr>
<td>Implement a national mentoring program for doctoral students in blindness and low vision.</td>
<td>$300,000 Leadership Development CFDA 84.325D</td>
<td>College and universities with doctoral faculty in blindness and low vision; professional organizations; public and private agencies.</td>
<td>5. Supply of personnel increases. [B.7.2, D.3.1]</td>
</tr>
<tr>
<td>Facilitate collaboration among personnel preparation programs to bring doctoral students and scholars together for study, research and innovative training opportunities both within the field of visual impairment and with other OSEP-funded projects of national significance.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Sample Functions and Implementation Strategies</td>
<td>Annual Funding Requirements</td>
<td>Potential Partners</td>
<td>Performance Indicators</td>
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</tr>
<tr>
<td>Establish and maintain a national information center that is both Web and telephone based to provide technical information to families, schools, and community agencies.</td>
<td>$800,000 Research Institute CFDA 84.324</td>
<td>National Council on Educational Statistics; American Foundation for the Blind; American Printing House for the Blind; Personnel Preparation Technical Assistance Network; Deafblind Link</td>
<td>GPRA Goals B, C, D: 1. Information center established. [D.1.1, D.2.1, D.4.1] 2. Number of inquiries increases annually. [D.2.2, D.4.2, D.6.2] 3. More children with blindness or low vision receive appropriate services. [B.4.1, B.4.2, B.4.3, C.3.2, C.4.2, D.5.2]</td>
</tr>
<tr>
<td>Create and maintain a Web site focusing on personnel preparation issues, new trends, demographics, strategies, and current research, including current information useful to direct service personnel in the fields of regular and special education.</td>
<td>Discminate data and research information to IHEs, SEAs, advocacy groups, and direct service personnel with particular focus on information that informs personnel preparation and staff development, including information on the creation of new positions for direct service personnel.</td>
<td>Provide counsel and support to OSEP specific to this low incidence area as it conducts training and dissemination. Coordinate research among universities and other research centers related to personnel, service delivery, and results for students with blindness or low vision.</td>
<td>GPRA Goal D: 1. Increase in number of research studies [D.1.1] 2. Increased rigor in research studies. [D.1.1] 3. Increased dissemination of research to the field. [D.1.2, D.2.1] 4. Parents and teachers access research information. [D.4.1, D.4.2]</td>
</tr>
<tr>
<td>Track and disseminate current data related to the number of OSEP-funded projects and programs related to personnel needs, and work with the Personnel Preparation Technical Assistance Network to make this information available nationally.</td>
<td>Work collaboratively with OSEP, APH, SEAs, and other stakeholders to maintain an accurate count of students and personnel in the low incidence area of blindness and low vision.</td>
<td></td>
<td>GPRA Goal B, D: 1. Increase in number of appropriately trained personnel. [B.7.2, D.5.1] 2. Annual increase in requests for data [D.4.2]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>GPRA Goals B, C, D: 1. Number of children identified as receiving vision services increased. [B.4.1, B.4.2, C.1.1, C.2.1] 2. Increase in number of appropriately trained personnel. [B.7.2, D.5.1]</td>
</tr>
</tbody>
</table>
Table 3 continued: Functions of and Implementation Strategies

Objectives 3.1 & 3.2 Recruitment and Retention Project

<table>
<thead>
<tr>
<th>Sample Functions and Implementation Strategies</th>
<th>Potential Partners</th>
<th>Performance Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilitate communication and sharing among states to address personnel shortages and provide appropriate services to children and youth with blindness or low vision.</td>
<td>Industry and business; state and local education agencies; parent, consumer, and professional organizations; Ideas That Work; National Clearinghouse on Professions in Special Education; colleges and universities; public and private agencies.</td>
<td>GPRA Goals B, C, D: 1. Increase in number of appropriately trained personnel. [B.7.2, D.5.1] 2. Increase in number of children appropriately served. [C.1.1, C.3.1, C.3.2, C.4.2, D.5.2]</td>
</tr>
<tr>
<td>Provide counsel and support to OSEP specific to this low incidence area as it conducts training and dissemination.</td>
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<td></td>
</tr>
<tr>
<td>Improve recruitment and retention of HIE faculty in the area of blindness and low vision.</td>
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<tr>
<td>Identify, seek pro bono support and guide the activities of one or more public relations marketing firms to develop a comprehensive, cohesive recruitment campaign.</td>
<td></td>
<td></td>
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<tr>
<td>Support recruitment aimed at underrepresented and culturally diverse populations.</td>
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<tr>
<td>Support campaign activities by training relevant personnel and securing support from stakeholders in the field and the National Clearinghouse for Professions in Special Education.</td>
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<tr>
<td>Work with OSEP's Ideas That Work public relations campaign to coordinate dissemination of information regarding IDEA success stories involving children and youth with blindness or low vision.</td>
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<td></td>
</tr>
</tbody>
</table>

