DOCUMENT RESUME

ED 443 230 EC 307 924

TITLE	Reaching Individuals with Disabilities Early (RIDE) Project: Individuals with Disabilities Act, Non-Directed Model Demonstration Project. Final Report.
INSTITUTION	Ohio Valley Educational Cooperative, Shelbyville, KY.
SPONS AGENCY	Special Education Programs (ED/OSERS), Washington, DC.
PUB DATE	2000-06-16
NOTE	35p.
CONTRACT	HO24B50036
PUB TYPE	Reports - Descriptive (141)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	*Assistive Devices (for Disabled); Community Education; *Disabilities; Educational Technology; Elementary Education; Field Tests; *Inclusive Schools; Preschool Children; Preschool Education; Program Development; Program Effectiveness; Training Methods; Young Children

ABSTRACT

This final report discusses the components and outcomes of the RIDE (Reaching Individuals with Disabilities Early) Project, a program that supports the inclusion of young children with disabilities in their school environments, homes, and communities. The core component of the RIDE Model, Students' Success and Inclusion in the Regular Education Process, is made possible by the following elements: (1) access to assistive technology; (2) training, which includes teachers, parents, children, and other professionals; (3) on-site and on-demand technical support for educators, parents, and students; and (4) a Central Lending Library of assistive devices so that school districts can try out devices before they buy devices. The model was developed during the first 3 years in 16 sites in 6 school districts. At the end of the third year, the project was approved for the final 2 years of field-testing. Field test sites were 8 schools in 3 school districts. During the 5-year period, 136 children were referred and 73 were served following assessment. Results indicate children participating in the RIDE Project demonstrated significant improvements in their assistive technology utilization. This report discusses the project's goals and objectives, conceptual framework, participants, problems encountered, evaluation findings, and future activities. (Contains 26 references.) (Author/CR)

Reaching Individuals with Disabilities Early (RIDE) Project: Model Demonstration Project

FINAL REPORT

Individuals with Disabilities Act, Non-Directed Model Demonstration Project

U.S. Department of Education

Grant Number: HO24B50036

CFDA: 84.024B

Darlene Hilsenbeck

Project Director

Ohio Valley Educational Cooperative

100 Alpine Drive

Shelbyville, Kentucky 40065

June 16, 2000

Abstract

The RIDE Project was developed by the Ohio Valley Educational Cooperative in Shelbyville, Kentucky. The major goal was to develop and demonstrate a model that supports the inclusion of young children with disabilities in their school environments, their homes, and in the community.

The RIDE Model was designed with two distinctive components. The first component, an enhancement package for child find activities, is essential to the success of the second component since identifying children with disabilities is the first step in providing educational services. The core component, Student's Success and Inclusion in the Regular Education process, is made possible by the following elements: (1) Access to assistive technology; (2) Training, which includes teachers, parents, children, and other education professionals; (3) On-site and on-demand technical support for educators, parents, and students; and (4) Central Lending Library of assistive devices so that school districts can try out devices before they buy devices. The model was developed during the first 3 years in sixteen sites in six school districts, including schools and preschools. At the end of the third year, the Project submitted findings to the USDOE, was found to be effective, and then was approved for the final 2 years of field-testing. Field test sites were 8 schools in three school districts. During the 5 year period, 136 children were referred, 73 were served following assessment, data was collected on all 73 children, 26 families, and 39 interns.

Data were gathered from child observations, parent surveys, intern monthly logs monthly data reports on AT usage, and the annual state child count reports. Results support the claim that children participating in the RIDE Project demonstrate significant improvement in their assistive technology utilization. The findings during field testing in Years 4 and 5 are consistent with results during model development.

The RIDE Project developed numerous products, including an award winning Child Find video, child find parent brochures in English and Spanish, two mini-training videos, a Central Lending Library of over 1400 items, and a 714 page training manual containing 18

chapters plus references, appendices, and an index. The manual provides all the necessary information to replicate the RIDE trainings. Dissemination activities have included conference presentations, workshops, newsletter articles, and our web page.

The RIDE Project, a model demonstration project, received funding from the United States Department of Education's early Education Program for Children with Disabilities in 1995. From 1995-1998, the project went through its model development phase. In 1998 following the submission of our progress report, we were granted funding for the second phase of the project, replication, which began in July of 1998 and ended in June 2000.

Table of Contents

Goals and Objectives of the Project

The goals of the RIDE Project included the following:

1. Develop, implement, and demonstrate an effective, replicable Model, based on related research findings and observational learning theory, to ensure that children with disabilities are located at the earliest age possible; Identify and address the barriers to effective child find procedures
2. Develop methods and strategies to facilitate the inclusion and independence of young children from 3 to age eight with a wide range of disabilities, in the school, the home, and in the community through the use of assistive technology.
3. Provide the children with timely recommendations for appropriate assistive technology to enhance IEPs and placement in the most inclusive setting.
4. Disseminate the model to other schools and agencies across the state and country so they could replicate the RIDE Project.

Objectives

The objectives for the project were divided into Model Development Objectives and Direct Service Objectives. The major objectives needed to accomplish the goals are listed below.

