

CORNELL UNIVERSITY
OFFICIAL PUBLICATION

School of Education

1954-55

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Faculty

(As of April 1, 1954)

Deane W. Malott, A.B., M.B.A., LL.D., President of the University.
Forrest Frank Hill, Ph.D., LL.D., Provost of the University.
Andrew Leon Winsor, Ph.D., Head of the Department of Rural Education and Director of the School of Education.

J. Stanley Ahmann, Ph.D., Assistant Professor of Rural Education.
Howard G. Andrus, Ph.D., Director of the Educational Placement Bureau and Assistant Professor of Rural Education.

Frank C. Baldwin, M.A., Dean of Men.

Sara E. Blackwell, Ph.D., Assistant Professor of Home Economics Education.

Mrs. Dorothy V. N. Brooks, Ed.D., Dean of Women and Professor of Education.

John M. Brophy, Ph.D., Associate Professor of Industrial and Labor Relations.

Julian Edward Butterworth, Ph.D., Professor of Rural Education (Educational Administration), Emeritus.

Samuel J. Catalfano, M.S., Supervisor of Practice Teaching in Modern Languages, Ithaca Public Schools.

Cora B. Chase, M.S., Professor of Rural Education (Home Economics Education), Emeritus.

Ethelywn G. Cornelius, M.S. in Ed., Instructor in Home Economics Education.

E. William Crane, B.S., Instructor in Rural Education.

Robert H. Dalton, Ph.D., Professor of Child Development and Family Relationships.

Dora M. DePew, M.A., Supervisor of Practice Teaching in Mathematics, Ithaca Public Schools.

Theodore H. Eaton, Ph.D., Professor of Rural Education, Emeritus.

Lloyd Elliott, Ed.D., Associate Professor of Rural Education (Educational Administration), and Director of the Summer Session.

Margaret Elliott, M.S., Instructor in Home Economics Education.

Lynn A. Emerson, Ph.D., Professor of Industrial Education.

Carol Engebretson, M.S., Assistant Professor of Home Economics Education.

- Jean Failing, Ph.D., Professor of Home Economics and Coordinator of Resident Instruction, College of Home Economics.
- Richard B. Fischer, Ph.D., Assistant Professor of Rural Education (Nature and Conservation Education).
- Frank S. Freeman, Ed.D., Professor of Psychology and Education.
- Marvin D. Glock, Ph.D., Professor of Rural Education (Educational Psychology), and Director, University Testing and Service Bureau.
- Eva L. Gordon, Ph.D., Associate Professor of Rural Education (Nature Study).
- Lawrence B. Hixon, Ed.D., Assistant Professor of Education.
- Helen Hoefer, M.S. in Ed., Associate Professor of Home Economics Education.
- Edwin R. Hoskins, Ph.D., Professor of Rural Education (Agricultural Education).
- Margaret Hutchins, Ph.D., Professor of Home Economics Education.
- Philip G. Johnson, Ph.D., Professor of Rural Education (Nature and Conservation Education).
- Loretta Klee, M.A., Assistant Professor of Education and Director of Social Studies, Ithaca Public Schools.
- Paul J. Kruse, Ph.D., Professor of Rural Education (Educational Psychology), Emeritus.
- Claude L. Kulp, M.A., Professor of Education.
- William R. Kunsela, Ph.D., Assistant Professor of Rural Education (Agricultural Education).
- J. Paul Leagans, Ph.D., Professor of Extension Education.
- Lillian V. Mastrotto, M.Ed., Instructor in Education.
- Clyde B. Moore, Ph.D., Professor of Education.
- Helen Moser, M.A., Associate Professor of Home Economics Education.
- A. Gordon Nelson, Ph.D., Associate Professor of Educational and Vocational Guidance.
- Harold Noakes, Ph.D., Instructor in Rural Education (Agricultural Education).
- Milacent G. Ocvirk, M.A., Director of English, Ithaca Public Schools.
- E. Laurence Palmer, Ph.D., Professor of Rural Education (Nature Study and Science Education), Emeritus.
- H. Irene Patterson, M.S., Associate Professor of Home Economics Education.
- Isabel Peard, Ph.D., Assistant Professor of Education, Director of Student Deans and Head Residents.
- Katherine M. Reeves, M.A., Professor of Child Development and Family Relationships.
- William A. Smith, Ph.D., Professor of Rural Education (Agricultural Education) and Director of Extramural Courses.
- Rolland M. Stewart, Ph.D., Professor of Rural Education, Emeritus.

- Frederick H. Stutz, Ph.D., Associate Professor of Rural Education (Secondary Education).
 Flora M. Thurston, M.A., Professor of Home Economics Education, Emeritus.
 Helen L. Wardeberg, Ph.D., Assistant Professor of Rural Education (Elementary Education).
 Ethel Waring, Ph.D., Professor of Child Development and Family Relationships.

ASSISTANTS, 1953-54

- William Anderson, M.A., Assistant in Rural Education.
 Robert Coffin, M.S., Assistant in Rural Education.
 Ruth Cook, M.A., Assistant in Home Economics Education.
 Sylvia Gardels, M.S., Assistant in Home Economics Education.
 Albert E. Lawrence, M.S., Assistant in Rural Education.
 H. L. Marlow, M.A., Assistant in Industrial Education.
 Helen McMullen, M.S., Assistant in Home Economics Education.
 Merton Merring, M.A., Assistant in Teacher Education.
 Harold Miller, M.Ed., Research Fellow, Rural Education.
 Frank Nearing, M.S., in Ed., Assistant in Rural Education.
 Keith Norman, B.Sc.Eng., Assistant in Industrial Education.
 Gertrude Nygren, M.S., Assistant in Home Economics Education.
 Marvin M. Okanes, M.A., Assistant in Rural Education.
 Kenneth Olcott, B.S., Assistant in Rural Education.
 Carol Rayhill, M.S., Assistant in Rural Education.
 David Sarner, M.S. in Ed., Assistant in Rural Education.
 Orville E. Thompson, M.Ed., Assistant in Rural Education.
 Fred K. T. Tom, M.S. in Agr., Assistant in Rural Education.
 Dorothy Jean Westfall, B.S., Assistant in Home Economics Education.
 Avola Whitesell, B.S., Assistant in Home Economics Education.
 Dora Worbs, M.L.S., Assistant in Rural Education.

