A project report describes a Tennessee State University planning project for an educational laboratory serving the Appalachian states of Kentucky, Tennessee, Virginia, and West Virginia. A needs assessment and think tank session were conducted to identify educational problems, gather data on educational strengths/weaknesses in each state, generate ideas for educational improvement, explore research options of educators, suggest new programs/research topics, identify strategies for educational laboratory operations/services, and explore potential relationships with other Appalachian educational organizations. Regional problems were analyzed from state, regional, and national perspectives. Educational trends for the Appalachian region were discussed. Educational research, development, dissemination, assistance, and training capabilities of organizations in the region were assessed and their effectiveness evaluated. An organizational design for the regional educational laboratory was proposed. Capabilities of Tennessee State University to establish a laboratory were described, including staff, research/development activities, facilities, equipment, library resources, and satellite institutions. Strategies for governance, management, planning, and evaluation systems for the laboratory were presented. Extensive appendices list survey and think tank participants, related research projects of Tennessee State University and its satellites, and recurring educational problems identified in the think tank session. A bibliography with 169 references is included. (LFL)
NEEDS ASSESSMENT OF THE APPALACHIAN REGION:
RESULTS OF THINK TANK AND SURVEY

Dr. Merriel Bullock, Editor

FINAL REPORT: Part Three of Three
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Preface

Tennessee State University Center of Excellence—Basic Skills for the Disadvantaged was awarded a Grant to Plan for a Regional (Appalachian) Educational Laboratory. The National Institute of Education has designated Tennessee, Kentucky, Virginia and West Virginia as the States which comprise the Appalachian Region. During the planning phase, numerous documents were perused and/or utilized to ascertain information which would enhance the acquisition of information which reflects the mission, functions and governance structures of laboratories as well as the socioeconomic and educational data pertaining to the region. In addition, the work scope of the project entailed conducting a Think Tank and a Needs Assessment Interview via extensive consultations with knowledgeable organizations and individuals. The results of the aforementioned endeavors contained herewith reflect the range and depth of documents utilized for the accomplishment of this project.
Acknowledgments

This publication is the result of the accomplishments of numerous research activities conducted by the project staff and consultants.

Major contributions to the success of this endeavor and their respective role(s) are as follows:

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Special thanks are also extended to the many organizations and individuals who provided input and support services.
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1.0 Grant to Plan for an Educational Laboratory in the Appalachian Region

Tennessee State University was awarded a "Grant to Plan for an Educational Laboratory" for the Appalachian Region. The National Institute of Education has recently redefined the Appalachian Region. The Appalachian Region currently consists of four States: Kentucky, Tennessee, Virginia and West Virginia. The work scope of the grant entailed conducting (1) a needs assessment interview via extensive consultations with knowledgeable organizations and individuals, (2) Think Tank, (3) indepth reviews of relevant research and literature, (4) secondary analyses of existing data, and (5) organization design activities.

Implementation of the aforementioned activities resulted in the accomplishment of the five major objectives of the grant. They are delineated as follows:

1. To determine the major social, economic and educational characteristics of the Appalachian Region;
2. To identify the most persistent educational problems for which laboratory services are most needed;
3. To determine the adequacy of existing research and development in the region;
4. To identify promising strategies for the organization focus, operation and services of the laboratory, and
5. To explore the potential for relationships with other appropriate organizations in the Appalachia. Highlights of information and data gathered are contained within these three final reports (i.e. Part One of Three, Part Two of Three and Part Three of Three).
1.1 Needs Assessment Survey

One of the primary objectives of the planning activities of the planning grant entailed conducting a needs assessment interview via extensive consultations with knowledgeable organizations and individuals. These interviews were conducted throughout each of the four states (Kentucky, Tennessee, Virginia and West Virginia) within the Appalachian Region. The consultations were conducted through the combined use of site visits and personal interviews, group discussions and telephone conversations.

A judgmental sample of organizations were selected for inclusion in this study. Knowledgeable representatives of the following organizations were identified and consulted within each state. The following subsections delineates a partial listing of organizations which were visited or contacted via telephone. A total of 70 organizations participated in the needs assessment. (Refer to Appendix D for a complete listing of organization and/or participants by state of the study).

1. Parents
   a. Parent-Teacher Associations
   b. Association of Children with Learning Disabilities

2. Students
   a. Student Governments of various Institutions of higher education
   b. Area High School Student Council

3. Legislators
   a. House Education Committee
   b. Senate Education Committee
4. Research Centers  
   a. Memphis State University—Bureau of Educational Research and Service  
   b. University of Virginia—Evaluation Research Center  

5. State Department of Education  
   a. Virginia State Department of Education  
   b. West Virginia State Department of Education  

6. State Teacher Associations  
   a. Kentucky Education Association  
   b. Tennessee Education Association  

7. Multicultural Organizations  
   a. Bureau of Jewish Education  
   b. NAACP  
   c. Effective Advocacy for the Handicapped  
   d. Tennessee Indian Council  

A needs assessment instrument entitled "Interview Protocol" was designed and utilized to ascertain pertinent data. Four primary categories emerged. Questions 1.0 - 2.0 inquired about the educational strengths and sense of value placed on the State's Schools. Questions 3.0 - 4.0 ascertained the major problems, weaknesses and barriers encountered in the state's educational system. Question 5.0 pursues information relative to programs that the participants would propose to improve education. Questions 6.0 - 12.0 assesses research options which are available to educators and to propose new and/or innovative programs and research topics. (Refer to Appendix A: Interview Protocol for additional information.)

An analysis of the data is presented in Chapter 2: Critical Analysis of Key Strengths and Problems of Education in the Appalachian Region and the Most Important Trends Influencing
Education. Data is presented from a statewide, regional and national perspective.

1.2 Think Tank

A "Think Tank" session was held at the Maxwell House Hotel in Nashville, Tennessee during the timeframe of Sunday, February 17, 1985 through Monday, February 18, 1985. On Sunday, from 6:00 - 7:00 p.m., an Introductory Meeting was held. Two brainstorming and discussion sessions were held on Monday commencing at 8:00 a.m. and concluded at 4:30 p.m.

The participants in the Think Tank represented individuals from predominantly Black and White institutions as well as institutions located in rural and urban settings. In addition, the participants were almost evenly distributed between males and females. As a result the participants represented a cross section of the population. Refer to Appendix E: Listing of Universities Participating in the Think Tank Meeting. The discussion and brainstorming session focused on the identification of Appalachia's most persistent educational problems and needs, the exploration of potential relationships between various organizations within the region and the development of innovative and promising strategies to organize, focus and operate an educational laboratory in the Appalachian Region. The sessions elicited responses which represented various perspectives. They included (1) urban, (2) rural, (3) multicultural, (4) higher education and K-12. During the final session of the "Think Tank," all of the needs identified were grouped within the twelve major recurring themes. The recurring themes and some of their respective subgrouping of needs are
listed below.

Recurring Themes

1. **Teacher Preparation - inservice, preservice curriculum**
   a. Programs to assist in application of research and exemplary programs in the classroom
   b. Classroom management

2. **Community Support & Involvement**
   a. Need for parental and community involvement
   b. High tech cooperation (schools and industry)

3. **Equal educational opportunities, resources, quality of programs - minority issues**
   a. Programs dealing with techniques of working with different kinds of groups
   b. Generate more data relative to minority groups. (across all components)

4. **Evaluation Issues - application of testing, use of testing impact on minorities**
   a. After school program to help students pass proficiency tests
      b. Evaluation process for all teachers

5. **Public School Curriculum Issues**
   Effective Schools Research
   Vocational Education -vs- Traditional
   Early Childhood Education
   a. Programs to help districts implement master plan
   b. Self-auditing and review board for community (not with local system) to audit curriculum programs
   c. More resources for Special Education - learning disabilities, vision training
   d. System to give better start in early years
   e. Magnet schools - gifted education
   f. School reorganization
6. Funding
   a. Foundation for soliciting funding to help solve the problems of women entering job market
   b. Force local districts to comply with minimum standards to receive funding

7. Basic skills/achievement issues
   Skills, how to learn, Education/employment relationship
   a. Remedial programs for low achievers
   b. Technical assistance in basic skill areas
   c. Tutorial programs to improve student achievement

8. Leadership issues - principals
   Central office staff - staff development
   a. Inservice development for administrators and school board
   b. Student discipline (policies)

9. Drop out - adult literacy issues

10. Teaching as a profession - condition of employment for teachers
    a. Accountability measures - tying more money to better performance
    b. Help public relations for teaching profession
    c. Provide a place for teachers, future and experienced, meet, handle burnout

11. Cultural Diversity
    a. Improved teacher education programs - multicultural training program - inservice, preservice, administrators
    b. Program for disadvantaged and socio-economic racial groups - tutorial, basic skills

12. Politics of education - involved in all issues government control, centralization - erosion of local control
    a. Special Education network to align connections between politics and programs for Special Education.
b. Have on-going oversight by state legislators - to assess progress of implementing educational reform

A complete listing of all of the identified needs is included in Appendix L: Think Tank--Recurring Themes.

Further analyses of the data collected during the Think Tank in conjunction with the data from the Needs Assessment Survey is presented in Chapter 2 of this document. Data is presented from a statewide, regional and national perspective.

Chapter 2

Critical Analysis of Key Strengths and Problems of Education in the Appalachian Region and the Most Important Trends Influencing Education in Appalachia Over the Next Five to Ten Years

2.0 Overview

National, regional and State education reform initiatives are, of course, directed to problems in education that need to be resolved. Education reform initiatives also reflect educational strengths that support the development of the solutions the reforms are designed to achieve.

During 1983, deep-seated dissatisfaction and controversy over the quality of public education, widespread and sincere public concern about complex domestic problems, efforts of professional educators, and in-depth media coverage of education and other pressing domestic issues culminated in an unprecedented education reform movement. Individuals and groups historically divided by differences in educational orientations and philosophies, and members of the public, private and business communities joined together across the nation to achieve the goal of excellence in education. Characterized by negotiation, cooperation, commitment to sustain change and innovation, the reform movement that has ensued promises to leave no State, no community, no organization and no individual engaged in educational endeavors untouched by its effort to achieve excellence.

The reports of the National Commission on Excellence in Education, "A Nation at Risk", and Governor James B. Hunt's Task Force on Education for Economic Growth, Action for Excellence, tapped deep public concern about the nation's public schools. A tidal wave of school reform promises to once again renew American education. Local school boards, State school boards and State legislative bodies are demanding comprehensive reform initiatives including increased academic course requirements for secondary schools, teacher education reforms,
and performance-based pay. Evidence of the depth of the reform efforts is the extent of the response of the public, the press and broadcasting media, and the broad range of educational professionals:

- A Fall 1983 poll by the Public Policy Analysis Service indicates concern among all population groups that the future of the Nation is threatened by declining education.

- The National Conference of State Legislators reported in October, 1983, that education, along with crime and unemployment ranks at the top of the nation's domestic agenda.

- The media response has extended beyond simply citing the existence of the reports, and the reaction to them.

- A Department of Education review of 45 different newspapers identified over 700 articles related to A nation at Risk. Major periodicals devoted extensive space to the issues. Network television coverage has been extensive, particularly in the spring and summer of 1983. Local stations continued to feature educational issues.

- The education profession has responded in the public interest. A review of 100 articles in professional education journals between April, 1983 and the fall revealed that nearly half of these were on teaching. Many dealt with curriculum, expectations, time, leadership and fiscal support.

State leadership in the Appalachian region has been in the forefront of the education reform movement. Governors' messages delivered to 1984 legislatures were dominated by themes of excellence in education. Each of the four States in the region has responded to the challenge. The comprehensive approaches, the commitment of all sectors to excellence in education -- State and local governments, the education community, parents and private sector industry and business -- are key strengths in the region that have been rallied to address and resolve the region's persistent educational problems.

2.1 State Educational Profiles

A State-by-State Analysis of key strengths and problems and reform initiatives in the Appalachian region is presented below.

2.1.1 Kentucky

Kentucky has many different kinds of school districts,
ranging from urban Louisville to the surburban areas south of Cincinnati to the isolated rural communities of historical Appalachia. Lexington and Frankfort offer examples of school districts in small cities with a relatively affluent tax base and a sizeable professional class. Eastern and Southern Kentucky and the area along the Mississippi River suffer from the opposite syndrome - a very poor rural property base and a largely unschooled citizenry that assigns little value to education.

The state contains a large segment of Appalachian countries, and these areas are in distress economically and educationally. Their schools cannot afford to provide the instructional supplies and facilities with which to offer a basic - much less quality - schooling. More importantly, children in these districts often do not get enough to eat and sometimes are not adequately clothed, conditions which make the task of learning difficult if not impossible. Sometimes in the rural districts, the problems of poverty, educational deficiencies, and restrictive political control over the schools dovetail to create a near inpenetrable morass of obstacles to improvement.

Kentucky, however is taking steps to upgrade its educational offerings.

Some of the educational strengths of Kentucky are as follows:

- A consensus on the need for educational revision and the cooperation of citizen groups and politicians to achieve progress.

- Commitment of the governor and the State Superintendent to raising the leve. of public school expectations.

- A strong public higher education system, based at the University of Louisville and the University of Kentucky.

- The work of the Pritchard Commission in submitting education proposals, encouraging state action, and involving concerned citizens through its program of "town forums."

- Influence of the "pockets of quality" in the Kentucky school system is starting to spread through it the state; partly, this is the result of demographic diffusion as new business and population move to the countryside.

The Kentucky Education Association (KEA), representing nearly 30,000 public school teachers and educators, has prepared a Mandate for Educational Excellence: KEA's Call to Action, dated October, 1983. KEA believes that creative solutions to public schools of Kentucky requires broad based public support,
state leadership, time, money and effort. Two immediate objectives of the mandate are:

- Teacher and Professional Standards including salaries and teaching conditions, recruitment and incentives and a beginning teacher program.

- Student Competency Expectations/Testing. The KEA proposal includes instituting student competency requirements at each grade level; establishing maximum class sizes; updating instructional materials and supplies; and implementing an approach to Kentucky’s severe dropout problem which allows young persons to explore their reasons and options.

Longer-ranges objectives proposed are a state-wide study of curriculum for Kentucky schools; an examination of the issues involved in lengthening the school year; and correction of buildings contaminated with asbestos and formaldehyde, particularly in poorer districts where new construction has been minimal.

In October, 1983, the State Board of Education adopted minimum basic skills by grade as a condition for State accreditation. Graduation requirements were increased, as were college admissions requirements. Academic bankruptcy legislation enacted in 1984 mandated publication of achievement results by school and district. Class size has been stipulated and more time is available for basics. A Governor's Commission is developing a Career Ladder plan for teachers to be presented to the 1986 General Assembly. Kentucky has a tuition loan program to encourage more education students to become certified or recertified in Mathematics and Science. For each year they teach, a year of the loan is forgiven. The State has initiated a special assistance program for ten (10) low achievement school districts. Special tax raising options give local school districts fund-raising capability.

Kentucky's educational problems are deeply-rooted and tend to be concentrated in the economically-stagnant areas of the state. Kentucky has one of the most poorly-educated citizenries in the country. Some 56% of its adults do not have a high school diploma. The state rules for college admission actually encourage a prospective student to obtain a G.E.D. rather than a high school diploma. The state ranks last in the number of pupils going on to college. It follows, therefore, an educationally impoverished populace hitherto that has been content with a minimal performance by their schools.

This public neglect of the schools has been reinforced in the past by an outdated system of political control by local school board superintendents. Superintendents are often prominent local businessmen or/and owners who possess little or no background in education. Kentucky ranks 42nd in per pupil
expenditures. This is, in part, an outcome of the reluctance of landowners in local districts to finance better schools through higher property taxes. Outdated policies, nepotism, and severely underfunded schools have been the chief legacies of local politics in education.

A similar problem exists in high school management, where most administrators come from a coaching background and the preponderance are men. Vocational education seems to be in good shape statewide, since the vast majority of teachers are women, this fact suggests that many administrators say not have much classroom experience. This "gender gap" between teachers and administrators is especially pronounced in rural districts, where it can lead to a lack of understanding and attention on the part of administrators toward teacher needs.

Kentucky has begun to take action to improve Basic Skills learning in the schools. However, it has yet to provide advanced training programs for gifted or talented students. High schools need to increase efforts to reach the college bound students with better career and academic guidance.

Adult education programs are lacking in a state where the adult illiteracy rate is the highest in the nation. There is a special need for vocational rehabilitation in communities where traditional livelihoods such as mining or mill work have been decimated by layoffs and shutdowns.

While the state legislature has mandated new Basic Skills requirements and teacher training standards, these standards may, or may not, have much impact without continued action. State officials are working on a teacher evaluation and merit pay plan, however, as yet, the legislature has not provided any new funds for education. The present governor is supportive of education but has not yet offered a complete program for changing the educational priorities of the state. Governors and State School Superintendents may only serve one term in Kentucky, so there is not always continuity on educational policy from one administration to the next.

Even with favorable leadership at the state level, school reform may be difficult to enact in Kentucky. Local financial support is low, almost non-existent, in some rural counties. An archaic tax structure that won't allow local districts to raise their support for education is one of the biggest hurdles to improvement. There are over forty general taxes in Kentucky, and it would seem that some measure of tax reform will be necessary before school finance in the state can be put on sound footing.

2.12 Tennessee

Tennessee is a socially and economically diverse state whose public schools display a wider range of quality. Local school districts vary in character from inner city to affluent
suburban to consolidated rural districts. Support levels also vary tremendously. At one end of the spectrum is Oak Ridge, whose city school system benefits from being in a wealthy high-tech community. At the lower end are the economically-strapped county systems of West Tennessee, the Cumberland Plateau, and the Highland Rim, where school facilities are often in a state of disrepair, and basic learning supplies are often unavailable. There are great differences even within single counties. In Shelby County, the Memphis inner city schools experience a variety of problems unknown in the outlying suburban schools. Since 40-50% of the school funding comes from local property taxes, the level of material prosperity in a given district often determines the quality of local education.

Historically, the state has ranked in the lowest national percentiles in terms of its support for public schools. Teacher salaries and per pupil expenditures, two key indices of state support, rank from 45th to 48th among the states. The pockets of well-funded, quality schools are unable to offset the general level of mediocrity that prevails over much of the State school system.

Key educational problems and barriers to school improvement in Tennessee include the following:

- entrenched political control of local superintendents in some rural districts, leading to patronage, corruption, and an unwillingness to innovate;
- administrators and superintendents, from coaching or business backgrounds, who have little or no experience in the classroom;
- low level of local school funding particularly in some rural districts;
- inadequate salaries and an overload of non-instructional duties for teachers; teacher "burnout" and a high attrition rate out of profession;
- archaic and regressive tax structure which causes increase in state school support to come from unpopular hikes in sales tax; lack of an income tax;
- low achievement test scores, especially in reading, math and science and the serious shortage of qualified teachers in these areas;
- low proportion of graduating high school students or students going on to higher education;
- problems specific to urban school districts, such
as overcrowded classrooms, student crime and drug abuse, and the time and expense involved with busing;

- the "culture of violence" that exists in some metropolitan high schools, making teacher's control and student's attention to learning nearly impossible at times; and

- waste of resources, as, for example, with the overbuilding of large, "comprehensive high schools" when adequate facilities already exist.

With educational quality so uneven across the state, it is somewhat difficult to rate the entire educational system. The State's educational strengths are mainly in the nature of the potential for improvement as a result of heightened public interest and support as follows:

- high level of political interest and media attention for education, though this has subsided somewhat since the passage of the governor's Education Act; - second term governor and General Assembly leadership committed to upgrading school quality;

- recent enactment of a legislative package - including a career ladder for teachers, Basic Skills requirements, Centers of Excellence, and alternative schools - that may provide a framework for educational progress;

- funding for these new programs through an increase in the state sales tax; and

- economic growth occurring in parts of Tennessee; affluent urban professionals moving to the state in the wake of business growth will demand a higher level of quality in the public schools.

In 1981 the Tennessee legislature commissioned an eighteen month study of education. This effort was implemented nearly a year prior to "A Nation at Risk" and other reports that clamored for educational reform. The resulting Tennessee Comprehensive Education Study (1983), provided the germinal thoughts for what would become the Better Schools Program that was announced in January, 1983. A select Committee on Education of the Tennessee General Assembly recommended a major education reform bill, stronger than the program proposed by Governor Lamar Alexander in January, 1984, that was based on the eighteen month study of the state's educational structure. By the spring of 1984, the Tennessee legislature, with bipartisan support, approved and funded the Comprehensive Education Reform Act of 1984 (CERA) -- the legislative mandate for educational excellence in the State of Tennessee.
The Better Schools Program in Tennessee is based on and includes the following provisions:

- **Basic Skills First:** The teacher-designed curriculum establishes 1300 skills in Reading and Math, 680 of which must be acquired. By 1990, every child must pass a competency test prior to entering the ninth grade.

- **Computer Skills:** Before ninth grade every child will be computer literate.

- **More Math and Science on the Secondary School Level:** Required credits in Math and Science have been doubled momentarily. Incentives for Math and Science teachers are available.

- **Redefinition of Vocational Education Curriculum:** Vocational education programs are being revised to provide training for jobs of the 80's. Funds have been allocated for new equipment.

- **Classroom discipline:** Creative alternative schools for disruptive students. State-paid liability insurance is in place.

- **The Career Teacher Program:** This program, the heart of the plan, is designed to attract and keep the best teachers in the Tennessee public school system. A Career Ladder with commensurate pay has been instructed. More vigorous evaluations of teachers is being implemented, including a "probationary" entry year for new teachers. The program is being funded in part through a state sales tax.

2.1.3. **Virginia**

Virginia ranks low on the national scale in traditional measurements of school quality such as teacher salaries, achievement test scores, retention rates, and pupil expenditures. Of the four states in the Appalachian region, Virginia shows the greatest intra-state differences in its public schools. There are really three district areas in the state--North, Central Urban (Richmond and Norfolk), and the rural mountainous west. Those in the high growth, affluent area of Northern Virginia are rated among the finest in the country, while those in the western part of the state rank in the bottom 20% of the nation. The poorer historically Appalachian districts bring down the level of the entire state school system.

Educational problems tend to be divided along geographical and economic lines. In the cities, for instance, student discipline, drug and alcohol abuse, and the persistence of segregation are prominent problems.
Norfolk contains the largest naval installation in the country and providing educational services to meet the needs of military personnel and families is a special problem. Suburban districts experience a shortage of qualified teachers in special education and advanced science and math programs. Underdeveloped rural areas, on the other hand, have more serious problems with student underachievement, inability to hire new teachers, lack of sufficient remedial programs, and community apathy toward education. Rural districts find it especially difficult to retain quality faculty, because of low salaries and poor working conditions. Virginia's key educational problems and barriers to school improvement:
o lack of money;

o not enough quality teachers;

o not enough community support, involvement, and commitment;

o lack of resources and expertise to implement many of the legislative mandates and research findings; and

o inequities in curriculum, instructional supplies, and equipment between rural and urban schools.

The strong and the weak schools systems are spread throughout the state. The strongest system are principally in the suburban Washington, D.C./Fairfax County area, while the problem areas are concentrated in rural Appalachian areas. The tremendous range of quality from one area to another make it very difficult to assign an overall rating of Virginia's educational system.

Northern Virginia is an area whose schools benefit enormously from nearby high-tech business, Federal government resources, and a large urban professional population. School districts in this area have taken the lead in educational innovation in Virginia. Largely as the result of their influence, the State has already put into effect many of the reforms now being considered in other states.

Virginia, like other states in the region, has undergone a major revival of interest in public education. The Governor has made education a focus of legislative attention in the past four years, and the media has helped to arouse new public concerns for better schools. To its advantage, Virginia possess a populace with a generally high level of education, an extensive community college system, and two nationally ranked universities. Although educational quality is still uneven over much of the State, a corps of good teachers and effective government leaders are taking steps toward general improvement of the overall system. Moreover, Virginia had taken significant steps to improve education long before publication of national reports on deficiencies in the public schools. For example, Standards of Learning program was initiated in 1979-1980, and revised standards for teacher preparation and certification became effective July 1, 1982.

Virginia's Governor who has been very supportive of elementary and secondary education though less supportive of higher education, and the General Assembly have been very active in promoting school reform and directing policy initiatives. State leaders, in close cooperation with legislators in the State House and Senate, have fashioned some bold initiatives in planning for the enacted minimum "standards of quality," which serve as academic and organizational guidelines for every
The criteria are well-defined and carry the force of law. Using these minimum standards, the State periodically audits each local district to see if it is improving the quality of its schools.

During 1984 and 1985, Virginia reform initiatives have included more vigorous graduation requirements; more demanding instructional programs notably in mathematics and science; and greater involvement of parents, business leaders and other citizens in education. Virginia, like Tennessee, has initiated reform in Vocational/Technical Education Programs. Competency-based education (CBE) is the vocational counterpart of the Standards of Learning Program. CBE establishes an instructional framework for vocational education which is based on skills required for successful employment. A task force composed equally of representatives from business and industry, and representatives from education (excluding members of the Department of Education), has examined Virginia's vocational program in light of changing technology. The State has initiated a Rural School Effectiveness Project, and a School-Industry Partnership program. Highly trained employees provide service to the schools, and make part-time work and research opportunities available to students and teachers. In turn, school facilities are available to business and industry for in-service training and physical fitness program.

Virginia has in operation pilot dropout intervention projects. These "second chance projects" are innovative programs directed to dropouts who are neither eligible for, nor inclined to re-enter the public schools. School districts with the highest dropout rates will receive special assistance.

In the Spring of 1983, planning began for a model high school, to be known as the Governor's Center for Educational Innovation and Technology. Varina High School near Richmond was selected because its demographic composition is representative of the State. The Center will demonstrate the latest research findings on effective methods of instruction; the value of cooperative involvement with business/industry; and institutions of higher learning; the use of technology; and the value of teacher professional development efforts.

The Commonwealth's active government intervention in public education can have drawbacks as with the legislatively imposed "standards of quality." The General Assembly mandated these minimum requirements for local school districts in the early eighties, but it only recently began to supply the funds necessary to implement them. Underfunded rural districts have found it particularly difficult to afford compliance with some of these new statutes.

In other areas, however, the State is moving more deliberately. The State Board of Education has tested pilot programs in advanced curriculum, career ladders for teachers, and high school counselling. These pilot programs that have been
undertaken as an initial step before the State Board seeks general funding and enactment by the legislature.

2.1.4 West Virginia

West Virginia constitutes the heart of rural Appalachia. The entire state is mountainous, though the southern part is the most rugged and isolated. There are no areas of real urban density. Racial diversity and crowded inter-city schools are not part of the state's educational picture.