Model Development Objectives

- Identify the barriers to effective child find procedures and develop products and methods to help eradicate the barriers
- Make the process of meeting children's assistive technology needs more cost effective for school districts
- Increase knowledge and skills of the teachers, service providers, school districts and the children's families so they can effectively determine assistive technology needs of children.
- Develop effective staff development procedures and products to train demonstration site teams to use the RIDE Project model in the demonstration sites.
- Develop procedures and products to assist in presentation of project activities to demonstration sites.
- Develop effective procedures to work with families of children in the RIDE Project demonstration sites.
- Develop effective products to assist school district teams to implement the RIDE Project Model.
- Disseminate information about the RIDE Project Model.

Evaluate RIDE Project Model Development objectives.

Direct Service Objectives

- Implement the RIDE Project in demonstration sites.
- Provide information and skills related to RIDE Project families.
- Provide information and skills related to the RIDE Project to the demonstration sites' AT teams.
- Evaluate RIDE Project Direct Service Objectives.

Theoretical/Conceptual Framework for the Project

Research has long shown that early intervention services for children with disabilities have positive benefits for the targeted children, the families of the children, the educational system, and society. Over fifty years of research on services to young children with disabilities has produced evidence to support claims that early intervention can "1) ameliorate, and in some cases, prevent developmental problems; 2) result in fewer children being retained in later grades; 3) reduce educational costs to school programs; and 4) improve the quality of parent, child, and family relationships" (Salisbury, 1990). Guralnick (1991) reports that early intervention services have the ability to minimize declines in development among children with disabilities. Research by Kirk (1987) shows that children with learning disabilities identified at an early age and receiving early intervention services can partially or totally overcome the disabilities by the time they enter school. A study of 518 children in four Colorado school districts receiving preschool special education for three years and follow-up for three years

(McNulty, Smith, & Soper, 1983) found that approximately 38% of children identified with disabilities and receiving early intervention services exited the special education system before they left primary school. As a result of the reduced need for special education classes by the preschool group, after the cost of the program was subtracted, the school districts saved $1,560 per disabled child and $1,050 per at-risk child over the three-year time frame. Without an effective child find system, children with disabilities remain unidentified, thus delaying or eliminating their access to early intervention services.

Research confirms the lack of understanding by community agencies and service providers of the criteria for identifying young children with disabilities. According to Ponder (1991), family physicians frequently deny the need for treatment of children with developmental problems, often because they expect the children to outgrow the problem. Physicians are the primary means of assuring the future welfare of children with developmental problems, and their familiarity with local services is crucial. Healy (1991) reports that few family physicians include comprehensive developmental testing as part of well-baby care. Healy suggests that family physicians be made aware of the kinds of early intervention available and how to refer children accordingly.

ASSISTIVE TECHNOLOGY

Research (Hammel, & Smith, 1993; Todis & Walker, 1993) shows that children with disabilities often require the use of assistive devices in order to function successfully in an integrated setting. If children with disabilities are to be placed in a regular

classroom, they must receive appropriate aids in order to be effectively integrated into the classroom (Wall & Siegel, 1994). With the push for full inclusion of children with disabilities into regular classes, the need exists to provide all the support needed to ensure that these children succeed. For many young children, assistive technology is needed to facilitate their participation in public school and early intervention programs (Governors Task Force on Technology and Disabilities, 1987).

According to a report by the National Council on Disability (1993), assistive technology helps three-fourths of the children with disabilities who use it to remain in regular classrooms and has reduced school related services required by students with special needs by 45%.

The Reauthorization of IDEA (Public Law 105-17, 1997) requires that assistive needs be addressed for each child identified and qualifying for special education services. Because assistive technology is required as part of a child's individual education program (IEP), providing training for students, teachers, and other professionals, is increasingly more important. The need for training in the use of assistive technology is a widespread problem of national interest and concern. Special education personnel must be cognizant of when technology will assist in meeting the needs of children with disabilities (Lahm, 1989) and what technology is appropriate in meeting their needs (Esposito & Campbell, 1980).

According to a statewide survey of the technology needs of 206 children with disabilities ages birth through five in Arkansas (Parette & VanBiervliet, 1991), 69% of

the respondents reported more information was needed regarding assistive devices/services, 37% reported inadequate training in the use of assistive devices, 62% reported they did not have an opportunity to try out devices before being required to pay for them, and 40% expressed dissatisfaction with the length of time required for the servicing or repair of their devices.

A national survey of special education teacher preparation programs (Blackhurst & MacArthur, 1986) indicated that most institutions of higher education report a need for technology training by special education personnel.

In the Commonwealth of Kentucky, schools are accountable for making improvements to meet the Kentucky Educational Reform Act (KERA) (1990). In the case of assistive technology, there appears to be insufficient local expertise to effectively identify children's assistive technology needs (Sax, Pumpian, & Fisher, 1997; Wheatly, 1993). According to a survey of 113 OVEC educators, 46% indicated a need for further training in the use of assistive technology and 38% indicated it as their number one training need.