Annual Funding Requirements: $875,000

CFDA 84.325
<table>
<thead>
<tr>
<th>Sample Functions and Implementation Strategies</th>
<th>Annual Funding Requirements</th>
<th>Potential Partners</th>
<th>Performance Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lengthen the period for federally supported personnel projects to 5 years.</td>
<td>$7,500,000 Personnel Preparation CFDA 84.325A</td>
<td>Colleges and universities; state education agencies</td>
<td>GPRA Goal D:</td>
</tr>
<tr>
<td>Increase flexibility to budget grant funds that support faculty positions.</td>
<td></td>
<td></td>
<td>1. Increase in average length of training grant period. [D.3.1]</td>
</tr>
<tr>
<td>Encourage planned collaboration within regions that maximizes and promotes effective and efficient use of resources.</td>
<td></td>
<td></td>
<td>2. Increase in average proportion of funding allocated for faculty support. [D.3.1]</td>
</tr>
<tr>
<td>Require that general and special education funding initiatives include attention to the needs of children with blindness or low vision.</td>
<td></td>
<td></td>
<td>3. Greater incidence of college and university collaboration to deliver training. [D.3.1, D.3.2, D.3.3]</td>
</tr>
<tr>
<td>Create absolute and/or secondary priorities within the low incidence competition that address diversity, scarcity, needs of rural communities, and bilingual personnel.</td>
<td></td>
<td></td>
<td>4. Number of personnel from minority backgrounds increases. [D.3.1]</td>
</tr>
<tr>
<td>Mention programs in blindness and visual impairment as eligible participants in every relevant grant announcement.</td>
<td></td>
<td></td>
<td>5. Children receive appropriate services. [B.4.1, B.4.2, B.4.3]</td>
</tr>
<tr>
<td>Require each CSPD and SIG proposal to demonstrate collaboration with every IHE in the state that prepares personnel for students with blindness or low vision and demonstrate expenditure of funds for meeting the needs of students with blindness or low vision and the personnel who serve them.</td>
<td></td>
<td></td>
<td>6. States include blindness and low vision in SIG plans. [D.5.1, D.5.2]</td>
</tr>
<tr>
<td>Create line item budget funds in both leadership and low incidence competitions for blindness and low vision personnel preparation projects that utilize creative recruitment strategies, incentives, new technologies, and other innovation.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sustain funding for personnel preparation projects in blindness and low vision that builds upon 1997-98 funding levels.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Anticipated Impact

Overview

Several factors compound the problem of preparing an adequate supply of qualified personnel to meet the needs of students with blindness or low vision within the near future, even with the implementation of the proposed initiatives. First, it is important to recognize that factors negatively influencing supply and demand reach beyond the field of blindness and low vision to the larger education community. Shortages are currently reaching crisis proportions for educators, with the greatest needs identified for special educators, bilingual educators, and math and science teachers. Recent pressures to meet state and national standards have created additional need for administrators as well as educators. As a result, it is reasonable to assume that these additional opportunities will be attractive to qualified personnel, thereby increasing the difficulty of recruitment and retention in the specific field of blindness and low vision.

Second, just as retirement and aging-out are impacting the number of educators for children with visual impairments in the field of blindness and low vision, they are also impacting the number of leaders who prepare personnel at IHEs. Third, other newly created jobs, particularly in high-technology areas, are competing with the educational fields for personnel. Fourth, recent concerns over caseload indicate that the number of professionals employed to adequately prepare children and youth with blindness or low vision will need to triple to reduce caseloads (to the recommended national average of 8 students to 1 instructor) and expand services to meet the needs of currently unserved students (see Section II). Fifth, due to OSEP's planning and budget cycle, the National Plan has been designed with a start-up date of Project Year 20028, with the impact of many components of the Plan not realized until recruitment activities are underway and new faculty are available in 2006.

8 OSEP's budget for 2001 has already been submitted to Congress. OSEP's project years begin in October. Project Year 2002 begins in October 2001. For ease of reference all years are presented as project years.
In light of current conditions, leaders will need to factor in several additional considerations when attempting to project realistic outcomes of the proposed initiatives. To begin, they should consider that the current mitigating variables might also lead to solutions. For example, many national teacher and administrator organizations are recommending that salaries be increased and other incentives (such as training stipends and sign-on bonuses) be used to make compensation more competitive. Furthermore, major public relations campaigns are underway, not only to attract youth through better recruitment in middle and high schools, but also to attract nontraditional students interested in second careers in education. Additionally, the ease and time flexibility of Web-accessed and other distance learning course offerings are attractive to individuals seeking advanced learning opportunities.