West Virginia's economy is labor intensive and centers around heavy industries such as coal, steel, and chemicals. In the northern part of the state, the residents are influenced by and oriented towards Pittsburgh. Most residents are "blue collar" workers who see education as a way for their children to better themselves. They have fairly high educational expectations. The people support education and are inclined to be involved with the schools.

In Southern West Virginia, the attitude is different. There is a low expectation for education. It may even be seen as negative, since students who do well in school often move away from the area. Coal mining is the mainstay occupation in this area, and completing one's schooling bears little relation - may even be a liability - to getting a good job in the mines. As a result, there is less support here for the school. Because of this value system and the precarious fiscal base in these areas, it is hard to obtain support for increased funding of the schools.

Layoffs in the steel industry coupled with high employment in the coal field have severely depressed the local economy in many districts and undercut school funding. The dismal economic situation in some areas has caused a drain of educated young people who leave to seek job opportunities elsewhere. Consequently, the State is top-heavy with an older population that is less willing to support educational improvement.

The following are among West Virginia's key educational problems and barriers to improvement:

- poor economic climate; a declining population and tax base in areas affected by industrial shutdown;
- low school attendance and retention rates, especially in coal fields (dropout rate of 21% statewide);
- functional adult illiteracy as high as 50% in some areas; this reinforces the rampant public apathy about education;
- low teacher salaries (43 in nation);
enthrenched local leadership unwilling to finance quality schools; some underfunded districts have multi-grade classrooms and only one principal for two or more schools;

Meager economic rewards for people who stay in the community for high school or college; high out-of-state attrition of students with degrees;

pressing need for adult education; the steel and coal industries are floundering and most residents have few vocational options;

better facilities and school plants;

shortage of qualified teachers in special education;

low achievement among a high percentage of students; there are very few remediation programs in the state, and, as a result, the low achievers are often assigned to special education classes (the fact that special education students are counted three times in the funding process reinforces this tendency); and

extraordinary fiscal burdens imposed on many districts by the court order to equalize the schools by implementing the "master plan".

Considering the low property and income base in many of its districts, West Virginia makes a good effort of supporting her schools. The state ranks 6th in the nation in the ratio of pupil expenditures to per capita income and rates well (16th nationally) in terms of teacher-to-pupil ratio.

The West Virginia Education Fund, a unique organization funded entirely by the private sector, assists the public education community with many programs. Since so much of the state's wealth is generated by out-of-state corporations, business may in the future, take a more active role in supporting public education.

West Virginia has a strong state university system which can provide direction for educational reform. It also enjoys a natural advantage in having only 55 school districts, as opposed to the welter of overlapping administrative units in other states.

The chief factor working in favor of West Virginia education is the growing recognition by public leaders that the school system must be upgraded for the state to remain economically viable. A commitment to improving the schools is evident in the General Assembly, at least in the educational leadership of the House. The statewide effort to equalize the schools has expanded into a multi-faceted attack on underachievement and the traditional method of conducting education.
The initiative for educational reform in West Virginia has come, not from the governor's office, or citizen's group, but from a landmark court case. (Pauley vs. Bailey, 1975). A Circuit Court ruling in the late 1970's found that the existing mechanism for financing state schools was discriminatory, and resulted in the denial of a "thorough and efficient" education in some districts. In 1982, a higher-court ordered the State to correct this disparity in educational opportunity and outlined, in considerable detail, the core elements of an adequate schooling in West Virginia.

As a result of the lawsuit, the State and the courts have developed a comprehensive "master plan" for upgrading and equalizing public education in West Virginia. The plan provides a policy and program context for long-range educational reforms:

- Under the plan learning outcomes for a number of general program areas and vocational education were recommended to the State Board.

- The State Board adopted new educational goals including emphasis on science, mathematics, and technology. A state-wide computer-assisted education network operates in 50 vocational centers, and will be operating in all schools within three years.

- West Virginia became the first state in the nation to require a "C" average before students can participate in athletics and other extracurricular activities.

- A model for improving schools through the application of school effectiveness research findings will be used to establish criteria. The plan also includes training for teachers and principals in educational strategies that will enhance student learning and the school environment.

- Twenty-four have dealt with master teacher or career ladder proposals; six (6) have implemented statewide or pilot programs.

- A minimum of eight jurisdictions have approved lengthening the school day, a minimum of seven have lengthening the school year, and a minimum of eighteen have enacted mandates affecting the amount of time for instruction.

- At least thirteen are considering changes in academic requirements for extracurricular and athletic programs, and five have already adopted more rigorous standards.

- At least twenty-two states have enacted increased college admissions requirements, twelve (12) have proposals under consideration.
At least twenty-nine states have approved academic enrichment programs, eleven jurisdictions have this improvement under consideration.

2.2 Most Important Trends and Programs for Education in the Appalachian Region

Attracting new jobs and economic growth the region seem to be the main hope for improving education in the future. School reforms in states like Tennessee and Virginia rest on the promise that upgrading public education is one element in bringing new business to their states. Tennessee, for example, new has about 1/3 of the total Japanese investment in this country. In general states are moving toward closer ties between schools and local businesses, particularly in areas of high-tech growth such as Fairfax County, Virginia and Oak Ridge, Tennessee.

The Appalachian region has many educational deficiencies and much ground to make up with respect to the rest of the country. Uneven economic development makes for uneven educational quality, and many of the region's rural areas are characterized by stagnant economics and a lack of opportunity. In the past, concentration on farming, coal mining, and industrial work make education a low priority here, since schooling bore little relation to one's job. Many rural school district today are in deep trouble due to long decades of neglect and dismal prospects for the future.

As traditional livelihoods decline in importance, the educational demands of the citizenry conform to new realities. Affluent urban professionals are moving to the outlying rural counties and displaced rural people are moving to the cities to look for jobs. This demographic trend will raise the demand for quality education in the rural districts and, in all likelihood, increase the burdens on already crowded schools in the urban centers.

This raises the questions of exactly what the schools will be training children for? With the disappearance of many types of "blue-collar" employment, work in the 80's and beyond is increasingly polarized between a mass of low-paid service jobs and a much smaller stratum of high-paid, technically-skilled professions. What will the role of schools be when most kinds of work will not require skills beyond the eighth grade level? States, may concentrate their efforts on equipping a minority of students with the advanced training necessary for technical and professional jobs.

Demographics have also changed the teaching profession. No longer can schools draw from the best and brightest women simply because of the lack of professional opportunities elsewhere. Teaching must become more renumerative,
and education must cease drawing its personnel from the lower academic ranks, as it has in the past decade. Low status and the lack of competitive pay for teachers are among the most acute educational deficiencies in the Appalachian region. Regional politicians are finally waking up to the fact that, in order to attract and hold better qualified individuals, their school systems need to offer higher salaries and more professional opportunities.

Administrators will have to become more professional and competent at evaluating instruction in the classroom. The gender gap between teachers and administrators will have to diminish. High school principaship, in particular, can no longer be an almost exclusively male preserve for ex-coaches.

In terms of higher education, there is a definite trend toward the consolidation of the university system. The general perception is that there are too many institutions offering the same program of study. Colleges may begin to specialize along functional roles - one school specializing in liberal arts curriculum, one in engineering, one in medicine, etc. State universities may continue to consolidate, as with the proposed merger between the University of Kentucky and the University of Louisville. As higher education competes with smaller budgets for a declining enrollment pool, colleges and universities are likely to have to streamline their services.

On the state level, there is a definite trend toward centralizing school policy and governance. State legislatures and administrators are taking a much more active role in educational affairs. State Superintendents and Departments of Education are now initiating school policy, whereas in the past they were merely service bureaus responding to local concerns. They are using unprecedented coercive measures ("academic receivership", impoundment of funds, superintendent dismissal) to ensure compliance with state guidelines by the local districts. By mandating minimum standards of performance and specific learning objectives for each grade, the state is saying to school boards-"You may do the job in your way, so long as you do it."

2.2.1 Effectiveness of Organizations Providing Research, Dissemination, Training and Assistance to Local Educators and State-Level Decisionmakers in the Appalachian Region

A major objective of Tennessee State University's NIE sponsored project 'to plan for an educational laboratory for the Appalachian region was to conduct a comprehensive assessment of the educational research, development, dissemination and assistance capabilities in the region. Tennessee State University has determined that there are a vast number of organizations both within and outside of the region that possess a broad range of capabilities to provide research, dissemination, training and assistance to local educators and state-level decisionmakers in the region. These organizations
function at the national, regional, state and local levels and are far too numerous to inventory here. They include appreciable numbers of independent private nonprofit and private for profit organizations, colleges and universities, research arms of State and local government agencies, big business and industries, and NIE laboratories, centers and dissemination networks. Tennessee State University has also determined that their capabilities are largely untapped. Considering the vast array of organizations that have these capabilities, few are providing direct assistance to the Appalachian States either individually or collectively. Conversely, Tennessee State University has also determined that State-level decisionmakers and local educators are not taking full advantage of the capabilities of organizations that do provide services on their behalf. Moreover, inter-agency and inter-organizational communication, networking and collaboration on research, dissemination, training and assistance has been minimal in the Appalachian region.

2.2.2 Organizations that Provide Services in the Region

Organizations that are providing research, dissemination, training and assistance to state-level decisionmakers and local educators are briefly include the following:

- the Appalachian Educational Laboratory;
- the Southern Regional Council for Educational Improvement;
- the Southern Regional Education Board;
- Research Triangle Institute, Center for Educational Studies;
- Tennessee State University, Center of Excellence: Basic Skills for the Disadvantaged;
- East Tennessee State University, Center of Excellence: Appalachian Studies and Services;
- Kentucky Department of Education, Research Coordinating Unit;
- University of Kentucky, Office of Education, Research and Development; Interdisciplinary Human Development Program; and Center for Professional Development;
- Eastern Kentucky University, Interdisciplinary Human Development Program;
- University of Virginia, Evaluation Research Center, and McGufey Reading Center;
Vanderbilt University, Peabody Center for Economic and Social Studies Education;

Memphis State University, Bureau of Educational Research Service; and

University of Tennessee at Knoxville, Bureau of Educational Research and Service.

This selection of organizations is not intended to be all inclusive but is designed to illustrate the various types of organizations that are providing services in the region.

2.2.3 Assessment of Effectiveness

Tennessee State University's assessment of the effectiveness of the organizations that provide research, dissemination, assistance and training in the region is principally based on data that were obtained from a broad range of organizations and individuals that were interviewed during planning grant activities as well as the University's experience in providing these services in the four-state Appalachian region. Following are some major observations regarding the effectiveness of these organizations:

- Mixed qualities of services are provided, ranging from very good to outstanding, however services are limited in scope.

- Principal barriers that limit effectiveness of the services include:
  - limited and ineffective dissemination strategies and vehicles;
  - lack of credibility with local populations
  - lack of sustained, long-term efforts instead of "in and out" activities;
  - limited resources to implement strategies to conduct research as well as to attract external resources;
  - limited knowledge of or receipt of services from existing NIE funded regional laboratory, centers and dissemination organizations;
  - difficulty in translating research results into forms that practitioners and the public can understand and use;
  - resistance to change among some educational professionals; and
- political constraints.

- Lack of network and collaboration among organizations providing services and organizations that have the capability to provide services in the region; inter-organizational linkages are virtually non-existent;

- Organizational strengths include staff credentials, experience and demonstrated expertise; quality of services provided despite their limited nature and scope; and the high level of interest among the organizations to establish linkages to strengthen regional, state and local services and breakthrough the existing barriers.

A major focus of the mission and institutional strategy of LISC will be to connect, cultivate collaborative relationships and strengthen capabilities among organizations that either provide or have the capability to provide research, dissemination, training and assistance to local educators and State level administrators in the Appalachian region. An extensive and successful networking effort was undertaken during the proposal development effort, as evidenced by the letters of support that have been included in the appendix to this proposal.

2.2.4 Key Lessons of Research and Experience Relevant to Educational Laboratories

Much has been learned through research and experience during the past two decades of regional educational laboratory institutional operations. NIE has devoted considerable time to the identification of such key lessons and has relied heavily to develop revised frameworks for laboratory operations. In its final report to the Director of NIE, the NIE Laboratory Study Group presented conclusions that included the following:

- The laboratory experience had demonstrated the educational research is a vital tool for improving the quality of American education, and support of such research is an appropriate and essential federal role.

- NIE's laboratories and R & D Centers are critical components of the total R & D and education improvement system in the United States. Their impact is more than commensurate with the resources invested.

- The public generally favors increases in educational research. To reach the levels of research required for major advances in education, the educational research community and NIE must develop higher levels of public confidence and support than they have achieved in the past (Laboratory Study Group, 1983).
NIE's six statements about the mission, functions and governance structure of laboratories reflect the key lessons of research and experience that have been learned:

1. Laboratories focus on school and classroom improvement.

2. Laboratories feature dissemination and assistance strategies.

3. Laboratories engage in applied research and development that support improvement.

4. Laboratories serve designated regions.

5. Laboratories have independent governing boards.

6. Laboratories are part of a nationwide system.

These six statements reflect both the strengths and weaknesses that have been inherent in laboratories and their work during the nineteen years they have been in operation.

2.3 Key Problems in the Region Which Are National in Scope.

The opportunity certainly exists for collaboration between the LISC and other NIE laboratories and research centers on key problems in the region and nation. Many of the educational problems that effect the Appalachian Region have a national dimension.

In a bevy of recent national reports and commissions investigating the state of American Education, different analysts have tried to discern what is wrong with our nation's schools and to point the direction for future improvement. Polls have registered the public's commitment to a quality public school system and its willingness to support reforms to achieve "excellence in education." Although the crises in education is seen to be national in scope, educational decision making and political action is being concentrated at the state level.

All the attention and interest around educational reform found prompt and widespread expression in the states of the Appalachian Region. When public scrutiny focused on the educational shortcomings of the nation's schools, the need for improvement in Kentucky, Tennessee, Virginia and West Virginia was clear and unequivocal. The awareness of educational problems, through the media, and the determination to do something to correct them, by political leaders, is at an all-time high in these four states. State officials, educators, and researchers have been very responsive to the demand for a new direction in education. They have devised innovative approaches for upgrading school quality that are models for the rest of the
During our needs assessment and constituent interview activities, we identified many key problems in the Appalachian Region that were also national in scope. Traditionally, schools in the Region mirrored the educational difficulties of the entire country, though often in a magnified form. The legacy of this uneven economic development within the four states is probably the single most important problem for public education in the Appalachian Region.

School dropout and adult illiteracy are serious regional problems that are cited by recent educational reports as major national problems. Dropout rates are very high in all four states, and state level decision makers are enacting prevention and remediation programs in Kentucky and West Virginia to address the problem. Along with adult illiteracy, with which it has a high functional correlation, the dropout rate represents a significant degree of non-participation and non-support for the schools. Profiling potential dropouts, improving career counseling, and upgrading vocational education to incorporate new job skills training are among the measures being taken in these states to lower early school leaving rates. Since the problem is so severe and endemic in parts of the Appalachian Region, there are numerous research and development organizations and state and local education agencies working to alleviate it. These organizations and agencies, using the intermediary services of LISC, would be available to network with the other regional educational laboratories that have identified dropout and illiteracy as major problems.

Lower student achievement is one of the persistent educational problems cited by the recent national reports. The decline in the basic skills of reading, writing, math and science, as measured by test scores, has been especially troubling to educators, since these capabilities are central to the primary mission of the schools. All four states in the region have taken steps to strengthen their requirements for basic skills proficiency and to place these skills at the core of classroom instruction. They have instituted periodic proficiency testing as a yardstick of student achievement, established more rigorous skills requirements for graduation, set learning objectives for each grade and subject area, raised college admission standards, and offered incentives for outstanding academic achievement. Chief school officers in the Region generally have followed the lead of the "Nation at Risk" Report, which urged the adoption of higher, measurable standards for the schools and an incentive structure for student achievement. The public schools, says the report, have been satisfied with a low level of performance for too long, and the time has come to raise our academic expectations and requirements.

The need for improved math and science instruction in the Appalachian region is acute, as is the shortage of trained teaching personnel in these fields. There are fewer students
taking advanced science and math courses, and many current instructors are not certified to teach in these disciplines. Regionally, some states are raising math and science requirements and using pay incentives to hire more qualified teachers. Tennessee and Virginia are also establishing "magnet schools" to provide advanced technical and scientific training for their top students. This renewed emphasis on math, science, and engineering skills is especially critical to the Appalachian Region, since these states are anxious to attract new business growth and high-tech firms to their boundaries.

The fast pace of technological and scientific advances is one reason why these states are providing accelerated educational settings for students intending to go to college. Tennessee has mandated extensive new programs and equipment for raising computer literacy in the schools. Virginia is taking advantage of the new educational technologies to beam instructional broadcasts across the state. Several states are utilizing progressive business firms and their professional expertise to foster school-business partnerships. These activities are aimed at meeting the national priority of expanding the private sector resources for public schools and gearing education to meet the future-oriented needs of business and the research sector.

A whole series of recommendations have been submitted by investigative groups that are designed to improve the preparation of teachers and to make teaching a more rewarding and respected profession. The underlying national problem is that the status, remuneration, and working conditions of teachers have steadily declined while the demands and responsibilities put on teachers are greater than ever. Twenty years ago almost 23% of all entering college freshmen were training to be teachers; today, less than 4% of entering college students are doing so. There is a serious crisis in the teaching profession and an impending shortage of qualified instructors in several fields.

To meet and, hopefully, resolve this crisis has been one of the consistent aims of recent state education policy in the Appalachian Region. Salaries have been raised in some states and career ladder plans for teachers have been enacted or are being considered in all of the states. Competency based teacher certification and periodic testing to determine assessment are new realities. More importantly for the purpose of educational research, all four of the states are engaged in developing systematic evaluations which will assess teacher performance. These new evaluative tools and procedures will be utilized by state-level decisionmakers as a basis for promotion, rewards, and additional responsibilities for teachers. Outstanding teachers will be given new policy-making and curricular design roles within the school systems, in addition to higher pay and better professional opportunities.

Tennessee has already enacted a Career Ladder Plan for its teachers and currently is implementing the evaluation system...
on which it will be based. Virginia is experimenting with pilot programs in "master teacher" and pay-for-performance systems. Kentucky's legislature has passed a career ladder program for teachers, but it has yet to provide the necessary funds. West Virginia has provided free student loans to high academic achievers who remain in the state to teach. All these measures are designed to arrest the deterioration of the teaching profession by keeping talented individuals in the classrooms and attracting top-notch graduates to careers in education.

One related key problem is the inadequacy of teacher preparation programs. Pre-service training for teachers tends to be "soft" on subject matter, weighted as it is toward "educational methods" curricula. Following a national trend, colleges and universities in the Appalachian Region are beginning to require students preparing to teach to meet high educational standard, to demonstrate an aptitude for teaching, and to show competence in an academic discipline. School districts are also working with researchers to improve in-service and professional development training for teachers who have been in the system for a long time.

Many of the new initiatives and programs for teachers and school administrators are intended to "shake up" the education system and introduce some measure of accountability. The public perception that public education tolerates mediocrity and does not sufficiently reward quality is quite strong. Political decision makers feel that they must convince the taxpayers that they are getting more in terms of quality and performance for their educational dollar. This trend towards cost-effectiveness and accountability is most pronounced in those states where educational reforms require increased funding.

Many of the foregoing educational problems are not limited to any one state but are regional and national, in their scope. School reforms often involve levels of decisionmaking that go beyond the state level or require new programs that have not even been tried in the region. The approach of the LISC is that problems of this magnitude can most fruitfully be approached through collaboration with other laboratories and research centers.

CHAPTER 3
Organization Design for the Educational Laboratory in the Appalachian Region

3.0 Overview

A series of discussion groups were conducted to develop promising strategies to organize, focus and operate an educational laboratory in the Appalachian Region. Information gathered from these discussion groups (including Think Tank) were utilized to develop ideas for the major aspects of the
The ensuing subsections present the organization design of the proposed regional education laboratory which is entitled The Laboratory for the Improvement of Schools and Classrooms (LISC).

3.1 Tennessee State University Appalachian Region

Tennessee State University as the land grant institution of higher education based in the state capital, is uniquely situated to meet the demands of hosting a regional educational laboratory. Tennessee has been in the forefront of educational reform, and many of the school improvement issues that have been considered throughout the Appalachian Region are currently being tested in this state. Educators at the University have been very active in facilitating and contributing to this process of educational change. In addition to the School of Education, which provides extensive graduate and undergraduate training for teachers and administrators, the University recently became the site for one of the statewide Centers of Excellence. These centers were mandated by the Comprehensive Education Act of 1984 to serve as research, service and/or instructional centers. They are based at various institutions of higher education within the Board of Regents System or the University of Tennessee System. The Center of Excellence at Tennessee State University has demonstrated its commitment to foster improvement in education through the application of research in the areas of Special Education School and Rehabilitation Services and Community Leadership, Math and Computer Literacy, Reading and Writing, and Class Size. Thus Tennessee State brings to the NIE competition a cadre of professional staff and model facilities that are already poised to assume the added responsibilities of a regional educational laboratory.

3.2 Capabilities of Tennessee State University and Its Satellites to Establish an Education Laboratory for the Appalachian Region

Tennessee State University Center of Excellence is entitled The Center for the Study of the Components that Impact Basic Skills Instruction for the Economically and Educationally Disadvantaged" Better Known as Basic Skills for the Disadvantaged. It is one of the original 14 Centers of Excellence that have been funded at Universities throughout the State of Tennessee. $10 million has been allocated or appropriated by the State Legislature to fund various projects throughout the State. The process for selection of these Centers of Excellence was unique. Each institution of higher education within the State submitted one or more proposals for the establishment of a center at their respective institution. After all of these proposals were received, proposals were then submitted to various consultants. Consultants reviewed the proposals utilizing a set of criteria. Their reports were then submitted to the Board of Regents or Board of Trustees. Each system then evaluated the consultants' remarks or evaluations and
ranked the proposals for their respective systems. The rankings were submitted to the Tennessee Higher Education Commission. The staff of the Tennessee Higher Education Commission reviewed, evaluated, and made their own ranking. As a result, Tennessee State University was selected as one of the 14 Centers within the State to be funded with approximately a $1 million budget (includes: Base, Match and $409,000 State appropriations). The Center is under the direct line of supervision of the Vice President for Academic Affairs. Tennessee State University Center of Excellence is a new organizational unit drawn from existing related academic disciplines. The various academic disciplines related to teacher education will be involved in this endeavor. This includes some of the disciplines that come under the School of Education, the School of Allied Health and the College of Arts and Sciences. Each Center has submitted Benchmarks which must receive final approval by their respective Board, Tennessee Higher Education Commission and the Legislature. Eight benchmarks were established for the Tennessee State University Center of Excellence. The highlights of the Benchmarks proposed for Tennessee State University include:

A. The number of research articles accepted in refereed and non-refereed journals

B. The number or invited participants as speakers, panel member of discussant on Center related topics at Regional or National meetings.

3.2.1 Research and Service Functions

In addition to each one of the components having to accomplish the aforementioned benchmarks relative to research and service function, each of their major program components established five-year projections of objectives and goals which must be met. The three major program components will be involved in research and demonstration activities as it relates to Basic Skills Instruction for the Educationally and Economically Disadvantaged. By Educationally Disadvantaged we mean youngsters who score at or below the thirteenth percentile on the Standardized Achievement Test. The criteria for defining Economically Disadvantaged would be youngsters who qualify based on amount of income and number of children in a family for free lunch. Both of the criteria to be utilized are the same as those utilized by the Metro School System since this is where the initial thrust of some of the research will begin. The first component, Basic Skills: Elementary and Secondary Education has three units. The Reading and Literacy Subcomponent will (1) develop a set of in-service training packets for grades k-12 that are intended to increase teaching materials in the classroom. (2) establish classroom research and methods and materials utilizing target classrooms, teachers and affiliated personnel, (3) demonstrate teacher improvement and literacy skills instruction in grades k-12 to enhance their teaching of basic mathematical skills for normal and special populations. Additionally, this unit is designed to:
1. Demonstrate improved proficiency of teacher of mathematics,

2. Improve attitudes of teachers toward the ability to learn and teach mathematics,

3. Demonstrate teacher improvement and mathematical skills in instruction in grades K-12,

4. Increase pupil improvement of mathematical skills,

5. Establish classroom research of methods and materials utilizing classroom teachers and affiliated school personnel.

The major activities for the third subcomponent under basic skills elementary and secondary programs is class size. This area will conduct basic and applied research data on the effects of small class size on student achievement in order to improve instruction in grades 1-3. Some of the research questions to be answered include:

1. Does class size (15 or less) per se make a difference in student achievement and development of self-esteem in the early grades?

2. Does class size (15 or less) with 2 or 4 interventions make a difference in student achievement and development of self-esteem in the early grades?

3. Does it appear that the additional cost in the early grades may lead to reduced cost later?

The second major component of this project is basic skills: Special Education and Rehabilitative Services. This project will conduct research on public and private agencies. It will be a cooperative multi-disciplinary venture. Some of the disciplines that will be included in this component will include Special Education, Psychology, Speech and Hearing, Communication, Curriculum and Instruction, Multi-Cultural Education, Nursing Education, Vocational Rehabilitation, Genetics, Children Youth Services, Mental Health, Physical Medicine, Rehabilitation and Occupational Therapy. Some of the research activities include:

1. Development of various Needs Assessment Instruments which incorporated numerous topics such as:

   a. Infant/toddler/child/adolescent development,
   b. Counseling for family problems,
   c. Behavior management techniques,
   d. Home activities,
e. Recreational activities
f. Available community services
g. Interpretation of test results
h. Training in classroom activities and teaching methods, and
i. Other activities as identified by needs of parents.

2. Investigate the effect of infant stimulation programs upon the development of economically disadvantaged infants,

3. Specifications of developmental patterns and corresponding teaching strategies, and

4. Investigate the impact of integration of the usage of modern technology in the Special Education and Rehabilitation process.

The third major component of this project is the school/community leadership component. The primary focus will be to increase the quality and quantity of public school community partnerships throughout Tennessee. A network of educators from each of the nine state regional universities will receive intensive training in school-community partnership programs. Once trained, these educators will teach the school-community partnership program to their pre-service teachers and administrators. These same educators would also consult and present in-service workshops to public school district personnel in their service area.