FORD FOUNDATION FELLOWS

- | | |
|--------------------|------------------------|
| Shirley Banks | Mizuhoko Kotani |
| Mary Louise Becker | Barbara H. Lynch |
| Ellen M. Brown | Sheila Olsen |
| Susan J. Brown | Barbara Querze |
| Carol J. Condie | Joan I. Raymaster |
| Janet A. Conklin | Jacqueline L. Scribner |
| Mary Jean Cooper | Jean C. Strough |
| Lylli J. Cox | |

STUDENT DEANS

Donna Barnes
 Sue Block
 Amy Botsaris
 Jean Bradley
 Nancy Cole
 Alba DeLellis
 Margene DeSmidt
 Nila Haresign
 Nancy Hoddick

Jane McCormick
 Jean Parker
 Elizabeth Reilly
 Evelyn Stern
 Edith Willman
 Jean Winters
 Patricia Winters
 Carol Zillgitt

SUPERVISING TEACHERS
 ELEMENTARY TRAINING PROGRAM

William L. Banner
 Leona A. Bell
 Virginia S. Bristow
 Ann M. Buzzell
 Florence B. Harley
 Doris B. Holtham
 Patricia N. Hoover
 Phyllis J. Jacobs

Katherine A. Knapp
 Hazel A. Lamb
 Grace McKenna
 Winifred M. Pineo
 Lila Sheppard
 Josephine C. Snyder
 Hilda Mae Tolle

COOPERATING TEACHERS
 IN THE ITHACA PUBLIC SCHOOLS

Lawrence Bach
 Ruth Balmuth
 Albert Bedworth
 Fred Bennett
 Mary Boehlert
 Samuel Catalfano
 Mayfred Claflin
 Albert Clark
 Dora DePew
 Marian Elliott
 Kenneth Elmore
 Eloise Hadlock
 Elsie Hinman
 Kasimer Hipolit
 Emily Howes
 Lois Hudson
 Ralph Jones
 Marion Leary
 Jessie MacDonald
 Roger Ming

Martha Neighbour
 Dorothy Minogue
 Norma Newman
 Carolyn O'Brien
 Curtis Pfaff
 Harry Powell
 Louise Richards
 Walter Schroeder
 John Skawski
 Kathryn Stenson
 Jane Stoutenburg
 Sarah Stutz
 Carol Taber
 Aileen Thompson
 Muriel Weeks
 Donald Wells
 Margaret L. Woodside
 Adelaide Wright
 Donald Young
 Dewitt Zien

COOPERATING TEACHERS IN CENTERS OUTSIDE ITHACA

Evo Baglini, <i>Dryden</i>	Mary Humpton, <i>Newfield</i>
John Cassavant, <i>Newfield</i>	Clinton Parker, <i>Lansing</i>
Frances Doig, <i>Trumansburg</i>	Jean Snyder, <i>Spencer</i>
Madeline Dunsmore, <i>Spencer</i>	Marjorie Swift, <i>Dryden</i>
Florence Friedel, <i>Newfield</i>	David Taylor, <i>Lansing</i>
Mary Holt, <i>Lansing</i>	Elizabeth Trinkl, <i>Lansing</i>

COOPERATING ADMINISTRATORS

Bertha Bartholomew, *Principal, Boynton Junior High School*
Clark C. Carnal, *Principal, Lansing Central School*
Russell I. Doig, *Principal, Trumansburg Central School*
Edward G. Fennell, *Principal, Newfield Central School*
William L. Gragg, *Superintendent, Ithaca Public Schools*
Edward Long, *Principal, Dryden Central School*
Marjorie Smith, *Principal, West Hill School*
Clyde Spear, *Principal, Spencer Central School*
Louis J. Wolner, *Principal, Homer Central School*

The School of Education

THE SCHOOL of Education at Cornell was established to provide opportunity for basic and advanced study and research in education. It is an organization through which the various colleges of the University cooperate to offer a balanced program of general and professional education for students who plan to serve in this field. Courses of study arranged in the School prepare students for such positions as teachers in elementary schools, high schools, and colleges; school principals, superintendents, and supervisors; guidance counselors; and various positions in extension work and adult education. For students who qualify, advanced preparation is provided for positions in research, authorship, and professorships in colleges and universities.

It is the purpose of the School of Education to direct the basic preparation of these students so that maximum strength in the arts and sciences may be integrated with a broad understanding of human development, social processes, and professional work. As an integral part of a university rich in scientific, cultural, and professional programs, the School of Education provides unusual advantages for this type of training. Furthermore, the policy of limiting enrollment in the school affords an intimate relationship of faculty and students and permits personal direction of individuals in terms of their background, abilities, and professional interests. In addition to the academic program on campus, students are given an opportunity to observe and teach under trained supervisors in the schools in representative New York State communities, so that theory and practice are combined in their training.

Cornell University offers many advantages and opportunities for students preparing to teach. The students in education attend classes with all other students in the University; thus they have access to the strong subject matter courses and laboratories that the various colleges have built up. They live in the dormitories and fraternities with students preparing for other professions and occupations, and enjoy the social and educational stimulation that a large university provides.

The School has been authorized to act as agent for the State Department of Education in recommending certificates for services in New York State, and it recommends to the proper educational authorities

in other states that similar credentials be issued. Candidates who have completed the appropriate training programs at Cornell may be recommended for one or more of the following credentials: elementary school teacher, high school teacher, supervisor, principal or superintendent, school counselor.

Undergraduates in the University who are majoring in a subject matter or technical field may take designated professional courses and qualify for teaching at the same time that they meet their college requirements for a degree.

In order that undergraduates may complete the certification requirements as well as the degree requirements of their college at the same time, it is necessary for them to see an official adviser from the School of Education by their sophomore year. He will advise the student of the required courses and their proper sequence, so that both goals may be achieved. At the conclusion of the program, the Educational Placement Bureau will assist with the placement of the candidate in an appropriate professional position.

