

DOCUMENT RESUME

ED 107 223

88

IR 001 961

TITLE Educational Research and Development Makes a Difference in Schools. Annual Report to Members.

INSTITUTION Northwest Regional Educational Lab., Portland, Oreg.

SPONS AGENCY National Inst. of Education (DHEW), Washington, D.C.

PUB DATE Apr 75

NOTE 29p.

EDRS PRICE MF-\$0.76 HC-\$1.95 PLUS POSTAGE

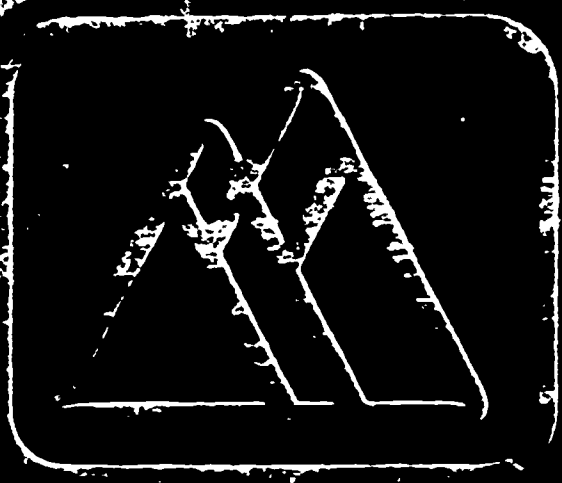
DESCRIPTORS Adult Education; *Annual Reports; Career Education; Computer Science; Demonstration Projects; Educational Experiments; Educational Research; Educational Technology; Instructional Innovation; Intermediate Administrative Units; Manpower Development; *Regional Programs; *Research and Development Centers; Rural Education; Teaching Skills; Telecommunication

IDENTIFIERS *Northwest Regional Educational Laboratory; PLANIT; Samoa

ABSTRACT

The annual report of the Northwest Regional Educational Laboratory summarizes research and development work and technical assistance activities in 15 programs and projects administered through four laboratory divisions. Among topics covered are improving teacher competencies, rural education, intercultural reading and language development, Alaskan telecommunications, career education, manpower counselor training, adult education, Samoan education, and evaluation, audit and assessment projects. A complete listing of individual projects is included and a three-year statement of income by programs and funding agencies given. (SK)

ED107223



Northwest
Regional
Educational
Laboratory

Annual Report to Members

EDUCATIONAL RESEARCH AND
DEVELOPMENT IN K-12
CONFERENCE
2008





Northwest Regional Educational Laboratory

Annual Report to Members

Mission

The mission of the Laboratory is to improve educational processes by:

- Developing educational products and procedures based on scientific knowledge and technology
- Assisting institutions, organizations and agencies in installing and using effective products and procedures

Governance and Membership

A nonprofit organization, the Laboratory is governed by a 27-member Board of Directors. A total of 822 member institutions participate in cooperative planning, development, evaluation and dissemination activities.

Staff and Facilities

The Laboratory is headquartered in the seven-story Lindsay Building and occupies space in the nearby Loyalty Building and World Trade Building in downtown Portland. Field offices are maintained in American Samoa and Tacoma, Washington.

The Laboratory has a staff of more than 200 full-time employees.

Finance

Contracts with the National Institute of Education, U.S. Office of Education and other federal agencies, State Education Agencies, colleges, schools and other organizations provided \$6.27 million for Laboratory activities during 1974.

Programs

Research and development work and technical assistance activities are carried out in 15 programs and projects administered through 4 Laboratory divisions.

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Programs

IMPROVING TEACHING COMPETENCIES PROGRAM	3
RURAL EDUCATION PROGRAM	4
INTERCULTURAL READING AND LANGUAGE DEVELOPMENT PROGRAM	5
COMPUTER TECHNOLOGY PROGRAM	6
PROJECT PLANIT	7
ALASKA TELECOMMUNICATIONS PROJECT	8
CAREER EDUCATION PROGRAM	9
AREA MANPOWER INSTITUTE FOR DEVELOPMENT OF STAFF	10
MANPOWER COUNSELOR TRAINING PROJECT	11
ADULT EDUCATION PROGRAM	12
SAMOA EDUCATION PROJECT	13
EVALUATION AND AUDIT PROJECTS	14
ASSESSMENT PROJECTS	15
EXPERIMENTAL SCHOOLS EVALUATION PROGRAM	16
OTHER TECHNICAL ASSISTANCE PROJECTS	17

Improving Teaching Competencies Program

Traditional school methods and curriculum content are centered mainly on the transmission of information. Comparatively little emphasis is given to providing students with the knowledge, skills and attitudes necessary to become responsible individuals capable of living interdependently in a world of continuous, rapid change.

Generally, schools have met objectives which center on cognitive learning for students with high intellectual ability and motivation. They have been less successful in promoting individual worth and dignity, self-understanding and maximum potential for individual growth.

To help meet this need, a set of instructional systems is being developed to conduct inservice workshops and campus courses for teachers and administrators.

8,933 TEACHERS, ADMINISTRATORS GAIN NEW SKILLS IN COURSES, WORKSHOPS

Major inservice efforts were underway in Fairfax County, Virginia; Detroit; the states of Florida and South Dakota; Minneapolis; Spokane and Seattle, Washington; Portland; Montgomery County, Maryland and Australia.

Instructional leaders trained by the Laboratory conducted 140 courses and workshops for 4,751 teachers and administrators during 1973-74 school year. Sales records of publishers indicate NWREL materials were used to provide training for an additional 4,182 school personnel during 1974.

Development and evaluation of six new training systems progressed during the year.



Seattle workshop in Preparing Education Training Consultants

Completed Instructional Systems:

INTERPERSONAL COMMUNICATIONS (IPC) - NWREL-trained instructional leaders at colleges and schools used the training program to conduct workshops and courses for 848 school personnel in capabilities to communicate with students, the community and each other. Publisher's records indicate the materials were used for training an additional 2,492 teachers and administrators.

RESEARCH UTILIZING PROBLEM SOLVING (RUPS) - Classroom and Administrators versions of the system were used by NWREL-trained instructional leaders at colleges and schools to conduct workshops and courses in problem solving skills for 632 school personnel. Publisher's records indicate the materials were used to train an additional 1,045 teachers and administrators.

SYSTEMATIC AND OBJECTIVE ANALYSIS OF INSTRUCTION (SOAI) - NWREL-trained instructional leaders at colleges and schools used the training program to conduct workshops and courses for 204 school personnel in interpersonal relations skills, supervisory techniques and teaching strategies. Publisher's records indicate the materials were used to train an additional 217 school personnel.

DEVELOPMENT OF HIGHER LEVEL THINKING ABILITIES - The system was used by NWREL-trained instructional leaders at colleges and schools to conduct workshops and courses for 197 teachers in teaching strategies which increase student's problem solving capability. Publisher's records indicate

the materials were used to train an additional 321 teachers.

FACILITATING INQUIRY IN THE CLASSROOM - Teaching strategies which encourage student inquiry were gained by 248 teachers in workshops and courses conducted by NWREL-trained instructional leaders at colleges and schools. Publisher's records indicate the materials were used to train an additional 139 teachers.

INTERACTION ANALYSIS - The system was used by colleges and schools to conduct workshops and courses for 332 teachers in techniques of Interaction Analysis.

SYSTEM APPROACH FOR EDUCATION - Seventy-five teachers were trained in the systematic planning process.

Instructional Systems Under Development:

INTERPERSONAL INFLUENCE - Field testing and experimental use of the system for increasing skills which enable people to clarify misunderstandings usually mistakenly dealt with as conflicts involved 704 teachers and administrators.