The fourth component is the administrative unit. The administrative unit will oversee the establishment and implementation of the objectives and benchmarks which have been established for the Center. Additionally, a Clearinghouse/Resource Center on Basic Skills for the Disadvantaged will be established and implemented. It will design a network and linkage system with research and demonstration centers across the region and nation which have been funded through such agencies as NIE, NIHR, NIH, NIMH and State Department of Education. Additionally, this component will serve as a research assemblage and dissemination unit for the following:

1. Results, conclusions and recommendations related to each area,

2. Publication and distribution of training packets and technical reports,

3. Implications for further basic and applied research, and

4. Other pertinent information and materials developed by the Center.
3.2.2 Research and Service Function Within The Region

Some of the objectives of the Resource Center/Clearinghouse are delineated as follows:

1. Continue to develop and implement a clearinghouse for the Center of Excellence and to promote a new pursuit of "academic excellence."

2. Continue to collect and organize educational materials to help the faculty and students with evaluations, selection, and utilization of resources which meet the needs of the Center of Excellence.

3. Continue to provide leadership and materials in the areas of Elementary and Secondary Education, Special Education and School and Community Leadership; and other subject areas related to the aforementioned areas.

4. Continue to provide the most effective allocation, justification, and use of limited resources in relationship to the objectives of the Center of Excellence.

5. Continue to provide better ways for students to become more effective learners in the classroom and in independent study.

6. Establish a relationship between the University Library, to facilitate access to dialogue, to retrieve literature concerning education and other related areas which meet the needs of the Center.

7. Provide micro-computers, indexes, and catalogs as the key to the identification of materials.

8. Establish a networking and linkage system to various NIE funded agencies throughout the nation not only to provide services, but to receive services and to work cooperatively on joint ventures.

9. Establish state networks for the Center of Excellence consisting of the state education agency, teacher education institution, and local school districts to provide services and to work cooperatively on joint ventures.

10. Visit Research and Development centers to observe operation and services provided.

11. Serve as a support service to the Center of
Excellence and to provide effective dissemination of materials and knowledge developed by each component area.

12. Provide audio and visual materials as instructional techniques for the Center of Excellence's three components.

13. Continue evaluation of the Clearinghouse and Resource Center in support of the Center of Excellence philosophy and purpose of the University and the needs and interests of the faculty and students served.

There are twenty-five staff positions (clerical and support, administrative, faculty and research assistants) in the Center of Excellence--Basic Skills for the Disadvantaged. Every non-clerical person has had public school teaching experience and has been involved in various basic and/or applied research endeavors. The following section delineates the doctoral level staff, their degrees and areas of specialization:

**DEGREES**

Dr. Merriel Bullock  
1977 - Ph.D.: Special Education  
Family Therapy and Clinical Child Psychology  
American University  
Washington, D.C.

1973 - M.Ed.: Special Education  
Howard University  
Washington, D.C.

Dr. Arthur L. Neal  
1985 - Ph.D.: Higher Education Administration  
Vanderbilt Univ.  
Nashville, TN

1978 - Ed.S.: Education Admin. and Supervision  
TN State University  
Nashville, TN

Dr. Helen Bain  
1974 - Ed.D.: Education Admin. and Supervision  
University of TN  
Knoxville, TN

1950 - M.A.: Speech  
(English Cognate)  
University of Mich.  
Ann Arbor, MI

Dr. Raymond Richardson  
1979 - Ph.D.: Mathematics  
Vanderbilt Univ.  
Nashville, TN

1963 - M.S.: Mathematics  
Atlanta University  
Atlanta, GA

Dr. Roberta Dabney  
Peabody College for
1972 - Ed.S.: Mathematics
Dr. Kofi Semenya
1980 - Ph.D.: Bio-Statistics
1974 - M.S.: Mathematical Statistics

Dr. Marino Alvarez
1980 - Ed.D.: Reading & Special Education
1976 - M.A.: Reading

Dr. Carole Stice
1974 - Ph.D.: Instructional Design & Personnel Development - Reading & Language Arts

Dr. Jill Copeland
1978 - Ph.D: Special Education
1967 - M.S.: Special Education

Dr. Chrystal Partridge
1977 - Ph.D.: Education Curriculum & Instruction

Dr. Dorothy Stewart-Granberry
1972- Ph.D.: Social Psychology

Dr. Donald Page
1977 - Ph.D.: Speech (Radio - Television - File)

Teachers
Nashville, TN
Peabody College for Teachers
Nashville, TN

University of NC
Chapel Hill, NC

University of Ghana
Legon, Ghana

W. VA University
Morgantown, W. VA

W. VA University
Morgantown, W. VA

FL State University
Tallahassee, FL

Murray State Univ.
Murray, KY

George Peabody College for Teachers
Nashville, TN

Pittsburg State University
Pittsburg, KS

Univ. of Michigan
Ann Arbor, MI

University of Mich.
Ann Arbor, MI

University of Conn.
Storro, CT

University of Mich.
Ann Arbor, MI
1973 - M.A.: Communication Arts and Sciences
Dr. Alberta Herron
1978 - Ph.D.: Psychology
Western Mich. Univ. Kalamazoo, MI

1973 - M.A.: Psychology
George Peabody College for Teachers Nashville, TN

Dr. Edward Gerhardt Mantel
1979 - Ph.D.: Program and Staff Development Admin. and Supervision
Vanderbilt Univ. Nashville, TN

Ohio University Athens, OH

Dr. Donald Lueder
1973 - Ph.D.: Educational Admin. and Teacher Ed.
Syracuse Univ. Syracuse, NY

Cornell University Ithaca, NY

3.2.3 Pursuit of Excellence In Education
Tennessee State University Center of Excellence - Basic Skills for the Disadvantaged sponsored its First Annual Visiting Scholars Program Sunday, March 17, 1985 thru Wednesday, March 20, 1985 at the Radisson Plaza Hotel in Nashville, Tennessee. The theme of our Conference was "Pursuit of Excellence in Education."

The four (4) day Visiting Scholars Program was attended by educators, practitioners, parents, legislators, administrators, academicians, community leaders and others throughout the nation. National consultants in various disciplines served as presenters. The following subsections delineates the Visiting Scholars Program:

1st Annual Visiting Scholars Program
March 17-20, 1985

Sponsored by Tennessee State University Center of Excellence Basic Skills for the Disadvantaged

Sunday, March 17, 1985-Radisson Plaza Hotel
Registration--6:00-8:00 p.m.
Keynote Address--7:00-9:00 p.m.
"Excellence"
Keynote Speaker-Dr. Mario D. Fantini
Dean, School of Education
University of Massachusetts

Monday, March 18, 1985-Radisson Plaza Hotel
Registration--8:00 a.m.-4:00 p.m.

9:00-11:15 a.m. Morning Sessions

Session A
"Education for the Disadvantaged"
Mario D. Fantini, Ph.D.
Dean, School of Education
University of Massachusetts

Session B
"Implementing School/Community Partnership:
A Process For Community Analysis"
Daniel Merenda, Ph.D.
Executive Director
National School Volunteer Program

Session C
"Special Education & Rehabilitation Services for the Economically Disadvantaged"
Reginald Jones, Ph.D.
Chairperson & Professor of Afro-American Studies
Professor of Education
University of California at Berkeley

Session D
"Psychological Perception that Impede the Learning Process"
Rita Smith, Ph.D.
Professor of Psychology
Millersville State College

Session E
"Diagnostic & Perscriptive Instruction in Mathematics"
Lloyd Richardson, Ph.D.
Professor of Mathematics Education
Head, Developmental Mathematics Program
University of Missouri at St. Louis

Session F
"A Curriculum for the Disadvantaged: An Emphasis on Language, Natural Learning and Teacher College"
Gary Kilarr, Ph.D.
Visiting Professor in Reading
Indiana, University

Session G
"Implementing School/Community Partnerships:

Session H

"Power and Politics"
Everette Nance, Director
Midwest Community Education Center
and
Vivian Kidd, Executive Director
West Virginia Education Fund

"Aggression In The Schools"
William Morse, Ph.D.
Professor of Education and Psychology
University of Michigan

11:30-1:15 p.m.  LUNCHEON

"Past, Present and Future Education Opportunities for the Economically Disadvantaged"
Keynote Speaker-Dr. Mary Frances Berry
Commissioner
U.S. Commission on Civil Rights
Professor of History & Law
Howard University, Washington, D.C.

Tuesday, March 19, 1985--Radisson Plaza Hotel
Registration--8:00 a.m.-12 Noon

8:00-8:30 a.m.  Continental Breakfast
8:30-9:30 a.m.  General Session

Welcome-Dr. Merriel Bullock
Introduction of Head Table-Dr. Raymond Richardson
Introduction of Speaker-Dr. Mary Burger
"Education Reform and Its Simplications for the Economically and Educationally Disadvantaged"
The Honorable Ned Ray McWherter,
Speaker of the House
The State of Tennessee
Introduction of Consultants-Dr. Marino Alvarez
Closing Remarks-Dr. Frederick Humphries

Acknowledgements-Dr. Helen Bain

9:30-11:45 a.m.  Morning Sessions

Session A

"Effective Classroom Management Strategies"
Nicholas Long, Ph.D.
Professor of Special Education, American University
Director, Rose Demonstration School
Session B
"Partnership As a New Approach to Educating the Disadvantaged"
David S. Seeley, Ed.D.
Educational Consultant/Adjunct Professor
City University of New York

Session C
"Implementing School/Community Partnerships: Leadership Strategies"
Vasil "Bill" Kerensky, Ph.D.
Professor of Community Education
Florida Atlantic University

Session D
"Breaking Through Learned Helplessness: Part I"
Martin Seligman, Ph.D.
Director of the Clinical Program
Department of Psychology
University of Pennsylvania

Session E
"Problem Solving in the Basic Skills"
Ray Robicheaux, Ph.D.
Professor of Mathematics
Louisiana State University at Eunice

Session F
"Developing Strategic Readers in Subject Matter Classrooms"
Charles W. Peters, Ph.D.
Secondary Reading Consultant
Oakland Schools, Pontiac, Michigan

Session G
"Small Class Size"
Charles Achilles, Ed.D.
Professor of Educational Leadership
University of Tennessee at Knoxville

Session H
"In Pursuit of Excellence: Experiences In Language, Teaching and Learning:
Alma Vineyard, Ph.D.
Governor State University

12 Noon-1:30 p.m.  Lunch*
1:45-4:00 p.m.  Afternoon Sessions
(Repeat of Morning Sessions)

Session D
"Breaking Through Learned Helplessness: Part II"
Martin Seligman, Ph.D.

*Not Provided by COE
Wednesday, March 20, 1985

--Roundtable Discussions--
Tennessee State University--Main Campus
9:00-11:30 a.m.

Roundtable 1 Nicholas Long, Ph.D. School of Business-Suite 123
Roundtable 2 David S. Seeley, Ph.D. Library Suite 316A
Roundtable 3 Ray Robicheaux, Ph.D. Women's Building Auditorium
Roundtable 4 Charles Peters, Ph.D. School of Music-Auditorium
Roundtable 5 Alma Vineyard, Ph.D. School of Education-Suite 111

**Roundtables feature discussions where you can meet and converse with outstanding leaders in various disciplines in education (i.e. Elementary Education, Secondary Education, Special Education and Rehabilitation Services, Psychology, Education Administration and School/Community Leadership.)**

3.2.4 Other Research and Development Activities

Tennessee State University has received funding from numerous organizations to establish and implement research, demonstration, development, instructional and/or service projects. Sponsoring agencies have included both private and public sources. The following listing delineates a sampling of agencies under both of the aforementioned categories:

**Public**

1. U.S. Department of Agriculture
2. Tennessee Valley Authority
3. National Inst. of Mental Health
5. Department of Transportation
7. National Park Service
8. CETA
9. Tennessee Energy Authority
10. National Institute of Health
11. National Science Foundation
12. Dept. of Health & Human Services
14. Department of Education
15. Tennessee Department of Mental Health

**Private**

1. Am. Society of Engineering Ed.
2. Monsanto
3. Chrysler Corp.
4. Hoover Foundation
5. Union Carbide
6. General Electric
7. Alcoa
9. Air Products and Chemical
10. Bell Laboratories
11. Exxon
13. 3m Company
14. Rehab. Corp. of America
15. Am. Soc. of Engineering Education
3.2.5 Adequacy of Resources

Tennessee State University is a Land Grant Institution which focuses on research, instruction and service. It is comprised of seven schools: School of Agriculture and Home Economics, School of Allied Health Professions, School of Arts and Sciences, School of Business, School of Education, School of Engineering and Technology and the School of Nursing. It has numerous research and demonstration projects which are free standing (not under the auspices of the aforementioned schools such as Center of Excellence--Basic Skills for the Disadvantaged). Libraries/Learning Resource Center, Aerospace Studies, Extension and Continuing Education, University College Cooperative Agriculture Research Program, Tennessee Learning Center, Center for Urban and Public Affairs and others.

Tennessee State University is fully accredited by various academic and professional organizations. In addition, it is a member in good standing with numerous associations. The following delineates the various accrediting institutions and associations:

Accreditations

Southern Association of Colleges and Schools
National Council for Accreditation of Teacher Education
Accreditation Board for Engineering and Technology
National Association of Schools of Music
Council on Social Work Education (Undergraduate)
American Home Economics Association
Commission on Dental and Dental Health Auxiliary
Educational Programs of the American Dental Association
National Collegiate Athletic Association
National League of Nursing
National University Extension Association
Federal Aviation Agency
Tennessee Board of Nursing
American Medical Association Committee on Allied Health Education and Accreditation in Collaboration with the American Medical Record Association

Memberships

Association of Land Grant Colleges and Universities
American Association of Colleges for Teacher Education
Tennessee Association of Colleges for Teacher Education
American Council on Education
The Teachers College Association of Extension and Field Services
Association of American Colleges
Tennessee College Association
National Collegiate Athletic Association
Association of Colleges and Schools of Education in State Universities and Land Grant Colleges
3.5.1 Facilities

Tennessee State University has two campuses. The Central campus is comprised of sixty-five buildings, parking lots, outdoor facilities and farmlands which occupy four hundred fifty (450) acres of land. The downtown campus is located approximately three miles from the central campus. It is housed in a large modern building with adjacent parking facilities.

3.5.2 Equipment and Supplies

Various scientific medical and educational equipment and supplies are housed and maintained in their respective department projects and/or schools. In addition, specialized equipment and services are housed and provided through the various computer centers located throughout campus and the Learning Resource Center. These include Academic Computing, Education, Engineering, Physics and Math, Business, Learning Resource Center and various administrative offices. Tennessee State University Computer Center contains two centralized processors (IBM 4341 and DEC VAX 11/780 with VAX/VMS operating system) with over 200 timesharing interactive and timesharing terminals. Timesharing services and technical assistance to faculty and students are also provided. A major expansion of the Computer System has been funded and will be implemented during Spring, 1985.

The main campus houses the Brown-Daniel Library. It is an ultramodern facility which houses approximately 400,000 volumes and contains subscriptions to approximately 57,000 periodicals. The library also provides special study and research facilities for faculty and graduate students. The downtown campus houses a separate library with a full range of services. It maintains a book collection of approximately 300,000 volumes and contains subscriptions to approximately 750 periodicals. Both libraries maintain microfilm, and microfiche readers, etc.

The Learning Resource Center is located on the main campus. A branch is located on the downtown campus. It provides audiovisual and media support to the University. Acquisition, circulation and rental of audio-visual materials, study canals with playback equipment, inventory of materials equipment for short-term loan, reproduction of slides, transparencies, graphics, video and audio recorded materials, Computer Center with technical assistance for faculty and students are some of the services provided by the Learning Resource Center.

3.2.5.3 Library Resources

Tennessee State University has an excellent library facility. The library holdings (e.g., books, periodicals, software, tests, etc.) meet the criteria of various accrediting organizations. The National Council for the Accreditation of
Teacher Education, Southern Association for Schools and Colleges and the Tennessee State Department of Education evaluated our Teacher Education Program and has granted accreditation and/or the ability to certify teachers. These agencies provide us with three levels (i.e., National, Regional, and Local) of approval. The subsequent information delineates a sample of the University's holdings in designated areas:

Volumes in the Library (January 1, 1985)

<table>
<thead>
<tr>
<th></th>
<th>Main</th>
<th>Downtown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Books</td>
<td>222,506</td>
<td>133,354</td>
<td>355,860</td>
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<tr>
<td>Bound Periodicals</td>
<td>37,668</td>
<td>19,426</td>
<td>57,094</td>
</tr>
<tr>
<td>Microfilms</td>
<td>7,197</td>
<td>7,025</td>
<td>14,222</td>
</tr>
<tr>
<td>Microfiche</td>
<td>66,700</td>
<td>45,034</td>
<td>111,734</td>
</tr>
</tbody>
</table>

3.2.6 Satellite Capabilities

The Laboratory for the Improvement of Schools and Classrooms (LISC) will have access to resources at each of its seven satellites. Satellites include Education Testing Service, Memphis State University, Norfolk State University, ERIC Clearinghouse on Rural Education and Small Schools, ERIC Clearinghouse on Urban Education, ERIC Clearinghouse on Teacher Education, and ERIC Clearinghouse on Handicapped and Gifted Children.

3.2.6.1 Capabilities of Educational Testing Services (ETS)

Founding and Purpose

ETS was founded by the American Council on Education, the Carnegie Foundation for the Advancement of Teaching, and the College Board, and chartered as a nonprofit corporation in December, 1947 under the education law of the State of New York. The primary aim of ETS is to serve education through measurement, related services, and research.

Governance and Direction

ETS is governed by a 17-member Board of Trustees representing various levels and areas of interest in education and related fields and industry. Sixteen trustees serve four-year terms. The president of ETS is also a member of the Board of Trustees. The board's primary responsibilities involve setting policies, determining direction for the organization, and overseeing the leadership provided to ETS by its officers. The committees of the board are: Nominating, Audit, Finance, Research and Development, Public Responsibility, and Executive.
External Sponsoring Boards

External sponsoring boards are appointed by users of ETS services who wish to set up testing programs or services to assist them in monitoring their own professional or occupational area. These boards set policies and agree to plans and procedures for their own programs.

Advisory Committees

Advisory committees composed of leading educators, researchers, test specialists, and experts in other fields help ETS define its special role in the educational community. Other advisory committees participate in planning and evaluating major efforts in research, development, instruction, and assessment.

Many members of these committees are recommended by the professional organizations that are clients of ETS or by other associations active in a particular committee's area of work.

Test Development Committees

In addition to advisory committees, several test development committees help the ETS staff set specifications, develop questions, and review both questions and whole tests. For academic tests, most committee members are teachers who contribute expertise in their own fields. For tests of certification or equivalency, committee members are actively involved in the profession or occupation being assessed.

Service Areas, Scope of Work and Consultants

Research: ETS conducts research on measurement theory and practice, on teaching and learning, and on educational policy. Its research staff numbers over 150, including some of the nation's most distinguished scientists in the fields of psychometrics and statistics.

Development: ETS creates new or improved measures; explores their descriptive or predictive properties; develops system for the use of these aids; and develops mechanisms that provide more efficient educational measurement. At any given time, ETS has more than 200 projects under way in various aspects of testing and assessment.

Programs of Measurement: ETS initiates, conducts, and improves practical programs of measurement and related services as required by educational and other institutions and agencies. It annually develops scores of tests for the school, college, graduate, and employment fields and administers tests to over four million test takers in the United States and abroad.
Advisory and Field Services: ETS provides information and professional counsel to educators on a wide range of problems in educational measurement; initiates field visits to help solve problems of measurement and evaluation; promotes its products and services both nationally and internationally.

Scope of Work

The dollar volume of ETS activity for 1982-83 was about $133 million. Activities covered a broad spectrum, including extensive research and development and comprehensive measurement services.

ETS develops and conducts many testing programs. In addition to well-known national programs for academic selection at the high school, college, graduate, and professional levels, it conducts more than 50 programs in career and occupational assessment. Some programs are relatively small, entailing few candidates and limited operational demands. Others involve millions of candidates, several administrations each year, and complex processing operations.

Research of ETS has four essential missions. Basic research, embracing both the technical and the substantive foundations of educational measurement, is conducted in support of the goals of ETS and its clients. New product research and development; currently emphasizes innovative uses of technology in support of education and measurement. Research to enhance and maintain the technical quality of tests includes methodological, psychometric, and statistical studies. Public service research provides program evaluation for a variety of clients as well as policy research dealing with the implications of judicial and legislative actions and issues of access and equity for women and minorities.

Instructional activities and advisory services complement the total enterprise of promoting improved use of measurement products and research results.

Consultants

As warranted, ETS employs consultants to augment its staff resources. Some consultants serve on a continuing basis, and others provide supplemental expertise on individual projects or programs.

Locations

The main office of ETS is on a 400-acre site on the outskirts of Princeton, New Jersey. Field service offices are located in Atlanta, Georgia; Austin, Texas; Berkeley and Los Angeles, California; Brookline, Massachusetts; Evanston, Illinois; San Juan, Puerto Rico, and Washington, D.C. The International Field Office is in Princeton.
Facilities at Princeton include six administration and office buildings; an operations center and computer complex for large-scale processing; a shipping center; and several service buildings. In addition, the Henry Chauncey Conference Center on the Princeton site contains 11 meeting rooms, a dining room, and 100 rooms for single or double occupancy to accommodate overnight guests. ETS also maintains two large buildings in Ewing Township, New Jersey, that house printing, mailing, and other operational facilities, and two buildings on the Forrestal campus of Princeton University for the ETS financial aid and professional licensing and certification units.

The Berkeley and the Evanston Field Service Offices conduct test programs, research, and advisory services. The Atlanta, Austin, Northeastern, Los Angeles, and Puerto Rico Field Officers provide advisory and consulting services for their regions and participate in nationwide projects. The Washington Field Office serves as liaison with federal legislation.

Personnel

ETS has approximately 2,200 permanent staff members including about 650 professionals, more than 175 of whom have the doctoral degree. An additional 245 have the master's degree. Professional training is concentrated in education, psychology, statistics, and psychometrics and also in such associated fields as economics, sociology, the humanities, and the sciences. Supporting services are provided by specialists in computer technology, business management and finance, library sciences, and communication.

ETS is an equal opportunity employer and actively recruits women and minority staff members.

Major Functions

The work of ETS falls into four major categories, each with its own specified objectives. The two ETS divisions that will be directly involved in the work of LISC are briefly highlighted below.

Division of Education Policy Research and Services

The Division of Education Policy Research (EPRS) is the ETS Research Division that focuses on education policy issues. EPRS addresses basic policy issues in educational finance and governance, such as equity in resource allocation, intergovernmental aspects of educational programs, and the politics of educational institutions. These problems are approached from an interdisciplinary perspective that is reflected in the professional training and experience of staff in education, public administration, economics, political science, law, psychology, and demography.

EPRS research has addressed and policy issues of
current interest to federal and state education officials and legislators, among them the role of federal, state and local authorities in education programming, finance and governance; issues of equity and equal opportunity; the sociopolitical environment in which assessment data are collected and used; the relation of educational assessment to the differing concerns of policymakers, administrators, and citizens; the minimum competency testing movement; the relative merits of legislative proposals to reform school finance; the information needs of federal and state governments for monitoring funding; the effect of judicial decisions on education; and Congressional proposals to consolidate categorical grant programs.

EPRS conducts several kinds of work. It provides reports and recommendations to assist public policymakers in preparing regulations and legislation and improving their procedures. Publications are intended to increase public comprehension of America's complex education system. Work that EPRS and ETS have completed that relates to the proposed study is described below. Evidence is provided of successful projects in the areas of teacher certification and licensing, teacher effectiveness, and program implementation.

**Atlanta Field Service Office**

The Atlanta (GA) Field Service Office was established in 1973 to respond to the needs of southern educational groups, agencies, and institutions for evaluation services, research and development services, instructional programs, professional and technical consultations, and local testing programs. Assistance is offered in such diverse areas as project and materials design, development of assessment and information systems, program evaluation, preparation of proposals and requests for proposals, staff development, and facilitation of interaction between groups.

The following are representative of the scope and diversity of the projects in which AFSO staff have recently participated: operation of the South Carolina Teacher Assessment Program; development of promotion examinations for the DeKalb County (GA) Department of Public Safety and design of validation and standard setting studies for the National Teacher Examinations in several southeastern states. In addition, the Atlanta Office acts as a technical-assistance center for the U.S. Department of Education to assist school districts and states in the region with evaluation of their Title I programs.

The Atlanta Office responds to requests for information about ETS's national programs and services and can refer students or educators to appropriate sources of additional help. To this end, the staff works closely with ETS's Educational and Reference Service groups and with the Research and Programs Divisions in Princeton.
The Atlanta Office provides services for educational institutions at all levels, as well as government, education, and other agencies in Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Virginia.

3.2.6.2 Capabilities of ERIC/Clearinghouse on Rural Education and Small Schools

The ERIC Clearinghouse on Rural Education and Small Schools (CRESS) has been in operation since 1966 and has been producing a variety of major publications each year since 1968. It has long-term staff who are experienced in the development and production of monographic literature.

CRESS has access to the major bibliographic vendors and conducts computer searches of the ERIC data base as well as other educational data bases.

The Clearinghouse is located on the campus of New Mexico State University, one of two major universities in New Mexico. The University library is less than one block away and affords the usual facilities of a major university library.

The skills necessary for developing publications are available at the Clearinghouse, the College of Education, or the support community (editing and graphic arts).

Facilities and provisions for needed equipment and supplies

ERIC/CRESS is located on the second floor of the University Center and has a modified open space floor plan of 4,186 square feet. The subcontract would be housed in the Clearinghouse.

The quick turnaround time required in this subcontract would necessitate rental of a personal computer for word processing. This could be effected through the Educational Research Center of the University.

Supplies would be purchased through the New Mexico State University Bookstore.

3.2.6.3 Capabilities of ERIC/Clearinghouse on Urban Education

The ERIC Clearinghouse on Urban Education is housed at Teachers College, Columbia University. It gathers information on programs and practices in public, parochial, and private schools in urban areas and the education of particular racial/ethnic minority children and youth in various settings; the theory and practice of educational equity; urban and minority experiences; and urban and minority social institutions and services. This Clearinghouse is responsible for the development and dissemination of six different products. These products are
The Urban Diversity Series consists of state-of-art papers, reviews, and annotated bibliographies. Each paper summarizes the existing literature concerning the educational, socioeconomic or social/psychological issues involved in the development of diverse urban populations.

The Compact Guides consist of ERIC Digests, brief bibliographies, and directories which capulize information on pertinent issues.

The Urban Schools Bibliography is a set of comprehensive references of the literature on urban schools available through the ERIC system. The Guidebook to Hispanic Organizations and Information is a directory.

The Topical Bibliographies of ERIC References, compiled from computer searches of the ERIC database, are references of the literature on various topics available through the ERIC system. Like the citations in the Urban Schools Bibliography, these citations include an abstract of the document.