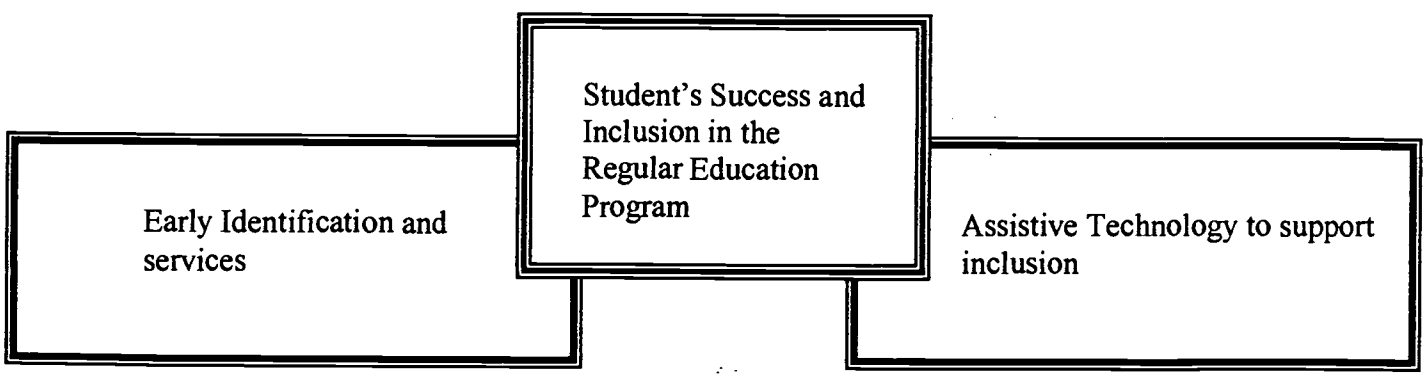
Training in assistive technology for school personnel increases the likelihood of a child to receive the appropriate device, and reducing abandonment of the device by both the educator and the child (Phillips, 1992 Phillips, 1991; Scherer, 1997; Thorkildson, 1994). Effective application of the assistive technologies is ultimately dependent on the knowledge level and technical skills of the service providers and users (Derer, Polsgrove & Rieth, 1996; Huttinger, 1994; Todis, 1996; Vanderheiden, 1987, 1983).

Rural school districts throughout the nation face a special challenge in getting appropriate support services for assistive technology because there is a tendency to centralize resources in the larger metropolitan areas. According to the statewide survey of the assistive technology needs of Arkansas children referenced above (Parette & VanBiervliet, 1991), 36% reported traveling 1-50 miles to receive assistive technology support services, 22% traveled over 50 miles, and 31% traveled over 100 miles; 70% reported no assistance with transportation. In the Commonwealth of Kentucky, there are four assistive technology centers, each located in larger metropolitan cities. The average distance most individuals in the OVEC area must drive to reach an assistive technology center is 75 miles.

Description of the Model and Participants

The controlling factors of the RIDE model are shown in Figure 1. The model involves, children, teachers, related service personnel, parents, and the community. The key goal is the success of students with disabilities in the regular education environment and the early identification and assistive technology components are the foundation for the model.

Figure 1. RIDE Model



"early identification and services" component focuses on enhancing the child find efforts that exist in school districts through the development of a comprehensive package to be distributed to community agencies and service providers.

The next component, "assistive technology to support inclusion" provides a set of training modules designed to build assistive technology teams in local school districts. It also includes establishing central lending library resources for school districts and a system of support for team members, teachers, and parents. The training program developed by the RIDE Project provides appropriate and effective trainings necessary to provide team members with a core base of knowledge necessary to identify the assistive technology needs of children with disabilities. The trainings promote awareness of the importance assistive technology plays in the education of children with disabilities.

Participants during Model Development (Years 1-3)

During Years 1-3, the RIDE Project staff trained teams from 6 member school districts of the Ohio Valley Educational Cooperative and worked with children in a total of 27 classrooms. Each of the 6 districts remained as continuation sites during years 4 and 5. In the state of Kentucky many counties participate in the National Head Start program as well as the state funded preschool program.

The Anchorage Independent School in Anchorage, Kentucky serves children from Kindergarten through 8th grade. They have a total enrollment of 385 children in the K-6 range and a total enrollment of 13 preschool age children. Anchorage referred a total

of 7 children to the RIDE Project between the ages of 3 and 8. The average yearly enrollment of children with disabilities between 3 and 8 years is 20, thus approximately 35 % of the 3-8 year olds were served by RIDE staff.

Carroll County Schools in Carrollton, Kentucky operates 2 elementary schools serving children from PreK-6th. They have a total enrollment of 830 children in the K-6 range and a total of 156 preschool age children. Carroll County referred a total of 9 children to the RIDE Project between the ages of 3 and 8. The average yearly enrollment of children with disabilities between 3 and 8 years is 74 thus approximately 12 % of the 3-8 year olds were served by RIDE staff.

Grant County Schools in Williamstown, Kentucky operates 3 elementary schools serving children from PreK-6th. They have a total enrollment of 1745 children in the K-6 range and a total of 190 preschool age children. Grant County referred a total of 35 children to the RIDE Project between the ages of 3 and 8. The average yearly enrollment of children with disabilities between 3 and 8 years is 166, thus approximately 21 % of the 3-8 year olds were served by RIDE staff.