SKILLS TRAINING (PETC II) - Increased skills in selecting, adapting and conducting training programs were gained by 359 teachers and administrators participating in field test workshops. As part of the training, they in turn conducted workshops in Group Process Skills for 949 other school personnel.

CONSULTATION SKILLS (PETC II) - Field testing and experimental use of the system for

increasing consulting skills for improving the organizational functioning of a school involved 66 teachers and administrators.

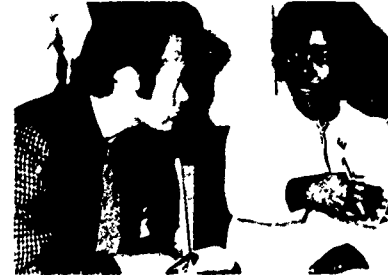
ORGANIZATIONAL DEVELOPMENT (PETC III) - Trial of the program for increasing organizational development skills involved 36 teachers and administrators.

RELEVANT EXPLORATIONS IN ACTIVE LEARNING (REAL) - The first 14 learning packages were tested with 45 teachers.

CONFLICT AND NEGOTIATIONS - Twenty-four teachers participated in the first trial of the training program.



University of Idaho summer workshops



1974
1973
1972
1971
1970
1969
1968
1967
1966

8,933 Teachers Trained

Systems Completed
Res. Util. Prob. Solv.
(Adms. Vers.)

System Approach for
Education

7,300 Teachers Trained

Systems Completed,
Res. Util. Prob. Solv.
(Classroom Version)

Sys. & Obj. Anal. of
Instruction

Int. Com.

7,200 Teachers Trained

7,800 Teachers Trained

Systems Completed:
Facilitating Inquiry
in the Classroom

Interaction Analysis

7,600 Teachers Trained

6,500 Teachers Trained

2,500 Teachers Trained

300 Teachers Trained

Program Begun
Lab Established

Rural Education Program

In recent years programs for schools in rural communities have been planned largely by agencies outside those communities, and local people have not had the means to initiate and carry out educational changes they desired. By enlarging the capacity of local people to solve educational problems, states can help rural communities have greater influence over the nature of their schools. As community representatives, students and school personnel with their school boards, join in planning school programs, they can have a positive and lasting impact on local learning opportunities and educational achievement.

The Laboratory is developing a Rural Futures Development (RFD) Strategy that encourages communities to use carefully planned, step-by-step approaches to design new school programs, install them and determine their success. At the same time personnel in State Education Agencies are being trained to coordinate RFD Strategy work statewide.

STRENGTHENING LOCAL SCHOOL AND COMMUNITY CAPABILITY FOR CHANGE -

Materials and procedures were designed for four complementary, systematic change and development processes

- Community Change Process
- School Renewal Process
- School Leadership Development Process
- School Board Development Process

ENHANCING EDUCATION AGENCY SUPPORT FOR CHANGE -

Materials and procedures were designed to assist personnel in state and regional education agencies in utilizing the RFD Strategy including:

- RFD Strategy Descriptions
- RFD Support Agency Guide
- RFD Training Plan and Materials
- Process Facilitator Manual



TRIAL OF RURAL FUTURES DEVELOPMENT STRATEGY BEGUN IN UTAH

The design, development and testing of sets of interrelated materials and procedures for improving rural schools progressed at Washington field sites. Trial of a training system for State Education Agency personnel was carried out in Montana.

The first complete test of the entire Rural Futures Development Strategy is underway in Utah.



NWREL Rural Education staff works with San Juan (Utah) School District staff (center right and bottom right) and schools in Okanogan County, Washington, to carry out RFD Strategy



1975
1974
1973
1972
1971
1970
1969
1968
1967
1966

Trial of Integrated RFD Strategy Begun

Teacher, School and Support Agency Strategies Added

Development of Community Change Process Begun

Program Begun Lab Established

Intercultural Reading and Language Development Program

The different language patterns, value systems and personal experiences of many children from varied cultural backgrounds result in a need for special teaching materials. There also is a growing awareness on the part of many cultural groups that their children are growing up without the knowledge and appreciation of the unique characteristics of their culture.

To help meet these needs, reading and language development materials are being created for elementary grades. The systems are designed to increase reading and language abilities and at the same time, bolster pride in ethnic heritage and confidence in abilities to achieve.

NORTHWEST INDIAN READERS - Indians in three regions of the Northwest continued the design and development of materials for the early elementary grades. Plains Indian materials are being tested in Montana, Plateau Indian materials in Oregon, and Coast Indian materials in Washington.

GUAM READERS - First grade materials were printed for all elementary schools on the island. Evaluation of second grade materials continued and third grade materials were introduced in test classrooms.

CHAMORRO LANGUAGE AND CULTURE COURSE - Development was begun on a Chamorro language and culture course for junior high students in Guam.

ALASKAN READERS - The Eskimo, Indian and Aleut Printing Company in Fairbanks is printing and distributing the Alaskan materials, which are being used during the 1974-75 school year in 77 village schools.

SPECIAL EDUCATION MATERIALS - Vocational and career related materials in language skills, social skills and work habits are being developed with the Hawaii State Department of Education for mentally retarded children in Pohukaina and Waimano Schools.

COMMUNICATIONS MODULES - Testing of "Strategies in Communications," units for increasing listening, reading, speaking and writing skills of junior high students, was completed in 27 Northwest school districts. The materials are being prepared for publication and general use.

MATERIALS MEET SPECIAL NEEDS OF ALASKA, GUAM, HAWAII, NORTHWEST INDIAN CHILDREN

The use of first grade materials developed by Pacific Northwest American Indians began in selected schools in Idaho, Montana, Oregon and Washington.

First grade materials were printed for all elementary schools in Guam, while evaluation of materials for second and third graders was underway at test schools.

The Eskimo, Indian and Aleut Printing Company in Fairbanks continued to print and distribute Alaskan Readers to village schools.

Development of vocational and career related materials in language, social skills and work habits for mentally retarded children began with the Hawaii State Department of Education.



Northwest Indians develop reading and language materials



1974
1973
1972
1971
1970
1969
1968
1967
1966

Hawaii Materials Begun

Alaskan Readers Completed

Indian Readers Begun

Guam Readers Begun

Alaskan Readers Begun
Lab Established

Computer Technology Program

The use of computers for school administration and instruction is increasing.

Two things are needed for expanded and effective use of computers in schools.

1. Teachers and administrators who are knowledgeable about potential and appropriate computer applications
2. Curriculum materials which are available for teachers to use in the classroom

Curriculum Materials:

ELEMENTS OF COMPUTER CAREERS — The career education materials for high school students have been completed and are being published this spring by Prentice-Hall.

PROBLEM SOLVING UNITS — Prototype units in science, social studies, business education and energy/environment have been drafted.

Training Materials:

INTRODUCTORY AND APPLICATIONS COURSES — A completed introductory course, applications course for teachers and application course for administrators are available through Tecnica Education Corporation. Major trial of the materials as part of a graduate program in school administration is taking place at the University of Idaho; a major inservice training program was completed in Utah.