The IRCD Bulletin carries an analytical or review article devoted to a single subject in the field of urban education. The aim of the Bulletin is to synthesize and formulate concepts and practices which will improve the development and educational achievement of urban children and youth.

Equal Opportunity Review (EDR) consists of short papers on critical educational issues which are topical and informative. Several issues of EDR are exclusively bibliographies on urban and minority education.

The ERIC Clearinghouse on Urban Education has had years of experience in developing numerous publications, collaborating with scholars and providing technical assistance.

3.2.6.4 Capabilities of ERIC/Clearinghouse on Teacher Education

The ERIC Clearinghouse on Teacher Education (CTE) has been in operation since 1968. CTE has school personnel at all levels; teacher selection and training, preservice and inservice preparation, and retirement; the theory, philosophy, and practice of teaching; curricula and general education not specifically covered by other clearinghouses; all aspects of physical education, health education, and recreation education.
3.2.6.5 Capabilities of ERIC/Clearinghouse on Handicapped and Gifted Children

The ERIC Clearinghouse on Handicapped and Gifted Children (CHGC) has been operation since 1966. ERIC/CHGC has acquired advanced literature in all aspects of the education and development of the handicapped and gifted, including prevention, identification and assessment, intervention, and enrichment, both in special settings and within the mainstream, hearing impaired, visually impaired, mentally retarded, developmentally disabled, abused/neglected, autistic, multiple handicapped, severely handicapped, physically disabled, emotionally disturbed, speech handicapped and learning disabled.

CHGC is located at the Council for Exceptional Children in Reston, Virginia.

3.2.6.6 Capabilities of Memphis State University

Memphis State University is the largest institution within the Tennessee State Board of Regents. The campus consists of approximately 1,100 acres and has over 100 buildings located near the center of the City of Memphis. The enrollment of the institution is approximately 21,000 students. Memphis State University is accredited by the Southern Association of Colleges and Schools. A sampling of the academic areas which are accredited are enumerated as follows: (1) Business, (2) Chemistry, (3) Engineering, (4) Computer Science, (5) Rehabilitation, (6) Counseling, (7) Special Education, (8) Elementary Education, Secondary Education, School Personnel Services and numerous other areas.

The computer center supports the instructional and administrative programs of the university and faculty research endeavors. The central computer system is a Sperry-Univac 1100/62 which has over 8 million characters of main storage. It supports both time-sharing and remote batch job entries. Remote batch job entry stations are located at various locations on campus.

Memphis State University has outstanding library facilities. The John Willard Brister Library has specialized collections in the Department of Chemistry, the Department of Mathematical Sciences, the Department of Music, the Harff College of Engineering, the Cecil C. Humphreys School of Law, the Speech and Hearing Center and the Bureau of Business and Economic Research. The University libraries contain approximately 876,683 microforms, 11,775 audiovisual materials, and 118 current periodicals subscriptions.

The University's School of Education is comprised of numerous programs. In addition to the aforementioned, the School
of Education co-sponsors with various funding agencies and various research and development projects. A sampling of these projects include: Center of Instructional Services and Research, Center for Manpower Studies, Bureau of Business and Economic Research, Bureau of Educational Research, Center for the Study of Higher Education, Handicapped Student Services, Speech and Hearing Center and Regional Economic Development.

3.2.6.7 Capabilities of Norfolk State University

Norfolk State University, a predominantly black urban institution of higher education, is located in Virginia's largest city. It is the youngest of Virginia's five predominantly black colleges and universities. The University is the third largest black institution of higher education in the nation.

The campus consist of approximately 105 acres of land located east of downtown Norfolk. The enrollment of the institution is approximately 7,286 students. Norfolk State University is accredited by the Southern Association of Colleges and Schools.

The University is also accredited as a professional school for the undergraduate training of teachers by the National Council for Accreditation of Teacher Education Programs and the Virginia State Board of Education. The University is a member of various professional organizations. A listing of the organizations include the American Association of Colleges for Teacher Education, The American Council on Education, National Association of School of Music, The Administration Management Society, Mid-Atlantic Association for School, College and University staffing, and numerous other organizations.

The Lyman Beecher Brooks Library Collection contains approximately 200,000 volumes and a current subscription for more than 2,300 magazines and journals, and 3,000 catalogs on microfiche. The library maintains numerous other resources.

The computer center supports each of the University's academic administrative and program areas.

The computer center provides computer terminals, programming and advisory services for faculty research and for the graduate and undergraduate student body. The computer center is equipped with several mainframe computers and numerous microcomputers. The University has distinctive Educational programs. Some of these programs are: Cooperation Education with Old Dominion, Interdisciplinary Programs in General Studies, Urban Affairs, Urban Planning and Music in Media, Cross Registration with Old Dominion University, Evening Colleges, Community Education Development Center, Servicemembers Opportunity College, Social Service Research Center, and Community Outreach programs that provide academic and support services to the educationally disadvantaged and physically handicapped from day care through college.
3.2.6.8 Summary Capabilities

The Laboratory for the Improvement of Schools and Classrooms (LISC), which will be hosted by Tennessee State University, recognizes the need for collaborating and networking with federal, state and private organizations. Recognizing that the network or regional laboratories linked with research and development centers represent a power creative resource whose cooperative effort far exceeds the sum of the work of individual institutions. LISC will engage in collaborative efforts to develop products of national and regional significance. The previous subsections has highlighted their capabilities and resources, all of which will enhance the capabilities of the laboratory in meeting the needs of the Appalachian Region. Refer to appendices for details relative to the research, service and development of products by key organizations; who will be involved in the implementation of LISC mission, goals and objectives.

3.3 Development of Effective Governance, Management, Planning and Evaluation Systems for the Laboratory

As an organization designed to improve educational practice through the production, application, and conveying of knowledge derived from research and development activities, the Laboratory for Improvement of Schools and Classrooms embodies a dual responsibility. It must be accountable to the region for a regional research agenda, and developmental support for regional educational problems, and to the NIE and other government agencies for research and development work on national educational priorities. Consequently, the laboratory's organizational structure will allow for a "bottom-up" flow of information and services, from local practitioners to Federal and regional researchers, as well as a "top-down" flow from research and development organizations to education professionals at the local level. It is hoped that this two-way flow of research products and services will provide the balance of regional and national priorities which the NIE envisions for the educational laboratories.

The governing board for the Laboratory for Improvement of Schools and Classrooms will be composed of representatives of all constituent groups that the laboratory serves. Specifically, the board will include chief state school officers, professors of education, school administrators, classroom teachers, school board members, legislators, parents, and private sector participants. Board membership will be apportioned so that each state (Tennessee, Kentucky, Virginia and West Virginia) is represented equally. Women and members of racial and ethnic minorities will also be assured equitable membership on the board. The term of board members will be set at variable intervals and staggered in relation to one another. An orderly process for all regional constituents and networking
organizations to participate in selecting board members will be established.

The functions of the board will include, but not be limited to:

1. establishment of annual and long-term goals for the laboratory, policies, and procedures,
2. hiring and reviewing the performance of the executive director,
3. review of the fiscal management of the laboratory including annual audits,
4. review and approval of programs submitted by laboratory managers and
e. oversight of the conduct and progress of programs and activities, and evaluations of the programmatic effectiveness of the laboratory.

Historically, the large and unwieldy membership of the governing boards made effective oversight of the laboratory day-to-day operations very difficult. The boards tended to become passive, "rubber stamp" bodies which approved every measure deemed necessary by the executive directors. To remedy this flaw, the Laboratory for Improvement of Schools and Classrooms will draw from its governing board a smaller executive or steering committee which will meet regularly to direct the short-term policies of the Laboratory and to set the agenda for the larger governing board. In this fashion, the key stakeholders within the region will have a greater voice in guiding the laboratory to meet their needs. Giving the constituent-based governing board a more active role should increase the laboratory's responsiveness to regional educational problems. Board members in the past have not been sufficiently involved laboratory programs; special attention, therefore, will be paid to keeping board members informed of programmatic details.

The executive director, in conjunction with the Board of Directors Advisory Councils and with the central staff, will conduct a periodic regional needs assessments to revise and update the laboratory's R & D agenda. Needs sensing in the region will be an ongoing staff activity in LISC. Three programmatic units - each with its own Task Director and staff - will report directly to the governing board and executive director. The first programmatic unit will correspond to Task 2 as outlined in RFP No. NIE-85-0003, "Work with existing organizations to improve schools and classrooms." The Task 2 Director will oversee a variety of school improvement research projects. Each of which will have its own project manager and unit staff. The Task 2 Unit will have its own advisory council composed of representatives from key organizations - universities, state associations of teachers, parent groups, SEA's and local districts - with which the laboratory is expected to develop relationships. The second programmatic unit, corresponding to Task 3, will work on three major research projects designed to provide technical assistance to state-level
decision makers on school improvement issues. Its advisory council will include legislators, chief state school officers, and state education agencies' staff. The third programmatic unit will focus on creating research and development based resources for school improvement (Task 4). The advisory council for this unit will consist of representatives from Educational Testing Services and other regionally-based research and development organizations with which the laboratory will be linked.

The Executive Director of the laboratory will be charged with the task of coordinating the activities and products generated regionally with similar activities nationwide.

The evaluation process for the laboratory projects will be conducted by the Executive Directors' staff in conjunction with outside consultants. The evaluation procedures will take the steps necessary to assess the individual projects from the initial context level, through the planning and operational stages, to a final accountability evaluation of the products. This internal evaluation will be conducted, at least, on quarterly intervals.

Since Tennessee State University is not currently designated as an educational laboratory, it will be necessary to devote significant resources and time to developing management and governance systems. The lack of entrenched governance structures, however, will provide the opportunity to redress imbalances in representation and to correct the lack of constituent participation which have been characteristic in the past.

3.3.1 Working With and Through Existing Organizations to Improve Schools and Classrooms

The Laboratory for improvement of Schools and Classrooms considers this task a major focus of its effort. The four states of the Appalachian Region share a number of serious educational problems that hamper progress in school improvement. A shortage of qualified teachers, low pay and status for teachers, high dropout and illiteracy rates, low student achievement, underfunding (especially in some rural districts), restrictive political control, and a lack of public support are some of the difficulties encountered by public education in the region. Historically, Tennessee, Kentucky, Virginia and West Virginia have lagged behind the rest of the nation in terms of the resources put into the schools and the educational level of the students which they produce.

This rather bleak picture has begun to change recently. As a result of concerted school improvement efforts, the four states of this region are today among the nation's leaders in devising innovative solutions to classroom problems. Recognition of the need to remedy past deficiencies has caused educators to take the lead in school improvements. It is a very propitious time for a regional educational laboratory to join
with existing research and development organizations to become part of this exciting renovation of the schools.

In the course of conducting our regional needs assessment, Tennessee State University took the initial steps toward developing relationships with the networks of organizations involved in school improvement. We found, first of all, that there were many different types of research going on, secondly that there was little coordination among research groups or between research groups and practitioners in the region. Our first priority was to survey all local, state, and regional organizations working in the area of school improvement. This survey included parent and teacher's organizations, university researchers, State departments of education, colleges of education, and privately-funded educational research centers in all of the four states. From this compilation of existing organizations, we were able to ascertain what types of research was going on and how and where it was being disseminated.

Knowledge of existing research efforts, combined with the information gathered in the needs assessment, helped us to design an integrated responsive unit plan for Task 2.

The entire Task 2 unit will be under the direction of a single director. That person will coordinate the efforts of the four Task 2 functional sub-units - Organization Support, Local Improvement, Direct Services, and Dissemination.

The Organization Support Division will provide technical assistance and training to help staff members of service improvement organizations strengthen their assistance strategies. It will be the primary responsibility of this division to create and nourish the network of government agencies and research organization engaged in improvement initiatives.

The Local Improvement Division will concentrate on initiatives at the school and district level. One facet of that effort, for example will be the "School Dropout Project" which will use workshops, conferences, training sessions, and publications to bring together the work of dropout researchers and local dropout prevention personnel. This particular project will entail a direct linkage between the regional and national research network on dropouts and local practitioners in the four states.

The Direct Services Division will include those Task 2 activities that offer immediate services and direct forums to clients. The "Multicultural Training Project", "Low Student Achievement Project", and "Pre-School/Elementary School Partnership Project" will furnish in-service training to provide clients with an understanding of current research. These three projects involve the direct, hands-on training and interaction needed to bring clients into the laboratory's organizational support system.
Finally, the Dissemination Division will serve as the central clearinghouse for all research data connected with Task 2. By linking with Educational Testing Services (ETS) and the ERIC Computer Systems, this dissemination unit will be capable of supplying national as well as regional data to network organizations. The Dissemination Division will facilitate the diffusion of research knowledge by publishing and spreading all reports, newsletters, training materials, and periodical publications generated by school improvement activities.

It should be emphasized that, in Task 2, the Laboratory for the Improvement of Schools and Classrooms (LISC) will not be engaged in primary research or data collection. Rather, the Laboratory will monitor and evaluate current research products and survey research-based solutions to organizations and practitioners that provide improvement assistance directly to schools and classrooms LISC seeks to move away from "laying on" ready-made answers to working collaboratively with school professionals in seeking solutions to their problems.

3.3.2 Working with State-Level Decision Makers on School Improvement Issues

Addressing Task 3 is greatly facilitated by the extremely high level of political interest and activity surrounding school improvement issues in the Appalachian States. In this region, as well as across the nation, the quality of education has been called into question, and education has been raised to the status of a burning issue. The past two years have witnessed a feverish pace of commission investigations, reports and recommendations and school reform legislation.

While the demand for educational improvement is being made, Federal Financial support for public schools is clearly on the decline. This puts state-level decisionmakers on the spot, and they have been extremely active in reformulating educational policies and implementing new programs to upgrade instructional quality. Since the states are being expected to shoulder a greater responsibility for funding the schools, they are also centralizing control over school policies and professional standards to an unprecedented degree. State-level policymakers have not received significant attention from labs in the past, but they are increasingly important in determining the resources, standards, and legal mandates for local school districts.

In the fast-paced "search for excellence", a variety of state-level groups have been pivotal decisionmakers and interest groups, legislative education committees, particularly in the lower chambers of the state general assemblies, have been very active in reviewing and passing reform measures and major funding bills for schools. Governors, particularly in Tennessee, Kentucky, and Virginia have been among the chief advocates of school improvement bills. State department of education have been busily engaged in cataloging and analyzing severe and persistent educational needs in their respective states. State
level association of teachers and parents have been monitoring and lobbying educational legislation as it comes before the general assemblies, though they have rarely initiated such legislation.

The primary clients of Task 3, therefore will be governors and their education staff, state legislators, state board of education members, and state associations of educators. Since State Department of Education and their officers have been among the most active initiators of new educational programs, they will be high-priority recipients of LISC technical assistance. The "Chief State School Officers Support Group", for example, will be targeted at this group of organizational actors which, in the past, has been neglected by regional educational laboratories.

The LISC will place a heavy emphasis on research on policy alternatives. It will document and monitor the implementation, costs, problems and successes of different state approaches to such problems as teacher evaluation systems, minimum quality standards, and instructional leadership training programs. The Laboratory will develop and package resources for decisionmakers in forms such as directories, audiovisual materials, research syntheses, and catalogues of exemplary programs. These technical assistance products, it is believed, will have the most effective impact on decisionmakers. Dissemination activity in this Task area is most efficiently handled by working through state agencies.

In addition to linking with policymakers through project activities, the LISC will build links between policymakers within the Appalachian Region through involvement in governances. This would be one component of the Laboratories overall goal of "constituency building".

In several states the rate of political discussion and legislative activity has outstripped the existing knowledge of the problems and what to do about them. State-level decisionmakers are swamped with proposals and demands and are receptive to objective support from research-based organizations. The politics of school improvement in the four state Appalachian Region provides a rich opportunity for collaborative work between the regional educational laboratory and state-level decisionmakers.

3.3.3 Working to Create Research and Development Based Resources for School Improvement

Educational laboratories should be critical components in the total research and development and education improvement system in the United States. Pursuant to this aim, the mission of the LISC will be to link the educational institutions of the Appalachian Region to provide research, development, and dissemination support services in a cooperative effort for the improvement of educational practice. The lab is uniquely capable...
of providing this linkage mechanism for the networking that needs to take place around any problem area. As a neutral agency, it can provide the setting for cooperative action among competing agencies and across state lines.

The LISC seeks to enhance its research data base and extend its dissemination capabilities by linking up with as many educational research organizations as possible. The initial step in establishing this network will be to identify all researchers and research organizations in the states of Kentucky, Virginia, West Virginia, and Tennessee. This compilation will be carried out with the assistance of Educational Testing Services (ETS) and the ERIC computer system. LISC will tie directly into four of the ERIC clearinghouses - Rural Education (New Mexico), Urban Education (Columbia University), Teacher Education (District of Columbia), and Handicapped Education (Virginia). Networking with these national educational research dissemination systems will expand tremendously the research-based information which the LISC can draw upon and channel to its clients. With the ongoing needs assessment activity to provide direction, we will be capable of identifying technical assistance needs for conducting research and, using our research linkages, to quickly provide products on services to meet those needs.

The key lesson from past laboratory experiences has been that the effectiveness of certain REL's suffered from an excess of "in-house" research activity and a paucity of links with other regional and national organizations. Too much valuable data and research material remained inside the main office and never reached the organizations for whom it was intended. The LISC hopes to remedy this shortcoming by decentralizing its data base and extending its research-gathering capabilities as far as possible. By "satellitizing" with ETS and other eminent research organizations, the Laboratory can offer to its clients the most extensive and patterned flow of information available. This is a highly cost-effective approach to resource and data base exchange, as demonstrated by the widely acknowledged success of McREL's decentralized approach to educational research services. The research and development approach of this laboratory, in short, will be that the organizational sum is greater than the parts.

3.3.4 Working in Collaboration with Centers and with Other Laboratories on Regional and National Educational Problems

The LISC intends to serve as a "bridging organization", linking horizontally to NIE Centers and other REL's and vertically to LEA's, SEA's, and the NIE itself. These collaborative ties will be maintained through on-site monitoring, institutional publications, quarterly reports, and project coordination. The ERIC Clearinghouses and the ETS "satellite" unit will provide substantial means of examining regional problems in their national scope. The Laboratory will also monitor nationwide educational developments through the National
Diffusion Network of the U.S. Department of Education. The NDN Facilitators will provide a principal link between exemplary projects that provide training, materials, and technical assistance and those seeking new programs.

Numerous federal, state, intermediate, local, and postsecondary agencies, including the NIE Centers and Regional Laboratories, share responsibility for improving education through nationwide research and dissemination. The LISC intends to supplement the institutional resources of the Appalachian Region by defining a place for itself in relation to these existing structures and services.

CHAPTER FOUR

Project Evaluation

The Tennessee State University planning project for an educational laboratory in the Appalachian Region was designed to accomplish five major objectives. They are delineated below:

1. To determine the major social, economic and educational characteristics of the Appalachian region;

2. To identify the most persistent educational problem for which laboratory services are most needed;

3. To determine the adequacy of existing research and development in the region;

4. To identify promising strategies for the organization focus, operations and services of the laboratory and;

5. To explore the potential for relationships with other appropriate organizations in Appalachia.

These objectives were accomplished through the implementation of the work scope. The work scope of the grant entailed conducting (1) a needs assessment interview via extensive consultations with knowledgeable organizations and individuals, (2) Think Tank, (3) indepth reviews of relevant research and literature, (4) secondary analyses of existing data and (5) organization design activities.

Project evaluation was conducted on a monthly basis throughout the four month (December 4, 1984 thru April 4, 1985) span of the planning grant project. These evaluations included both groups and individual assessments. Modifications of project activities were made when applicable. Refer to Chapters One thru Three of this document for particulars on each of these activities.
Additionally, project timelines were monitored. The following exhibits depicts the timeline for performing the major project activities. (Exhibit 1)

### EXHIBIT 1

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>MONTHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity 1: Project Start Up</td>
<td>1 Y</td>
</tr>
<tr>
<td>Activity 2: Data Collection and Analysis</td>
<td>1 - Y -</td>
</tr>
<tr>
<td>Activity 3: Preview of Research and Literature</td>
<td>1 - Y -</td>
</tr>
<tr>
<td>Activity 4: Consultation</td>
<td>1 - Y -</td>
</tr>
<tr>
<td>Activity 5: Organization Design</td>
<td>1 - Y -</td>
</tr>
<tr>
<td>Activity 6: Evaluation</td>
<td>1 - Y -</td>
</tr>
</tbody>
</table>

**Legend**

--- Preparatory of Work
--- Period of Performance
X Report
Y Meeting
All projects activities and objectives were successfully accomplished within the timeframe of the grant award period.
CHAPTER 5

BIBLIOGRAPHY


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INTRODUCTION

We are in the process of gathering background information which will assist us in assessing the educational needs and programs in the Appalachian Region. The Appalachian Region, as defined by the National Institute of Education, consists of Kentucky, Tennessee, Virginia and West Virginia. We would like to ask your opinion about these issues. This information will enable us to determine how and in what ways a regional program could best meet the area's educational needs. All responses will be grouped and individual responses will not be identified.

1.0 What are the educational strengths in your region?

2.0 How would you rate the public schools in your region?

3.0 What are the most pressing educational problems in your region?
   3.1 Which of these are more pertinent to your urban areas?
   3.2 Which of these are more pertinent to your rural areas?

4.0 What are the major barriers to school improvements?

5.0 What kinds of programs would you propose to improve education?

6.0 Are there research and development organizations currently serving your region? Who are they?

7.0 What is the nature of their services?

8.0 How would you rate their services?

9.0 Are there any barriers that limit the R and D's effectiveness?

10.0 What is the nature of the relationship of your organization with the R and D Centers in your region?

11.0 What changes would you recommend to improve the effectiveness of the R and D Centers in your region?

12.0 What are some specific programs or approaches, that you would recommend R and D Centers to implement in your region?
13.0 What are some of the strengths and weaknesses of the programs and services offered by your organization?

14.0 In what ways could a R and D Center assist your organization in meeting your educational needs?

15.0 What is the greatest area of need in improving classroom institution?
   15.1 Basic Skills
   15.2 Teacher training
   15.3 Discipline and student behavior
   15.4 Classroom materials
   15.5 Higher performance standards
Donald C. Lueder, Ph.D.
Associate Professor/Senior
Research Associate
Tennessee State University
3500 John A. Merritt Blvd.
Nashville, Tennessee 37203

Dear Don:

Thank you for your recent letter regarding your efforts to draft a proposal for the educational laboratory for the Appalachian region. I shall be happy to serve on the Board of Directors for the educational laboratory for the Appalachian regions. Chief State School Officials must be involved if the laboratory is to be successful. I would appreciate receiving a copy of your proposal at your earliest convenience.

Again, thank you for the invitation to serve on the Board for the proposed educational laboratory. Please let me know if I can be of further help.

Sincerely,

Robert L. McElrath
Commissioner

RLM:jrs

cc: Beecher Clapp
JoLeta Reynolds
Dr. Donald C. Lueder  
Associate Professor/Senior Research Associate  
Tennessee State University  
3500 John A. Merritt Boulevard  
Nashville, Tennessee  37203

Dear Dr. Lueder:

Thank you for your letter asking me to serve on the board of directors in the event that you and your staff are successful in your proposal for an educational laboratory for the Appalachian region. I think it is essential that each of the Chief State School Officers personally serve on the board if a regional lab is to be successful.

Therefore, please be advised that I would be most pleased to serve on such a board.

Sincerely,

[Signature]

Roy Truby  
State Superintendent of Schools

March 12, 1985
Dr. Donald C. Lueder  
Associate Professor/Senior  
Research Associate  
Center of Excellence  
Basic Skills for the Disadvantaged  
Tennessee State University  
3500 John A. Merritt Blvd.  
Nashville, Tennessee  37203

Dear Dr. Lueder:

This will serve to acknowledge your recent letter in which you requested that I serve on the Board of Directors of an educational laboratory to serve the Appalachian region provided that your proposal is funded.

Not having a copy of your proposal or any description of the project, I feel a little uncomfortable in giving an unqualified "yes" to your request. I shall say, however, that favorable consideration will be given to the matter of serving on the Board of Directors provided I am in agreement with the goals and objectives of your proposal as well as the governance structure.

I feel confident that you will be able to address these concerns of mine as you refine your proposal.

I trust that this letter will be acceptable to you. If I can help you in any way, please let me know.

Sincerely,

S. John Davis  
Superintendent of Public Instruction

SJD:nmd

cc: Dr. William H. Cochran  
Dr. Grant Tubbs
March 25, 1985

Dr. Donald C. Lueder  
Associate Professor  
Center of Excellence  
Tennessee State University  
3500 John A. Merritt Boulevard  
Nashville, Tennessee 37203

Dear Dr. Lueder:

I appreciate the good work you and your colleagues are doing in planning the proposed educational laboratory to serve the Appalachian region.

Kentucky Department of Education staff members have been pleased to work with you in planning the direction of this service. As you know, I support the laboratory and the potential benefits it offers to the Appalachian regions and intend to see that Kentucky remains involved by maintaining representation on the board.

Please keep me informed as your plans progress.

Sincerely,

Alice McDonald  
Superintendent of Public Instruction
Dr. Frederick S. Humphries  
President 
Tennessee State University  
3500 John Merritt Boulevard 
Nashville, TN 37203 

Dear Dr. Humphries: 

I am pleased to convey, on behalf of the Educational Testing Service (ETS), our proposal to the Tennessee State University (the University) to serve as a research and development satellite for the Laboratory for the Improvement of Schools and Classrooms in the Appalachian Region under National Institute of Education Request for Proposal #NIE-R-85-0003. 

The NIE Regional Laboratories are among the most important resources for facilitating more effective education in the United States. If the University receives the NIE award to establish the Laboratory for the Improvement of Schools and Classrooms, ETS will work with the University to assure the project’s success. 

The proposed project is one of high priority for ETS. We intend to make all of the resources of the organization available to the ETS Project Director, Dr. Michael Nettles, to assure that our tasks are performed effectively and efficiently. Moreover, we will provide consultation and support from personnel in all parts of the organization, including those in the Atlanta Regional Office. I have a personal interest in the success of the project, and have assured the Project Director that I will help in any way I can to assure that the necessary resources are available and that all parts of ETS respond to the project’s high priority. 

I believe ETS is uniquely qualified to participate in this Laboratory for four reasons. First, ETS researchers have recently conducted several important research and development projects that have identified methods for improving school and classroom effectiveness. Second, ETS has been a pioneer in the fields of measurement and evaluation, and has applied this expertise to research questions concerning relationships among student characteristics, school and learning conditions, and test score changes. Third, ETS is experienced in working with local, state and federal policymakers and in translating educational
research into a format that is relevant for addressing the policy questions they face. Finally, ETS is experienced in providing high quality services to NIE through both contracts and grants.