UNDERGRADUATE STUDY

ADMISSION OF UNDERGRADUATES

Applications for admission should be made on forms provided by the office of Admissions. A candidate for admission as a freshman in the undergraduate colleges must satisfactorily complete secondary school subjects carrying a value of 15 entrance units. The subjects in which these units may be offered, the number of units that may be credited in each subject, and the units required in specific subjects by the several divisions of the University, together with other general information about admission and costs at Cornell, are all described in the *General Information Announcement*. This booklet may be obtained from Cornell University Official Publication, Edmund Ezra Day Hall, Ithaca, N.Y.

GUIDANCE AND SELECTION OF UNDERGRADUATES

In most cases the student will be assigned to a regular college adviser on entrance. In order that the prospective teacher may secure advice regarding his professional program, he should, as early as possible in his university experience, consult with the official adviser in his teaching field. A list of these advisers is given on page 12.

As the student proceeds in his preparation for teaching, appraisal will be made of the development of his abilities, understandings, and appreciations, and of such other qualities as make for success in teaching. Special determinations will be made at two principal points as to

the fitness of the candidate to continue: (1) at the end of the sophomore year, and (2) prior to the period of student teaching in the senior year. Committees responsible for the selection in the several fields will be concerned with the personal and physical fitness of the candidate, his emotional and intellectual equipment, his general and special academic competence, his familiarity with current affairs, and his ability to use the English language.

Knowledge gained of the student by his advisers and his instructors, supplemented by the health record and the more formal measures such as psychological and personality tests, will provide information useful in judging the strictly personal factors involved. In general, each student will be expected to maintain a standing in scholarship at least equal to the average of his college. A steady growth in the use of English will be expected of each student. Standards of accomplishment will be set up for the several groups of prospective teachers, beginning in the freshman year, and checked at frequent intervals throughout the period of preparation. Training in the organization of materials and in reading will be required. Opportunity to discover and remedy defects in speech will be provided.

These requirements and standards may be supplemented by additional requirements in the several fields of training in order to ensure a high degree of competence at all levels and to meet the special demands in different areas of teaching. Students entering the program later than the sophomore year will be expected to meet the standards and requirements indicated above and may find it necessary to remain for an additional term or summer session.

Students planning to apply for admission to the undergraduate colleges should apply directly to the Director of Admissions of the University. If they expect to obtain a Bachelor of Science degree, they should apply for admission to the Colleges of Agriculture or Home Economics. If they seek a Bachelor of Arts degree, they should apply to the College of Arts and Sciences.

Students planning to teach should consult with official advisers as follows:

Academic Subjects except Science: Assistant Professor Hixon, 203 Barnes.

Agriculture: Professor W. A. Smith, 209 Stone.

Art: Professor J. A. Hartell, 303 White.

Home Economics: Professor Margaret Hutchins, Apt. C, Van Rensselaer.

Industrial and Technical Education: Professor L. A. Emerson, 20 Industrial and Labor Relations Building.

Science: Professor P. G. Johnson, 4 Stone.

Information pertaining to eligibility of veterans for benefits, and living facilities, is contained in the *General Information Announcement*. For details concerning requirements in military science and physical training, see the *Announcement of the Independent Divisions and Departments*.

A student pursuing the undergraduate program will pay the tuition of the college in which he is matriculated as a candidate for the Bachelor's degree. See the *General Information Announcement* for details of tuition and fees.

UNDERGRADUATE PROGRAMS OF PROFESSIONAL PREPARATION

The requirements for teaching certificates vary considerably throughout the country. A student preparing to teach should not assume that the completion of the requirements for a degree at Cornell, including courses in education, automatically qualifies him for a teaching certificate in the locality in which he plans to teach. Special requirements of the state or city in which the student expects to teach should be a guide in planning a teacher training program. Questions concerning these requirements should be referred to the student's adviser in education.

Observation and directed teaching are conducted in selected schools of Ithaca and near-by communities. Apprentice teaching also will be done in off-campus schools, selected primarily to provide better than average opportunity for experience and growth. Students engaged in apprentice teaching in vocational agriculture will live in the school community during the period of this experience and will be expected to participate in community life.

TEACHERS OF AGRICULTURE

Graduation Requirements of the College of Agriculture. Students preparing to teach in the field of vocational agriculture will register in the New York State College of Agriculture and must meet the requirements of that College for graduation. The College of Agriculture requires the completion of the following program of courses: orientation, 1 hour; English, 6 hours; botany, biology, or zoology, 6 hours; chemistry or physics, 6 hours; geology, 3 hours; basic sciences and social studies, 24 hours; electives in the College of Agriculture, 54 hours; general electives, 20 hours.

Technical Studies in Agriculture and Related Sciences. In the present plan for the preparation of prospective teachers through the New York State College of Agriculture, a total of 54 semester hours in agriculture and related science is required. A minimum of 36 of these hours should be distributed in the following broad fields:

	<i>Semester hours</i> <i>Minimum</i>
Agricultural economics and farm management.....	6
Agricultural engineering and farm mechanics.....	12
Farm animals including dairy and poultry.....	6
Farm crops chosen from field, vegetable, and fruit crops....	6
Soil technology.....	3
Dairy science.....	3

General Electives. The prospective teacher will find opportunity to select such courses from agriculture, science, or other University offerings as will contribute further to his preparation for teaching.

TEACHERS OF ACADEMIC SUBJECTS

Graduation Requirements of the College of Arts and Sciences. At Cornell University all prospective teachers of academic subjects, except students in the College of Agriculture preparing to teach science, will register in the College of Arts and Sciences and must meet the graduation requirements of that college. For full information consult the *Announcement of the College of Arts and Sciences*.

To teach an academic subject in the public high schools, the prospective teacher must complete considerable course work in the area to be taught and must also fulfill certain education courses as prescribed by the state.

As an aid to the prospective teacher, programs in the academic subjects have been established, for the four undergraduate years, which meet college requirements and provide the preparation needed for teaching in the secondary schools. These programs vary in extent and in the number of prescribed courses. It is desirable that some one of the programs below be selected, although other combinations may be arranged to suit individual needs.