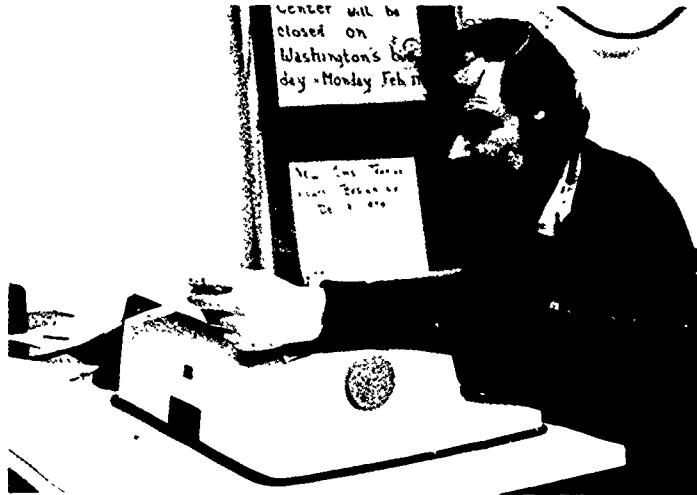
THE COMPUTER IN DATA MANAGEMENT/DECISION MAKING — Trial of materials at Northern Arizona University and Portland State University produced data for revision of prototype materials. Revised materials were further tested at Northern Arizona University and the University of Iowa and are ready for publication.

SELECTING, SPECIFYING AND DEVELOPING COMPUTER INSTRUCTIONAL MATERIALS — Trial of materials at 10 workshops involving 250 Minnesota teachers produced data for revision of prototype materials. The materials on "selecting" were revised and further tested in Minnesota.

PRENTICE-HALL PUBLISHES CAREER EDUCATION MATERIALS IN COMPUTER OCCUPATIONS

"Elements of Computer Careers," published by Prentice-Hall, provides materials for high school students.

Introductory and applications courses are being used both for inservice training at schools and as part of graduate programs in school administration at universities.



University of Idaho uses computer units in educational administration program



World's Fair visitors try NWREL computer unit on energy and environment



Secondary school administrators at Granite School District, Salt Lake City, in computer training session

Career Education Materials Published

Introductory and Application Courses for School Personnel Completed

Program Begun

Lab Established

1974

1973

1972

1971

1970

1969

1968

1967

1966

Project PLANIT

A computer language which can be used on a variety of different time sharing systems greatly facilitates the writing and use of computer based instructional materials. PLANIT (Programming Language for Interactive Teaching) is designed for use on various computing equipment of the type that is normally operated on college and university campuses.

PLANIT includes a language for authoring instructional course content and the logic for administering it automatically and simultaneously to a group of students working at computer terminals. The author prepares his material in the PLANIT language either at a terminal or on cards and the time sharing system presents it to students, automatically keeping performance records. The system, which is contained in a single magnetic computer tape, can be installed on a variety of computers with much less effort and expense than any other comparable computer program.

PLANIT DEVELOPMENT — Under development at various institutions for some 10 years, the language for computer assisted instruction has been completed and a dissemination system and materials prepared. It is now in use at more than 20 universities.

PROFICIENCY MAINTENANCE INSTRUCTIONAL MODULE — A translator program for installation of PLANIT on Litton's ANGYK-12 TACFIRE computer at Ft. Hood, Texas is underway.

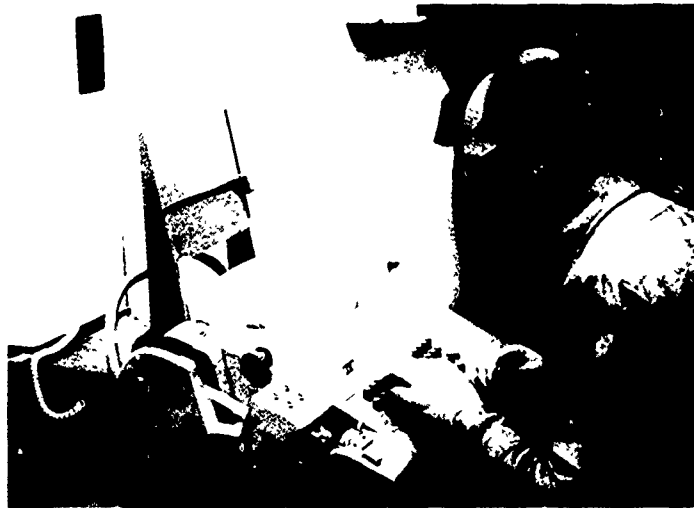
USE OF COMPUTER LANGUAGE RANGES FROM UNIVERSITIES TO MILITARY BASES

Debugging of the PLANIT computer language has been completed and it has been packaged for general use. PLANIT is being used at more than 20 universities.

A translator program is being developed to install PLANIT on a Litton-built computer for U.S. Army education programs.



Project PLANIT Director Charles Frye explains new language for computer assisted instruction



Teachers need not know computer language to develop their own instructional units at teletype terminal



1974

Dissemination Begun

1973

Debugging Completed

1972

Project Begun

1971

1970

1969

1968

1967

Lab Established

1966

Alaska Telecommunications Project

The spring of 1974, the ATS-F satellite was launched as part of a program to demonstrate the potential applications of communications technology to education. The National Institute of Education awarded grants to three regional organizations for the initial planning and subsequent operation of experimental demonstrations: The Office of Telecommunications of the Office of the Governor of Alaska, the Federation of Rocky Mountain States, and the Appalachian Regional Commission. These demonstrations explore the use of satellite distribution of educational television materials and other services.

The Alaska Office of Telecommunications contracted with the Laboratory to design 96 television programs in basic oral communications and health education. The programs are being produced by KUAC-TV at the University of Alaska.

BASIC ORAL LANGUAGE DEVELOPMENT - The 32 "Amy and the Astros" programs provide direct teaching with Amy assisting two Astro children to learn to speak the English language and learn about Alaska.

HEALTH EDUCATION - The 64 "Right On!" programs present health information in a lively and humorous manner.

ALASKAN CHILDREN VIEW TV PROGRAMS VIA SATELLITE

The two series "Right On!" and "Amy and the Astros" use puppets interacting with human characters to present health information and teach children to speak the English language. Experimental telecasts to 15 communities and villages began October 7, 1974.



Children in Valdez view TV programs broadcast from University of Alaska via satellite



1974
1973
1972
1971
1970
1969
1968
1967
1966

Television Broadcasts Begun

Project Begun

Lab Established

Career Education Program

Career education is a broad new concept which emphasizes the need for education to deal with all life careers - worker, learner, family member and citizen.

Experience-Based Career Education (EBCE) is one model for providing career education. It uses businesses and community agencies as learning sites in an alternative program for high school juniors and seniors. EBCE provides an individualized approach for students to learn life skills, basic skills and career development.

EXPERIENCE-BASED CAREER EDUCATION (EBCE) - Based on development and trial of the model, "user guidelines" are being prepared on the topics of governance, management, instructional system, basic skills, life skills, career development, guidance, employer/community utilization and product development and dissemination.

Eleven sites have been selected in the Northwest for replication and further testing of EBCE materials and procedures.

11 DISTRICTS PLAN TRIAL OF EXPERIENCE-BASED CAREER EDUCATION

Development of the EBCE model is in its third year at Tigard, Oregon, where 59 juniors and seniors currently are enrolled in the pilot project.

Evaluation of the total model at five additional sites and specific parts of the model at six sites is being planned and will begin in the fall of 1975.



Juniors and seniors at Tigard, Oregon, in Experience-Based Career Education Program



1974
1973
1972
1971
1970
1969
1968
1967
1966

Replication Sites Selected

EBCE Exploratory Test Begun

EBCE Model Designed

Feasibility Studies Begun

Lab Established

**Area Manpower Institute
for Development of Staff**

An increase in manpower training programs throughout the nation has been accompanied by an increased need for skilled instructors, counselors and administrators.

Western AMIDS provides training and assistance for staff members of local manpower programs in 11 states and territories. Assistance typically concentrates on capabilities for identifying, analyzing and solving learning problems of trainees outside the cultural mainstream.