We welcome this opportunity to work with the University. I wish you and your colleagues success in obtaining a contract award.

Sincerely,

Gregory R. Anrig

Enclosure
Technical Proposal

Title: Subcontract Proposal for Appalachian Regional Laboratory

Applicant Organization: Educational Testing Service
Rosedale Road
Princeton, New Jersey 08541

Project Directors:

Michael Nettles
Research Scientist
609-734-1153

Ruth B. Ekstrom
Senior Research Scientist
609-734-5308

Ernest J. Anastasio
Vice President for Research Management
609-734-1501

Cognizant Officer:

Authorized Negotiator:

Patricia R. Curran
Contracts and Grants Administrator
609-734-5044

Submitted to: Tennessee State University
Nashville, Tennessee

Period of Work: October 1, 1985 - September 30, 1990

Date Submitted: March 29, 1985

Status: New Proposal

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NOTICE

The information and data furnished are proprietary and shall not be duplicated, used, or disclosed other than to evaluate the proposal for possible funding; provided that, if a contract is awarded to Educational Testing Service as a result of the submission of this proposal, the Government shall have the right to duplicate, use or disclose the information or data to the extent provided in the contract. This restriction does not limit the Government's right to use or disclose information and data obtained from another source without restrictions. The financial information and staff vitae contained in the proposal are considered proprietary data and not required to be released under the Freedom of Information Act.

Any release of information or data under a Freedom of Information Act request will be for the use of the individual requester only, and will not constitute a license to publish or distribute, or a transfer of any rights in or to the information or data.
March 15, 1985

To Whom It May Concern:

I will be available to begin work as a Materials Development Specialist on October 1, 1985. I understand that this position involves writing and consulting and intend to begin work whenever notified.

Sincerely,

D. Lanette Vaughn
College Assistant Professor
18 March 1985

Dr. Merriel Bullock
Director, Center of Excellence
Tennessee State University
3500 John A. Merritt Blvd.
Nashville, TN 37203

Dear Dr. Bullock:

We are pleased to support your proposal for the Appalachian Regional Educational Laboratory. The kind of joint venture proposed between our two organizations should result in better delivery of information to the classroom teacher—the person in the best position to effect change and enhance educational effectiveness. This type of linkage between labs and clearinghouses has been desired for a long time.

We look forward to a most productive relationship. We stand ready to serve in the implementation of the subcontract as of 1 October 1985.

Good luck with the competition.

Sincerely,

Jack Cole
Director

Betty Rose D. Rios
Associate Director

The proposed work plan is contingent upon New Mexico State University's successful re-bid for the ERIC/CRESS Clearinghouse, with the competition to be held in late fall, 1985.
March 25, 1985

Merriel Bullock, Ph.D.
Director
Center of Excellence/Basic Skills for the Disadvantaged
3500 John A. Merrill Blvd.
Nashville, TN 37203

Dear Bullock:

I would be happy for the ERIC Clearinghouse on Urban Education to cooperate with the Tennessee State University Center of Excellence/Basic Skills in carrying out the work of an NIE Regional Educational Laboratory, should you be awarded the contract.

We would be happy to develop four monographs each year and print and distribute items cooperatively with the proposed laboratory, under a subcontracting arrangement with your organization.

I wish good success in your proposal.

Sincerely yours,

Erwin Flaxman, Ph.D.
Director
March 11, 1985

Merriel Bullock, Pn.D.
Director, Center of Excellence
Basic Skills for the Disadvantaged
Tennessee State University
3500 John A. Merritt Boulevard
Nashville, TN 37203

Dear Dr. Bullock:

Thank you for contacting us in regard to cooperating with you in the preparation of your contract application to NIE for a regional laboratory. I'm sorry that our schedule was so crowded that we were unable to do the amount of detailed subcontract development you requested in the required time frame.

Nevertheless, I would like to assure you that the ERIC Clearinghouse on Handicapped and Gifted Children would be happy to work with you in the future if you are awarded the opportunity to develop an educational laboratory for the Appalachian Region. We have recently received a new three year contract with two additional option years. Thus we expect to have NIE funding for our Clearinghouse activities through August 1989.

You inquired specifically about our capability to develop monographs. That is an area in which we have considerable successful experience. In response to your question about cost you should plan on an amount of $3,000-$7,500 per monograph depending upon length and format.

Good luck in your proposal preparation. I am fully aware that you have a very difficult task on your hands.

Sincerely,

Donald K. Erickson, Ph.D.
Director
ERIC Clearinghouse on Handicapped and Gifted Children

bma
March 26, 1985

Dr. Muriel Bullock  
Director  
NIE Planning Grant Project  
School of Business Bldg.  
Room 123  
Tennessee State University  
Nashville, TN 37203  

Dear Dr. Bullock:

I am writing in support of your proposal for the Appalachian Regional Laboratory in its efforts to collaborate with other NIE-sponsored projects. Collaboration among these groups, in addition to being mandated by Congress for the labs, is essential to the efficient and effective use of talents and resources.

If Tennessee State is awarded the contract, the ERIC Clearinghouse on Teacher Education will be willing to negotiate contract with the lab to produce several monographs.

I look forward to working with you in this collaboration.

Sincerely,

Elizabeth A. Ashburn  
Director

ERAC/CPF
25 March 1985

Dr. Wayne Moore
Center for Excellence
Tennessee State University
Nashville, Tennessee 37203

Dear Dr. Moore:

This is to confirm our telephone conversation of 21 March 1985 in which I expressed our general interest in participating or collaborating in research efforts related to high school dropout reduction/remediation. If (when) opportunities arise that appear suitable for our combined efforts, I will contact you regarding the appropriateness of some type of joint effort. I understand that you will do likewise by contacting us should you note an appropriate potential research possibility.

Sincerely,

Lamarr Cox
J. Lamarr Cox
Senior Educational Psychologist

JLC:ls
5234

cc: Marie Eldridge
March 26, 1985

Dr. Merrill Bullock, Director
National Institute of Education Project
Tennessee State University, School of Business
3500 John Merritt Boulevard, Room 123
Nashville, Tennessee 37203

Dear Dr. Bullock:

LINC Resources, Inc. is pleased to support your proposal to NIE to establish a Regional Educational Laboratory under TSU. The activities of you and your colleagues are well known through your work with the Center for Excellence. It is the kind of leadership that has been implemented by the Center that is needed from the Regional Laboratory. You are demonstrating this leadership once again, drawing together the strengths of many national resource organizations within your proposal.

LINC will be pleased to assist in creating a national dissemination channel via the commercial publishing industry for the Regional Education Laboratory. Our experience in bringing the best research and development efforts of the U.S. Department of Education to schools and students across the nation through the cooperation of commercial publishers is well known.

Since 1977, we have been privileged to assist federal agencies and their numerous funded projects in the areas of marketing, editorial and technical considerations, and legal issues and concerns. It is from this background and history that we stand ready to support, work with, and provide assistance for your proposal. We will be happy to join the Laboratory's networking concept and to apply our expertise to the benefit of the Laboratory and its clients.

We wish you every success in your proposal and hope that we will have the opportunity to work together in the near future.

Sincerely yours,

Victor Fuchs
President

VEF:mvk
March 25, 1985

Dr. Merriel Bulluck
Director, NIE Project
P.O. Box 757
Tennessee State University
Nashville, Tennessee 37203

Dear Dr. Bulluck:

Please accept this letter as support for the Center's proposed project plan to NIE. I am extremely pleased that teachers will be involved in the implementation of the project. Not only am I pleased to support your proposal but I look forward to working with you and the Center in the implementation of the project.

Good luck!

Sincerely,

Vincent M. Kiernan
Regional Director
Mid-Atlantic Regional Office
March 26, 1985

Dr. Merriel Bullock
Director
National Institute of Education Project
Post Office Box 757
Tennessee State University
Nashville, Tennessee 37203

RE: Regional Educational Laboratory

Dear Dr. Bullock:

This is to advise you that the NEA Southeast Regional Office supports the Tennessee State University Center for Excellence in its bid to become the Regional Educational Laboratory for the Appalachian Region.

Much of the education reform activity now prevalent throughout the country is centered in the NEA Southeast Region. Tennessee State University is ideally located in Nashville to provide services and teacher involvement to educational institutions in our region.

The NEA hopes you are successful in this endeavor and we urge you to include teachers from throughout the Appalachian Region on your Advisory Council as you develop plans and programs for the Regional Laboratory.

Very truly yours,

James S. Seibert
Regional Director

cc: Carolyn Breedlove
March 25, 1985

Dr. Merriel Bullock, Director
National Institute of Education Project
P. O. Box 757
Tennessee State University
Nashville, Tennessee 37203

Dear Dr. Bullock:

We were pleased to learn you have received a $25,000 grant to develop a proposal for a Regional Educational Laboratory. If your project is funded, we would be happy to support your efforts by cooperating through networking procedures.

We would be pleased to keep you informed of our upcoming conferences, seminars and world congresses, as well as our publications and all other professional activities. We would hope you would not only see this as a means of gathering information generated from these professional activities, but would also appreciate the opportunity to become involved in the various programs as a means of disseminating information developed through your project.

As I am sure you are aware, the International Reading Association is a nonprofit, nongovernmental professional educational association of over 60,000 members interested in improving reading instruction, developing strong reading interests and promoting literacy so that all individuals may reach their full potential. In addition to our conferences and publications, we have a network of over 1,100 councils and affiliates, including local councils in every state (over 1,000) and state councils in 49 states. Each state and local council holds meetings and publishes newsletters and/or journals. As you might imagine, this network provides an efficient and extensive means of disseminating and exchanging information.

Again, we are pleased you are developing plans for a Regional Educational Laboratory and look forward to working with you in areas of mutual concern to the full extent of our bylaws and established policies.

Very cordially yours,

[Signature]

Donald W. Mitchell
Executive Director
March 26, 1985

Dr. Merriel Bullock, Director
National Institute of Education Project
P.O. Box 757
Tennessee State University
Nashville, TN 37203

Dear Dr. Bullock:

The National Center for Research in Vocational Education serves as the locus for vocational education research and development in the United States. Its various outreach responsibilities and activities include clearinghouses, nationwide dissemination, and leadership development.

Should the National Institute of Education award Tennessee State University a contract to serve as the Appalachia Educational Laboratory, the National Center will work with and assist the University in all ways appropriate to the mission and objectives of both agencies.

Sincerely,

Robert E. Taylor
Executive Director

kob
March 22, 1985

Dr. Merriel Bullock
Director of National Institute for Educational Programs
Tennessee State University
Box 757
Nashville, TN 37203

Dear Dr. Bullock:

There are many good educational programs that deserve a wider audience. The establishment of a network of educational laboratories whose purpose would be to share materials and programs would be an effective means of keeping educators informed. Our organization would be willing to cooperate in any way that we can if such a network is funded.

Best wishes for your success in this endeavor. Please keep us informed of your progress.

Sincerely,

Young Jay Mulkey
President

YJM:nlt
March 21, 1985

Dr. Merriel G. Bullock
Center of Excellence
Tennessee State University
Nashville, TN 37203

Dear Dr. Bullock:

I wholeheartedly support your proposal for an Educational Laboratory at Tennessee State University which will service the Appalachian Region. Also, too, I will be delighted to serve as a consultant on this project, and, to this end, I have enclosed a most recent resume and background.

Best wishes for a successful Center of Excellence project.

Sincerely yours,

Gwendolyn Calvert Baker
Executive Director
March 26, 1985

Dr. Merriel Bullock, Director
Tennessee State University Center of Excellence
Tennessee State University
3500 John A. Merrit Blvd.
Nashville, TN 37203

Dear Dr. Bullock:

We write to assure you that we, the Mid-Atlantic/Appalachian Race Desegregation Assistance Center (MAARDAC), will assist and cooperate with the Laboratory for the Improvement of Schools and Classrooms (LISC) in providing services authorized under its funding guidelines. We will be pleased to support efforts and work because, based on past experiences of interactions and work with several persons employed in the Center of Excellence, we know of the concern, commitment, and effectiveness demonstrated by the staff in providing high quality education and development to economically depressed populations.

Sincerely,

Charlene B. Michael
Charlene B. Michael, Ph.D.
Associate Director/MAARDAC
March 22, 1985

Dr. Wayne Moore  
Center for Excellence  
Tennessee State University  
Nashville, TN 37203

Dear Dr. Moore:

As we discussed in our phone conversation, there is a strong need to serve youth who are at-risk of dropping out of school. We want to express our support for your proposed efforts in dropout prevention. We look forward to working with you in several ways, including networking and sharing information and resources. Also, we are available as consultants to assist you in your regional, statewide, and local programming efforts.

The two of us have directed a series of studies during the last eight years that focus on dropout prevention and youth programming. We have reviewed existing dropout prevention efforts, worked with dropout prevention program staff, and served as consultants in the development of local programs. In addition, we developed a series of planning resources including dropout prevention handbooks and two sound-filmstrips that educators can use to plan programs that meet local needs.

Our national and state recognition in dropout prevention includes coordinating dropout prevention efforts among state educational and training agencies, working with 65% of the school districts in Wisconsin, conducting planning workshops for community organizations, and providing on-going assistance to schools, agencies, and other groups. We are frequent presenters at national conferences and actively share our findings and resource materials both in and out of the state.

We are strongly committed to helping youth stay in and succeed in school, therefore, we look forward to working with you in this much needed educational endeavor.

Cordially,

Jan Novak  
Project Director  
608 263-4357 or  
608 263-7806

Barbara Dougherty  
Project Director  
608 263-3679

Enclosures
March 26, 1985

Dr. Merriel Bullock  
Director  
NIE Planning Grant Project  
P. O. Box 757  
Tennessee State University  
Nashville, TN 37203  

Dear Dr. Bullock:

Upon approval of your grant for an educational laboratory in the Appalachian Region, we will be pleased to provide you with technical assistance. Our expertise focuses on special needs population - talent development, handicapped populations, behavior and academic disorders.

We can provide consultation in:

- testing and test construction
- child and student management
- working with parents
- rehabilitation counseling
- career development
- school and community counseling
- conflict resolution
- transitions from home to school and school to work
- clinical and corrective instruction
- teaching the gifted and talented
- teaching the handicapped

Enclosed is a copy of our magazine - The Directive Teacher.

Sincerely,

Thomas M. Stephens  
Executive Director  
Professor and Chairman  
Department of Human Services  
Education  
TMS/IC  
Enclosure

Faculty for exceptional children  
College of Education
March 28, 1985

Dr. Merrii Bullock  
Director  
National Institute of Education Project  
P.O. Box 757  
Tennessee State University  
Nashville, TN 37203

Dear Dr. Bullock:

Having been a participant in the Tennessee State University survey regarding educational needs for the Tennessee, Kentucky, Virginia, West Virginia area, I was very happy to learn that I was being considered for your advisory committee. After talking with Dr. Neal at some length about the Center for Excellence's application for a Regional Education Laboratory, I am excited about the possibility of such a laboratory being located in Nashville. As you know, Nashville provides not only a good geographical location but also is the state capitol of one of the first states to consider the question of educational reform. Moreover, the laboratory would be near the Peabody Family and Child Study Center where I serve as the Research Coordinator. The Family and Child Study Center is a clinical research facility within The John F. Kennedy Center for Research on Education and Human Development. I would be very interested in the laboratory's activities in education for children who by virtue of mental and physical handicaps find it difficult to function in the regular classroom.

I highly support your application and am very interested in serving on your advisory board. I wish you the best of luck with your application.

Sincerely,

William E. MacLean, Jr., Ph.D.  
Assistant Professor of Psychology  
and Human Development

WEM:kmg
March 26, 1985

Dr. Merriel Bullock
Director of Tennessee State University Center of Excellence
3500 John A. Merritt Blvd.
Nashville, Tennessee 37203

Dear Dr. Bullock:

This letter is to express appreciation to you and your staff for the invitation provided me to attend the First Annual Visiting Scholars Program sponsored by Tennessee State University Center of Excellence. The entire conference was enjoyable, informative and well organized.

During the conference, there was a discussion relative to the (LISC) Laboratory Improvement in Schools and Classroom Project proposed for several states. I support the establishment of this project and feel that the staff of Tennessee State University Center of Excellence is knowledgeable and very capable of organizing, demonstrating and initiating needed reforms for excellence in schools and classrooms with the (LISC) Laboratory Improvement in Schools and Classroom Project as a part of Tennessee State University Center of Excellence.

Again, thank you for a well planned conference.

Sincerely,

Oscar Allen, Principal

Mary Ann Garber School
2225 Roanoke Avenue
Chattanooga, Tennessee 37406
March 26, 1985

Dr. Merriel Bullock
Center of Excellence
Tennessee State University
Nashville TN  37203

Dear Dr. Bullock:

We in the Human Relations Commission are extremely pleased to hear of your proposed Laboratory for Improvement of Schools and Classrooms (LISC). This sounds like a much-needed addition to educational preparation and enhancement throughout our region!

We were particularly impressed with the proposal for a Multi-Cultural InService Training Project for Rural School Districts. We understand that this is to be carried on in Tennessee, Kentucky, Virginia, and West Virginia. The proposal, as we understand it, would involve three-day workshops for administrators, who would, in turn, train teachers. The inclusiveness of this proposal—including not only different ethnic groups, but also different religious groups and the handicapped as well—would meet a real need. The Human Relations Commission is convinced that helping teachers (and through them, students) think in an inclusive rather than a parochial manner is urgently needed for the health of our society. Thus, the Human Relations Commission gives its unreserved support to this proposal.

As a long-time Professor of Human Relations, I would be glad to work with the program (on a leave-time basis) if my service were wanted and if the program is funded.

We wish you well in this exciting endeavor!

Sincerely yours,

Fred Cloud
Executive Director
March 20, 1985

Dr. Donald Lueder
Tennessee State University
Center of Excellence Basic Skills for the Disadvantaged
3500 John A. Merritt Boulevard
Nashville, Tennessee 37203

Dear Dr. Lueder,

Please consider this letter as an expression of interest of some members in the Department of Educational Administration at Memphis State University in serving as consultants in your Center. Our familiarity and involvement with the activities of the Center and with some of the proposed projects such as the proposal for a Regional Educational Laboratory are obvious reasons for wanting to work with your Center.

However, and at least of equal importance, is the fact that we are extremely impressed with the personnel and leadership that have been assembled by the Center and their dedication to what we consider to be some of the most important tasks facing our society.

Enclosed, please find a vitae for each of the following personnel:

- Dr. Eugene Connors
- Dr. Elzie Danley
- Dr. Frank Markus
- Dr. Thomas Valesky

Please let us know when members of our department may be of assistance to your Center.

Sincerely,

Frank W. Markus
Chairman and Professor, EDAS
March 22, 1985

Dr. Chrystal Partridge
School of Education
Department of Curriculum and Instruction
Tennessee State University
Nashville, TN 37203

Dear Dr. Partridge:

I am enthusiastic about supporting your effort to establish a regional Laboratory for Improvement of Schools and Classrooms. With the current emphasis on excellence in education, it is obvious that such a laboratory will be extremely beneficial to the teachers and administrators in the regional area. To my knowledge, there currently is not one available to assist school systems.

Knowing your skill in multicultural education, I am pleased to agree to work with you as a consultant. Enclosed is a copy of my resume.

Sincerely,

[Signature]

Dorothy J. Skeel, Director
Peabody Center for Economic and Social Studies Education

DJS:rlc
Enclosures
Dear Dr. Bullock:

I would like to convey to you my hearty support for your application for a Regional Educational Laboratory. I have had over 15 years of experience working with educational activities in the Appalachian Region and feel that the availability of the services proposed in your application would be of significant benefit to the people of the region. We are all aware of the proposed reductions in the activities of the Tennessee Valley Authority and the Appalachian Regional Commission. Certainly, the proposed center, located at Tennessee State University, would help to lessen the negative impact of any reductions aimed at T.V.A. and/or A.R.C.

In my role as Assistant Provost at The University of Tennessee at Chattanooga, I had the opportunity to respond to your needs assessment, and was excited by many of the potential benefits of a program such as you propose. I am no longer affiliated with U.T.C. and therefore cannot forward an institutional endorsement, but I know from past experiences that the type of educational assistance proposed will find a receptive and appreciative audience.

Again, good luck with your efforts, and if I can be of additional service, please do not hesitate to contact me.

Sincerely,

Dr. Dan R. Quarles
Associate Professor and Director

DRQ/rmc
Dr. Merriel Bullock, Director
National Institute of Education
Post Office Box 757
Tennessee State University
Nashville, Tennessee 37203

Dear Dr. Bullock:

I am interested in the Regional Educational Laboratory becoming located in Tennessee. In talking with a member of your staff, I have been impressed by the activities that have taken place at Tennessee State University, and am willing to work with you in any way that my previous commitments would allow.

Sincerely,

Mary Gardiner Gruenewald
Institutional Research Director

MGG/ehd
March 21, 1985

Dr. Merriel Bullock  
Director  
N.I.E. Project  
Tennessee State University  
P. O. Box 757  
Nashville, TN 37203

Dear Dr. Bullock:

This letter signifies the interest of the Center and of myself in contributing to the work of the Appalachian Regional Educational Laboratory. As the enclosed materials about the Center will indicate, we have been actively carrying out research and services projects with diverse two- and four-year colleges in the region since 1977. We now have a strong network of affiliated institutions and have become quite well acquainted with institutions in the service area which would be encompassed by the Lab.

I also would be willing to serve on an Advisory Committee for the Regional Laboratory or to serve as a consultant within the limits of my competence and other constraints on my time. I have enclosed a resume which you can attach to your application if you so desire.

Congratulations on obtaining the Planning Grant and good luck in your efforts. If I can be of further assistance, please feel free to call.

Sincerely yours,

Arthur W. Chickering, Director  
Distinguished Professor of  
Higher Education

Enclosure

c: Dr. Jerry Boone, Vice President for  
Academic Affairs  
Dr. Robert L. Saunders, Dean  
College of Education
Dr. Merriel Bullock, Director  
National Institute of Education Project  
P. O. Box 757  
Tennessee State University  
Nashville, TN  37203  

Dear Dr. Bullock:  

We are pleased that you are submitting a proposal to N.I.E. in response to the open competition for a regional laboratory to serve the Tennessee area. Reactions from fellow faculty members at Memphis State University have been favorable and hopeful.

In response to the inquiry from Mr. Arthur Neal, yes, I would work with you and support your proposal and, eventually, your project as permitted within the guidelines and policies of the Tennessee State Board of Regents.

We wish you well in this endeavor.

Yours very truly,

Fred K. Bellott  
Director  

FKB/bg
March 20, 1985

Dr. Merriel Bullock, Director
National Institute of Education Project
P.O. Box 757
Tennessee State University
Nashville, TN 37203

Dear Dr. Bullock:

The invitation extended by Dr. Arthur Neal to serve in the capacity of a consultant or perhaps as a member of the advisory committee for the Regional Educational Laboratory which TSU is proposing to NIE was a pleasant surprise this morning. Please know that I shall be happy to serve in either or both roles, should the laboratory at TSU become a reality.

I know that TSU has worked diligently in preparing this proposal and, with the assistance of the planning grant, has pooled numerous data which hopefully will support the awarding of a regional laboratory to the Nashville area. If I or any of the faculty/staff of the School of Education here at UTC can be of educational assistance, please feel welcome to contact us.

I shall look forward to hearing from TSU soon regarding the laboratory and/or the TSU Center of Excellence.

Sincerely,

Roy Stinnett
Dean

cc: Dr. Arthur Neal
March 21, 1985

Ms. Crystal Partridge
Tennessee State University
Nashville, Tennessee 37203

Dear Ms. Partridge:

Please accept this letter as my endorsement of the L.I.S.C. project of the Tennessee State University. Further, please know of my willingness to serve as a consultant for the project. Projects such as this are vital to education.

I am enthusiastic about the prospect of working together.

Sincerely,

Dr. Corinne R. Davis
Professor of Education

CRD/dcr
March 21, 1985

Dr. Merriel Bullock
Director, National Institute of Education Project
Box 757
Tennessee State University
Nashville, TN 37203

Dear Dr. Bullock:

I was pleased to learn that your institution is a finalist in seeking to host the regional education laboratory. I have been impressed with many of the activities carried on by you folks at Tennessee State, particularly those in the area of community education. We are in need of a fresh approach to providing services to the educational community in this part of the country and perhaps your institution is the right one to provide that leadership at this time.

If Tennessee State University is awarded the contract for the regional educational laboratory, I would look forward to working with the staff in any way that I might make a contribution and serve to link the resources of my institution into an effective network for the improvement of educational opportunities for all the citizens in our part of the country. Please keep me informed and let me know how I might be of assistance to you.

Sincerely,

Steve R. Parson, Ed.D.
Director, National Cooperative Extension Center for Community Education

Enclosure
March 21, 1985

Dr. Merriel G. Bullock  
Center of Excellence  
Tennessee State University  
Nashville, Tennessee 37203

Dear Dr. Bullock:

I am pleased to offer my full support for the proposal for an Educational Laboratory at Tennessee State University, LABORATORY FOR THE IMPROVEMENT OF SCHOOLS AND CLASSROOMS (LISC). This laboratory will provide needed service to the Appalachian Region.

I will be pleased to serve as a consultant and as a coordinator for one of the programs.

Best wishes for a successful project.

Yours truly,

Elaine P. Witty
Dean, School of Education
March 21, 1985

Dr. Merriel Bullock
Director
National Institute of Education Project
P.O. Box 757
Tennessee State University
Nashville, TN 37207

Dear Dr. Bullock:

As a follow-up to my conversations with Arthur Miller, I write to confirm my willingness to work with the Educational Research Laboratory. I feel there is something to be gained from the sharing of information and the results of our research projects.

If you have any questions or need additional information, please don't hesitate to contact me (804 924-3417).

Sincerely,

Stephen D. Campbell

SDC:1mp
March 21, 1985

Dr. Merriel G. Bullock
Center of Excellence
Tennessee State University
Nashville, TN 37203

Dear Dr. Bullock,

In response to your letter of March 18th, I do wish to confirm that I would be glad to work as a consultant for the Center of Excellence's NIE Educational Laboratory.

I am sorry that I was unable to meet the time set for a proposal on basic skills. The date was impossible to meet given my work load here.

My vitae is attached.

Best wishes for a successful project.

Sincerely,

Mary L. Smith
Dean
College of Applied Sciences

MLS:psn

Dictated but not read.