At the state policy level, the need for reciprocal certification agreements—making it easier for teachers trained in one state to obtain employment in another—is providing the impetus for problem-solving, and new arrangements are continually surfacing. Such flexibility is expected to improve the available pool of direct service personnel.

In determining the anticipated impact of the proposed solutions, leaders must consider not only trends in education, but also surrounding societal contexts, all of which could influence the proposed initiatives positively or negatively. Public attitudes, demographic trends, political programs, technological factors, and other competing needs will all impact surrounding contexts for implementation of the proposed solutions. Given these conditions, the NPTP planning process devised strategies that are projected to be robust under varying future scenarios, even with less-than-ideal contextual influences. However, to maintain the greatest usefulness, these contextual conditions must be continuously monitored and strategic adjustments made as needed.

The National Plan has recommended many activities, most of which are supported by data that have been obtained in related fields, thereby enhancing the likelihood of a positive impact (i.e., an increased supply of qualified personnel).

In general terms, our estimates of impact follow:

- The quality and quantity of programs, including a number of new programs that are anticipated to meet AER, CEC, and NCATE standards, is expected to increase (due largely to the impact of mentoring and technical assistance).

- The supply of professionals from diverse backgrounds will increase.

- The supply of researchers and leaders will increase (due to the proposed leadership initiative, mentoring program, and specific government funding for such efforts).

- The stability, duration, and diversity of funding for training programs will improve (due to changes in federal funding policies, increased support, heightened understanding, and collaboration—as alliances are built).

- Greater numbers of applicants will be recruited from traditional and nontraditional applicant pools through coordination with others and a national public relations/marketing campaign.

- Potential trainees will find easier and more flexible access to training programs (through campus-based programs and distance education programs proposed for high-need areas), resulting in greater numbers of program graduates and an increase in both teachers and O&M specialists.

While the National Plan was designed to be implemented over a 5-year period, participants realized that total solutions to the problem of supplying needs will not be achieved within 5 years. However, the National Plan was designed to be realistic, and contributors believe it is realistic to anticipate a 36-55% reduction in the shortage within 5 years after its implementation.
Historical Data and Projections

To arrive at a plan for increasing the number of personnel and determining associated costs, a small working group came together in November 1999. In developing a statement of potential impact, the working group recommended that the National Plan first depict recent historical trends. That group began by factoring in data on students receiving certification and graduating in programs in TVI, TDB, O&M, and dual certification, as well as doctoral students over the past 4 years (Corn & Ferrell, in press; Ferrell, 1999). (See Figure 2 below.)

The data in Figure 2 confirm the urgency in reversing current trends that are exacerbating personnel shortages in the field of blindness and low vision. As the data in Figure 2 indicate, the number of students being trained as direct service professionals is growing at a very slow rate. In fact, the number of students being prepared as O&M specialists and those receiving dual certification is actually decreasing each year. The data in Figure 2 have been plotted on a logarithmic chart to provide for a linear analysis of trends. (The accompanying data table [Ferrell, 1999] provides information from studies from 1993-94 and 1994-95; however, because of differences in the collection of data during those years, only the past 4 years were included in projecting future trends.)

Based on discussions and activities with strategic planning stakeholders and data on supply and demand for direct service personnel a conceptual model for implementation was developed. (See Figure 3.)

The Plan includes six major national components. Five of the six components address Goals 1-3 through overlapping spheres of influence: the Recruitment Projects, the National Technical Assistance Network, strengthening Personnel Preparation Programs, the Leadership Development Institute, and the Research to Practice Institute. The National Coordinating Council, the sixth component, provides a mechanism to facilitate implementation of the National Plan across the three goal areas. However, the impact of these components is interdependent. For example,

- Recruitment of students into certification and degree program is a key linchpin upon which the effective resolution of personnel shortages rests.
Sequence for Implementation and Impact


Recruitment and Retention Project

Personnel Preparation Technical Assistance Network

- Instructional supports, distance education, program mentoring

Research to Practice Institute

Leadership Development Institute

Personnel Preparation Programs

- Increase in number of training programs
- Increase in number of certified personnel
- Increase in number of doctoral candidates

There is a high degree of goal-directed interdependence and collaboration among the key components.