Staff development services are concentrated on the following areas:

- Human and cultural awareness
- Instructional methods
- Curriculum development and adaptation
- Guidance and counseling
- Related and basic education
- English as a second language
- Manpower planning and administration
- Interagency cooperation and community support services

**2,963 MANPOWER PERSONNEL
BENEFIT FROM 277 TRAINING,
ASSISTANCE ACTIVITIES**

A total of 277 workshops and other assistance activities were conducted during 1974 for local manpower staff members in Alaska, American Samoa, Arizona, California, Guam, Hawaii, Idaho, Nevada, Oregon, the Trust Territory and Washington. Manpower project personnel participating in these activities totalled 2,963.



Manpower training sessions were conducted in 11 states and territories in the Pacific and Western United States



1974
1973
1972
1971
1970
1969
1968
1967
1966

Services Expanded to
11 States, Territories

Northwest AMIDS
Established

Lab Established

Manpower Counselor Training Project

Counselors who work with manpower trainees need different skills, abilities and insights than counselors who work in schools. Manpower training program counselors need to understand cultural and language differences, real experience in the labor market and frustrations typically experienced by the unemployed adult.

The Laboratory, Oregon State University and Portland State University have cooperatively developed and evaluated a model training program for the preparation of manpower counselors.

Three basic features of the training program are:

- Training takes place in the actual work setting
- Success of training is measured by actual performance, not by completion of a specific number of credit hours
- First-hand experiences in the world of work help counselors understand problems of trainees

TRAINING MATERIALS —

Training materials and procedures are available in a package format including:

1. Training Package
2. Instructor's Key to Preassessment Materials
3. Resource Manual

DISSEMINATION WORKSHOPS — Forty-two workshops were conducted during 1974 to introduce the training program on college and university campuses across the United States.

42 WORKSHOPS INTRODUCE COUNSELOR TRAINING NATIONWIDE

The development of a field-based, individualized, open entry and open exit training program has been completed over the past three years.

Oregon State University and Portland State University installed the program in September 1973 parallel to their regular counselor education program for a field test of the model.

Training materials and procedures have been packaged and used to conduct dissemination workshops.



Typical "graduates" of the program are (top) Mike Lee, Manpower Planner, Clackamas County, Oregon; (center) Gail Mejia, Manpower Counselor, Portland Community College; and (bottom) Ray Ayala, Counseling Supervisor, School for the Deaf, Vancouver, Washington



1974
1973
1972
1971
1970
1969
1968
1967
1966

Dissemination Workshops Conducted

On-campus Trial of Model Begun

Training Model Developed

Project Begun

Lab Established

Adult Education Program

An estimated 60 million adults in the United States including one out of every two adults in Alaska, Idaho, Oregon and Washington do not have a high school education. Effective staff development has not been readily available to adult education administrators, teachers, counselors and para professionals. This is particularly a problem in the Northwest because it encompasses a large sparsely populated geographic area.

A regional consortium was formed to:

- Develop and conduct local, state and regional training programs in proven techniques of instruction in adult education
- Develop an institutional and agency capability to carry out adult education staff development

REGION X STAFF DEVELOPMENT PROJECT

Courses and workshops were conducted during 1973-74 for 1,134 state and local administrative, teaching, counseling and paraprofessional staff members in Alaska, Idaho, Oregon and Washington. Training activities included university courses, workshops and individualized technical assistance.

COUNSELOR TRAINING PROJECT

Pilot testing of 67 counseling and guidance training modules was completed by 20 adult education evaluators in rural and urban settings. Idaho State University and Oregon State University were instrumental in conducting these tests.

An Adult Career Education Counseling and Guidance Literature Resource directory and supplement were prepared for counselors and adult educators.

1,134 TEACHERS OF ADULTS BENEFIT FROM TRAINING, SERVICES

Staff development activities are provided in Region X by a consortium including the State Education Agencies in Alaska, Idaho, Oregon and Washington; the University of Alaska; Idaho State University; Oregon State University and Washington State University.



Community college staff members develop training modules in adult career education counseling



Workshops for adult educators are coordinated from University of Alaska, Idaho State University, Oregon State University and Washington State University campuses



1974
1973
1972
1971
1970
1969
1968
1967
1966

1,134 Adult Educators Participate in Training
Counseling Modules Tested

Counseling Project Begun

1,459 Adult Educators Participate in Training

Staff Development Project Begun

Lab Established

**American Samoa
Education Project**

Over the past three years many new federally funded projects and programs have been initiated by the Government of American Samoa. This growth has increased greatly the need for training in planning and evaluation skills, as well as the need for developing a comprehensive planning and evaluation system.

DEPARTMENT OF EDUCATION - Evaluation of nine Department of Education projects is underway

- Upgrading Language Abilities Program
- Sea Study Laboratory
- Reading Project
- Elementary Inservice Training Project
- SCIS
- Special Education Program
- Secondary Vocational Education/Industrial Arts Project
- PACIFIC
- American Samoa Bilingual/Bicultural Project

The Laboratory also is assisting the Department of Education in preparing a five-year plan and program goal setting.

COMMUNITY COLLEGE -

- Evaluation of six Community College projects is underway:
- Vocational Education Program
- Manpower Development Training
- Adult Basic Education
- Commercial Fisheries Development Project
- Driver Training and Safety Program
- Education Professions Development Act (EPDA)

The Laboratory also is assisting the Community College in preparation for accreditation and staff development.

**PROJECTS MEET SPECIAL NEEDS
OF CHILDREN, ADULTS IN
AMERICAN SAMOA**

Primary Laboratory assistance to the American Samoa Department of Education and Community College is in planning, managing and evaluating educational projects, and in increasing staff and organizational effectiveness through teacher training and organization development activities.



1974 - 1973 - 1972 - 1971 - 1970 - 1969 - 1968 - 1967 - 1966

Community College
Projects Begun

Department of
Education
Projects Begun

Lab Established

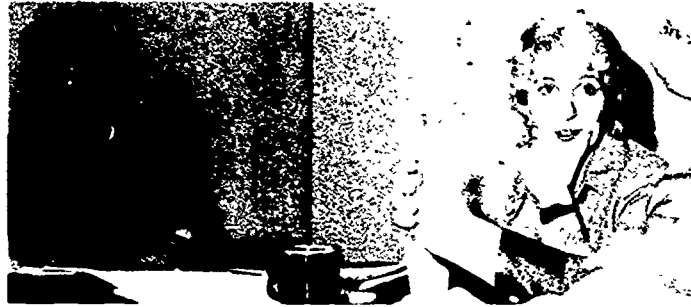
Evaluation and Audit Projects

The Laboratory's Audit and Evaluation Section has adopted an "evaluation by objective" approach to evaluation. This approach entails organizing the work of a project into components such as management, instruction and development. The work on each component is then organized into a series of tasks and each task is converted into a performance objective. The performance objective may entail the use of a particular procedure (i.e., process objectives) or the objective may specify an outcome (i.e., product objective). At least one evaluative question is posed for each performance objective. Subsequently, an evaluation procedure is devised to secure an answer to each question.

NWREL staff members make periodic visits to project sites to review data collection efforts and perform summary analysis of the data. Site visits result in an implementation report, an interim evaluation report or a final evaluation report summarizing project activities to date and recommending changes where appropriate.

78 PROJECTS BENEFIT FROM EVALUATION ASSISTANCE

The Laboratory conducted 28 project evaluations, onsite technical reviews for 35 additional projects and provided technical assistance to 15 others.