Enclosure.

pc: Chrystal L. Partridge, Ph.D.
Multicultural Consultant
Dear Dr. Bullock:

I am pleased to learn that your institution and Center for Excellence have received an NIE planning grant for a regional educational laboratory for the Appalachian area. This is a time when there is much to be done to improve educational systems and processes at all levels within our own states and our regional neighbors. The Tennessee Centers of Excellence program is an example of steps in the right direction. I support your proposal and would be pleased to assist your laboratory in an advisory or consultant capacity if your proposal is funded. Best wishes for a successful competition.

Sincerely,

Warren E. Lacefield, Ph.D.
Director
March 21, 1985

Dr. Merriel Bullock
Director
National Institute of Education Project
Tennessee State University
Nashville, TN 27203

Dear Dr. Bullock:

I have talked with Arthur Neal regarding the proposed Educational Regional Laboratory for the Appalachian Region. I was involved in the initial needs assessment and have talked with him subsequently about the development of your pending proposal. As Director of an educational resource unit, I believe there are many issues that can be addressed through this multi-state endeavor.

In the event that your proposal is funded, I would be happy to serve in an advisory or consultative role with your office and certainly will be willing to share the results of our materials development, faculty training and educational research efforts.

Best of luck to you in your quest for funding.

Sincerely,

William C. Pfeifle, Ed.D.
Director
Educational and Biomedical Resources
March 25, 1985

Dr. Merriel Bullock  
Director, National Institute for Education Project  
P.O. Box 757  
Tennessee State University  
Nashville, Tennessee 37203

Dear Dr. Bullock:

Dr. A. L. Neal has asked me to write a letter indicating my willingness to serve as a consultant for the Educational Laboratory at Nashville if this laboratory is funded. I believe that Nashville would be an excellent location for a regional laboratory.

I participated in the developmental stages of the CEMREL and AREL regional laboratories. I have MED and EDD degrees in educational administration from the University of Florida, and I have served as Director of Institutional Research and Testing at Eastern Kentucky University since 1965.

I would be pleased to provide what assistance I can to the development of the regional laboratory at Nashville.

Sincerely,

R. Dean Acker  
Director of Institutional Research

RDA/s1
March 21, 1985

Dr. Chrystal L. Partridge
Department of Curriculum and Instruction
Tennessee State University
Nashville, TN 37203

Dear Dr. Partridge,

This is to indicate my willingness to serve as a consultant and/or project monitor to Tennessee State's proposed Laboratory for the Improvement of Schools and Classrooms. The prospect of working in an ongoing capacity with a center with such a vital mission is extremely exciting.

Please keep me informed of the status of the proposal. I'm looking forward to working with you and the rest of the Tennessee State staff.

Sincerely,

Hakim M. Rashid, Ph.D.
Associate Professor

HMR/jo
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Appendix D: Listing of Participants in Needs Assessment Survey

Tennessee:

Parents
- Parent-Teachers Association (PTA)
- Assn. for Children with Learning Disabilities

Students
- University of Tennessee, Student Government
- White's Creek Student Council

Legislators - General Assembly
- House Education Committee
- Senate Education Committee
- Legislative Oversight Committee

Research Centers
- Memphis State University
  Bureau of Educational Research and Service (BERS)
  Memphis, TN 38152
- Memphis State University
  Center for Instructional Services and Research (CISR)
  Memphis, TN 38152
- Memphis State University
  Center for the Study of Higher Education
  Ball Education Building
  Memphis, TN 38152
- Memphis State University
  Office of Institutional Research
  Memphis, TN 38152
- University of Tennessee at Chattanooga
  School of Education
  Chattanooga, TN 37402
- University of Tennessee at Chattanooga
  Office of Institutional Research
  Chattanooga, TN 37402
- Vanderbilt University
  Peabody Center for Economic and Social Studies Education
  Box 320
  Nashville, TN 37203
- Vanderbilt University
  Peabody Child Study Center
  Peabody College
  Box 158
  Nashville, TN 37203

State Teacher Education Associations
- Education Department
  Cordell Hull Building
  Nashville, Tennessee 37219

Multicultural Organizations
- Nashville Urban League
Kentucky:

Parents
- Kentucky P.T.A.
- Pritchard Educational Research Commission

Students
- University of Kentucky, Student Association

Legislators
- State Board of Education
- Senate Education Committee

Research Centers
- Eastern Kentucky University
  Office of Institutional Research
  Richmond, KY 0475
- Research Coordinating Unit
  Kentucky Department of Education
  Frankfort, KY 40601
- University of Kentucky
  Center for Learning Resources For Allied Health
Medical Center Annex 3
Lexington, KY 40536
- University of Kentucky
  Interdisciplinary Human Development Program
  Graduate School
  Lexington, KY 40506
- University of Kentucky
  Office of Education Research and Development (OER)
  105 Taylor Education Building
  Lexington, KY 40506
- University of Kentucky
  Center for Professional Development (CPD)
  College of Education
  105 Taylor Education Building
  Lexington, KY 40506

State Education Agencies
- Department of Public Instruction
  1725 Capital Plaza Tower
  Frankfort, KY 40601

Multicultural Organizations
- River City Chapter Business & Professional Women's
  611 W. Main
  Louisville, KY
- President Bureau of Jewish Education
  Citizen Plaza - 28th Floor
  5th and Jefferson St.
  Louisville, KY
- Louisville Urban League
  1202 S. Third St.
  Louisville, KY
- Educational Committee
  NAACP
  233 W. Broadway
  Louisville, KY
- Louisville Human Relations Commission
  200 South 7th
  Suite 120
  Louisville, KY

Virginia:

Parents
- Virginia P.T.A.
- Legislative Lobbyist Virginia P.T.A.

Students
- University of Virginia Student Government
- Virginia Commonwealth University Student Government
- Legislators
- House Education Committee
- Senate Education Committee
- Virginia Superintendent of Public Instruction
Research Centers
- Old Dominion University Office of University Planning and Budget
  218 New Administration Bldg.
  Norfolk, VA  23508
- University of Virginia-Center for Study of Higher Education
  260 Ruffner Hall
  405 Emmett Street
  Charlottesville, VA  22903
- University of Virginia
  Evaluation Research Center
  264 Ruffner Hall, Education School
  405 Emmet Street
  Charlottesville, VA  22903
- University of Virginia
  McHugh Reading Center
  Charlottesville, VA  22903
- University of Virginia
  Office of Institutional Planning and Studies
  102 Levering Hall, East Range
  Charlottesville, VA  22903
- Virginia Polytechnic Institute and State University
  Cooperative Extension Center for Community Education
  267 University City Office Building
  Blacksburg, VA  24061

State Teacher Education Associations
- Department of Public Instruction
  P.O. Box 60
  James Monroe Building
  14th and Franklin
  Richmond, VA  23216

Multicultural Organizations
- NAACP
  415 N. Second St.
  Richmond, VA
- State Advocacy of Dev. Disabled
  9th St. Office Building Suite 527
  Richmond, VA  23219
- Richmond Urban League
  101 East Clay
  Richmond, VA

West Virginia:

Parents
- West Virginia P.T.A.
- Research Aide P.T.A.

Students
- University of West Virginia Student Council
- Student Legislative Aide

Legislators
- House Education Committee
- Senate Education Committee

State Teacher Education Associations
- State Department of Education
  1900 Washington St.
  Building B
  Charleston, West Va. 25305

Multicultural Organizations
- National Council of Jewish Women
  1218 Quavier St.
  Charleston, West VA 25301

- West VA. Advocates for Dev. Disabled
  1021 Quavier St. Suite 407
  Charleston, West VA.

- National Black American Women’s Association
  423 1/2 Bauregard St.
  Charleston, West VA
Appendix E: Listing of Universities participating in the Think Tank Assessment

- University of Virginia
  Charlottesville, Virginia
- University of Kentucky
  Lexington, Kentucky
- Marshall University
  Huntington, West Virginia
- Kentucky State University
  Frankfort, Kentucky
- West Virginia State College
  Institute, West Virginia
- Norfolk State College
  Norfolk, Virginia
Appendix F: Related Projects conducted by Tennessee State University

The following listing of research, service and development projects represent a sample of products completed by and/or are currently engaged in by Tennessee State University Faculty and Staff. These research, service and development projects reflect a commitment of the University to address diverse and key aspects of education.

**EFFECT OF PCBs ON EARLY DEVELOPMENTAL EVENTS DURING SEA URCHIN EMBRYOGENESIS**

**SPONSOR:** Office of Research and Development, U.S. Environmental Protection Agency

**EFFECT OF PCBs ON GROWTH AND MORPHOGENESIS**

**SPONSOR:** Department of Health, Education, and Welfare/Public Health Services - Division of Research Resources

**MATHEMATICAL LABORATORY: THE DEVELOPMENTAL STUDIES PROGRAM**

**SPONSOR:** Strengthening Developing Institutional Program

**NUTRIENT INTAKE AND PLATE WASTE OF SCHOOL LUNCH PARTICIPANTS IN RURAL TENNESSEE**

**SPONSOR:** United States Department of Agriculture

**BIOFEEDBACK CONTROL AS A FUNCTION OF SUBJECT AND TASK VARIABLES**

**SPONSOR:** National Institute of Health-Division of Research Resources, and the National Institute of Mental Health

**EVALUATION OF HYBRID SOYBEANS USING REPLICATED RG: TRIALS II**

**SPONSOR:** United State Department of Agriculture/Science and Education Administration cooperative Research

**CORRELATING MACHINABILITY, WEAR AND CAVITATION EROSION RESISTANCE OF METALLIC MATERIALS**

**SPONSOR:** NASA

**BINDING OF BENZO(a) PYRENE METABOLITES TO DNA**

**SPONSOR:** National Cancer Institute

**KINETICS AND THERMO-DYNAMIC STUDIES OF DRUG BINDING TO DNA**

**SPONSOR:** National Institute of Health

**TENNESSEE LEARNING CENTER**

**SPONSOR:** State of Tennessee (Department of Labor)

**HERBICIDE PERFORMANCE AND EFFICIENCY UNDER CONVENTIONAL AND NO-TILLAGE SOY-BEAN SYSTEMS**

**SPONSOR:** CSRS (United State Department of Agriculture)

**BUREAU OF RECLAMATION PRIORITIZATION METHODOLOGY**

**SPONSOR:** Department of Interior Bureau of Reclamation
MEDICAL PROBLEMS AND LIFE EVENTS AS FACTORS IN DEPRESSION  
SPONSOR: National Institute of Mental Health

URBAN-RURAL DIFFERENCES IN PSYCHIATRIC IMPAIRMENT  
SPONSOR: USDA

THE ISOLATION OF FACTORS RELATED TO LEVELS AND PATTERNS OF LIVING IN THE RURAL SOUTH  
SPONSOR: Department of Agriculture CSRS

FACTORS INFLUENCING SOYBEAN CALLUS INDUCTION, GROWTH AND MORPHOGENESIS POTENTIAL  
SPONSOR: Cooperative Agricultural Research Program

MARC HONORS UNDERGRADUATE TRAINING PROGRAM  
SPONSOR: National Institute of General Medical Sciences

REGULATION OF CYCLIC 3', 5' NUCLEOTIDE PHOSPHODIESTERASE  
SPONSOR: National Institutes of Health

STRENGTHEN AND BROADEN HUMANITIES CURRICULUM AT TENNESSEE STATE UNIVERSITY  
SPONSOR: National Endowment for the Humanities

A PRESERVICE TRAINING PROGRAM IN SPEECH PATHOLOGY AND AUDIOLOGY  
SPONSOR: Office of Education: Bureau of Education for the Handicapped

IMPROVEMENT OF AUDIOLOGY AND SPEECH PATHOLOGY SERVICES AND FACILITIES  
SPONSOR: Department of Education

IMPROVING THE QUALITY OF ACADEMIC PROGRAMS IN SPEECH PATHOLOGY AND AUDIOLOGY  
SPONSOR: Title III, SDIP, U.S. Department of Education

A COOPERATIVE PROGRAM IN SPEECH PATHOLOGY AND AUDIOLOGY  
SPONSOR: Maternal and Child Health Service

A PRESERVICE TRAINING PROGRAM IN SPEECH PATHOLOGY AND AUDIOLOGY  
SPONSOR: Department of Education

GOVERNOR HIGHWAY SAFETY  
SPONSOR: Tennessee State Department of Transportation

A STUDY OF NEUROTRANSMITTERS IN THE HORSESHOE CRAB  
SPONSOR: National Institutes of Health

ECONOMIC DEVELOPMENT CENTER  
SPONSOR: U.S. Department of Commerce, Economic Development

TECHNICAL REPORT ON THE ECONOMIC IMPACT OF THE FEDERAL HIGHWAY SYSTEM  
SPONSOR: U.S. Department of Transportation

STRENGTHENING DEVELOPMENT INSTITUTION PROGRAM: WRITING CLINIC  
SPONSOR: Federal Government, Title III

UPGRADING ACADEMIC COMPUTING AND EDUCATIONAL PROGRAM CAPABILITIES
SPONSOR: Title III IAP Special Needs

BIOMEDICAL RESEARCH SUPPORT GRANT
SPONSOR: National Institute of Health

MINORITY BIOMEDICAL RESEARCH SUPPORT
SPONSOR: National Institutes of Health

UNIVERSITY READING CENTER, TITLE III STRENGTHENING DEVELOPMENT INSTITUTIONS PROGRAM
SPONSOR:

SMALL FARM DEVELOPMENT PROGRAM IN WEST TENNESSEE
SPONSOR: U.S. Department of Agriculture, Science and Education Administration/Cooperative Research

A BACHELORS PROGRAM IN MENTAL HEALTH
SPONSOR: National Institutes Of Mental Health

EFFECT OF SULFUR & MOLYBDENUM ON YEILD AND QUALITY OF LADION CLOVER IN COSTAL BERMUDA GRASS PERS.
SPONSOR: United States Department Of Agriculture

TECHNOLOGICALLY-ASSISTED PHYSICAL SCIENCE PROGRAM
SPONSOR: National Science Foundation

NUTRITIONAL HEALTH OF ADOLESCENT FEMALES
SPONSOR: U.S. Department of Agriculture/Science and Education Administration Cooperative Research

BLOOD STUDY IN SPRAGUE DANLEY RATS
SPONSOR: OFFICE OF NAVAL RESEARCH - DEPARTMENT OF THE NAVY

DRUG INTERACTION
SPONSOR: U.S. Department of Agriculture

DRUG INTERACTION BETWEEN COMBINED PESTICIDES AND CENTRAL NERVOUS SYSTEM DEPRESSANTS IN MICE
SPONSOR: Department of Health, Education and Welfare Public Health Services
ETS Related Projects

The following summaries of research and development projects represent a sample work recently completed by ETS staff on issues related to the needs identified for the Appalachian Regional Laboratory. The Summaries can be classified into the following five categories: (1) testing and assessment; (2) educational technology and the use of computers in teaching and learning; (3) educational policymaking and school finance; (4) education and employment transitions; and (5) education equity and equal opportunity.
EDUCATIONAL EQUALITY PROJECT

Educational Equality (EQ) is a project of the College Board that is designed to strengthen the academic quality of secondary education and ensure equality of opportunity for postsecondary education. A two-year period of consultation with teachers and others led to the publication of a statement of the skills and competencies needed by college-bound students—Academic Preparation for College. ETS is assisting the College Board's several academic advisory committees in developing additional publications addressing the means of achieving the outcomes called for in this publication. In addition, ETS has undertaken several research projects on behalf of EQ.

Kimmel 1980- P/J 192-02

College Board
James Herbert

TEACHER CORPS PROJECT

Under subcontract to the Teacher Corps, ETS worked with the Education Department of Trenton State College (TSC) and the Trenton Public Schools.

The project was conducted at Wilson School, Trenton—an almost all-Black elementary school that is among the network of schools using Individually Guided Education materials and techniques. Bringing about improvement in reading and math skills by improving teacher competencies was the goal of the project. TSC designed the training modules and trained the teachers; the evaluation was based on improvement in student performance. During the first year, the focus was on classroom management skills; in the second year, it was on instructional skills in math and reading.

McDonald 1975-77 P/J 565-01

U.S. Teacher Corps
PERSONAL-SOCIAL DEVELOPMENT IN DIFFERENTIATED CLASSROOM CONTEXTS

This is an assessment and research program on children's social and task-oriented behaviors in natural contexts, especially the classroom. The project has involved the development of a multivariate observation system and a three-dimensional framework for understanding consistencies and change in social competence.

Studies have been undertaken to examine the development of individual differences, the influences of the classroom context on children's behaviors, the influence of the mother's relationship with the child on social competence, and the relationships between cognitive functioning and social competence.

Emmerich 1980-81 P/J 818-02

E. Anastasio

Educational Testing Service

A STUDY OF EXCELLENCE IN HIGH SCHOOL EDUCATION: EDUCATIONAL POLICIES, SCHOOL QUALITY, AND STUDENT OUTCOMES

The general, long-term goal of this project is to improve school quality and, thus, produce excellence in high school education. The specific, short-term goals are to conduct two studies: 1) a cross-sectional analysis comparing 1972 high school seniors and their schools with 1980 high school seniors and their schools, and 2) a longitudinal analysis relating growth and development of 1980 high school sophomores to their schooling experience over the period 1980-82.

This study has four major objectives: 1) to document changes in achievement over time both nationally and by selected subpopulations, 2) to identify the school-related and student-related variables that affect student outcomes in high school education, 3) to understand how these variables and the interaction between them affect the quality of high school education, and 4) to present this information to educational policy-makers in a way that will be illuminating and will help them arrive at decisions leading to excellence in high school education.

Rock 1983-85 P/J 822

U.S. Department of Education
Marion J. Washington
CALIFORNIA POSTSECONDARY ALTERNATIVES STUDY

The California Postsecondary Alternatives Study was conducted by ETS in 1975. The general theme of the final report, Postsecondary Alternatives to Meet the Educational Needs of California Adults, is that the state should act to create more opportunities for adult learning (degree and nondegree). The report analyzes the need and offers 17 recommendations for institutional reforms (via internal redirection of resources) and for new state programs (supported through new state funds). Chief among the latter are proposals for a statewide postsecondary information and counseling service, an individualized learning program (somewhat like New York's Empire State College program), and a learning validation service that would award degrees for knowledge and skill regardless of how acquired. In addition to the final report, a number of background technical reports were prepared. Among them were:

1. California's Need for Postsecondary Alternatives. Analyses of current enrollment patterns and trends, expressed interests, preferred methods of learning, perceived problems, and so forth.

2. Community Needs for Postsecondary Alternatives. Summaries of what was learned from community forums about adult educational interests, aspirations, perceived barriers, and so forth.

3. Inventory of Existing Postsecondary Alternatives. A summary of existing nontraditional programs in California.

4. Noninstructional Services as Postsecondary Alternatives. This report presents a discussion of services such as counseling, awarding credit for prior learning, and credit banking, as well as methods for publicizing such new services.

Peterson 1974-75 P/J 487

TEACHING AND ASSESSING READING

The Early Education Group has undertaken a project that brings together experienced practitioners and research staff in an intensive investigation of children's reading. The primary focus of the study is on younger children, but older children's reading capabilities are also investigated as a backdrop for the larger study.

The research objectives of the project are threefold: 1) to produce detailed documentation of individual children's reading, 2) to develop theoretical formulations about reading that are grounded in the documentary data, and 3) to conduct selected analyses of the data for their relationship to specific areas of reading research. In addition, the collaborative methodology itself is viewed as a major outcome that has considerable significance for both research and teaching practice.

Bussis/Chittenden P/J 858-33
TEXAS EDUCATION AGENCY PROFICIENCY-BASED TEACHER CERTIFICATION PROGRAM

Texas has passed legislation that will require all preservice teachers to pass competency exams in their subject areas. The American Council on the Teaching of Foreign Languages (ACTFL) received federal funding to work with the Texas Education Agency to use proficiency testing in its foreign language battery. ETS was subcontracted by ACTFL to conduct one oral proficiency testing workshop in the first year of the project.

Liskin-Gasparro 1983 P/J 584-13

American Council on the Teaching of Foreign Languages

ASSESSMENT PROCESS WORKSHOP

The purpose of this workshop was to help the Virginia Department of Education develop the assessment component of Virginia's Standards of Learning (SOL) Program. This component is concerned with the development of sets of procedures that teachers may use directly or as models in monitoring learners' progress in mastering the basic day-to-day and week-to-week instructional objectives of the Virginia public schools.

The Virginia Assessment Process Workshop was a one-day meeting held in February 1983 to present advantages and disadvantages associated with different assessment methodologies to the Virginia educators who would put the SOL program into operation.

Hardy 1983 P/J 702-32

Virginia Department of Education
Dr. David Mott

TEACHER INTERVIEW STUDY

A study of 60 elementary school teachers in informal instructional settings was conducted through in-depth interviews. A major purpose of the study was to undertake an analysis of the variety of teachers' constructs—their beliefs and understandings—regarding curriculum, children's learning, and the school as a working environment for adults. This project resulted in publication of a book, Beyond Surface Curriculums, by Westview Press in 1976.

Bussis/Chittenden 1974-76 P/J 858-10

Ford Foundation
GROWTH STUDY

The longitudinal study of academic prediction and growth (begun in 1961) followed a sample of 9,000 students from fifth through twelfth grades, and, in some cases, beyond. The sample was representative of public and private schools of the four major regions of the country.

The purpose of this study was to determine how intellectual growth varies with, or is affected by, characteristics of the school and the community and the characteristics and background experiences of the students. Analysis of the data provides information on how well the performance of high school seniors on ability and achievement tests can predict performance on college entrance examinations as well as information pertaining to the academic record, characteristics, and background experiences of students who leave school before graduation. Although the last data collection was in 1973, analysis of the data by researchers will continue for many years.

Hilton 1961-73

Educational Testing Service
The College Board
U.S. Department of Education

SREB/ETS TEST DEVELOPMENT ACTIVITIES

Educational Testing Service is assisting the Southern Regional Educational Board (SREB) with a project designed to improve the performance of students attending Historically Black Colleges on standardized achievement tests such as the NTE and the Graduate Record Examinations (GRE). The purpose of the project is to increase student exposure to test items measuring high-level cognitive skills. This increased exposure will be accomplished through 1) the training of faculty groups at each of the nine Historically Black Colleges in the development of test items similar to those found on the NTE, and 2) the provision of a pool of test items that can be incorporated by these faculty members in classroom tests.

ETS staff members from the Atlanta and Princeton Offices have presented workshops to approximately 75 faculty members from the nine participating institutions. Working in faculty groups, the institutions participating in the project have developed over 900 test items in five different subject areas. These items have been reviewed and edited by ETS. In addition, ETS will provide approximately 600 test items from retired test forms from national programs for use by institutions participating in the project. Faculty members will be encouraged to use test items from the pool in their classroom testing throughout the academic year.

Robinson 1983-84 P/J 709-01

Southern Regional Educational Board
Educational Testing Service
CALIFORNIA TEACHER BASIC SKILLS TEST

Under legislation signed by the governor in 1982, California requires demonstration of proficiency in basic reading, writing and mathematics skills before a person can be awarded a credential, permit, or receive certification to serve in the public schools. Under a contract with the California State Department of Education, the Berkeley Field Service Office of ETS has worked with state officials, teachers and teacher trainers in California, and test development specialists from the ETS Princeton Office to develop test specifications and write test items. The initial set of items and essay topics were field tested in the Fall of 1982. A validity study and standard setting sessions, involving over 300 California educators, were conducted shortly after the field testing, and the results were submitted to the State Department of Education and California Commission on Teacher Credentialing (CTC). The tests are designed for administration individually or in any combination.

Starting in December 1982, the newly developed California Basic Educational Skills Test (CBEST) became operational and the responsibility of the CTC. ETS is providing a full range of operational services including preparation of tests and publications, establishing of test centers, registering of candidates, distributing and storing of test materials, scoring of answer sheets, conducting essay readings, reporting scores, and preparing special statistical reports for the CTC. Beginning in 1985 CBEST will also be required for initial certification in Oregon for teacher personnel specialists, and administrators.

Seder 1982- P/J 512-33 California Department of Education
David Gordon

SOUTH CAROLINA TEACHER AREA EXAMINATIONS

The South Carolina Teacher Area Examinations (SCTAE) are used for certification of teachers in South Carolina in 16 subject areas. This project involves the development of new forms of tests, registration of candidates, administration of tests, scoring, and reporting results.

Kalisch 1983-86 P/J 432 South Carolina Department of Education
Dr. Paul Sandifer
NEW JERSEY LANGUAGE PROFICIENCY TESTING PROGRAM

On behalf of the New Jersey Department of Education, ETS developed and administered a program of interview-based speaking proficiency testing for the certification of bilingual (Spanish/English) teachers and teachers of English as a second language. Under the program, ETS trained language proficiency interviewers at eight New Jersey colleges and universities that served as testing centers. All interviews were tape recorded and evaluated by a central group of raters, also trained by ETS. Through June 1979, approximately 3,000 interviews were administered in English and Spanish.

Under the same program, ETS assisted the New Jersey Department of Education in planning and carrying out an empirically based score-setting procedure to determine the minimum speaking proficiency levels required for effective classroom use of the test language.

Woodford/Clark 1977-80 P/J 698-54 N.J. Department of Education

PLATO IN ELEMENTARY EDUCATION

In the fall of 1974, the PLATO (computer assisted) system was used in 12 elementary classrooms with four terminals in each room. Courses were in math and reading. An evaluation that was conducted focused on student performance and teacher training. Evaluation in 1975-76 consisted of continued assessment of the impact of CAI on the individual child through assessment of achievement and of student attitude toward subject area, school, and PLATO; a study of student characteristics; and students' general reaction to computers and technology.

Swinton 1972-76 P/J 672-04 National Science Foundation
Erik McWilliams
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Woodford/Clark 1977-80 P/J 698-54 N.J. Department of Education

TECHNICAL ASSISTANCE - EAST HARTFORD, CONNECTICUT

ETS provided technical assistance to the East Hartford (CT) Public Schools in developing tests, setting standards, and examining the comparability of the state basic skills tests for a graduation requirements program.

Elford P/J 679-26 East Hartford (CT) Public Schools

EAST HARTFORD (CT) PUBLIC SCHOOLS READING TESTS

The East Hartford Public Schools have begun a minimal competency testing program in reading, and ETS provided technical assistance for their Kindergarten through grade 8 tests. The K-5 tests (one at each grade level) were piloted and revised by East Hartford staff members; the 6-8 tests (also one at each grade level) are newly written. ETS involvement included technical reviews of the K-5 tests, workshops for staff members writing the 6-8 tests, and technical reviews of the 6-8 tests. All responsibility for the production, implementations, and standard-setting has been assumed by the East Hartford Schools.