Henry County Schools in New Castle, Kentucky operates 3 elementary schools serving children from PreK-6th. They have a total enrollment of 980 children in the K-6 range and a total of 61 preschool age children. Henry County referred a total of 16 children to the RIDE Project between the ages of 3 and 8. The average yearly enrollment of children with disabilities between 3 and 8 years is 53, thus approximately 30 % of the 3-8 year olds were served by RIDE staff.

Trimble County Schools in Bedford, Kentucky operates 2 elementary schools serving children from PreK-6th. They have a total enrollment of 667 children in the K-6 range and a total of 83 preschool age children. Trimble County referred a total of 12 children to the RIDE Project between the ages of 3 and 8. The average yearly enrollment of children with disabilities between 3 and 8 years is 48, thus approximately 25 % of the 3-8 year olds were served by RIDE staff.

The West Point Independent School in West Point, Kentucky serves children from Kindergarten through 8th grade. They have a total enrollment of 147 children in the K-6 range and a total enrollment of 32 preschool age children. West Point referred a total of 4 children to the RIDE Project between the ages of 3 and 8. The average yearly enrollment of children with disabilities between 3 and 8 years is 20, thus approximately 20% of the 3-8 year olds were served by RIDE staff.

Participants during Replication of the Model (Years 4 and 5)

During Years 4 and 5 of the RIDE Project, AT Teams were developed in 3 new sites. Each of the new sites was located in Kentucky. Two of the districts were members of the Ohio Valley Educational Cooperative.

Gallatin County Schools in Warsaw, Kentucky operates 2 elementary schools serving children from PreK-6th. They have a total enrollment of 785 children in the K-6 range and a total of 54 preschool age children. Gallatin County referred a total of 6 children to the RIDE Project between the ages of 3 and 8. The average yearly

enrollment of children with disabilities between 3 and 8 years is 51, thus approximately 12% of the 3-8 year olds were served by RIDE staff.

Kenton County Schools located in Erlanger, Kentucky operates 12 elementary schools serving children from PreK-6th. This is a rapidly growing school system that is located between three large metropolitan cities, Louisville, KY, Lexington, KY, and Cincinnati, Ohio. They have a total enrollment of 5663 children in the K-6 range and a total of 401 preschool age children. Kenton County referred a total of 31 children to the RIDE Project between the ages of 3 and 8. The average yearly enrollment of children with disabilities between 3 and 8 years is 565, thus approximately .05 % of the 3-8 year olds were served by RIDE staff.

Spencer County Schools located in Taylorsville, Kentucky operates 1 elementary school serving children from PreK-6th. They have a total enrollment of 914 children in the K-6 range and a total of 122 preschool age children. Spencer County referred a total of 8 children to the RIDE Project between the ages of 3 and 8. The average yearly enrollment of children with disabilities between 3 and 8 years is 110, thus approximately .07 % of the 3-8 year olds were served by RIDE staff.

Total Participants

It was not at all uncommon for children to move in an out of the school districts since 8 of the nine sites that RIDE served over the 5 year project period, are located in high migrant population areas. In addition, most of the districts that RIDE served are considered rural and have a high turn over rate in educators, particularly special

education teachers and related service personnel. All total, 93 children were eligible for the RIDE Project, as indicated by their need of assistive technology. During the 5-year period, data was collected on 72 children. Table 1 discloses the number of children professionals, and family members the RIDE Project served during the five years of the project. The RIDE Project has impacted 93 children, 247 professionals, and 69 family members.

Table 1: Impact Chart

School District	Number of schools	Number of classrooms	Children Served	Family Members	Professionals
Anchorage	1	4	6	4	22
Carroll	2	4	9	26	29
Gallatin	1	2	4	1	12
Grant	3	6	21	12	38
Henry	3	5	10	7	34
Kenton	6	13	26	16	58
Spencer	1	4	5	4	22
Trimble	2	3	7	6	15
West Point	1	2	4	3	17

Methodological or Logistical Problems and How They Were Resolved

Change in Team Concept

As a result of a NEC*TAS consultation with Mary Shields and Patricia Huttinger in 1995, the process for the assistive technology assessment was redirected from a transdisciplinary team approach to a multidisciplinary approach based on the way that the schools in the target districts were set up. The teams established through the RIDE Project are comprised of a combination of the following discipline areas, some teams with all discipline areas represented and some with a couple of the discipline areas covered; Speech Therapists, Occupational Therapists, Special Education Teachers, Regular Education Teachers, Physical Therapists and Assistive Technology Practitioners. Consistent with the multidisciplinary team model the responsibilities of each professional and the contribution to the team they make are clearly defined.

Technology Needs

Originally we anticipated that the majority of the children who would be referred to the RIDE Project would have AT needs in the motor area. When the vast majority of children in the Demonstration sites turned out having Augmentative Alternative Communication needs, our contractual needs changed from Occupational Therapy and Physical Therapy to and Augmentative Communication Specialist. This factored in when we were determining what devices to purchase for the central lending library and also had us looking for additional funding from outside sources to fund AAC devices.