Evaluation services have been provided to programs which focus on a variety of cultural groups, including Spanish speaking students, Native American Indians, Black students, Alaska Native students and Asian American students in both urban and rural settings

Evaluation assistance was provided for 17 projects being conducted by 15 local and intermediate school districts under Titles I, III and VII of the Elementary and Secondary Education Act.

Evaluation services were provided to three multisite programs: Project SEED, California State Department of Education (32 sites); Child Development Specialist Project, Oregon State Department of Education (6 sites);

Urban, Rural, Racial, Disadvantaged Project, Washington State Superintendent of Public Instruction (31 sites)

Evaluation assistance also was provided during the year to: Oregon Regional Medical Program, University of Oregon Medical School

Idaho Consortium EPDA Project, University of Idaho

Metro Corrections Project, Columbia Region Association of Governments

Project to Read Project, Oregon State Department of Education
ational Village Training Pro-

grams, Portland School District
Increasing the Understanding of
Multi-Ethnic Heritage, Center
for Urban Education, Portland
Special Education Program Plan-
ning, Alaska State-Operated
Schools



NWREL evaluation staff provides services to educational projects in (top) Gresham, Oregon; (center and right) Alaska; and (left) Pocatello, Idaho

1974

1973

1972

1971

1970

Evaluation and Audit Section Established

1969

1968

1967

Lab Established

1966

Assessment Projects

The need to assess the performance of both students and school personnel is increasing.

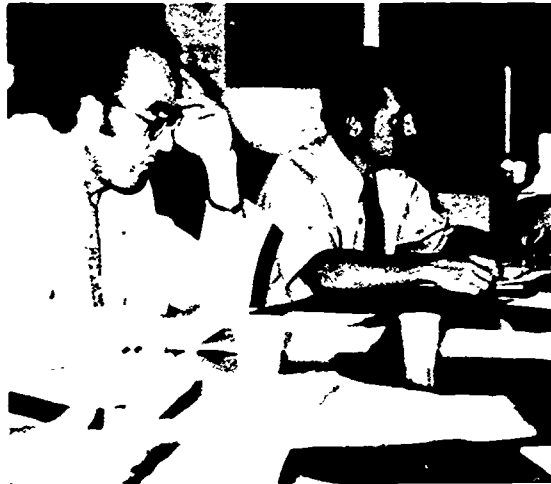
Many schools are moving toward competency based graduation requirements, resulting in the need for testing devices for the measuring of tasks in actual or simulated settings. State Education Agencies also need performance tests for statewide assessments.

Institutions of higher education have similar needs related to competency based programs for training of school personnel.

All of these institutions need access to instruments and procedures for assessing the skills and capabilities of students and school personnel. They also need planning and implementation services in collecting information about student achievement and other educational concerns.

STATE AGENCIES, LOCAL DISTRICTS RECEIVE ASSISTANCE IN ASSESSING STUDENT PERFORMANCE

Activities are designed to help school districts, State Education Agencies, federal agencies and institutions of higher education meet their needs in planning assessment work and in collecting reliable information for making important decisions.



Test Collection Projects:

CLEARINGHOUSE FOR APPLIED PERFORMANCE TESTING - The Clearinghouse was established in 1974 by the State Education Agencies in Hawaii, Oregon, Pennsylvania and Washington under a ESEA Title V grant to assist schools and agencies in locating and using appropriate testing materials and procedures.

MEASURES OF FUNCTIONAL ADULT LITERACY - Existing tests are being collected and evaluated for use by national and state Right-to-Read, Adult Basic Education and other programs.

Statewide Assessment Projects:

Assistance is being provided to State Education Agencies:

ALASKA - Analysis of alternatives for test development

HAWAII - Collection and development of exercises and items for reading and math assessments

OREGON - Selection of objectives, analysis of data and reporting of results

WASHINGTON - Assessment of reading at the sixth grade level

MULTILINGUAL ASSESSMENT - Instruments which are culturally and linguistically "bias free" are being refined and tested at 10 bilingual and bicultural projects across the United States.



Statewide assessment work by State Education Agencies in Alaska, Hawaii, Oregon and Washington focuses on reading and mathematics

Assessment Unit
Established

Lab Established

1974

1973

1972

1971

1970

1969

1968

1967

1966

Experimental Schools Evaluation Program

The Experimental Schools Program at Franklin Pierce School District near Tacoma is in its fourth year. The program represents a large scale, multi-year effort to bring a concentration of new educational materials and methods to one site.

A major element of the program — evaluation and documentation of the results — was contracted to the Laboratory. The result of Laboratory analyses will be to:

- Measure achievement, attitudes and other student objectives
- Identify and document individual successful and unsuccessful practices
- Describe and analyze relevant forces which influence the program
- Systematically document the total program
- Identify successful evaluation and documentation

Laboratory studies and documentation activities at Franklin Pierce School District during 1974 resulted in the following reports.

INSTRUCTIONAL ANALYSES — "Social Perspectives of Individualized Learning"

ORGANIZATIONAL ANALYSES — "The Fiscal Environment of the Franklin Pierce Experimental Schools Project"

"School District — Franklin Pierce Education Association Relationships"

"Project Governance A Three-Year Review"

"Perceptions of Institutional Character"

COMMUNITY ANALYSES — "Survey of the Parents of the Franklin Pierce School District"

EVALUATION LOOKS AT HOW AND WHY RESULTS ARE BEING ACHIEVED

Laboratory evaluation work focuses on three areas:
Instructional Analyses
Organizational Analyses
Community Analyses



NWREL evaluators work with Experimental Schools Program staff at Franklin Pierce School District in Washington



1974
1973
1972
1971
1970
1969
1968
1967
1966

Program Begun; Tacoma Office Established

Lab Established

Other Technical Assistance Projects

Many educational needs and problems are unique to a particular institution or setting.

To meet this need, state and local institutions may need to develop entirely new procedures or materials. In some cases the need may only be to locate and adapt existing ones.

The Laboratory provides special assistance to meet these specific needs upon request.

FEDERAL AGENCIES – Technical assistance and training was provided to strengthen the monitoring of programs and projects by Region X of the Department of Health, Education and Welfare.

STATE AGENCIES – Alaska, California, Montana, Oregon and Washington State Education Agencies were assisted in the areas of management, planning, evaluation and dissemination.

HIGHER EDUCATION – Special assistance was provided in such areas as planning, evaluation and communications.

SCHOOL DISTRICTS – Assistance to local and intermediate school districts varied from feasibility studies to training in cultural awareness.

OTHER ORGANIZATIONS – Assistance is provided to other organizations conducting educational programs.

INFORMATION SEARCHES – The Laboratory's Information Center uses a computerized information retrieval system called **DIALOG** to quickly search more than 200,000 magazine articles, research studies, books, instructional materials and state of the art papers comprising 20 different information bases, including ERIC (the Educational Resources Information Center). Searches were conducted during the year to locate information on such topics as:

- Recordkeeping in Elementary School Mathematics
- Special Education in Rural Areas
- Culture Free Tests
- Success in Learning and Self-Image
- Active Programs in Rehabilitation of Juvenile Delinquents
- Day Care Affiliated with Public Schools
- Career Education for the Elementary Level
- Governance and Finance in Community and Junior Colleges
- Teacher Militancy and Bureaucratic Change
- Self-Instructional Materials for Business Correspondence
- Family Influences on Early Childhood Development
- Women and Minorities in Educational Administration

Montana educators use the ERIC (Educational Resources Information Center) system

28 FEDERAL, STATE, LOCAL ORGANIZATIONS RECEIVE HELP ON SPECIAL NEEDS

Special assistance to meet specific needs and problems of federal, state and local agencies includes training sessions, design of management and monitoring plans, feasibility studies, planning, testing and design of materials.