English and Speech. In the sophomore year the student takes the course in great English writers (English 251-252) and a course in composition (English 201 or 203). In the junior year he takes the survey course in American literature (English 329-330), and in the senior year the course in Shakespeare (English 369-370). In addition to these requirements the following courses are recommended for prospective teachers: one course in criticism (which may be Literature 401-402), the course in American folk-literature (English 355), and a course in modern poetry (English 326 or 349). The requirement for this special English major is thirty hours after English 111-112 has been completed. Nine hours of speech must be included in the related subjects, preferably Speech and Drama 101, 111 or 141, and 333. Students primarily interested in speech and drama or in literature should major in those departments and supplement their training with considerable work in English.

Latin. Students desiring to prepare themselves to teach Latin in the secondary schools should fulfill the requirements of the major in classics. A combination may be made between Latin and another field of study which will satisfy the major requirements and prepare prospective teachers in both subjects.

Modern Foreign Languages. Students desiring to prepare themselves to teach the modern foreign languages in secondary schools should study carefully the offerings by the Division of Modern Languages and the several departments of literature or linguistics, in French, German, Russian, and Spanish. For detailed descriptions of work involved for the completion of the majors in these fields, see the Departments of German Literature, Romance Literature, and Russian Literature, and the Division of Modern Languages in the *Announcement of the College of Arts and Sciences*.

Mathematics. Preparation for teaching mathematics is based on the major requirement in the subject: 9 hours of analytic geometry and calculus plus 15 hours of advanced courses. Course 241-242 should be taken by all prospective teachers. As the teaching of mathematics is frequently combined with the teaching of physical science or general science, it is recommended that considerable work be taken in the sciences.

Science. Teachers of science may be prepared either through the College of Agriculture or through the College of Arts and Sciences. In the College of Agriculture the training includes 36 hours of basic courses in physical, biological, and earth sciences, and approximately 24 hours of advanced courses in one or more of these areas. The program in the College of Arts and Sciences is based on approximately 20 to 40 hours in a major field, ordinarily chosen from botany, chemistry, physics, or zoology, and additional courses to make a total of approximately 60 hours in science. In addition, completion of the minimum certification requirement of 15 hours in mathematics is advisable.

Social Studies. In social studies the student may major in history, economics, government, or sociology, although concentration in history is preferable. The basic program must include 18 hours of history and 18 hours of social science. Depending upon the major subject selected, the number of hours in the program will aggregate from 48 to 60.

Required Educational Courses as Effective Fall Term, 1954. Students preparing to teach in the public secondary schools of New York and other states must complete the following program of courses:

Sophomore or Junior Year

Zoology 201. The Nature of Man: Structure and Development. Fall Term.... 3 hrs.

Senior Year

The courses noted below should be taken as a block, either during the fall or spring terms.

R.E. 111 or Psych. 103. Educational Psychology.....	3 hrs.
R.E. 190. Social Foundations of Education.....	3 hrs.
Ed. 130. The Art of Teaching.....	10 hrs.

Total 16 hrs.

The new program will be adjusted according to departmental requirements and other contingencies. Prospective teachers should plan their college work in order that a full semester of their senior year may be devoted to the completion of the educational requirements.

TEACHERS OF HOME MAKING

Teachers

Graduation Requirements of the College of Home Economics. Students preparing to teach home economics in the public schools will reg-

ister in the New York State College of Home Economics and must meet the requirements of that College for graduation. In brief, the College requires the completion of 30 hours of basic sciences, of which 6 are to be in the biological sciences, 6 in the physical sciences, 12 in the social sciences, and 6 additional hours to be distributed among the three groups; 6 hours of English; 40 hours of home economics to include the "homemaking core"; 44 additional hours, of which 24 hours may be in any college of the University, and of which 20 hours must be in courses offered in the State Colleges of Home Economics, Agriculture, and Veterinary Medicine, and the State School of Industrial and Labor Relations. Detailed information may be secured from the *Announcement of the College of Home Economics*.

Subject Matter Requirements of the State Education Department for Certification. In the majority of school systems instructors in home economics teach all phases of homemaking. Even in those schools in which homemaking is departmentalized, it is desirable that each teacher have a broad view of the entire field. Information concerning state certification requirements may be secured from the *Announcement of the College of Home Economics*.

Extension Workers

Graduation Requirements of the College of Home Economics. See the requirements for teachers of home economics, above.

Subject Matter Recommendations in Addition to Graduation Requirements. It is recommended that students preparing for extension work have general training in homemaking and courses in sociology, psychology, economics, and education.

To assist the students in meeting these recommendations, a suggested plan is set up for the use of students and their counselors. This plan provides for courses as indicated to meet graduation requirements, recommended courses of special interest for extension workers, and elective courses which will further contribute to the students' preparation for extension service.

Suggested Experience. A student preparing to do extension work should plan her college program and her experiences during the summer to provide opportunity to work with individuals and groups, to observe and study communities and the significant situations and problems to which home economics applies. Summer experience in the extension service program is recommended whenever possible. Opportunities for volunteer work can be provided between freshman-sophomore, sophomore-junior years by the extension service. Summer assistant positions with compensation are provided between junior and senior years.

Practice in public speaking, radio, newspaper writing, and discussion with a variety of groups and organizations will be valuable.

TEACHERS OF ART

The School of Education cooperates with the College of Architecture in the preparation of teachers of art. Students desiring to prepare in this field should register in the College of Architecture as candidates for the degree of Bachelor of Fine Arts. See the *Announcement of the College of Architecture* for the curriculum.

The technical work in art, history of art, and related subjects, required of such students, is the equivalent of more than three full years of work, with the remainder of the time being spent on general education and professional education.

The technical work in art is given by members of the staff of the Department of Painting and Sculpture, who are all practicing artists. It affords a training in the fundamentals of design, drawing, and painting, which aims to equip the student as a competent practitioner of his art, as well as a teacher.

GRADUATE STUDY ADMISSION

Admission to study in the Graduate School is granted to graduates of approved colleges whose personalities, experience, and records provide evidence of ability to succeed in the various fields for which the school provides preparation. Members of the Faculty examine carefully the application of each individual and make recommendations to the Graduate School relative to his fitness as a candidate, or to the Committee on Professional Degrees relative to the appropriateness of his preparation. Every student, whether or not he is a candidate for a degree, must be admitted by the required procedures before he registers in any course. Final admission rests with the Dean of the Graduate School.