Turn-Over Rate

We experienced a high turn over rate of team members and related service providers, particularly occupational therapists, speech therapists, and physical therapists. Additionally, many of the teachers who were to serve as team members left to take jobs in other school districts. Many of the OVEC school districts serve as a "training ground" for special education and regular education teachers, because they are rural and small. Once the teachers have a year or two of teaching experience, they typically apply to districts closer to their homes and get hired. There was little the project could do to resolve this problem, however, we did find additional funding to produce some mini training videos that can be used to help new teachers become familiar with some of the concepts surrounding assistive technology and some of the devices. We have also been working with the University of Louisville to come up with a method of placing the training modules on-line. We submitted a grant to the USDOE for Outreach, which would have allowed us to place all of the modules on-line, however, we did not get funded. We provided some individuals stipends for attending trainings after their normal workday and on weekends, so that we could replace the team members who left.

Missing Data

For a number of reasons beyond our control, we did not receive sufficient data on children that the project served. Some circumstances were beyond our control. One of our school districts was closed for several months due to a devastating flood. A number of children would move frequently which made it difficult to collect consistent data.

We also had difficulty getting teachers and related service personnel to return the monthly data forms. Much of this was due in part to the increased amount of paperwork that the teachers faced due to the Kentucky Educational Reform Act and a lack of time in their workday to complete the forms.

We did increase the number of monthly data forms we collected during the replication phase of the project by providing incentives in the form of gift certificates for the teachers and related service personnel. In order to get a gift certificate, they had to return a data form for every month on children they served that were in the RIDE Project.

Lack of Parental Involvement

We had a difficult time getting parents to attend trainings that the project held. We sent a questionnaire to parents asking what would be the best time of day to hold the training and gave them a choice of days. The project, through donations from community organizations, provided child care reimbursement, a meal, and transportation. With all of this in place, we had, on average, a 2 percent attendance rate.

Parents were also asked for feedback on the project via a survey. During the Model Demonstration phase, we had a minimal return rate. Incentives were offered during the Replication phase, in the form of Wal Mart gift certificates. Our rate of return did increase to approximately a 50% return rate.

Evaluation Findings

The RIDE project has been in operation since 1995. The purpose of the project was to develop and demonstrate a model that supports the inclusion of young children

with disabilities in their school environments, their homes, and in the community. Objectives of the project were to find, evaluate, and connect young children with needed assistive technology and to build local school district capacity to sustain these objectives. The analysis to follow is analysis of data collected since March 1995. The analysis will include information on child find data, student performance and utilization of assistive technology, teacher training test performance, and parent knowledge and satisfaction with Project RIDE.

Child Find

The RIDE Project focused on change in three outcome areas which together make up a successful child find effort: community awareness, parental awareness, and early identification of children who need early intervention services. The project has far exceeded its expectations in child find outcomes.

Community Awareness

Improved community awareness of early intervention can be evidenced by the increase in community referrals and in the increase in the number of children referred. During the five years of its operation over four thousand students were identified in the nine participating districts. Table 2 provides a listing of the total number of students with disabilities, ages 3 to 8, found within the OVEC region in both the initial and replication sites. This information represents data collected during the three initial years and the most recent replication year. Since the initiation of the project, a total of 4,130 students were identified.

Table 2: Child Find Totals

Anchorage	YEAR	AGE 3	AGE 4	AGE 5	AGE 6	AGE 7	AGE 8
	1995	2	0	1	6	8	5
	1996	0	4	0	3	4	6
	1997	2	2	8	1	4	4
	1998	2	3	2	7	7	6
	1999		10	3	5	10	7
Carroll	YEAR	AGE 3	AGE 4	AGE 5	AGE 6	AGE 7	AGE 8
	1995	14	16	18	13	17	19
	1996	7	20	16	14	18	19
	1997	14	7	18	20	14	21
	1998	7	17	9	13	18	9
	1999	10	11	21	10	15	21
Gallatin	YEAR	AGE 3	AGE 4	AGE 5	AGE 6	AGE 7	AGE 8
	1995	6	5	6	9	11	8
	1996	4	8	12	11	10	22
	1997	8	9	11	14	15	13
	1998	3	11	9	11	13	7
	1999	6	11	16	14	14	14
Grant	YEAR	AGE 3	AGE 4	AGE 5	AGE 6	AGE 7	AGE 8
	1995	6	17	47	37	44	36
	1996	12	18	47	63	36	40
	1997	5	20	34	49	49	33
	1998	12	18	45	46	41	37
	1999	5	18	55	52	36	42
Henry	YEAR	AGE 3	AGE 4	AGE 5	AGE 6	AGE 7	AGE 8
	1995	7	10	12	9	16	16
	1996	5	5	11	8	6	14
	1997	3	8	8	16	3	11
	1998	3	15	19	10	13	7
	1999	2	14	19	26	7	17
Kenton	YEAR	AGE 3	AGE 4	AGE 5	AGE 6	AGE 7	AGE 8
	1995	61	120	95	85	113	86
	1996	51	93	132	90	96	96
	1997	70	107	103	108	88	85
	1998	59	111	119	95	101	93
	1999	91	146	140	129	92	99
Spencer	YEAR	AGE 3	AGE 4	AGE 5	AGE 6	AGE 7	AGE 8
	1995	15	27	19	19	4	15
	1996	21	34	29	10	16	10
	1997	17	51	26	16	13	14
	1998	26	40	41	9	15	13
	1999	21	46	36	31	10	16
Trimble	YEAR	AGE 3	AGE 4	AGE 5	AGE 6	AGE 7	AGE 8
	1995	4	7	8	9	4	15
	1996	4	9	11	16	9	17
	1997	1	12	8	12	13	9
	1998	2	8	10	13	11	14
	1999	3	11	10	16	12	11
West Point	YEAR	AGE 3	AGE 4	AGE 5	AGE 6	AGE 7	AGE 8
	1995	1	5	5	9	2	3
	1996	2	4	7	6	10	5
	1997	4	5	3	3	2	4
	1998	4	5	5	2	7	3
	1999	2	5	1	3	3	4
		13	24	21	23	24	19