One hundred and fifteen searches were conducted for school districts, colleges and other agencies to locate reports, documents and materials which helped answer specific questions and provided information for planning and implementing local educational programs.



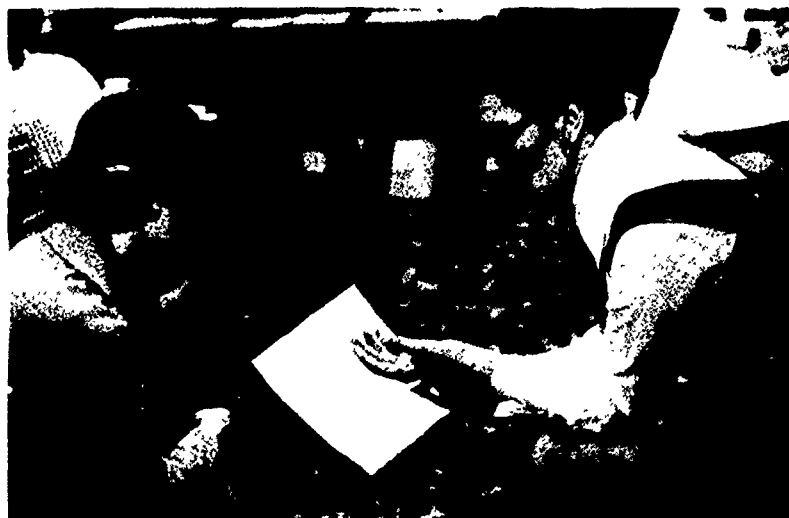
Workshop for Idaho school administrators



Study of instructional program at Seattle's Immaculate High School



Alaska State Operated School System plans special education activities



Summary of Activities

Program/Project	Purpose	Funding Source
Improving Teaching Competencies Program	Develop interrelated instructional systems to provide training for school personnel in process skills which promote student self-understanding, self-sufficiency and interdependence	National Institute of Education
Field Test and Dissemination Workshop	Utilize instructional systems to provide instruction for school personnel	Wellington Department of Education, New Zealand University of South Carolina Fairfax County Public Schools, Alexandria, Virginia Idaho State University Oregon State Department of Education Queensland Department of Education, Australia Detroit School District (Michigan) Spokane School District (Washington) Montgomery County Public Schools, Maryland
Rural Education Program	Provide products and procedures for rural people to change both their school systems and their communities to support more appropriate and effective learning experiences to enable youth to gain control of their futures	National Institute of Education
RFD in Utah	Field test materials and procedures in the Rural Futures Development Strategy	San Juan County School District (Utah) Utah State Board of Education
Intercultural Reading and Language Development Program	Develop systems to increase reading and language abilities of children from different cultural backgrounds while simultaneously bolstering pride in their culture	
Alaskan Readers	Complete development and evaluate materials for grades 1-3	National Institute of Education
Northwest Indian Readers	Develop materials in cooperation with 28 tribes in Idaho, Montana, Oregon and Washington	National Institute of Education
Guam Readers	Develop materials for grades 1-3	Guam Department of Education
Chamorro Language and Culture Course	Develop a course for junior high school	Guam Department of Education
Hawaii Special Education Project	Develop career and vocational educational materials for trainable mentally handicapped children	Hawaii State Department of Education
Computer Technology Program	Develop computer based materials for training school personnel for student use	National Institute of Education
Environmental Education Project	Develop computer based curriculum units on environmental education	U. S. Office of Education Division of Technology and Environment Education
Project PLANIT		
Programming Language for Interactive Teaching Project	Complete debugging of the PLANIT language for computer assisted instruction and package it for transport	National Science Foundation
Proficiency Maintenance Instructional Module Project	Install the PLANIT language on the Litton-built TACFIRE computer	U.S. Army Research Institute
Alaska Telecommunications Project	Design educational television programs for telecast via satellite to children in Alaskan villages	Alaska Office of Telecommunications

Program/Project	Purpose	Funding Source
Career Education Program	Continue development and evaluation of the Experience-Based Career Education Model	National Institute of Education
Area Manpower Institute for Development of Staff	Provide staff development services to the western states and Pacific territories	U.S. Office of Education Division of Manpower Development and Training
Manpower Counselor Training Project	Conduct dissemination activities related to the competency based manpower and community college counselor training system	Oregon State Department of Education/USOE Division of Manpower Development and Training
Adult Education Program		
Region X Project for the Training of Teachers of Adults	Continue the four-state staff development	U.S. Office of Education Division of Adult Education
Adult Career Education Counseling Project	Continue the development and evaluation of competency based training for paraprofessionals, teachers and administrators in career education counseling for adults	U.S. Office of Education Division of Adult Education
Samoa/Guam/Trust Territory Education Projects		
Samoa Education Project	Provide assistance to the Department of Education in planning and evaluation	American Samoa Department of Education
	Provide assistance to the community college in planning and evaluation	American Samoa Community College
Community Development Training Program	Conduct a needs assessment and training of community development personnel	Guam Department of Education
Human Relations Workshop	Conduct training for Government employees under the Intergovernmental Personnel Act	Guam Training and Development Division
Project PACIFIC	Continue to evaluate the pilot installation of Hawaii English Project materials in the three U.S. Pacific territories	American Samoa Department of Education
		Guam Department of Education
		Trust Territory Department of Education
Bilingual Education Projects	Continue to evaluate the project on Rota	Trust Territory Department of Education
	Continue to evaluate the project in Guam	Guam Department of Education
Budgeting and Contract Monitoring Plan	Design a place for special education and train staff	Trust Territory Department of Education
Special Education Management Monitoring Plan	Develop a management matrix and conduct staff training	Guam Department of Education
Evaluation and Audit Projects	Evaluate Title I, III and VII projects	Albany Union School District (Oregon) Anchorage Borough School District (Alaska) Bend School District (Oregon) Central Point School District (Oregon) Corvallis School District (Oregon) Grants Pass School District (Oregon) Gresham Union High School (Oregon) Highline School District (Washington) Jackson County Intermediate Education District (Oregon) Josephine County School District (Oregon) Lake Oswego School District (Oregon) Marion Intermediate Education District (Oregon)