Legend:
- Project Component Initiated
- Significant Impact Realized

Although all initiatives begin in 2002, the impact of some will be more immediate. The greatest impact will occur after 2006 when more faculty are available to prepare personnel.

Figure 3
More individuals from culturally diverse backgrounds are needed at all levels of personnel serving individuals with blindness or low vision. Targeting specific recruitment strategies to diverse populations should be a key factor in achieving the goal of more diversified personnel. Additionally, the stakeholders recommended that OSEP strengthen its support for preparing personnel from underrepresented groups.

For the total number of personnel to be increased, the number of individuals graduating with doctorates must increase. The Leadership Development Institute will provide an avenue for encouraging professionals to enter doctoral programs. Realizing how critical an increase in individuals with doctorates is, it must be emphasized that the primary impact of all initiatives will only be realized once a class of doctoral candidates graduates, 4 years after the beginning of these initiatives.

Based on the model in Figure 3 (previous page) and the analysis of the interrelationship of components, a model was designed to portray the impact of initiatives implemented between Project Years 2002 and 2006 (see Figure 4 below and Figure 5 next page). To provide for comparisons with Figure 2, these data are also graphed on a logarithmic chart. Figure 4 displays the projected increase in personnel by category. Figure 5 depicts the projected cumulative impact on personnel under three conditions: no attrition, an attrition rate of 5%, and an attrition rate of 7.3%.

Several differing sets of data regarding trends in faculty, training, research, and funding served as the basis for making projections. Differences in the data sets reflect such differences as focusing only on OSEP-funded training programs, only on AER-approved programs, a larger set of training programs that include programs which are not AER-approved, or data including Masters degree programs versus undergraduate programs or certification programs. In deciding which database to use in making projections, a variety of factors were considered; however, in most instances attempts were made to be realistic, yet to include the number of programs that would lead to the highest yield in graduates or those completing certification programs. In most cases the differences that might be obtained by basing projections on the number of undergraduate programs versus Masters programs, for example, were relatively minor.

The starting point for projections in Figures 4 and 5 is the number of individuals recruited into programs. Given that no data are available on number of recruitments in the field of blindness and low vision, that number is based on an extrapolation from the average number of students receiving degrees or certification from IHEs in 1998-1999.

The projections in Figures 4 and 5 were also based on the following assumptions:

- The incidence of blindness and low vision will remain constant. While conflicting projections have been made, no firm, reliable evidence is available to support
either an increase or decrease in prevalence (Kirchner, 1999).

- No intervention is expected to produce a significant change until the first year of implementation by OSEP in 2002. Implementation will not begin until 2002 because of the amount of lead time needed by OSEP for developing new initiatives.

- The number of individuals recruited each future year will at least equal the number of individuals receiving certification or degrees. (This number is used for calculations in the absence of any other data.)

- The number of training programs will gradually increase beginning in 2002.

- The greatest impact will only begin to be realized after one year of implementation of the recruitment campaign and the National Technical Assistance Network, at which time sharing course materials and distance education modules will facilitate expansion of programs and the ability of each IHE to instruct a larger number of students.

- A sufficient number of faculty will be retained to prepare direct service personnel over the next 7 years and over the next few years leadership initiatives will result in an increase in individuals preparing to teach at IHEs.

- All graduates are expected to assume full time positions with full caseloads.

Furthermore, current and historical information also provided some rationale for additional assumptions. These key assumptions follow:

- A minimum of 33 programs in visual impairments (universities offering Masters degrees [Corn & Silberman, 1999]) will be sustained.

- The percentage of individuals certified or receiving degrees in each area (TVI, O&M, TDB, dual, and doctorate) will remain constant with the relationship found in 1998-99: 70% combined TVIs and DB, 20% O&M specialists, 9% dual certificates, and 1% doctoral candidates.

The data have been presented two ways: with and without consideration of attrition. If attrition is not considered, then a total of 5,015 personnel should be added to the pool of existing 8,000 direct service personnel, resulting in 13,015 direct service personnel.
If attrition is factored in, the overall number of direct service personnel should reach 9,691 by 2006. An attrition rate of 5% was used based on the following information:

- The number of new professionals entering the field of blindness and low vision has been approximately 400 a year (Ferrell, 1999).

- The total number of professionals in the field of blindness and low vision has remained relatively constant over the past few years at 8,000.

- The ratio of new professionals to total numbers of professionals has been 400 to 8,000, or 5% (or 8 per state). The annual entry of an additional 400 professionals appears to just offset the number leaving the field of blindness and low vision each year.