SUM/AGE	604	1123	1255	1148	TOTAL YR.
SUM/AGE/95	116	207	211	196	730
SUM/AGE/96	106	195	265	221	787
SUM/AGE/97	124	221	219	239	803
SUM/AGE/98	118	228	259	206	811
SUM/AGE/99	140	272	301	286	999
TOTAL					4130

Parental Awareness

Increased parental awareness is demonstrated by more parents attending screenings and subsequently accessing community services. During the three-year model development stage, 5 of the 6 RIDE districts reported an increase in the number of referrals being received by community agencies. Also reports showed an increasing number of parents at the Spring child find clinics where more children were identified.

Child Identification

The third outcome, early identification of children who need early intervention services can be evidenced by the increasing number of children in districts participating in RIDE, who are receiving services. An analysis was performed comparing the child find data of the project's demonstration sites with those of other non-affiliated project schools of comparable demographic and geographic characteristics. The analysis controlled for population size, annual income, education, and relative geographic size and proximity to metropolitan areas. Relatively equivalent school districts were found for each of the respective

schools. Total number of children was used to compare the various schools. An Analysis of Variance was performed to determine if there were significant differences between any of the schools. The analysis indicated that the model schools found significantly more children at the probability level of .0000 level. Indicating that the child find efforts of the model demonstration sites far exceeded other non-participating sites.

Student Performance/Assistive Technology Utilization

As school districts determined eligibility and placement through the IEP process, eligible students were referred for possible assistive technology needs. As screening and student identification efforts were implemented, a total of 73 students were identified and involved as new students across all of the original and replication sites. Not all children had four months of data collected on their assistive technology utilization, thus the data in this report reflects data collected on a total of 39 students. Some of the student participants have moved away or transitioned into an elementary education system.

The total percentages that RIDE served (found on pp. 12-15) may not appear to be significant, but when we compared the baseline data that was taken before the initiation of the project and the data received at the end of the project, the numbers are more indicative of the impact of the RIDE Project. Each of the districts were asked to complete a questionnaire that asked the following questions: 1) How many children between the ages of three and eight have an IEP with AT addressed in it; 2) How many children between the ages of 3 and 8 do they believe need AT; 3) How many of the children in question 1 and 2 are full inclusion; 4) How many children 3-5 years were referred from outside sources. Table 3 provides a summary of the Pre and Post Project Baseline data, as provided by the directors of special education for each district.

Table 3: Baseline Data-Pre and Post Project

District	IEP with AT		Need AT		Inclusion		Outside source referral	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Anchorage	1	4	2	0	0	3	1	0
Carroll	0	4	4	0	4	4	1	0
Gallatin	3	4	10	1	2	4	2	0
Grant	1	5	5	2	3	5	2	8
Henry	3	9	8	5	3	2	0	0
Kenton	0	44	30	0	24	15	2	0
Spencer	0	14	4	2	4	16	1	3
Trimble	0	5	0	0	0	5	1	2
West Point	3	1	5	0	4	1	3	0

Data was collected on twenty-six students from the original demonstration sites. These data were analyzed with respect to the seven domains (Social/Emotional; Physical; Recreation/Leisure; Cognitive, Academic Communication; and Vocational). These domains are routine components in the records and progress reports for all Kentucky Schools. These data were analyzed by comparing the first two months of technology utilization with the last two months. No students were analyzed that had less than four months of data collected. The data indicates that all students have access to either high or low assistive technology devices and services for at least one to thirty minutes a day. The data show that, on average, the students used technology slightly more than 30 minutes per day when they began the RIDE project. Where as, during the most recent two months of data analyzed, the students utilized technology on average nearly 60 minutes per day. A paired t-test was performed comparing the initial two months and last two months of technology utilization for each student. The paired t-test analysis indicates that there was a significant difference in utilization of assistive technology.

The probability for both pre and post-tests were significance at .0001 level. Based upon the information gathered and the follow-up statistical analysis, the participating students at the original demonstration sites did increase their utilization of technology while participating in the RIDE project.

Data was also collected on 13 students at the replication sites. These data were collected in a similar fashion as the original demonstration sites. The data tracked the seven major educational domains and their utilization of technology within these domains. An analysis was performed comparing the students at the replication sites initial and last two months of assistive technology utilization. Again no student was included in the analysis unless they had four months of data. Data for this group indicated that there was a significant improvement in their assistive technology utilization. The result of this data was significant at the .002 level.