Program/Project	Purpose	Funding Source
		North Clackamas School District (Oregon)
		Pleasant Hill School District (Oregon)
		Pocatello School District (Idaho)
		Portland School District (Oregon)
		Reynolds School District (Oregon)
		Tigard School District (Oregon)
		Toppenish School District (Washington)
		Union Albany School District (Oregon)
		Union County Intermediate Education District (Oregon)
		Vancouver School District (Washington)
		Washington County Intermediate Education District (Oregon)
Oregon Regional Medical Program	Continue to provide evaluation assistance	University of Oregon Medical School
Project SEED	Continue to evaluate the special elementary education program for disadvantaged in four California cities	California State Department of Education
Idaho Consortium EPDA Project	Evaluate outcomes of leadership training activities	University of Idaho
Urban, Rural, Racial Disadvantaged Education Project	Evaluate projects at 30 sites in the state of Washington	Washington State Superintendent of Public Instruction
Metro Correction Project	Continue to evaluate the project in the Portland area	Columbia Region Association of Governments
Child Development Specialist Project	Evaluate six pilot projects in Oregon	Oregon State Department of Education
Right to Read Project	Evaluate training provided for staff members of five projects in Oregon	Oregon State Department of Education
Vocational Training Program	Assist in evaluating programs at Vocational Village	Portland School District
Increasing the Understanding of Multi-Ethnic Heritage	Evaluate the project	Center for Urban Education, Portland
Special Education Program	Assist in identifying needs and potential delivery system	Alaska State-Operated Schools
Warm Springs Internship Project	Evaluate the project	Confederated Tribes of Warm Springs, Oregon
Assessment Projects		
Clearinghouse for Applied Performance Testing	Provide state and local education agencies access to testing materials and procedures	Hawaii State Department of Education (for a consortium including the Oregon, Pennsylvania and Washington State Education Agencies)
Measures of Adult Literacy	Collect and evaluate measures of functional adult literacy	USOE Office of Planning, Budget and Evaluation
Statewide Assessments	Analyze data and prepare reports on reading assessment	Oregon State Department of Education
	Assist in preparing reading and math objectives	Hawaii State Department of Education
	Assist in assessment of reading objectives	Washington State Superintendent of Public Instruction
	Prepare an analysis of four bases for test development	Alaska State Department of Education
Evaluation Center Development	Assist in designing a center for training, research and service	University of British Columbia
Alternative Teacher Education Programs	Evaluate nine alternative teacher education programs	University of British Columbia
Experimental Schools Evaluation Program	Evaluate and document the Experimental Schools Program at Franklin Pierce School District	National Institute of Education
Other Technical Assistance Projects		
Six Functions of Schooling	Develop measurement instruments	National Institute of Education

Program/Project	Purpose	Funding Source
Strengthening Program and Project Monitoring	Provide technical assistance to the regional office staff	U.S. Department of Health, Education and Welfare, Region X
Multi-Cultural Awareness Workshop	Conduct training for district staff	Anchorage Borough School District
Career Education Project	Design a cost system for the project	Tri-District Co-Op, Mossyrock, Washington
Management Workshop	Conduct training for Alaska school administrators	Alaska State Department of Education
Feasibility Study	Develop and test new needs assessment procedures in the area of child care services	Mid-Willamette 4-C Council, Salem, Oregon
Copyright Procedures	Provide technical assistance	Sheldon Jackson College, Sitka
ESEA Title IV Planning	Assist in developing a planning matrix for Integrated Grants Management	Washington State Superintendent of Public Instruction
Vocational Skills Center	Conduct a study of the feasibility of a training center operated cooperatively by six school districts	Aberdeen School District (Washington)
Oregon Child FIND Project	Assist in designing programs for handicapped children	Regional Resource Center, University of Oregon
Problem Solving Consultation	Assist in planning processes in individual schools	Portland School District
Communications Assistance	Assist in preparing a 5-year report of activities for improved education of the handicapped	Regional Resource Center, University of Oregon
Human Resource File Development Project	Assist in developing a regional resource file of people in special education	Regional Resource Center, University of Oregon
Graduation Requirement Report Analysis	Assist in developing competency based high school graduation requirements	Lincoln County School District (Oregon)
Annual Testing Program Analysis	Assist in analyzing test data derived from the district's annual testing program	Josephine County School District (Oregon)
Evaluation Competencies Planning Project	Assist in implementing a systematic plan for producing evaluation competencies	Oregon State Department of Education
Developing Institution Project	Provide assistance in planning and evaluation	Concordia College, Portland
Comprehensive Plan for Postsecondary Education	Assist in development of a state-wide plan for Oregon	Oregon Educational Coordinating Council
Quality Basic Education Project	Prepare informational materials for community meetings	Montana State Superintendent of Public Instruction
Western Region Interstate Planning Project	Provide technical assistance to the 8-state project	Oregon State Department of Education
Administrator's Workshop	Provide staff development for Area III administrators in decision making processes	Portland School District
Attendance Unit Pattern Study	Determine the feasibility of modifying attendance units	Pendleton School District (Oregon)
Teachers' Workshop	Provide staff development for teachers at Atkinson and Llewellyn elementary schools	Portland School District
Consultation Assistance	Provide assistance to the Title III project	Billings School District (Montana)
AERA Evaluation Training Institute	Assist in conducting training for 30 state agency personnel	California, Oregon and Washington State Education Agencies
Inservice Education Program	Conduct training for 85 staff members in communications and problem solving	Milton-Freewater School District (Oregon)
Gifted and Talented Educational Needs Planning	Organize two planning sessions for representatives of national organizations	Ventura County Superintendent of Schools (California)
Instructional System Analysis	Develop a study of instruction and curriculum at Immaculate High School	Central Area Pastoral Ministry Study Steering Committee, Seattle
Manzanita Individualized Curriculum Project	Assist in production of dissemination materials	Josephine County School District (Oregon)
Helping Eliminate Early Learning Disabilities	Assist in production of dissemination materials for the project at Central Point School District (Oregon)	South Umpqua School District (Oregon)

Program/Project	Purpose	Funding Source
ESA Technical Assistance	Assist the ESA Advisory Council in Planning and setting priorities	National Advisory Council for the Emergency School Act
Vocational Skills Center	Assist in planning a multidistrict center in the Aberdeen area	Washington Coordinating Council of Occupational Education
Instructional Systems Analysis	Develop a study of instructional systems and content at Immaculate High School	Central Area Pastoral Study Steering Committee, Seattle
Experimental Schools Project	Provide planning assistance	Berkeley Unified School District (California)
Decision Making Workshop	Conduct training for the Washington State Department of Social and Health Services	Western Washington State College
Organizational Climate Variables	Assist in a study of the organizational climate of the district	Beaverton School District (Oregon)
High School Feasibility Study	Conduct a feasibility study for establishing a new high school	Sisters School District (Oregon)

Resources

NWREL INCOME BY PROGRAMS

	FY 72		FY 73		FY 74	
Improving Teaching Competencies Program	\$ 763,800	17.2%	\$ 831,130	16.6%	\$1,157,611	18.8%
Rural Education Program	601,300	13.6%	808,704	16.1%	1,289,413	20.9%
Intercultural Reading and Language Development Program	547,100	12.3%	657,807	13.1%	557,236	9.0%
Computer Technology Program	210,700	4.8%	198,333	4.0%	309,030	5.0%
Project PLANIT	--	--	59,409	1.2%	65,269	1.1%
Alaska Telecommunications Project	--	--	--	--	183,578	3.0%
Career Education Program	691,200	15.6%	847,817	16.9%	830,090	13.5%
Area Manpower Institute for Development of Staff	384,500	8.7%	361,314	7.2%	541,164	8.8%
Manpower Counselor Training Project	134,300	3.0%	159,679	3.2%	44,924	0.7%
Adult Education Program	71,200	1.6%	176,712	3.5%	277,655	4.5%
Samoa/Guam/Trust Territory Education Projects	318,200	7.2%	233,542	4.7%	98,182	1.6%
Evaluation and Audit Projects	84,400	1.9%	136,334	2.7%	216,376	3.5%
Assessment Projects	--	--	--	--	122,557	2.0%
Experimental Schools Evaluation Program	204,900	4.6%	257,950	5.2%	305,101	4.9%
Other Projects	350,400	7.8%	240,293	4.8%	143,890	2.3%
Miscellaneous Revenues	74,600	1.7%	40,537	0.8%	29,710	0.4%
Totals	\$4,436,600	100.0%	\$5,009,561	100.0%	\$6,171,786	100.0%