In checking these assumptions and determining an overall impact statement, project staff were not able to locate specific data on attrition in the blindness and field of blindness and low vision. However, the most recent data from the National Center for Educational Statistics (U.S. Department of Education, 1999) on attrition for full-time teachers included an overall attrition rate of 6% for public school teachers. When considering the impact of attrition, it is important to note that the greatest attrition for teachers in general (31-32%) was reported for teachers over the age of 60 when retirement is the primary source of attrition. Furthermore, data from 1987 to 1995 documented an increase in the percentage of teachers retiring from 27% to 31%, indicating an accelerating trend towards a greater number of retirements.

Other data (Smith-Davis & Billingsley, 1993) have indicated an attrition rate of 7.3% for the general special education field. Because of the lack of specific information on either attrition or retirement in the field of blindness and low vision, no specific formulas have been used to factor in an anticipated impact in preparing projections in Figure 5. Figure 5 has been designed to indicate the projected impact with no attrition, attrition rates of 5% and attrition rates of 7.3%.

According to the projections made, if the National Plan is implemented as recommended, over the next 7 years (until 2006), it is anticipated that the number of TVIs will increase from 273 to 715, the number of O&M specialists will increase from 77 to 202, the number of dually certified professionals will increase from 38 to 90, and the number of doctoral candidates will increase from 5 to 13. (These figures do not reflect attrition rates.)

**Anticipated Costs**

Table 4 presents a brief overview of the costs for the proposed components of the National Plan.

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<thead>
<tr>
<th>Initiative</th>
<th>Annual Costs</th>
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<td>Goal 1: Personnel Preparation</td>
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<td>National Personnel Preparation</td>
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<tr>
<td>Coordinating Council</td>
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<tr>
<td>Personnel Preparation Technical Assistance Network</td>
<td>$1,500,000</td>
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<tr>
<td>OSEP Implementation</td>
<td>$ 7,500,000</td>
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<tr>
<td>Goal 2: Leadership Development</td>
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<td>Leadership Development Institute</td>
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<tr>
<td>Research to Practice Institute</td>
<td>800,000</td>
</tr>
<tr>
<td>Mentoring Doctoral Students</td>
<td>300,000</td>
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<tr>
<td>Goal 3: Recruitment and Retention</td>
<td></td>
</tr>
<tr>
<td>Recruitment &amp; Retention Project</td>
<td>875,000</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$11,525,000</td>
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</table>

Currently OSEP is spending approximately $5.85 million annually to train personnel to provide direct services for students with blindness or low vision. (The sum is not an allocated amount but rather the amount of awards received by professionals in the field through competitive grants processes.) The total annual cost of the
current expenditures and the new request is $11,525,000. If through the National Plan an additional 5,015 professionals are recruited and enter the field of blindness and low vision, the cost for recruiting and training each professional can be calculated through estimating maintenance of current expenditures until 2002 and then increasing them to $11,525,000 annually for 5 years. Over the 7 years, the total spent on blindness and low vision is projected to be $69,325,000 and the cost for recruiting and training each professional is projected to be $13,823.

**Limitations**

In proposing the National Plan and estimating its cost benefits, stakeholders and project staff have been limited by factors that are common to most such futures planning. A primary limitation has been the lack of current and historical data on a number of factors that may impact outcomes of the project. Included in this realm are such key information items as the current number of personnel from culturally diverse backgrounds, the number of training stipends that remain unused due to failure to recruit students, the number of individuals recruited into personnel preparation programs each year, and the total number of individuals trained through non-IHE programs annually.

A key element that needs to be considered in implementing the Plan is the impact of the proposed components on current IHE faculty. As current faculty become involved in the proposed components, they will need to consider how to work with others (some of whom may be outside the field of blindness and low vision) to both implement the new components and to maintain current IHE instructional capacities.

Additionally, the projections are limited by uncertainties related to cost of living, competing activities, and the efficiency and effectiveness of the proposed initiatives. This Plan will also be either supported or impeded by factors such as:

- The effectiveness of collaborative efforts with professionals outside the field of blindness and low vision.
- The response of others, such as State Directors of Education, to the National Plan.
- The systemic capability to create the number of positions needed in individual school districts to reach recommended caseloads.