Because of the time required to secure and evaluate transcripts and other records, a period of two to four weeks usually elapses between the receipt of an application and formal action upon it. Every effort will be made to render decisions promptly, and applicants can assist materially by making early applications.

Students may be admitted to the Graduate School in one of the following three classes: (1) candidates for advanced degrees; (2) Resident Doctors; (3) graduate students not candidates for degrees ("noncandidates").

An application for admission should be made on the proper form, which will be supplied at the office of the Graduate School, 125 Edmund Ezra Day Hall. No application will be acted upon until all the credentials enumerated in this form have been filed. For admission in the fall term, the application should be filed before March 1; for admission in the Summer Session, between March 15 and May 1. Though applica-

tions may be filed at any time, the officers cannot give assurance that the application will receive the same consideration that it would receive if filed during those periods.

An applicant who is not a graduate of Cornell University must submit complete official transcripts of all previous college studies.

To be admitted to the Graduate School, either as a noncandidate or as a candidate for a degree an applicant (1) must have received his baccalaureate degree from a college or university of recognized standing or have done work equivalent to that required for such degree; (2) as judged by his previous scholastic record, or otherwise, must show promise of ability satisfactorily to pursue advanced study and research; and (3) must have had adequate previous preparation in his chosen field of study to enter at once upon graduate study in that field.

Since professors in each field have a restricted allotment of graduate students, late applicants may be denied admission.

THE PROFESSIONAL DEGREES IN EDUCATION

The Graduate Faculty distinguishes in purpose and in administration between two types of advanced degrees: *professional* and *general*.

Advanced professional degrees in education are designed as preparation and training for the professions of education. The admissions, requirements, and curricula for such degrees, as approved by the Graduate Faculty, are announced and administered by the Faculty of the School of Education, which is a division of the Graduate School. Degrees are awarded upon recommendation of the School of Education to the Graduate Faculty.

Two professional degrees are offered, namely, Master of Education and Doctor of Education. The Master of Education degree is planned for those who desire to complete a fifth year of preparation for teaching beyond a Bachelor's degree, or for the preparation of specialists in education; and the Doctor of Education degree for leadership in education. The program leading to these degrees shall include such courses, seminars, projects, and investigations of an advanced or graduate nature as will develop ability to perform acceptably the professional duties required of the several types of educational workers.

Registration. Candidates registering for a professional degree, Doctor of Education or Master of Education, must register in the School of Education and with the Registrar of the University. On official registration days this registration takes place at Barton Hall. Preceding the fall term, the Registrar notifies all students of the hour at which they are to report; if a graduate student does not receive notification at least a week before registration day, he should communicate with the Graduate School or the School of Education. Registration must be made in person. If a student cannot register at the appointed hour he should report

at the appropriate office at the earliest time thereafter, bringing an endorsement signed by his adviser or chairman. A fee of \$5 is required for late registration by matriculated students.

A registered student who for any reason discontinues his work during a term should immediately report that fact to the division which administers his degree in order to obtain an official withdrawal and any refund of tuition or fees he may be entitled to.

The student is responsible for fulfilling all requirements for degrees, as indicated in the catalogue.

THE DEGREE OF MASTER OF EDUCATION

The program for the degree of Master of Education (M.Ed.) is designed for those preparing for teaching or other comparable professional positions.

Admission to Candidacy. To be admitted for this degree an applicant must hold a Bachelor's degree from an institution of recognized standing, give evidence of ability necessary for successful progress in graduate study, and show a sincere interest in the profession. The Committee on Professional Degrees is responsible for action on admissions.

Residence. For the M.Ed. degree a minimum of two residence units is required. Residence may be earned in various combinations of:

- (1) Regular terms of full- or part-time residence during the academic year—1, $\frac{3}{4}$, or $\frac{1}{2}$ residence units.
- (2) Six-week summer sessions— $\frac{2}{5}$ residence unit.
- (3) Three-week summer periods or extramural work on or off campus—recorded in blocks of not less than 6 hours ($\frac{2}{5}$ residence unit).

One of the residence units must be earned by work on the Cornell campus. Credit earned through three-week summer session periods is not transferable in fulfillment of residence requirements for the general degrees of M.A., M.S., and Ph.D., nor for the Ed.D. degree beyond residence earned in candidacy for the M.Ed. degree.

Each candidate for an advanced degree is expected to complete his residence with reasonable continuity. Under any circumstances, a candidate who fails to register during any period of four or more years may continue only after the General Committee has stipulated the amount of additional residence to be required. The Committee will be guided in its decision by an estimate, written by the candidate's Special Committee, of the period of study necessary to recover ground lost. No more than ten years may intervene between the time of first registration for and the completion of all requirements for the degree.

Supervising Committee. A candidate must select a Committee of two or more members from the Graduate Faculty, one of whom will serve as chairman and represent the School of Education. Other members of the

Committee are to be selected with the advice of the chairman, to give adequate representation of the candidate's program. All members of the Committee shall approve the candidate's program.

Program of Studies. Within two weeks after registration for the first unit of residence a candidate shall meet with his entire Committee to plan a program of studies. The program, designed to develop professional competence, must include a minimum of thirty hours of credit in courses and seminars. Courses in *educational psychology* and in the *history and philosophy of education* shall be required of the candidate who has not previously completed such courses.

The candidate is required to have completed in candidacy or elsewhere courses and directed participation in the art of teaching appropriate to the field of professional service for which he is preparing.

The remainder of the candidate's program shall include courses in a teaching field or such other courses as will give unity and breadth to the program.

Essay. A candidate for the M.Ed. degree must complete an essay which is acceptable to his Committee. Regulations concerning preparation of essays shall be determined by the Committee on Professional Degrees. One copy of this essay, suitably bound, must be filed with the School of Education.

Diagnostic Examination. A candidate for the M.Ed. degree must take a written diagnostic examination prepared and administered by the School of Education. The examination, to be taken within one week after registration for the first unit of residence, shall be designed to appraise the candidate's knowledge of the field of education and ability in reading and communication. The Supervising Committee shall use examination results as a guide in planning with him a program of studies.