Gerritz 1982-83 P/J 728-62 East Hartford (CT) Public Schools
The National Teacher Examinations (NTE) are standardized, secure tests that provide objective measures of the knowledge and skills developed in academic programs for the preparation of teachers and other professionals, such as speech-language pathologists and audiologists. These measures enable state departments of education, school districts, and others to compare the qualifications of individuals from different colleges and universities that may have dissimilar standards and grading practices.

The program includes the Core Battery tests and 27 Specialty Area tests, each of which is two hours long. The former include three tests: Communication Skills, General Knowledge, and Professional Knowledge. The Test of Communication Skills measures listening (with a 30-minute taped segment), reading, and writing skills. (As part of the test, examinees are required to write a short essay.) The Test of General Knowledge includes questions on literature and fine arts, mathematics, science, and social studies. The Test of Professional Knowledge includes questions related to the social and cultural forces that influence curriculum and teaching as well as questions dealing with general principles of learning and instruction.

The Specialty Area tests, formerly referred to as the Area Examinations, measure understanding of the content and methods applicable to the separate subject areas. While most of the tests are designed to evaluate the knowledge and skills prospective teachers acquire in their academic preparation, some tests—such as Speech-Language Pathology and Audiology—are designed to measure examiners' preparation for careers other than teaching.

The NTE Policy Council is responsible for setting all program policies involving the development, administration, and use of the NTE tests. Its 15 members represent state departments of education and school districts that use the tests, individuals from user and nonuser teacher training institutions, and classroom teachers.

Although ETS conducts the NTE Programs for the NTE Policy Council, it is assisted and advised by professional educators from all sections of the country. The tests themselves are developed and revised periodically with the assistance of committees of recognized authorities in specific subject fields. These committees are usually appointed from nominations made by appropriate national professional associations.

Havrilesky 1950- P/J 510-21

P.J. Programs Policy Council
Dr. Peter L. LoPresti, Chairman
COMPUTER MATCHING PROCESS

ETS completed a computer matching process for students from the State of New Jersey who were administered the College Board's Admission Testing Program in 1980-81 and the New Jersey College Basic Skills Test in 1981-82. Matching students, as well as students that did not participate in both of the testing programs, were written to magnetic tape. The tapes contained student score and background information but did not contain individual student identification data or data permitting the determination of exact high school or college attended. The tapes were delivered to the New Jersey Department of Education with information regarding their format and content.

Becker 1983 P/J 119-04

State of New Jersey

LET'S LOOK AT CHILDREN

The central purpose of the Let's Look at Children project, which was supported by the Carnegie Foundation, was to develop materials that will help teachers understand and foster the intellectual development of children in prekindergarten through grade three. Goals were to provide the teacher with specific guides and techniques to help them observe, interpret, and encourage significant behaviors in children between the ages of approximately 4 to 9 years old. The final materials incorporate and thus supersede the original Let's Look at First Graders material.

Tasks and materials for the early grade levels are based largely on previous research phases of this project, which were also supported by Carnegie. Additional measures have been developed and tried out at the first, second, and third grade levels. Major emphasis has been placed on four aspects of development: language functioning and communication skills; quantitative thinking; natural events; use of egocentric and intuitive processes.

Bussis/Chittenden P/J 858

New York City Schools System
TEACHERS' C*A*R*E

The purpose of this project was to promote educational excellence through student cooperation and leadership. Cooperative learning groups have been shown to be more productive than individuals working alone and more productive than groups from classrooms in which whole-class instruction is the norm. Similarly, student leadership at academic tasks is associated with greater learning. Cooperation has also been shown to promote prosocial behavior in the classroom. This project led to the development of Teachers' C*A*R*E, "student use" curriculum materials and a teacher research guide for grades K-8. Teachers' C*A*R*E was derived from C*A*R*E: Curriculum and Research for Equity Training Manual (Lockheed, Harris, & Finkelstein, 1979) and was expanded to address all elementary grades, ethnic and racial minorities, and students with handicapping conditions.

Teachers' C*A*R*E provides teachers with strategies and curriculum materials that promote cooperation in the classroom and that distribute opportunities for leadership to all students in the classroom. These materials infuse standard academic subject matter areas—reading, language arts, social studies, mathematics and science—with the principles of cooperation and student leadership. Use of the curriculum materials that are contained in the manual for teachers requires little or no prior teacher training. The project had an external advisory board of experts to ensure that the materials that were developed were sensitive to the needs of ethnic minority and handicapped girls. In addition, volunteer teacher participants field-tested and provided feedback on all materials. Teachers' C*A*R*E materials and activities were based on validated principles that have been shown to be linked to positive academic and social student outcomes.

Lockheed 1982-83 P/J 851-01 Educational Testing Service

DOCUMENTATION OF COMPUTER SCHOOL

This project involves documenting the Computer School's program. During the 1983-84 school year (pilot year), documentation activities consisted primarily of interviewing the staff and conducting classroom observations, which provided baseline data for continuing evaluation work during 1984-85. The Computer school is located in a New York junior high school.

Chitterden 1984-85 P/J 798-11 Institute for Schools of the Future
ROBUST ESTIMATION FOR ITEM RESPONSE THEORY

It is hoped that Item Response Theory will provide the theoretical base for computerized adaptive testing, as well as the graceful solution for perplexing problems in traditional mental testing. An overriding concern that prevents the immediate adoption of these methods is the question of fit: Do these models accurately represent the observed data? Allied to this is the second question, how much misfit can be tolerated with minimal distortion in the parameters of interest? This project was concerned with the study of the robustness of the various competing models to deviations from the structure they hypothesize and the extent to which this robustness can be improved through modifications in the procedures employed for the estimation of their parameters.

The current project evaluated the one-, two-, and three-parameter logistic models described by Birnbaum in Lord and Novick (1968) and used a variety of estimation methods. This phase of the project was expected to last two years.

Wainer 1981-83 P/J 805-01

Air Force Human Resources Laboratory
James A. Earles

COLLEGE BOARD INFORMATION SYSTEM

College Board Information System (CBIS) is a long-range planning and development project that was undertaken under the auspices of the Joint Fund for Research and Development of the College Board and ETS. It was designed to improve the services provided to the users of College Board programs by using emerging information-processing technologies. Individual projects involve developing comprehensive data bases, delivering data electronically via data communications, including an on-line summary reporting service, and developing microcomputer software for use by client institutions and to help students interpret their SAT scores.

Glockler 1982 P/J 499

College Board
Educational Testing Service
Darrell Morris
EDUCATIONAL TECHNOLOGY CENTER

ETS is a member of a consortium that was formed to establish and operate a research center on educational technology at Harvard University. The center will conduct basic and applied research to find ways to increase the achievement of students in kindergarten through twelfth grade through technology, focusing on improving instruction in mathematics, science, and computer science.

ETS will assist in developing and updating an agenda for research, and staff will serve with math, science, and computer groups and will work with various services and dissemination committees. A national dissemination effort will be planned to eliminate much of the mystique that now surrounds the use of technology in the classroom. It is expected that this will enable educators to make more informed decisions about effective instructional techniques, hardware, and software and that this will lead to progress and change in the schools.

During the first three years of the program, field research will be restricted to schools in the New England states.

EVALUATION OF THE JOHN HENRY MARTIN “WRITING TO READ” PROGRAM

IBM is funding a field test of a reading program designed by John Henry Martin for kindergarten and first grade children. The program uses the IBM Personal Computer to teach the children a system of 42 corresponding sounds and symbols which they can then use to write whatever they can say. The program was implemented in approximately 100 schools in Florida, North Carolina, Washington, D.C., New York, Connecticut, Massachusetts, Minnesota, and Texas in 1982-83. Schools in Oregon, Missouri, Wisconsin, and Oklahoma are being added in 1983-84.

In the first year, ETS evaluated the training program, the initial stages of the implementation, and the impact of the project based on teacher and parent judgments. Feedback on the training has been used by IBM in the training program for 1983-84. In general, the program was well implemented. The children liked the program, overcame some early difficulties, and showed good development in managing their own learning in the context of the Writing to Read program. Surveys of teachers and parents show a wide acceptance of the program and a favorable impression of its educational effectiveness.

In 1983-84, ETS is evaluating the impact of Writing to Read on the reading and writing skills of children using standardized reading achievement tests and student writing samples.
Educational Testing Service and the College Board are working on the application of computerized adaptive testing to practical measurement situations. Adaptive testing uses modern statistical methods to tailor the difficulty of the test to the skills of the individual examinee. Adaptive testing provides efficient measurement at more skill levels than conventional paper-and-pencil tests. The computer makes it possible to rapidly determine which questions should be given to an individual; it also permits immediate reporting of the test results.

The first application of this process has been for the development of a test of skills in college reading, English, and mathematics. The test will enable postsecondary institutions to ascertain whether students are prepared for college-level work or need remedial studies.

The test consists of four independent modules—Reading Comprehension, Sentence Skills, Arithmetic, and Elementary Algebra. Consistent with current emphases in instruction, content specifications emphasize questions that require reasoning and problem solving.

Simulation studies show that the test provides very accurate measurement with far fewer questions than are required in typical conventional test batteries.

The first implementation of the testing system has been on the IBM Personal Computer. Field trials began in the spring of 1984 in cooperation with three institutions: Scottsdale Community College, Mansfield University, and Central Piedmont Community College. George Mason University and J. Sargeant Reynolds Community College joined in the field trials during the summer of 1984.

Ward 1982-84 P/J 494

Educational Testing Service
College Board
In 1976, CAI labs were created in four Los Angeles elementary schools. ETS researchers participated in the planning and training phases of the endeavor and designed and conducted a longitudinal evaluation of the program's effectiveness over a four-year period. Children in various grades used the terminals for varying amounts of time for drill and practice in the basic skills. Students were randomly assigned to CAI curriculums—reading, math, language skills, or a combination of two or three of these.

Information was collected on approximately 5,000 students during the life of the project, although the extremely high transiency rate in the schools reduced the longitudinal data base to approximately 2,500. These individuals were grouped in eight cohorts. Achievement testing took place twice a year during the four years of data collection. For students enrolled in one or more of the CAI curriculums, monthly progress reports were obtained. In addition to the formal measures, researchers collected time-on-task and other observational data in regular classrooms and conducted interviews with students, teachers and administrators. Similar formal, observational, and interview data were obtained in two non-CAI schools that served as controls. The research design also provided for within-class controls, by assigning students to different CAI curriculums, and within-school controls, by alternating grades each year. Thus, the data base for the project was not only large but extremely complex.

The project was conducted in an impoverished center-city area marked by high mobility and was further complicated by a desegregation plan put into effect during the study. However, through the cooperation between the researchers and the school and district personnel, the intricate research design was maintained throughout the life of the project.

Ragosta 1976-82 P/J 537-02

National Institute of Education
COMPUTERIZED VOCABULARY TUTOR

Under a contract with the Army Research Institute, Franklin Research Center (FRC) collaborated with ETS in the development of a computerized device to teach job-related vocabulary to soldiers. The "vocabulary tutor" hardware was designed and built by FRC. ETS developed the instructional specifications for the device and wrote a sample instructional program that teaches 126 vocabulary words and phrases for a specific military occupational specialty. ETS also designed and conducted an evaluation of the educational effectiveness of the device.

The vocabulary tutor includes a book containing text and illustrations, a 32 character dot matrix display screen, a keyboard for entering responses, and a digitized voice system. The tutor provides corrective feedback for questions presented in the text, routes the soldier to appropriate parts of the text, and helps the soldier play two word games, including a sophisticated increasing ratio review drill and practice routine.

Although the contract required development of courseware for only one military occupational specialty (cannon crewman), the device was designed to use plug-in memory modules so that courseware for additional specialties could be added later. Future adaptations of the tutoring system should have a wide variety of applications in the military, in industrial training, and in the schools.

Bridgeman 1981-82 P/J 837-01

TRAFFIC COURSEWARE ENHANCEMENT AND REFINEMENT OF HAND-HELD TUTOR

The purpose of this project is to enhance current Hand-Held Tutor hardware and provide additional courseware based on existing study guides for the M1 Tank. Limited field-study of the Tutor-based Study Guides will be conducted.

ETS will subcontract to Advanced Technology Laboratories for the hardware development and to BioTechnology, Inc., for assistance in writing the training materials.

bridgeman 1984-85 P/J 803-01

TUTOR CURRICULUM DEVELOPMENT IN MATHEMATICS

The hand-held vocabulary tutor developed under a previous subcontract with the Franklin Research Center under their prime contract with the U.S. Department of the Army is a flexible instructional tool that can do more than just provide vocabulary instruction. Under the current contract, curriculum materials will be developed for teaching basic mathematical skills to fire direction specialists in the field artillery. Skills to be taught include adding and subtracting signed numbers and rounding off to the nearest tenth and hundredth.

Bridgeman 1984 P/J 861-01
ARPA RESEARCH COORDINATION

ETS was a lead contractor for the Defense Advanced Research Projects Agency (ARPA) in conducting research on problems of instruction, with special emphasis on applications of instructional technology. ETS reviewed the status of ARPA work according to programmatic plans and provided assistance, when requested, in identifying information resources and developing assessment techniques. These activities resulted in a series of reports reviewing recent trends in instructional technology as well as other reports on such special concerns in advanced training technology as procedures for developing training materials and measures of job performance. ETS also undertook research on methods for accelerating the application of computer-based instructional systems. Among the research reports were a study of the effects of question placement on learning in a CAI format, an evaluation of a general communications system for text-editing and dialogue support, and an exploratory investigation of methods for preparing computer curricular materials. Twelve reports were submitted under this project, each concerned with a different phase of the project: review of ARPA work accomplished or underway; evaluation and assessment services; survey papers on current trends in instructional technology; and research reports.

Anastasio/Alderman 1974-76 P/J 675-

INTERACTIVE VIDEODISC APPLICATIONS TO ELEMENTARY MATHEMATICS EDUCATION

The purpose of this project was to design an interactive (computer-controlled) videodisc system for use in teaching the elementary mathematics topics of decimals and fractions. The system incorporates in a single delivery system the advantages of several instructional techniques: one-way television, computer-assisted instruction, sophisticated measurement designs, analysis of student errors, and detailed record keeping.

The system is viewed as a viable mechanism for progress toward equal educational opportunity in a cost-effective manner. The initial effort concentrated on a self-contained minicurriculum combining fractions and decimals. Materials were tested in fourth- and fifth-grade classrooms. At the conclusion of the project, the production handbook, the videodisc, the software for the lessons, and the final report were disseminated.

Bejar/Swinton 1981-83 P/J 887-01

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G-18
TECHNOLOGIES AND EFFICIENCY IN EDUCATION

For the NSF, ETS conducted a study of computer and communication technologies and efficiency in education. Activities focused on research in three areas: 1) the possibilities for using technology to improve the productivity of schools, 2) computer-assisted instruction and ITV as input variables in the construction of educational production functions, and 3) the potential role of technology in creating alternatives to formal schools.

Study results showed that computer-assisted instruction is effective in raising the academic performance of disadvantaged students. Further, the cost of CAI of the type studied was within the amounts currently spent per pupil for compensatory education under Title I, ESEA.

Jamison 1974-76 P/J 583-20 National Science Foundation

COMPUTER-ASSISTED INSTRUCTION STUDY

For EDUCOM, ETS conducted a study of factors inhibiting the widespread acceptance of computer-assisted instruction (CAI). Sponsored by NSF, the project had two purposes: 1) to identify and define impediments to wider use of CAI and 2) to produce a set of recommendations for action.

Results showed that impediments fell into several categories: 1) production and distribution of instructional materials, 2) demonstration of the effectiveness of CAI, 3) theory of instruction, 4) educational system and the teacher, 5) cost, and 6) technical research and development. The greatest problem within these areas was the lack of good computer-based materials. Suggestions for action included: increased development of simulation and gaming materials, use of systems allowing student control, improvement of student terminals, and research to explore the learning process in relation to CAI development.

Anastasio P/J 672 National Science Foundation
COMPUTERS IN EDUCATION

ETS offers a series of seminars for elementary and secondary educators that focus on the appropriate application of computers to instruction and administration. These seminars provide educators with the knowledge and skills needed to become critical consumers of computer-based systems, to use computers effectively, and to make informed decisions about selecting hardware and software.

Offered at the ETS Technology Lab, the seminars include such topics as:

1. **Introduction to Computers**, which is designed to acquaint educators who are novices with regard to computers with the fundamentals of computing

2. **Implementing Microcomputer Programs: A Seminar for Decision-Makers**, which provides participants with the practical knowledge and skills necessary to implement instructional and computer literacy programs at a building or district level

3. **Designing and Implementing Computer Literacy Programs**, which gives curriculum coordinators and teachers an opportunity to focus on the practical aspects of introducing computer literacy programs at the elementary and secondary level

4. **Administrative Applications of Microcomputers**, a seminar that provides school and business administrators with an understanding of the capability and limitations of the microcomputer as an administrative tool

5. **Selecting and Evaluating Instructional Courseware**, which is designed for educators interested in learning how to select and evaluate microcomputer instructional courseware

Schneiderman 1983 - P/J 798-53  Educational Testing Service
The ERIC Clearinghouse on Tests, Measurement, and Evaluation (ERIC/TH), funded by the National Institute of Education, has been located at ETS since the clearinghouse's establishment in 1970. It is one of 16 clearinghouses in the Educational Resources Information Center system.

The clearinghouse collects, evaluates, processes, and disseminates information in six broad areas: 1) tests and other measurement devices; 2) the methodology of measurement and evaluation; 3) the evaluation of programs, projects, and procedures; 4) research design and methodology; 5) human development; and 6) learning theory. Within these areas, the clearinghouse processes documents and articles for announcement in the ERIC journals, Resources in Education (RIE) and Current Index to Journals in Education (CIJE).

ERIC/TH also offers a number of services to ERIC users. These include: providing workshops on the use of the ERIC data base; responding to specific requests for subject-oriented information; performing computer searches of the ERIC data base; maintaining the complete ERIC microfiche collection; and preparing reports, bibliographies, and digests on a variety of current topics.

Wildemuth 1970- P/J 720 National Institute of Education
Kevin Arundel

ASSESSMENT OF BEGINNING READINGS: DIAGNOSIS OF ERROR PATTERNS IN ORAL READING

The objective of this research was to determine how error patterns that are common in children's reading performance can be used by teachers as an additional basis for assessing progress and diagnosing difficulties. Particular attention was given to two key indicators—self-correction and sensitivity to syntax—and to questions of how these and other indicators may change with the child's increasing proficiency. More broadly, the study contributes to the development of a performance-sample methodology, appropriate for classroom assessment of skills in the primary grades.

Chittenden 1981 P/J 969-14 Educational Testing Service
SCHOOL FINANCE EQUITY PROFILES

The Education Amendments of 1978 require that every two years the National Center for Education Statistics (NCES) produce school finance equity profiles for every state.

Under subcontract with the American Institutes for Research, ETS conducted a six-state pilot study for NCES's Statistical Analysis Group in Education. The purpose of the study was to determine the availability of state data that could be used to validate existing federal data for use in developing congressional mandated equity profiles.

The states involved in the study included: California, Illinois, Louisiana, New Hampshire, South Carolina, and New York.

Baratz 1978-79  P/J 415-01/02  American Institutes for Research
John MacDonald

GUIDEBOOK ON SPECIAL EDUCATION FINANCE

This guidebook is designed to assist state policy makers in their consideration of the appropriateness of current systems used to finance special education and the desirability of alternative approaches. The guidebook addresses the major issues state policy makers face and the information they need as they make an effort to meet federal and state mandates to provide all handicapped children with free and appropriate public education services. The guidebook is written in a straightforward manner that outlines issues and potential solutions.

Moore 1980-82  P/J 835-01  National Institute of Education
James Fox
DISTRICT OF COLUMBIA SCHOOL RESOURCE REALLOCATION

ETS' Educational Policy Research Institute has completed a study of alternative plans for the reallocation of school resources that can be used by the District of Columbia School District. The study was conducted for the D.C. Citizens for Better Public Education, which had received a 1975 Ford Foundation grant to assist the D.C. Public School System in developing a method of resource equalization that would be educationally sound, fiscally possible, and politically and administratively feasible.

Recognition of the need for alternative allocation plans was an outgrowth of the landmark Hobson v. Hansen decision, which addressed the question of intradistrict disparities in school spending. In its decision, the court issued an injunction against racial and economic discrimination in the D.C. Public School System and ordered integration of faculties, a nondiscriminatory pupil assignment plan, and elimination of the track system and optional pupil attendance zones. In a subsequent order, the court invited the school system to return with a resource allocation plan of its own making that would eliminate inequality of school-by-school spending.

The alternative resource allocation plans included in the EPRI report were designed to give the D.C. Board of Education options in developing a plan in response to the court order. The options were: changing procedures for implementation of both the court decree and Title I regulations; complying with either the court decree or Title I 1) with existing procedures or 2) with altered implementation procedures; and creating a new equalization plan with new procedures.

Also included in the report was a suggestion that the board of education investigate decentralization and school-site budgeting.

Baratz 1977

Citizens for Better Public Education, Washington, D.C.

DEVELOPMENT AND DISTRIBUTION OF JOB TRAINING ASSESSMENT PROGRAM

The Job Training Assessment Program (JobTAP) is an integrated system of materials and services that can help employment counselors in a variety of settings in both the public and private sectors provide information to help place unemployed workers in job-training programs. This easily managed system includes a variety of reliable assessment tools as well as a full sequence of counseling information and training/employment options to help job seekers identify and take advantage of promising opportunities.

Wasdyke 1983-89 P/J 335-83

California Test Bureau/McGraw-Hill
IMPLEMENTING THE URBAN HOLDINGS OF LEVITOWN V. NYQUIST (NY: YORK CITY PROJECT)

The Education Policy Research Institute (EPRI) of ETS is conducting a program of research aimed at helping the New York City Board of Education and the United Federation of Teachers contribute effectively to developing new school-finance legislation.

The emphasis is on the unique problems of large urban school districts that require special treatment in state school-aid formulas. The aim of EPRI's investigation is to find formula adjustments that are educationally constructive, fiscally sound, politically feasible, and constitutionally acceptable. Thus, EPRI is identifying the concerns of education interest groups and educators as well as reviewing and developing proposed state-aid formulas sensitive to the problems of New York City and other urban school districts. The new proposals will be publicized for discussion by legislators and policymakers and by the general public.

Berke/Goertz 1979-84 P/J 416-02
Ford Foundation
J. Kelly
New York Community Trust
L. Slutsky
NYC Board of Education
F. Macchiarola
United Federation of Teachers
A. Shanker

POLITICIANS, JUDGES, AND CITY SCHOOLS: Reforming School Finance in New York

The Education Policy Research Institute (EPRI) of ETS produced a book intended to help policymakers develop a new system for raising and distributing revenues for public elementary and secondary education in New York State. The study was designed to 1) inform policy makers of the issues, alternatives, and tradeoffs in developing a new school finance system for New York State and 2) describe the political, economic, and governmental constraints upon changing the existing system.

Central to the book is an exploration of how to develop finance-reform alternatives that can attract coalitions powerful enough to pass legislation while achieving fiscal equity, recognizing urban education problems, and achieving equality of educational opportunity. The book will be addressed to public officials and their staffs, to leaders of organizations that affect school-finance issues, and to citizens active in educational affairs.

Berke/Goertz 1979-84 P/J 418-01
Russell Sage Foundation
Bernard Gifford
POLITICS OF SCHOOL FINANCE REFORM

EPRI conducted a study of the politics of passing and implementing school finance reform laws in four states—New Jersey, Connecticut, Illinois and Washington—during a time of economic constraints and decreasing public support for public education. The purpose of the project was to examine the changing social and economic climate within which school finance reform occurs, study the politics of school finance reform implementation in New Jersey, and the passage of reform laws in Connecticut and the State of Washington. In New Jersey, research focused on the role of nonestablishment interest groups in implementing New Jersey's education reform. The study involved examining the development and interrelationships of these groups as well as their access to decision making regarding finance, accountability, and questions concerning "thorough and efficient" education. Extensive interviews with participants in the school finance reform movement in the State of Washington showed that a small, elite group of citizens wrote and lobbied for passage of a landmark funding law. In Connecticut, the legislature drew on the work of a widely representative task force to change that state's formula; fiscal constraints, however, threatened the timely implementation of this legislation.

Goertz 1977-80 P/J 491-20

Ford Foundation
James Kelly

THE INTERACTIONS OF FEDERAL AND STATE PROGRAMS FOR SPECIAL-NEEDS YOUTH

EPRI is engaged in a study of how federal and state governments work together to implement the major federal education programs and civil rights requirements. The study will describe strengths and weaknesses in intergovernmental program administration in education and offer recommendations for improvements. The fundamental issue is the balance between federal objectives and accountability, on the one hand, and recipients' need for flexibility and discretion, on the other.

Specifically, the study will look at interactions that occur among federal and related state education programs for special pupil populations and will seek to accomplish the following:

1. Analyze the federal requirements imposed on state and local education agencies by the programs.
2. Determine how states differ in their interpretation and administration of federal programs.
3. Determine how states modify federal requirements.
4. Assess how federal requirements affect the operation and administration of other federal and parallel state programs.
5. Identify modifications that would reduce administrative problems at the state and local levels and help advance equal opportunity.

Mary Moore 1981-82 P/J 526-01

Nations Institute of Education
E. Vander Putten

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HANDICAPPED CHILDREN - POLICY ISSUES

Change in Education: Three Policy Papers on Implementing the "Education for All Handicapped Children Act" is a paper prepared by the Educational Policy Research Institute for the Bureau of the Educationally Handicapped. The paper covers three topics: the need for a comprehensive program to identify handicapped children, the need for individual programs for each child, and how to finance the program.

Questions raised in the paper include: How are handicapped children to be identified, and who is responsible for identifying them? How are individual programs developed, and what are their contents? Who evaluates the programs? How are monies to be disbursed? Answers to these questions were to be included in the regulations under development in the Bureau of Education for the Handicapped.

Berke 1976
U.S. Department of Education

THE IMPACT OF STATE POLICY ON ENTRANCE INTO THE TEACHING PROFESSION

The purpose of this research project is to describe and evaluate the impact of state education policies on the entrance of individuals into the teaching profession. Particular attention will be given to issues of quality, equity, and coordination.

The study began by identifying points at which the number and/or quality of teacher candidates may be controlled. The types of policies that have an impact at each of these points and the states that have adopted such policies were identified through a 50-state survey. A sampling matrix was derived from this information, and four states were selected for in-depth case-study analysis. Interviews with respondents in state departments of education, legislatures, education interest groups, and selected higher education institutions provided important details about the political environment and rationale behind each policy, about the extent of coordination among state policies, and about the effects of the state initiatives on teacher quality and supply. A final report will be prepared for use by state policymakers who need nontechnical information on which to base decisions regarding teacher quality and supply problems.