And, finally, as is often the case, the interrelationships of the initiatives will have a significant impact on the effectiveness of each. Failure to recruit an adequate number of individuals into the field of blindness and low vision, for example, will reduce the overall effectiveness of the other initiatives. Similarly, a skillful blending of traditional on-campus programming with distance education, successful program mentoring, and successful grant applications will all increase the overall impact of the proposed Plan.
References


In the NPTP multi-state sample survey (Kirchner & Diament, 1999), the professors/administrators in the personnel preparation programs surveyed devoted an average of 12% of their time to research, although nearly half of those surveyed were not involved in any research activities. In 1998, the average professor spent 62% of his/her time on teacher training, 12% on research, and 25% on administration. Of the teacher training time, 75% on the average was consumed teaching vision-related courses, corresponding to 46% of their overall work time.

4. Methods of Achieving Certification
A 1996 national study (Lewis, 1996) found that the majority of states allow two methods for achieving professional certification: (1) obtaining a Bachelor degree in visual impairment, special education, or regular education and taking a comprehensive test, or (2) completing specific coursework in the vision field. The State Directors of Special Education survey indicated that 71% of the respondents employ personnel with emergency licenses/certificates to meet staffing needs.

A total of 35 states and the District of Columbia have reciprocity agreements for teachers. Each of the 35 states with reciprocity agreements extends those agreements to most other states. However, only 4 of the 25 states with specialized personnel preparation programs have such agreements (Kirchner & Diament, 1999).

5. Number and Funding of VI Personnel Preparation Programs
Corn and Ferrell (in press), in a study of 40 personnel preparation programs for visual impairment, report that 29 universities received 94 grants in 1997-98, for a total award of $8,793,968. All 29 universities received training grants (totaling $7,102,709). Three universities reported receiving no external funding. The mean number of grants per program was 2.4. Thirty-four percent of the funding for training was allocated to training dually certified teachers/O&M specialists. Twenty-nine grants were funded by OSEP (at a total cost of $4,590,495). States provided funding for 20 grants, the RSA funded 17 programs, private foundations funded three programs, and universities funded one program. The mean funding from OSEP was $163,946 compared to average awards of $72,276 from RSA.

6. Status of Faculty
As of 1995, 26% of the faculty in VI personnel preparation programs were full professors, 25% were associates, 25% were assistants, and the remaining 21% were instructors or "other." Fifty-one percent were tenured and 16% were in tenure line positions (Corn & Silberman, 1999). In 1994 only 15 faculty members were employed full-time. Sixty-seven percent of the faculty were female. Sixty-seven percent of the faculty were between the ages of 40-59 (Corn & Silberman, 1999).
Appendix A (continued)

References


Scenario-Based Planning

The planning process used by NPTP—scenario-based planning (Schwartz, 1996)—relied upon scenarios—stories about possible futures in which we may have to live. Key stakeholders met several times with a facilitator who led the group from a discussion of problems to envisioning outcomes and obstacles under alternative future scenarios, discussing promising solutions, and finally to consensus recommendations. To assist readers who may not be familiar with this process, a brief description of the components and strengths of scenario-based planning follows:

Pioneered by the Royal Dutch/Shell Oil Company in the 1970s, scenario-based planning is widely used by businesses and corporations today. Before the introduction of the scenario technique, planning was based on traditional forecasting, which relied on current trends as a basis for making projections about the future. In comparison, scenario-based planning is strengthened by considering (a) the key economic, social, political, and educational driving forces and (b) the potential impact of these forces on uncertainties, opportunities, and risks. Such planning leads to strategic conversations about multiple futures and supports the identification of strategies that are robust because they appear to be effective in several possible futures.

The NPTP strategic planning process, facilitated by Marianne Hughes, Executive Director of the Interaction Institute for Social Change, was implemented over a 12-month period of time following six steps:

- **Process Design.** The process began in January, 1999, with participants identifying their concerns and reaching consensus about the desired outcomes and process to be used in planning.

- **Problem Identification.** During the initial strategic planning meetings, participants analyzed the problem, including potential driving forces, and developed a problem statement. Factors that were determined to be most important and most uncertain established the basis for four scenarios (including one utopian scenario, one doomsday scenario, and two that were middle ground). These scenarios were developed by the Steering Management Committee.

- **Visioning.** During the March meeting, participants delved into the four scenarios, envisioning the possible outcomes under each and implications for the field. That activity set the stage for crafting an agreed upon vision for the field.
• **Solutions.** Also during the March meeting, participants developed strategies to achieve their desired future (vision). Working with the four scenarios, participants first identified strategies that could be effective under each condition, and then used a consensus process to agree upon the strategies the group believed to be most important to achieving the group's vision for the field.