Final Examination. For the M.Ed. degree a candidate must pass a comprehensive final examination conducted by his Committee. The examination, to be both written and oral, shall be designed to measure the candidate's proficiency in the theory and practice of education.

THE DEGREE OF DOCTOR OF EDUCATION

The program for the degree of Doctor of Education (Ed.D.) is designed to prepare the candidate for a position of leadership in the educational profession.

Admission to Candidacy. A candidate for the Ed.D. degree must be a graduate of an approved college, and must have completed a minimum of three years of successful experience appropriate to his proposed field of professional service.

The applicant must show evidence, based on previous training, of scholastic ability and other qualifications necessary for successful progress in graduate study, field study, and professional work. The Committee on Professional Degrees of the School of Education is responsible for action on admissions.

Residence. In fulfillment of the requirements for the Ed.D. degree, a minimum of five units of residence is required beyond the Bachelor's degree, of which at least three units must be earned in residence at Cornell. Two units of residence beyond the Master's degree or its equivalent must be earned at Cornell in regular terms, consecutive except on petition. Any remaining residence units may be earned in regular terms, in summer sessions, extramurally, or, in the instance of graduate assistants, by registration for Summer Research.

All requirements for the degree must be completed within four years after the minimum residence requirement has been satisfied. (See paragraph on continuity of residence under requirements for the M.Ed. degree.)

In addition to meeting residence requirements, a candidate must complete successfully one year of participation in directed field study as described in subsequent statements.

Supervising Committee. A candidate must select a Committee of at least three members from the Graduate Faculty, one of whom will serve as chairman and will represent the candidate's field of professional service. Other members of the Committee are to be selected, with the advice of the chairman, to give adequate representation of the candidate's program. All members of the Committee shall approve the candidate's program.

Program of Studies. Within a period of two weeks after registration for the first unit of residence, the candidate shall meet with his entire committee to plan a program of studies. The program, designed to develop competence in a field of professional service and in the general field of education, must include a minimum of sixty-five credit hours in courses and seminars beyond the Bachelor's degree, of which thirty-five hours shall be completed beyond the Master's degree or its equivalent.

The candidate will be expected to prepare himself in courses and seminars representing a field of professional service. Fields are described in terms of professional positions for which preparation is offered. Approved fields of professional service for the Ed.D. degree are as follows: Administrator, Coordinator, Curriculum Specialist, Extension Specialist, Student Service Specialist, Supervisor, Teacher.

The program of studies must include advanced courses or seminars in each of these subjects: educational psychology, history and philosophy of education, measurement, research in education, statistics. At least

fifteen hours of credit must be earned in courses other than those in professional education.

The transfer of credit in institutions other than Cornell University must be approved by the Supervising Committee and by the Committee on Professional Degrees.

Directed Field Study. For the Ed.D. degree a minimum of one year of full-time experience appropriate to the field of professional service is required. This period of participation, to be known as directed field study, will follow completion of a minimum of two units of residence beyond the Master's degree or its equivalent.

In advance of the period of field study the candidate will plan, with his Committee and with his employer or supervisor, for the kind and extent of experience to be obtained and studied during the field study period and for the manner in which the experience will be obtained, reported, and evaluated.

Direction and evaluation of the field study shall be the responsibility of the Supervising Committee under the general supervision of the Committee on Professional Degrees. The candidate and the employer or supervisor shall be invited to share in the evaluation.

The Supervising Committee and the Committee on Professional Degrees require a satisfactory comprehensive written evaluation of the experience. Successful completion of the field study is prerequisite to recommendation of the candidate for the degree.

Thesis. For the Ed.D. degree the candidate is required to present a thesis which will give evidence of the ability to apply knowledge to a professional problem. The thesis must satisfy the Supervising Committee in respect to both professional proficiency and literary quality. Regulations concerning preparation and publication of theses shall be determined by the Committee on Professional Degrees. Two copies of the thesis, suitably bound, must be filed in the School of Education.

Diagnostic Examination. A candidate for this degree must take a written diagnostic examination prepared and administered by the School of Education. The examination, to be taken within one week after registration for the first unit of residence, shall be designed to appraise the candidate's ability to read and interpret educational literature, to understand educational problems, and to demonstrate proficiency in communication of ideas. The Supervising Committee shall use examination results as a guide in planning with him a program of studies.

Intermediate Examination. A candidate for the Ed.D. degree must pass an intermediate examination given by his Committee. The examination, to be both written and oral, will be given before or immediately following completion of four units of residence.

Final Examination. For the Ed.D. degree a candidate must pass a final examination conducted by his Committee. The examination, to be written or oral or both, shall be prepared with the assistance of the Committee on Professional Degrees, and shall cover (1) the field of professional service, (2) core studies in education, and (3) the thesis. At least one member of the committee on Professional Degrees shall attend the examination.

NONPROFESSIONAL DEGREES

MASTER'S

Students with appropriate qualifications who are primarily interested in scholarly research may apply to the Graduate School for admission to candidacy for the degrees of Master of Arts, Master of Science, or Doctor of Philosophy. Requirements for these degrees are fully described in the *Announcement of the Graduate School*.

All candidates for these general degrees must register both in the Graduate School and with the Registrar of the University at the beginning of each term or session.

DOCTOR OF PHILOSOPHY

A candidate for the Ph.D. degree works under the direction of a Special Committee composed of three members of the Faculty. Programs for Ph.D. candidates are arranged and approved by the Special Committee in accordance with the following general requirements for the Ph.D. degree:

1. A minimum of six terms of residence as a graduate student.
2. The satisfactory completion, under the direction of a Special Committee, of work in one major subject and two minor subjects.
3. Certain requirements in foreign language.
4. The presentation of an acceptable thesis.
5. The passing of a qualifying examination and a final examination.

The candidate is advised to consult the *Announcement of the Graduate School* for further details concerning the requirements for the above degrees.