Teacher Performance

Teacher training was also implemented during at the replication sites during the recent project year. A total of 30 teachers were trained in the utilization of technology and assistive technology in the classroom. Two separate inservice trainings were offered one on AT for persons with Hearing Impairments the other on AT for persons with Vision Impairments. Data for the teachers were collected and analyzed regarding their performance on both a pretest and posttests examination on Assistive Technology and Knowledge of Basic Technology training in the respective areas. The average AT Hearing Impairment pre-test score for the participants was 75%. The average Hearing Impairment AT post-test score was 98%. The average Vision Impairment Utilization

Skills pre-test score was 56% with an average post-test score of 92%. These data were analyzed using a paired t-test. All results were found to be significant at the .001 level. Based upon the results of the t-test the teachers evidenced significant gains in knowledge and skills in the use and implementation of assistive technology and utilization of computers.

Parent Evaluation

Parent's needs were also evaluated. A survey was developed to assess the parent's knowledge and understanding of their child's needs and utilization of technology. Of those parents that responded, over 82% knew of their child's needs, 63% felt that their child needed to use technology at home and 80% were aware of their child's participation in the RIDE program. Of those parents who were aware of their child's participation in the RIDE program, a 100% were either satisfied or very satisfied with the program. These data are almost an exact replication of last year's data.

Project Evaluation Summary

Across the five years of the RIDE project significant gains have been accomplished. In reviewing the child find data, significantly large numbers of students were found as a result of the Project RIDE efforts. Even as compared to other similar schools, Project RIDE exceeded other child find efforts. Further, each year of Project RIDE's involvement in the model site schools showed significant gains in accessing and finding students with disabilities.

Student access to assistive technology improved across the board in terms of access and utilization. Each year that data was analyzed significant differences between

baseline and intervention was found. The significance levels for these years ranged from .001 to .0000 for the most recent year. The demonstration of these significance levels show quite convincingly that Project RIDE and the activities that the project represents had a significant impact on students with disabilities. While the above analysis does not include data that was unavailable or not collected, improvements were demonstrated to occur.

Teacher performance on understanding of AT concepts also demonstrated significant improvements. Every year of the Project RIDE's involvement in the schools teachers, when compared on a pre and post evaluation test, gained significant levels of knowledge about AT. The data show that teachers gained knowledge far exceeding chance. The probability levels ranged from a low of 05 to high of .000. Each year the teachers improved their performance on the testing, in an absolute sense, anywhere from 50 to 70% above the pretest score. While the second to last year of the project absolute gains of teachers barely achieved passing grades (a score of 70%), the teachers did improve significantly above their pretest scores of 20 to 30%.

Parent evaluations were correspondingly glowing of Project RIDE's influence and involvement. On average, parents felt that RIDE benefited both themselves and their child.

Project Impact

Products

The RIDE Project developed a number of print and video materials during the 3-year model development and 2 year replication periods. The products are described in the following sections.

Printed Materials: The RIDE Training Manual, a 714 page trainer of trainers manual with 18 training modules, was developed to provide participants with a common reference for planning and conducting a series of workshops on assistive technology. Each of the 18 training modules is designed to provide 3,6, or 12 hours of training. Each of the training modules has a set of handouts, list of equipment that will be needed, the objectives of the module, and a sample agenda. The training modules can be completed in full or in part and can be modified to meet the needs of the participants.

On the Road to Success is a booklet designed to educate parents about the importance of early intervention services and the early warning signs that a child might be at risk of having developmental problems. Descriptions of the early childhood programs are included along with the phone numbers in their area to obtain more information. A Spanish version of the booklet was developed, but was pulled out of circulation by the Project staff due to translation errors.

Videos: *RIDE Project: Early Intervention* is a 30-minute video targeting community agencies that serve families. The video won an award in 1996 from the National

Videographers Association. Narrated by Dr. Richard McChane, pediatric specialist from the University of Louisville Child Evaluation Center, the RIDE video provides an abundance of information about the development of children and the risk factors that are indicative that a child may need early intervention services. Filmed in early childhood centers that participated in the RIDE Project, it demonstrates a diverse population of children being served in a full inclusion classroom.

The RIDE staff produced 2 additional videos with funds received from the local WHAS Crusade for Children. Although the videos were not produced with RIDE funds they were used in the project. The two videos: *Intellikeys Troubleshooting* and *Low Tech Solutions for the Classroom* provide demonstrations that parents and teachers can use to supplement the trainings.

Software. A CD was created that contains a collection of communication boards and Intellikeys Overlays that were designed by the RIDE staff, RIDE participants, and that were located online. By compiling a CD with all of these resources, therapists, parents, and teachers do not have to take the time to create the most widely used overlays and communication boards, and they can adapt the boards to meet the needs of each student.

Availability. The RIDE Project products are available from the Ohio Valley Educational Cooperative, 100 Alpine Drive, Shelbyville, Kentucky 40065. The Web site is www.ovec.org

Dissemination Activities

RIDE Project staff have disseminated materials including information booklets, project brochures, newsletters, articles, and videotapes by mail, in person- hand delivering, via the RIDE Web page, and through televised university classes. RIDE staff have also given numerous presentations on the RIDE Project at local, state, regional, and national conferences, workshops, meetings, sponsored by various organizations and agencies. RIDE staff presented at Closing the Gap, Minneapolis, MN; Technology for Inclusion, Austin, Texas; Kentucky Department of Education Early Childhood Conference and Exceptional Children's Conference; Kentucky Educational Technology Conference; University of Louisville Department of Special Education; and Kentucky Association for the Education of Young Children. Overall, through the various presentations, the project has impacted over 450 people.