• **Review, Revision, and Refinement.** Between March and July, participants provided feedback on the draft Plan developed at the March meeting. In July, participants met a final time to prioritize and organize recommended strategies and develop draft action plans. Outcomes from the July meeting were circulated to the field in August, feedback was obtained, and the Steering Management Committee met in September to finalize recommendations and assist with organizing the final version National Plan. In late September, the draft Plan was circulated to key stakeholders for their feedback. Subsequently, in November 1999, a working group comprised of members of the Steering Management Committee and key researchers met one last time to review the proposed initiatives, funding level, and impact. Recommendations from that group were submitted to a representative sample of stakeholders, revisions were made, and a final version then submitted to OSEP.

• **Implementation.** To assure that a consensus process continues to be used in the implementation of this National Plan stakeholders have also been involved in designing recommended guidelines for implementation by OSEP and the field. This Plan includes the agreed upon recommendations for implementation, monitoring, and revision of the proposed strategies.

**References**
Further Information on Complementary Goals and Objectives

Goal 1: Consumer Partnerships
To ensure that consumers are effective and productive in advocating for the specialized needs of children and youth with blindness and low vision.

Objectives:
A. To develop a network of advocacy training sites and programs.
B. To identify and develop materials that describe available advocacy training programs.
C. To establish and/or strengthen advocacy groups at state and local levels.
D. To develop or identify local level directories or databases of identified contact persons and agencies.
E. To provide informational materials that motivate/educate targeted stakeholders.
F. To establish systems that assure interagency collaboration in local communities.

Goal 2: Human Resource Development
To ensure that professional and paraprofessional personnel are appropriately hired, trained and credentialled.

Objectives:
A. To provide effective training and supervision to all paraprofessionals.
B. To encourage state leaders and administrators to advocate for professional standards and best procedures in educating students with blindness and low vision.
C. To hire sufficient members of paraprofessionals from diverse backgrounds to support qualified vision professionals.
D. To develop protocols of evaluation models.
E. To implement effective evaluation protocols and provide accompanying training.
Goal 3: Enhanced Services to Children
To provide a full array of services to each visually impaired child at local, regional, and national levels.

Objectives:
A. To require that each state is responsible for identification of the services currently available in their state for VI children and youth with blindness and low vision (including those with multiple disabilities).
B. To conduct an analysis of the identified services as per Individuals with Disabilities Education Act and Americans with Disabilities Act and identify gaps within the system.
C. To develop mechanisms such as an interagency coordination council within each state to coordinate the delivery of services to students with blindness and low vision.
D. To implement effective assessment procedures according to IDEA and the Rehabilitation Act that ensure adequate identification of student needs, appropriate services and resources.
E. To develop and implement an appropriate educational/transition plan for every student with blindness and low vision.
Supporting Data for Figure 4, Section IV

These data depict the projected impact of a steady, but reasonable increase in production of TVIs, O&M specialists, and individuals with dual certifications and doctorates. We anticipate that this will occur by increasing the number of programs and the number of individuals receiving degrees/certification per program after the OSEP initiative begins in 2002. A greater impact will occur after more university instructors are available. (See also the supporting data for Figure 5.)

<table>
<thead>
<tr>
<th>Year</th>
<th>TVI</th>
<th>O&amp;M</th>
<th>Dual</th>
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<td>273</td>
<td>77</td>
<td>38</td>
<td>5</td>
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<td>2002</td>
<td>338</td>
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<td>2006</td>
<td>715</td>
<td>202</td>
<td>90</td>
<td>13</td>
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### Supporting Data for Figure 5, Section IV

This table presents the projected cumulative impact of the increased number of personnel.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total-5% Attrition</th>
<th>Total-7.3% Attrition</th>
<th>Total-No Attrition</th>
<th>Recruitments</th>
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<td>1037</td>
<td>715</td>
<td>202</td>
<td>90</td>
<td>13</td>
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</table>

The formula for projected recruitments is the anticipated average number of graduates per program x the anticipated number of training programs.

<table>
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<tr>
<th>Year</th>
<th>Recruitments</th>
<th>Total - No Attrition</th>
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<td>396</td>
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<td>2006</td>
<td>28 x 37:1037</td>
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</table>

Total additions 5,015
Current 8,000
Total in 2006 13,015

* The formula for projected recruitments is the anticipated average number of graduates per program x the anticipated number of training programs.
Appendix

NPTP Steering Management Committee

Nora Griffin-Shirley
Association for Education and Rehabilitation of the Blind and Visually Impaired, Division 17
(806) 742-2345
ibngs@ttacs.ttu.edu

Corinne Kirchner
American Foundation for the Blind
(212) 502-7640
corinne@afb.net