Goertz/Ekstrom 1983-84 P/J 808-01
National Institute of Education
James Steffensen
SCHOOL FINANCE IN THE 1970s

Under a subcontract with the Educational Finance and Governance Center of the Syracuse University Research Corporation (contract with HEW), ETS conducted a study of school finance in the 1970's from three viewpoints: 1) problems involved, 2) the federal role, and 3) context for policy.

Entitled School Finance in the 70s: The Background for Policy Development, the report on the study identified the fiscal problems confronting American education in most states as twofold: 1) local educational revenues are raised through finance systems widely perceived as unfair, and 2) revenues are distributed through mechanisms that fail to relate educational services to educational needs. Studying of the federal role showed that federal aid programs to states are generally designed to aid pupils with special requirements or provide special services. The federal government has traditionally met certain national educational needs through federally financed research and development, or more commonly by providing incentives for state programs.

The study showed that there has been unprecedented pressure for school finance reform from a variety of institutions at all levels of the federal system. State legislatures have begun to adopt reform plans; Congress is seeking to implement new concepts of equalization.

Monograph on Lifelong Learning

With the use of two sets of research studies, services that link the adult learner's interests to the learning resources of the society were examined. The first set of studies consisted of thirty state and national surveys or needs assessments of learners and potential learners. The second set consisted of investigations into the self-directed learning activities of adults. The findings of the two sets of research were integrated. More than 40 sets of recommendations for program implementation were also examined.

Three general areas were focused on in the attempt to supply the missing link between learner interest and learner resources: 1) facilitating access to appropriate learning resources, a process that includes providing access for underserved groups and advocacy for the special needs of adult learners; 2) providing information to adult learners about available learning resources and about themselves; and 3) providing counseling and referral services designed to assist learners in planning and matching their needs to appropriate learning resources. A report on the study was prepared: "The Missing Link: Connecting Adult Learners to Learning Resources" (College Board, 1978).

Monograph on Lifelong Learning
PROGRAM FOR ASSESSING YOUTH EMPLOYMENT SKILLS

The Program for Assessing Youth Employment Skills (PATES) is designed to assist program directors, counselors, and teachers in the guidance and counseling of persons with low verbal skills as they prepare for entry-level employment. Increasingly, it is being used by Job Corps Centers and CETA prime sponsors as part of their intake and assessment programs. It is based on extensive research in measurement by ETS for school dropouts, potential dropouts, and disadvantaged youth. The battery is divided into three parts:

1. Attitudinal measures of job-holding skills, perception of supervision, and self-confidence
2. Cognitive measures of job knowledge, job-seeking skills, and practical reasoning
3. Vocational Interest Inventory

PATES is useful with enrollees in CETA centers, skills centers, vocational high school special needs classes, adult basic education centers, and youths in correctional institutions. Designed to be administered orally to small groups in an informal, relaxed manner near the beginning of a program, it can be scored locally for quick results. PATES is distributed by Cambridge Book Company.

Freeberg/Vitellas/Wasdyke 1977- P/J 511-01/02 ETS

PUBLIC/PRIVATE PARTNERSHIPS IN THE D.C. SCHOOLS

The purpose of this research project was to promote understanding of the collaborative efforts of businesses and public schools in connection with education, aimed at increasing the employability of students. Through a case study of five collaborative programs in the D.C. schools, the study provided information about what is involved in such collaborations, the motivations and barriers in such relationships, and the kinds of education programs that are produced through these ventures.

A report was prepared for distribution to interested school systems and corporations.

Ficklen 1983-84 P/J 798-03 National Institute of Education Bella Rosenberg
The Service Mix Alternatives Demonstration Program was funded by the U.S. Department of Labor under the Youth Employment Demonstration Projects Act (YEDPA). ETS was responsible for evaluating the program effects on participants from program entry through an 8-month post-program follow-up. The intent of the Service Mix research design was to determine which of three treatment (training) conditions are most effective in producing desirable behavioral change over the course of the program and in enhancing trainee employability. The conditions are these:

1. A work-intensive condition (full-time paid employment with minimal supportive services)
2. An all-classroom training situation with full supportive services
3. A mix of intensive work experience and classroom training. Conducted at three sites (in cities), the study involved approximately 300 trainees at each site.

Freeberg 1980-82 P/J 883-02
U.S. Department of Labor
B. Liebman, Jr.

A 10 percent sample of public secondary schools was surveyed to determine what types of career information systems are in use, what the quality of information is, and what the patterns of usage are (Study 1). Six distinctive types of career information systems were also compared in 12 "specimen" schools to determine which types were most effective (Study 2).

Chapman 1979-81 P/J 637-01
National Institute of Education
R. Bucknam
ATLANTA WORK INCENTIVE PROGRAM - READING AND MATHEMATICS ASSESSMENT

The assessment of reading and mathematics skills of a sample of participants in the Metropolitan Atlanta Work Incentive Program (WIN) was undertaken to provide local program administrators with information that would:

1. Describe the range of achievement levels representative of program participants as a group.

2. Aid in the development of training programs appropriate to the levels of achievement of WIN participants.

3. Aid in the selection of appropriate curricular materials in reading and mathematics for the WIN training programs to improve participants' basic skills to the degree necessary for obtaining and retaining employment.

Major findings of the study were that median scores obtained were significantly below the national median for persons with a high school education. For the total group sampled, the Grade Level Indicator for reading was at the beginning eighth grade level; for Mathematics Computation, at the beginning sixth grade level; and for Mathematics Basic Concepts, at the second semester, fifth grade level.

Hardy 1979-80 P/J 755-04

JOBS FOR AMERICAN GRADUATES

This project involves an evaluation of the long-term impact of employment training programs on disadvantaged youth in the state of Delaware. Under study is Jobs for American Graduates, a training program supported by funds from both the State of Delaware and the Department of Labor. This program emphasized basic skills, job knowledge, and job-search behavior. The current study compares the labor market status of program participants with that of nonparticipants 36 months after program exit.

Rock 1984 P/J 798-02

U.S. Department of Labor
J. Bowles

Center for Labor Market Studies
Northeastern Unit
Andrew Sum
EDUCATIONAL FACTORS AFFECTING JOB SEARCH BEHAVIOR AND EMPLOYMENT FOR YOUTH

The main purpose of this project is to analyze existing data on youth employment and career guidance programs in order to identify the factors that are most important in producing individuals who can find and keep a job. The data base consists of longitudinal information on 775 individuals including both program participants and a matched comparison group. The first phase will be a data analysis focusing on the policy question "How do educationally developed individual characteristics, such as reading ability, job knowledge, job-seeking skills, job-holding skills, vocational attitudes, work attitudes, and the sex stereotyping of occupations, impact on employment outcomes of youth?" This question will be answered using a path analytic approach, first identifying job-search behaviors that have a significant relationship to employment outcomes, then identifying the educationally developed characteristics that relate to successful job search and/or job outcome. Next, policy analysis will relate the critical educational program factors to existing and proposed legislation. The project will produce two policy-oriented reports, one for state and local government and one for educators and program service providers; a technical report will also be prepared. The outcome of this project will be research-based policy information that can be used in planning or modifying employment training legislation and in designing and implementing programs to reduce unemployment among youth.

Freeberg/Ekstrom 1983-84 P/J 860-01 National Institute of Education John Wirt

ANALYSIS OF JOB COMPETENCIES OF WIN REGISTRANTS

Under a grant from the U.S. Department of Labor, EIS determined the job readiness skills of 2,000 participants in the Work Incentive Program, using the Basic Skills Test in Math and Reading. On the basis of criteria established by employers, WIN participants were categorized into three groups: those whose basic skills are inadequate for work even at lower-level jobs without remedial training; those whose basic skills fully qualify them for work at lower-level jobs and who need a job; and those whose basic skills are adequate for higher-level jobs or for training for higher-level jobs.

Goodison 1980-82 P/J 484-01 U.S. Department of Labor
COMPUTER EQUITY TRAINING

The Computer Equity Training Project was based on the observation of researchers and teachers that while girls and boys of elementary school age tend to respond equally well to the computer, starting in the middle school years, girls tend to lag behind boys in voluntarily using the computer or using it outside the classroom. Research indicates that at this age boys begin to use home computers more than girls and engage in greater extracurricular use of the computer in school for programming and games. Studies also show that greater practice with computers leads to continued computer study and higher likelihood of computer-related careers. As these careers are characterized by high growth potential, good career ladders, and excellent pay, it is essential to reverse girls' pattern of computer avoidance at the middle school level before it becomes so entrenched that equal opportunity for computer careers is a meaningless phrase.

The Computer Equity Training Project was designed to help increase girls' computer use at the middle school level by developing school-based strategies to encourage girls to make greater voluntary use of computers. Educational Testing Service evaluated this project.

Lockheed 1983-84 P/J 798-04 Women's Action Alliance, Inc.

BAY AREA MULTICULTURAL IN-SERVICE TRAINING INSTITUTE

ETS was chosen by Canáda College in Redwood City, California, and the USDE to evaluate an in-service education institute for teachers, school administrators, and paraprofessionals. The institute operated in the districts of San Francisco, Hayward, Palo Alto, Menlo Park, and Union City during 1973-74. The purpose of the institute was to provide the participants with communication, classroom management, and other skills to increase their effectiveness in working in desegregated classrooms. ETS provided the institute with a needs assessment report, "Before and after" assessment instruments, and final evaluation reports.

Corder 1973-74 P/J 648-13 U.S. Department of Education
AFFIRMATIVE ACTION FOR ARTS

Under a grant from the Ford Foundation, in 1981 ETS began an effort to interest talented minority and disabled students in participating in the Arts Recognition and Talent Search (ARTS) program. An outreach program of student/teacher affirmative action workshops was conducted to enable community and school leaders to participate in discussions about how the ARTS program could realize its goal to create an expanded definition of art only through full representation of talented minority youth, how their youth could benefit by participation, and the reassurance of teachers, school administrators and parents that the ARTS model is equitable.

Results were apparent within a year. Total minority participation increased to the extent that minority student finalists increased from 34 percent in 1981-82 to 39 percent in 1982-83. A pilot project was carried out with the Model Secondary School for the Deaf at Gallaudet College in Washington, D.C., and in the Arizona/New Mexico area for Native American youth. In addition, an ARTS Affirmative Action Superintendents Cabinet was created including Superintendents of Schools in Newark, Cleveland, Philadelphia, and Washington, D.C. Each was responsible for presenting the program to all teachers and students in his/her school district.

Fitchue 1981-83 P/J 372-02 Ford Foundation

WOMEN'S EDUCATION IN NEPAL

The International Center for Research on Women conducted research in Nepal to find out why the female enrollment in the elementary and secondary schools is 20 percent or less and to develop an integrated plan that will make school more attractive for girls starting at age six.

A report of the study will include an integrated plan for increasing female enrollment in schools throughout the country. Among probable recommendations will be: government subsidies for the cost of school attendance, a more agriculturally based curriculum, an adjusted school day that might involve only morning classes, and special programs that would be designed to attract young female students and their families.

Lockheed 1983 P/J 798-06 International Center for Research on Women
SEX EQUITY IN CLASSROOM INTERACTIONS

The purpose of this project was to identify three sex-equity goals: sex desegregation in classroom work groups, equal status interaction in mixed-sex groups, and reduction of sex-differences in problem-solving performance. To improve understanding of the nature of sex-equitable classroom interaction and to identify effective ways of altering classroom processes to achieve greater equity, this project included two separate studies.

Study 1 involved collecting classroom observation data and other student and teacher measures in 24 classes of fourth and fifth grade students in Connecticut and California. Embedded in this study were three distinct substudies: 1) a two-year replication design to test the effectiveness of previously developed intervention strategies in reducing sex segregation and male dominance, 2) a two-year process-product study linking classroom processes to student outcome variables, and 3) a two-year ethnographic study designed to tap teacher and student beliefs regarding components of sex equity.

Study 2 involved analyzing an extant classroom process-student outcome data base on 54 fifth grade classrooms. It identified sex inequities in teacher-student interaction and related these differences to academic performance.

Observations of the classrooms were conducted during the first year of the project by trained observers using the APPLE observation system, as well as instruments designed as part of the study. A random half of the observed classroom teachers participated in workshops based on C*A*R*E: Curriculum and Research for Equity, the teacher inservice training manual developed by ETS to teach management strategies to promote leadership behavior by female students. All teachers were also interviewed, and pre- and post-survey data were administered to students.

Lockheed 1980-82 P/J 880-01/02/03 National Institute of Education

WOMEN'S EDUCATIONAL EQUITY – TEACHER TRAINING MODULES

The purpose of this study was to translate laboratory research findings about the conditions needed for equal status behavior into materials that would be useful to the teacher in the classroom. Working with 14 teachers from the East Windsor (NJ) regional school system, project staff developed self-assessment and curriculum materials appropriate for fourth and fifth grade. Approximately 100 curriculum units for reducing sex stereotyping, increasing cross-sex interaction, and promoting female leadership were written. In the first year of the project, evidence that increased cross-sex interaction reduces cross-sex stereotypes was obtained. In the second year of the project, the materials were formally evaluated.

Lockheed 1976-78 U.S. Department of Education
ETS directed a program to assist faculty members in 12 participating institutions with the improvement of the learning skills of minority students. This Test-Taking and Learning Skills Program was carried out under the Basic Institutional Development Program of Title III, Higher Education Act of 1965, and was conducted during the academic year 1976-77.

The ETS component of the program focused on the improvement of instructional strategies and techniques that are related to developing students' analytic and interpretive skills. The staff of the institutions' basic studies programs were involved in this work.

The second component dealt with the students' need for test orientation. The services of counselors and staff members concerned with the students' career development were used in this aspect of the program.

Participating institutions included: Barber-Scotia College, Concord, NC; Cheyney State College, Cheyney, PA; Claflin College, Orangeburg, SC; Fayetteville State University, Fayetteville, NC; Lane College, Jackson, TN; Livingstone College, Salisbury, NC (the Title III coordinating college); University of Maryland, Eastern Shore, Princess Anne, MD; Morris College, Sumter, SC; Oakwood College, Huntsville, AL; St. Paul's College, Lawrenceville, VA; Virginia State College, and Voorhees College, Denmark, SC.

Spencer 1976-1978 P/J 733-02 Various Colleges
TITLE I EVALUATION TECHNICAL ASSISTANCE

Under Title I of the Elementary and Secondary Education Act, local education agencies were awarded funds for programs to help reduce the disparities between disadvantaged children and their more fortunate peers. To evaluate these programs and provide reliable and comparable data to Congress, USDE adopted several evaluation models for states to use in preparing reports to USDE. Technical assistance centers were set up in each Department of Education region to assist state and local district Title I staff members in implementing the evaluation models.

Technical services provided under agreements with each state included:

1. Workshops on the Title I reporting system, model selection computer systems, tests and measurements, and the Title I evaluation models.

2. On-site or telephone consultation on any aspect of Title I outcome evaluations.

3. Assistance in the installation of USDE-developed computer programs for analyzing Title I data.

4. Training or consultation in establishing evaluation quality control.

5. Sharing information and helping develop awareness of procedures and new materials.

Assistance was provided by ETS to the following states: Region II: New Jersey, New York, Puerto Rico, Virgin Islands Region IV: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee Region V: Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin

APPENDIX H: Related Projects conducted by ERIC Clearinghouse on Rural Education and Small Schools

III. Supporting Documents

A. Publication Experience of ERIC/CRESS

The ERIC Clearinghouse on Rural Education and Small Schools was one of the initial ERIC clearinghouses established in 1966 by the Office of Education. Rural education and small schools have been major thrusts since its inception. The ERIC system incorporated an emphasis on literature syntheses within the first three years, but CRESS began producing bibliographies and small literature reviews within months of its establishment. Since that time CRESS has produced more than 100 major print and non-print products.

CRESS contracts with authors around the country for its publications. Experience shows that it takes the full fiscal year to develop and print publications under this system. The control necessary for the quick turnaround time required in this subcontract means that product development must be done at CRESS.

Examples of CRESS' recent publications include:

"Technological Tools for Rural Education"
by Alan M. Hofmeister

"Before School Starts: A Handbook for New Elementary Rural/Small School Teachers"
by Leo M. Schell and Paul R. Burden

"Furthering Nonformal Adult Education in Rural America: The Free University and Three Traditional Providers"
by Jim Killacky

"How ERIC Can Help Librarians in Rural Areas Meet the Information Needs of Teachers, Administrators, and Students"
by Laura H. Connelly

"The Preparation and Certification of Teachers for Rural and Small Schools"
by Clark E. Gardener and Everett D. Edington

"The Principalship in Rural America"
by Alfred P. Wilson

"Meeting Educational Needs in Rural Communities Confronting Rapid Growth"
by J. T. Morris

"Community Resources for Rural Social Studies Teachers"
by A. Earl McCain
LIST OF PUBLICATIONS
ERIC Clearinghouse on Urban Education
Box 40
Teachers College, Columbia University
New York, N.Y. 10027
(212) 678-3433/3437

LIST OF PUBLICATIONS: 1977-1983

Descriptions of Publications

ERIC/CUE identifies and gathers information which is analyzed in serial publications.

The Urban Diversity Series consists of state-of-art papers, reviews, and annotated bibliographies. Each paper summarizes the existing literature concerning the educational, socioeconomic or social/psychological issues involved in the development of diverse urban populations.

The Compact Guides consist of ERIC Digests, brief bibliographies, and directories which encapsulate information on pertinent issues.

The Urban Schools Bibliography is a set of comprehensive references of the literature on urban schools available through the ERIC system. The Guidebook to Hispanic Organizations and Information is a directory.

The Topical Bibliographies of ERIC References, compiled from computer searches of the ERIC database, are references of the literature on various topics available through the ERIC system. Like the citations in the Urban Schools Bibliography, these citations include an abstract of the document.

The IRCD Bulletin carries an analytical or review article devoted to a single subject in the field of urban education. The aim of the Bulletin is to synthesize and formulate concepts and practices which will improve the development and educational achievement of urban children and youth.

Equal Opportunity Review (EOR) consists of short papers on critical educational issues which are topical and informative. Several issues of EOR are exclusively bibliographies on urban and minority education.
Two Special Reprints are also listed; these are articles which have appeared in journals but are available from the Clearinghouse.

Availability of Publications

Items on this list may be obtained from the Clearinghouse unless they are followed by an asterisk or indicate another source of availability. Items followed by an asterisk are out-of-print; in most instances, they may be obtained from the ERIC Document Reproduction Service (EDRS).

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Items in the Urban Diversity Series, IRCD Bulletin, Urban Schools Bibliography, and Topical Bibliographies of ERIC References are available for a nominal cost. Compact Guides (except for Bibliography #7) and Equal Opportunity Review are available, in limited quantities, free of charge while supplies last. Direct orders to the ERIC Clearinghouse on Urban Education, Box 40, Teachers College, Columbia University, New York, N.Y. 10027. Make all checks payable to Teachers College. All orders must be prepaid. Prices for publications available from the Clearinghouse appear at the end of each citation.

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No. 87 Reforming Schools in the 1980s: A Critical Review of the National Reports. A. Harry Passow. April 1984. ($10.00)


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ERIC Digests (Free)

No. 1 School Crime and Disruption. March 1980.

No. 2 Complying with Title IX Regulations. March 1981.


No. 4 Instructionally Effective Schools. March 1981.


No. 6 Reforming the Large Urban High School. June 1981. ED 209 407.*


No. 8 Writing Instruction for Dialectally Different Youths. January 1982.

No. 9 Counseling in a Multicultural Educational Setting. February 1982.


No. 11 Issues in ESEA Title VII Bilingual Education. April 1982.
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<td>The High-Risk Secondary Student and Experiential, Competency-Based Education.</td>
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<td>Equal Opportunity in Education.</td>
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<td>Fall 1983.</td>
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No. 1  ERIC References on Variables Affecting Black Achievement in Elementary and Secondary Education. 1982. 182 citations. ($3.00)

No. 2  ERIC References on Compensatory Education: Assessment and Program Evaluation and Implementation in Elementary/Secondary Education. 1982. 182 citations. ($5.00)

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No. 4  ERIC References on Bilingual/Multicultural Education Programs for Asian American Students in Elementary/Secondary Schools. 1982. 157 citations. ($5.00)

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- Charles Harrington. September 1976. (Published in
Psychological Anthropology 78,1.) ($1.00)
Appendix J: Related Projects Conducted by ERIC Clearinghouse on Handicapped and Gifted Children

The Council for Exceptional Children operates the ERIC Clearinghouse on Handicapped and Gifted Children. CEC over the years has been a tremendous force in providing opportunity for the profession and exceptional children. Professionals interested in Special Education usually receive products and services sponsored by CEC and some products and services which come from ERIC funding.

Examples of CEC/ERIC recent publications include:

Alternative programs for Disruptive Youth.
ED 216 495 (E C)

Computer Connection For Gifted Children and Youth.
ED 209 889 (E C)

Discovering Special Education Resources: A Workshop on Eric and ECER

Fact Sheets From the Eric Clearinghouse on Handicapped and Gifted Children, 1984, ED 214 319 (EC)

School Based Staff Support Teams: A Blueprint for action.
ED 216 498 (EC)

Personnel Development in Special Education: Quantity versus Quality
ERIC Digest, 1984.
Appendix K: Related Projects Conducted by ERIC CLEARINGHOUSE ON TEACHER EDUCATION

The ERIC Clearinghouse on Teacher Education provides service to professionals interested in Teacher Education. Information is provided on Elementary, Secondary and higher education. Other areas include information on preservice, inservice, preparation training and retirement. In addition the Eric Clearinghouse provides service for personnel development, physical education, Educational Theory, Curricular and Philosophy.

Examples of recent publications include:

- Deficits, Decline and dismissals: Faculty Tenure and Fiscal Exigency, ED 213 662 (SP) Current issues

- Field Practicum for Teachers of Sifted Children: The South Carolina Experience, ED 213 661 (SP) Current Issues

- Physical Education Teacher Teacher Education: Curriculum, pedagogy, certification...History issues trends. Information Analysis products, ED 219 337 (SP)

- Prospects for Black Teacher: Preparation, certification, Employment. Information Analysis products, ED 213 659 (SP)

- A qualitative study of excellence in teaching and The Search for Excellence in teaching: An Annotated Bibliography. Information Analysis products, ED 213 660 (SP)

- Teacher Education and Global perspectives current issues, ED 216 993 (SP)
APPENDIX L: Think Tank -- Recurring Themes

The following needs were identified by participants in the Think Tank which was held February 17-18, 1985 at the Maxwell House Hotel in Nashville, Tennessee. In addition to project staff and consultants, Think Tank participants from different institutions of higher education from each of the states within the Appalachian Region. Recurring themes with their respective identified needs are listed below.

1. **Teacher Preparation - inservice, preservice curriculum**
   - Programs to assist in application of research and exemplary programs in classroom (2,4)
   - Teach teacher counseling skills to deal with today's students - 2
   - Practical inservice - 2
   - Teach communication skills to teachers - 2,3
   - Student discipline - 2,3 (techniques)
   - Classroom management - 2,3

2. **Community Support & Involvement**
   - Program to educate the public concerning educational needs (2)
   - Need for parental and community involvement - 2,3
   - Counseling for parents (2)
   - Technical assistance for women entering job market - 2
   - Emphasis on parent education - 2
   - High tech cooperation (schools and industry) - 5

3. **Equal educational opportunities, resources, quality of programs - minority issues**
   - Programs dealing with techniques of working with different kinds of groups - 2,3
   - Generate more data relative to minority groups. (across all components)

4. **Evaluation Issues - application of testing, use of testing impact on minorities**
   - After school program to help students pass proficiency tests - 2,4
   - Evaluation process for all teachers - 3
   - Competency testing - 2,3,4
   - Higher performance standards - 3
   - Develop comprehensive national licensing exam for new teachers - 3
5. Public School Curriculum issues
   Effective Schools Research
   Vocational Education -vs- Traditional
   Early Childhood Education

   - Programs to help districts implement master plan - 3
   - Programs to assess
     Self auditing and review board for community (not with local system)
   - to audit curriculum programs
   - After-school programs to help students pass proficiency tests - 2,4
   - More resources for special education - learning disabilities,
     vision training - 2
   - Class size - 2
   - Improve classroom materials - 2
   - System to give better start in early years - 2

   - More organized method of training secondary level students 3,2
   - Magnet schools - gifted education - 2
   - Standards of learning objectives - 2,3
   - Electronic classrooms - 2
   - Study successful education models - 2,4
   - Exemplary programs - 2,4
   - Program to blend effective with cognitive
   - School reorganization
   - Time on task - 2

6. Funding

   - Foundation for soliciting funding to help solve the problems of
     women entering job market - 3
   - Improve facilities for individualized instruction
   - Force local districts to comply with minimum standards to receive
     funding - 3
   - Equalize local school financing to reduce funding - 3

7. Basic skills/achievement issues
   Skills, how to learn,
   Education/employment relationship

   - Remedial programs for low achievers (2)
   - Technical assistance in basic skill areas (2) (4)
   - Counseling for parents and students, elementary and secondary - 2
   - Tutorial programs to improve student achievement - 2
   - Class size - 2
   - Gifted education - 2,3
   - Research on split classroom - 2

8. Leadership issues - principals
   Central office staff - staff development

   - Inservice development for administrators and school board - 2,3
   - Student discipline (policies) 2,3

L - 2 197
9. Drop out - adult literacy issues

10. Teaching as a profession - condition of employment for teachers
    - Accountability measures - tying more money to better performance - 3
    - Teacher career ladder - 3
    - Minimum standard of excellence - 2,4
    - Help public relations for teaching profession - 2,3
    - Provide a place for teachers, future and experienced meet, handle burnout - 3,2
    - Study non-monetary rewards for teachers - 3

11. Cultural Diversity
    - Improved teacher education programs -
    - multicultural training program - inservice, preservice, administrators - 2,5,3
    - Program for disadvantaged and socio-economic racial groups -
    - tutorial, basic skills - 2

12. Politics of education - involved in all issues
government control, centralization - erosion of local control
    - Special Education network to aline connections between politics and programs for Special Education.
    - Have on-going oversight by state legislators - to assess progress of implementing educational reform - 3

These do not fit into any specific category

1. Programs dealing with long range issues - 3
2. Programs to help districts implement master plan - 3
3. NAACP educational program for youths to help alleviate problems - educational concerns - 2
4. Revitalize curriculum programs (k-higher Ed) - 2
5. Network between school system and universities in the region - 5
6. Annual conference - exchange reports - 5
7. Network with other research centers and coordinate basic research - 5
8. Establish network to help bargaining committee prepare negotiating package - 3,4,5