Implications of Findings

One of the most important findings is that in order for students to have access to assistive technology there has to be a core of individuals in a student's environment that have a base knowledge of AT and how to utilize AT to enhance participation in the regular curricular activities. The training materials developed by the project are a contribution to programs serving children with disabilities and their families. The data and feedback received by the project indicates that students in the participating districts are utilizing AT more frequently than before the project began and teachers, service providers, and families are more informed about AT and are more comfortable having children use AT in the home and school. For many children, the AT that they

have been using is the difference between participating in a regular education classroom and being in a resource room, it provides them with the means to be independent.

Future Activities

The RIDE Project, through the University of Louisville submitted a grant for Outreach in December of 1999, however we did not receive funding. We intend to resubmit our application under a new competition as well as look for other funding sources.

Assurance Statement

Copies of this report have been sent to the Office of Special Education at the US Department of Education and to ERIC. A copy of the title page and abstract was sent to NEC*TAS, at Chapel Hill.

REFERENCES

Blackhurst, A. E. & MacArthur, C.A. (1986). Microcomputer use in special education personnel preparation programs. *Teacher Education and Special Education, 9*, 27-36.

Derer, K., Polsgrove, L., & Rieth, H. (1996). A survey of assistive technology applications in schools and recommendations for practice. *Journal of Special Education Technology, 13*(2), 62-80.

Esposito, L. & Campbell, P. H. (1987). Computers and severely and physically handicapped individuals. In J. D. Lindsey (Ed.), *Computers and exceptional individuals.*,(pp. 105-124).

Governors Task Force on Technology and Disabilities. (1987). Issue Team on Technology for People with Disabilities, 1986.

Guralnick, M. J. (1991). The next decade of research on the effectiveness of early intervention. *Exceptional Children, 58* (2), 174-183.

Hammel, J. M. & Smith, R. O. (1993). The development of technology competencies and training guidelines for occupational therapists. *The American Journal of Occupational Therapy, 47*, 970-979.

Healy, A. (1991). Early intervention services for infants with disabilities. *American Family Physician, 43* (1), 102.

Hutinger, P. L. (1994) State of practice: How assistive technologies are used in educational programs of children with multiple disabilities. *A Final Report for the Project: Effective use of technology to meet educational goals of children with disabilities*, (ERIC Document Ed 378721).

Kirk, S. A. (1987). The learning disabled preschool child. *Teaching Exceptional Children,* Winter, 78.

Lahm, E. A. (Ed.) (1989). *Technology with low incidence populations: Promoting access to education and learning.* Reston, VA: Council for Exceptional Children.

McNulty, B., Smith, D. B., & Soper, E. W. (1983) Effectiveness of early special education for handicapped children. Colorado Department of Education.

National Council on Disability Report. (1993). Report to the President on the financing of assistive technology devices and services for individuals with disabilities.

Parette, H.P. & VanBiervliet, A. (1991). Rehabilitation assistive technology issues for infants and young children with disabilities: a preliminary examination. *The Journal of Rehabilitation, 57*, 27.

Phillips, B. (1991). *Technology abandonment: From the consumer point of view.* Washington, DC: Request Publication.

Phillips, B. (1992). *Perspectives on assistive technology services in vocational rehabilitation: Client and counselors.* Washington, DC: National Rehabilitation Hospital, Assistive Technology/ Rehabilitation Engineering Program.

Ponder, J. M. (1991). The family physician's rule in early intervention. *American Family Physician., 43* (1), 103.

Reauthorization of the individuals with disabilities education act (1997). 34 CRF Parts 300, 301, & 303.

Salisbury. (1990). Providing effective early intervention services: why and how? ERIC Document # 340-160.

Sax, C. Pumpian, I., Fisher, D. (March, 1997). Assistive technology and inclusion. *CISP Issue Briefs*, 1-5.

Scherer, M. J. (1997). Assessing individuals' predispositions to the use, avoidance, or abandonment of assistive technologies. *Journal of Rehabilitation Research & Development, 31*, 135-136.

Thorkildsen, R. (1994). *Research synthesis on quality and availability of assistive technology devices. Executive Summary. Technical report no. 8.* (ERIC Document ED386856).

Todis, B. (1996). Tools for the task. *Journal of Special Education Technology, 13*(2), 52-61.

Todis,B. & Walker, H (1993). User perspectives on assistive technology in educational setting. *Focus on Exceptional Children,* 26,3.

Vanderheiden, G. C. (1983). The practical use of microcomputers in rehabilitation. *Rehabilitation Literature, 44* 3-4.

Vanderheiden, G. (1987). Service delivery mechanisms in rehabilitation technology. *American Journal of Occupational Therapy, 41*(11), 703-710.

Wall, T. & Siegel, J. (1994). All included: inclusion of special education children in regular classrooms cannot happen without technology. *Electronic Learning, 13*, 24.

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

NOTICE

REPRODUCTION BASIS

☐ This document is covered by a signed "Reproduction Release (Blanket) form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

☑ This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").