NWREL INCOME BY FUNDING AGENCIES

	FY 72		FY 73		FY 74	
National Institute of Education	--	--	\$3,432,258	68.5%	\$4,240,572	68.7%
U.S. Office of Education	\$2,902,300	65.4%	204,295	4.1%	755,806	12.2%
Other Federal Agencies	--	--	64,629	1.3%	204,153	3.3%
State/Territorial Education Agencies	1,143,600	25.8%	1,083,717	21.6%	726,193	11.8%
Colleges/Universities	67,000	1.5%	24,300	0.5%	24,347	0.4%
School Districts	160,700	3.6%	125,994	2.5%	148,036	2.4%
Businesses and Others	163,000	3.7%	74,368	1.5%	72,679	1.2%
Totals	\$4,436,600	100.0%	\$5,009,561	100.0%	\$6,171,786	100.0%

Member Institutions

Laboratory members include institutions and agencies in the Northwest region and the Pacific area. New members accepted during 1974 were:

Community College of American Samoa
Firth (Idaho) School District
Melstone (Montana) School District

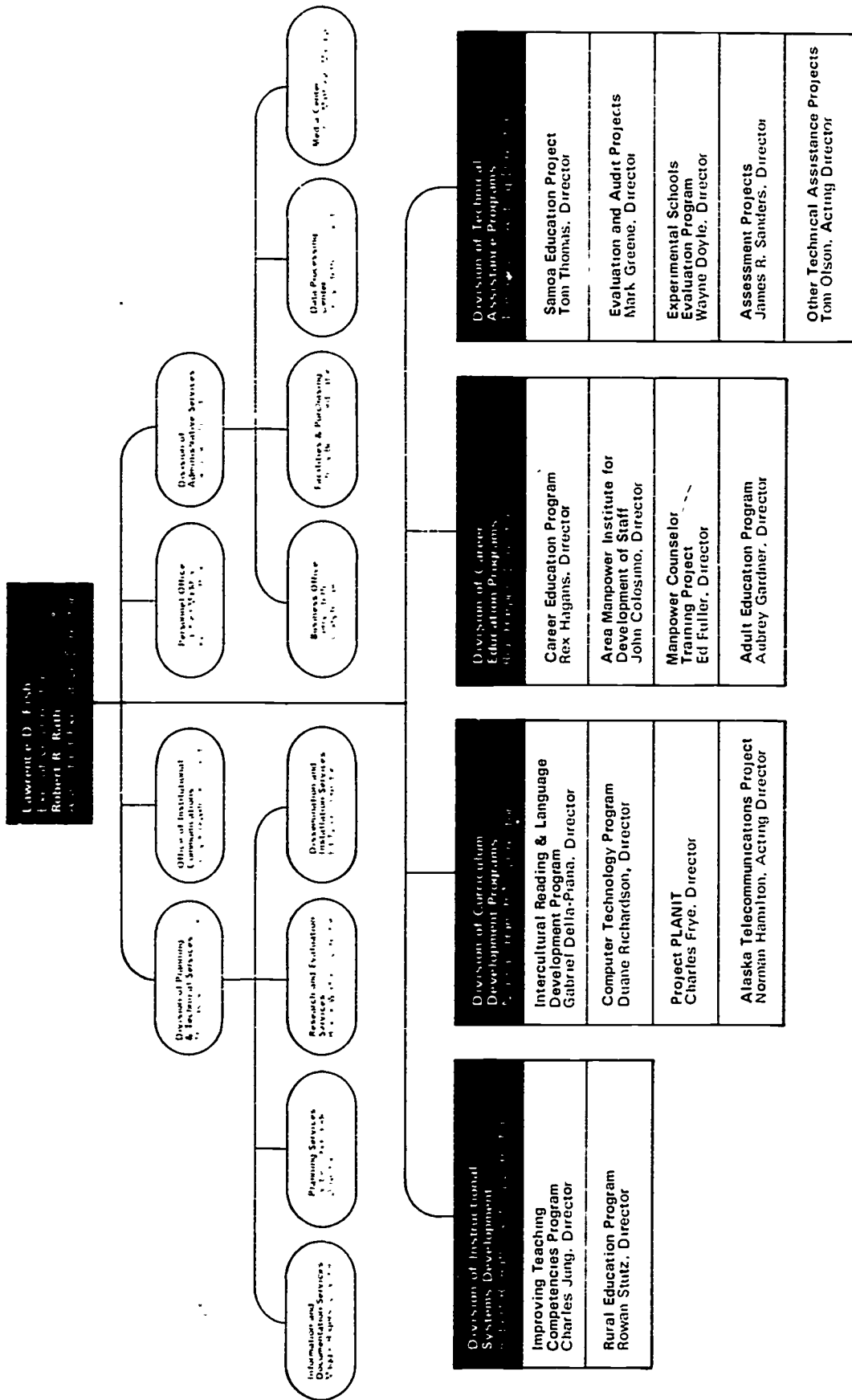
In addition to electing members of the governing board, member institutions are field sites for testing educational materials and procedures. Personnel from these institutions serve on program advisory committees and participate in the design, development and dissemination of new products.

	Alaska	American Samoa	Guam	Hawaii	Idaho	Montana	Oregon	Washington	Totals
State and Territorial Departments of Education . . .	1	1	1	1	1	1	1	1	8
Public School Districts	27	--	--	7	81	79	115	157	466
Private/Parochial Schools	7	--	--	1	3	4	7	8	30
Intermediate/County School Districts	--	--	--	--	--	8	18	12	38
Colleges/Universities	6	1	1	--	5	9	27	30	79
Professional Associations	7	--	--	--	6	2	59	55	129
Community/Cultural Agencies	1	--	--	--	--	2	5	4	12
Business/Industry	--	--	--	--	--	1	4	7	12
Others	3	--	--	--	4	3	29	9	48
TOTALS	52	2	2	9	100	109	265	283	822

Board of Directors

Paula Alvarez	Teacher Woodburn (Oregon) School District
Mere Betham	Director of Education Government of American Samoa
George Brain (chairman)	Dean of Education Washington State University
Frank Brouillet	Washington State Superintendent of Public Instruction
Maurice Claeys	Vice President Rainier National Bank Seattle, Washington
Dolores Colburg	Montana State Superintendent of Public Instruction
Verne Duncan	Oregon State Superintendent of Public Instruction
Rulon Ellis	Superintendent Pocatello (Idaho) School District
Hazel Hays	Manager Albina Multi-Service Center Portland, Oregon
Teichiro Hirata	Superintendent Hawaii State Department of Education
Lloyd Knudsen	Director Legislation and Political Education Oregon AFL-CIO
Marshall Lind	Alaska Commissioner of Education
William Marsh	Director Program Development and Research Anchorage Borough School District
John McCoy	Superintendent of Education Diocese of Helena
Lloyd Millhollen	Superintendent Lake Oswego (Oregon) School District
Rita Millison	Elementary School Principal Anchorage Borough School District
Franklin Quituqua	Director of Education Territory of Guam
Charles Ray	Dean of Behavioral Sciences and Education University of Alaska
Roy Seeborg	Superintendent Astoria (Oregon) School District
William Serrette	Assistant Superintendent Billings (Montana) School District
Andrew Smith	Superintendent Lewiston (Idaho) School District
Benjamin Trowbridge, Jr.	Businessman Medford, Oregon
Roy Truby	Idaho State Superintendent of Public Instruction
Robert Van Houte	Executive Secretary Alaska Education Association
Harold Wenaas	Superintendent Great Falls (Montana) School District
Richard Willey	Dean of Education Idaho State University
Robert Woodroof	Superintendent Edmonds (Washington) School District

Organizational Chart



Headquarters

710 S.W. Second Avenue, Portland, Oregon 97204 (503) 224-3650

Field Offices

American Samoa – Department of Education, Pago Pago, American Samoa 96799

Washington – 313 South 129th Street, Tacoma, Washington 98444 (206) 531-4254

April 1975