NONCANDIDATES

Students admitted to the Graduate School usually pursue a course leading to one of the advanced degrees; but a properly qualified person who, for special reasons, does not wish to meet the requirements for a degree, may be admitted to the Graduate School as a noncandidate and arrange a program of graduate study suitable to his purposes. For further information, consult the *Announcement of the Graduate School*.

FACILITIES FOR VISITING FELLOWS

Whenever possible, the Faculty welcomes mature scholars who wish to use the facilities of the University to prosecute investigations or to work with the Faculty in the advancement of knowledge. A scientist or scholar who wishes to work on the campus may, upon recommendation of the department in which he wishes to work and endorsement of the College Dean over that department, be given the title of Visiting Fellow by the President, providing he has no formal duties to perform and is paid no salary by the University.

TUITION AND FEES FOR GRADUATE STUDENTS

Registration Deposit. A deposit of \$28 must be made by every applicant for admission after the applicant has received provisional notice of acceptance, unless the candidate has previously matriculated as a student at Cornell University. This deposit is used to pay the matriculation fee, chest X-ray, and examination blank charge, and covers certain expenses incident to graduation if the student receives a degree.

A Tuition Fee of \$150 a term is to be paid by all students registered in the Graduate School with major concentration in subjects within the state-supported colleges of the University; all others must pay a fee of \$375 a term. This fee is payable at the beginning of each term.

Upon recommendation by the appropriate college dean and by action of the Board of Trustees, for each appointment in a state-sponsored school or college, waiver of tuition in the Graduate School may be made to a member of the teaching or scientific staff, whose major field of study is in a state-supported school or college, subject to the following limitations:

- (a) If the rate of annual salary for the academic year is not greater than \$1700, the tuition fee may be waived entirely;
- (b) If the rate of annual salary is greater than \$1700 but not greater than \$1800, 25% of the tuition will be charged and 75% waived;
- (c) If the rate of annual salary for the academic year is greater than \$1800 but not greater than \$1900, 50% of the tuition will be charged and the balance waived;
- (d) If the rate of annual salary for the academic year is greater than \$1900 but not greater than \$2000, 75% of the tuition will be charged and the balance waived;
- (e) If the rate of annual salary is greater than \$2000, no waiver will be made.

The word salary as used above means total pay, that is, base pay plus any bonus.

Graduate assistants on the nine- or twelve-month basis who reside here during the summer, who are registered for Summer Research for credit in the Graduate School, and who are required to give service in their department or college during that period may be recommended for waiver of tuition during the summer period under the above limitations. This waiver of tuition does not apply if the student registers in the Summer Session. Those who are engaged only in graduate study and not doing productive work for the department during the summer may not have their tuition waived. The amount of tuition to which the above percentages will be applied is the prorated amount of the full tuition fee based upon the maximum amount of residence units that can be earned.

A regularly appointed member of the teaching or scientific staff registered in the Graduate School, whose appointment does not carry free tuition, shall pay tuition at the rate of three-quarters of the tuition regularly charged full-time students, unless arrangements have been made in advance with the Dean of the Graduate School whereby such student is to receive less than three-quarters of full residence credit because of his appointment, in which case the student may apply to the Treasurer for proration of tuition on the basis of the maximum residence credit that may be earned.

Candidates who have completed minimum residence requirements for the Ph.D. degree are eligible for waiver of tuition.

A College and University Fee of \$67.50 a term, payable at the beginning of each term, is required of all students registered in the Graduate School. This general fee contributes toward the services supplied by the libraries, Clinic and Infirmary, and the student union in Willard Straight Hall, and pays a portion of the extra cost of laboratory courses and general administration.

A graduate student who returns to the University to present his thesis and to take the final examination for an advanced degree, all other work for that degree having been previously completed, shall register as a "candidate for degree only" and shall pay only an administration fee of \$34.50.

A Thesis Fee of \$30 is required of Ph.D. candidates at the time of depositing the approved thesis and abstract in final form. This fee covers the cost of preparing a master microfilm of the entire thesis; of publishing the abstract in the bimonthly periodical, *Dissertation Abstracts*; of mailing the thesis and abstract to and from the microfilm publisher; and of binding both copies of the thesis for deposit in the University Library. Candidates for the Ed.D. degree may take advantage of this opportunity if they wish to do so.

Any tuition or other fee may be changed by the Board of Trustees to take effect at any time without previous notice.

GRADUATE FELLOWSHIPS, SCHOLARSHIPS, AND ASSISTANTSHIPS

Financial assistance to students in the various phases of the work of the School of Education is available as indicated below. These aids are granted only to students matriculated in the Graduate School, who, in addition to adequate preparation in general subjects, in an appropriate special field, and in education, *have had a sufficient amount of successful teaching or other professional experience* to warrant seeking further preparation for educational leadership. Experience is not required of candidates for the assistantship listed under (5) below.

Free tuition in the Graduate School may be given in addition to the cash awards, except as indicated (see Tuition and Fees).

The amount and character of the service required of the holder of an assistantship varies, but additional information on this point may be secured upon request.

(1) RURAL EDUCATION

(a) One \$1600 research assistantship is available to a person desiring to prepare for professional service in some field for which the Department of Rural Education offers preparation, for example, administration, agricultural education, educational psychology, elementary education, guidance, nature study and science education, philosophy of education, secondary education, supervision. A well-planned project in research must be submitted. Normally this assistantship will be granted only to a candidate for the doctorate who is within approximately one year of completing the requirements for that degree (including a reading knowledge of two foreign languages, preferably French and German).

(b) One \$1400 and one \$1000 research assistantship open to candidates for a Ph.D. degree who are available for assistance in a research project being carried on in some field for which the Department of Rural Education offers preparation.

(c) One \$1400 assistantship open to qualified candidates for a Ph.D. in educational psychology who are capable of assisting with the instruction in the introductory psychology courses.

(d) One \$1400 and two \$1200 assistantships available in agricultural education normally only to those who are candidates for the doctorate. It is essential that the candidates shall have had satisfactory teaching experience in vocational agriculture. In addition, teacher training or supervisory experience in agricultural education is considered desirable.

(e) One \$2000 research fellowship provided by the Coke Oven Ammonia Research Bureau, Inc., for the development of more effective methods of presenting research data to students of agriculture in New York State. Available to advanced students in agricultural education.