Sandra Lewis
Association for Education and Rehabilitation of the Blind and Visually Impaired, Division 17
(850) 644-8409
lewis@coe.fsu.edu

Donna McNear
The Council for Exceptional Children, Division on Visual Impairments
(612) 689-3600
dmcnear@informns.k12.mn.us

Susan Spungin
American Foundation for the Blind
(212) 502-7631
spungin@afb.net

Stuart Wittenstein
The Council for Exceptional Children, Division on Visual Impairments
(510) 794-3816
swittens@supreme.cde.ca.gov

George Zimmerman
Association for Education and Rehabilitation of the Blind and Visually Impaired, Division 17
(412) 624-7247
gjz+@pitt.edu

Roseanna Davidson, Co-Principal Investigator
The Council for Exceptional Children, Division on Visual Impairments
(806) 742-2345
tdavi@ttacs.ttu.edu

Christine Mason, Co-Principal Investigator
The Council for Exceptional Children
(703) 264-9431
chrism@cec.sped.org

Colleen McNerney, Project Coordinator
The Council for Exceptional Children
(703) 264-9456
colleenm@cec.sped.org
Appendix E (continued)

Strategic Planning Stakeholders

Michael Collins
Perkins School for the Blind

Nancy Corbin
Rum River Special Education Cooperative

Anne Corn
Vanderbilt University

Susan Crawford
American Council for the Blind

Roseanna Davidson
Texas Tech University

Jan Day
University of Utah

Frances Dibble
Oakland Unified School District

Wayne Erickson
Minnesota Department of Children, Families & Learning

Jane Erin
University of Arizona

Kay Ferrell
University of Northern Colorado

Charles Freeman
U.S. Department of Education

Nora Griffin-Shirley
Texas Tech University

Cheryl Grindol
Portland State University

Jack Hazekamp
California Department of Education

Glinda Hill
U.S. Department of Education

Kathleen Huebner
Pennsylvania College of Optometry

Dean Inman
Oregon Research Institute

Richard Jackson
Boston College

Lynda Jones
Florida State University

Gaylen Kapperman
Northern Illinois University

Corinne Kirchner
American Foundation for the Blind

Alan Koenig
Texas Tech University

Susan LaVenture
National Association for Parents of the Visually Impaired

Sandra Lewis
The Florida State University

Richard Mainzer, Jr.
The Council for Exceptional Children

Christine Mason
The Council for Exceptional Children

Robert McCulley
University of Massachusetts Boston

Donna McNear
Rum River Special Education Cooperative

Colleen Mc Nerney
The Council for Exceptional Children

Kenneth Metz
University of Pittsburgh

Herbert Miller
St. Joseph School for the Blind

Marla Moon
Nittany Eye Associates, Inc.

Ed Moore
U.S. Department of Education

James Patton
College of William & Mary

Anna Lou Pickett
National Resource Center of Paraprofessionals
## Appendix E (continued)

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<thead>
<tr>
<th>Name</th>
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<tr>
<td>Gaylen Pugh</td>
<td>National Association of State Directors of Special Education</td>
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<td>David Ross</td>
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<td>Mary Jean Sanspree</td>
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<td>Kayte Fearn</td>
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<td>Donor Lion</td>
<td>Labat International</td>
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<tr>
<td>Dorothy Jessop</td>
<td>Medical and Health Research Association of New York City</td>
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</table>
Appendix E (continued)

National Advisory Board

Delia Cerpa  
South Atlantic Reg. Resource Center

Michael Collins  
Perkins School for the Blind

Anne Corn  
Vanderbilt University

Janice Day  
University of Utah

Frances Dibble  
Oakland High School

Paul Edwards  
American Council of the Blind

Kay Ferrell  
University of Northern Colorado

Michael Hardman  
University of Utah

William Jacobson  
University of Arkansas at Little Rock

Joy Markowitz  
National Association of State Directors of Special Education

Mary McLennan  
American Printing House for the Blind

Barbara McLetchie  
Boston College

Joe McNulty  
Helen Keller National Center for Deaf-Blind Youths & Children

Kenneth Metz  
University of Pittsburgh

Herbert Miller  
St. Joseph's School for the Blind

James Elton Moore  
Center on Blindness & Low Vision

Sandra Rosen  
San Francisco State University

Eileen Siffermann  
Association for Education and Rehabilitation of the Blind and Visually Impaired

Audrey Smith  
Pennsylvania College of Optometry

Ian Stewart  
Iowa Department of Education

Donna Stryker  
National Association for Parents of the Visually Impaired, Inc.

Brad Walker  
North Carolina Central University

Sylvia Walker  
Howard University
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