(f) The Julian E. Butterworth award for excellence in research in Rural School Administration. A prize of \$50 for meritorious research in this field may be awarded.

(2) NATURE STUDY AND SCIENCE EDUCATION

(a) Two \$150 scholarships given by the late Anna Botsford Comstock and available to graduate students in nature study.

(b) One \$1000 assistantship available to a person of experience preparing for a leadership position in the teaching of science.

(3) INDUSTRIAL EDUCATION

A number of assistantships are available in this field. Persons inter-

ested should apply to Professor John W. McConnell, School of Industrial and Labor Relations.

(4) HOME ECONOMICS EDUCATION

(a) An assistantship to help with details in connection with undergraduate courses, such aid to include preparation of teaching materials, making arrangements for field trips, and assisting in classroom situations. The stipend is \$1333. Candidates having home economics teaching experience and showing promise of leadership in the field of home economics education are given preference. This is a part-time appointment.

(b) An assistantship to help with details in connection with the graduate program, such aid to include preparation of teaching materials, abstracting articles and studies to be used by graduate students, and participation in some classroom responsibilities. The stipend is \$1333. Candidates should have experience in teaching home economics and should be preparing for a position of leadership in home economics education. This is a part-time appointment.

(c) An assistantship to serve as adviser in one of the Home Management Apartments. Such work includes living in the apartment for two semesters, serving as part-time adviser to resident students, and helping with other details in connection with the apartment course. The stipend is \$1000, living quarters, and some meals. A well-rounded undergraduate background in home economics is required. Some work toward a Master's or Doctor's degree is desirable. Directed by Assistant Professor Carol Engebretson.

(d) A research assistantship in connection with research studies in home economics education. The stipend is \$1599 for the regular year. Candidates should have held a position of leadership in home economics education and should have a Master's degree. Preference will be given to candidates who have undertaken post-Master's study, who are working for a doctorate, and who have had experience in research. This is a part-time appointment requiring 20 hours a week. Directed by the Graduate staff. Persons interested should apply to the Secretary of the College of Home Economics, Martha Van Rensselaer Hall.

(5) TEACHER TRAINING PROGRAM

One assistantship is available which provides an income of \$1725 for the academic year.

(6) EDWARD A. SHELDON SCHOLARSHIP FOR WOMEN TEACHERS

This scholarship may be awarded "to any woman of suitable qualifications who needs this assistance," preference being given candidates in the following order: first, a woman graduate of the State Teachers Col-

lege at Oswego, New York; second, a woman graduate of any other New York State Teachers College; third, a suitably qualified woman who is preparing to teach. The funds available will be apportioned among qualified applicants, usually not exceeding \$250 for any one scholarship. Free tuition is not included.

(7) STUDENT DEAN SCHOLARSHIPS

The scholarships are designed for men and women graduate students interested in student personnel administration. Appointees are given professional responsibilities within the personnel program which constitute the laboratory aspects of the course. Students major in guidance and personnel administration or in related fields. They receive a scholarship consisting of room and board plus an honorarium. Applications should be made to Assistant Professor Peard, Edmund Ezra Day Hall.

(8) FORD FOUNDATION FELLOWSHIPS

(a) Fourteen fellowships of \$1,800 each are available to students who meet the requirements for the Experimental Program in Elementary Teacher Education (see page 45).

(b) One \$2500 graduate fellowship for research in elementary teacher education.

A list of additional fellowships and scholarships open to candidates in all fields may be found in the *Announcement of the Graduate School*.

GRADUATE PROGRAMS OF PROFESSIONAL PREPARATION

FIELDS OF STUDY FOR GRADUATE STUDENTS

To meet the requirements of the Graduate School, candidates for advanced degrees must select a major or minor field of work or a field of concentration. Approved fields for majors in the School of Education are as follows:

Agricultural Education
Educational Administration and Supervision
Educational Psychology and Measurement
Elementary Education
Extension and Adult Education

Guidance and Personnel Administration
History and Theory of Education
Home Economics Education
Industrial Education
Nature, Science, and Conservation Education
Secondary Education and Curriculum

In general, candidates for higher degrees in education are encouraged to take one minor outside the field of education.

Description of Courses

ADMINISTRATION AND SUPERVISION

R.E. 219. *SEMINAR IN PERSONNEL ADMINISTRATION IN EDUCATIONAL INSTITUTIONS*. Spring term. Credit two hours. Open to graduate students in education. Th 4-6. Stone 201. Professor WINSOR.

A study of the problems of human relations in educational institutions. The methods and principles of recruitment, selection, placement, maintenance, organization, and government of staff and employees are analyzed.

R.E. 243. *PROCEDURES AND TECHNIQUES IN SUPERVISION*. Fall term. Credit three hours. Candidates for a principal's certificate may register for two hours credit. M W F 10. Stone. Assistant Professor WARDEBERG.

Designed for superintendents, supervisors, and principals. Students taking this course must be prepared to spend four full days or more in observing supervisory procedures in various school systems.

[R.E. 245. *SEMINAR FOR PRINCIPALS*. Fall term. Credit two hours. Required of all graduate students who are candidates for a principal's certificate. Not given in 1954-55.]

R.E. 261. *FUNDAMENTALS OF EDUCATIONAL ADMINISTRATION*. Fall term. Credit three hours. T Th 11-12:30. Stone 212. Associate Professor ELLIOTT.

An introduction to the study of administration with special application to the educational program. Both the science and the art of administration are examined.

R.E. 262. *THE SECONDARY SCHOOL PRINCIPALSHIP*. Fall term. Credit two hours. T 4:15-5:45. Stone 201. Associate Professor ELLIOTT.

A course in school administration dealing with the responsibilities of the secondary school principal within the school building. Special attention will be given to the problems of the six-year high school.

R.E. 264. *SCHOOL FINANCE*. Fall term. Credit two hours. Prerequisite, 261 or the equivalent. Th 4:15-5:45. Warren 201. Associate Professor ELLIOTT.

Typical problems: how local school funds are levied, collected, and disbursed; budget making; bonding; sources of state funds and their distribution.

[R.E. 265. *THE SCHOOL PLANT*. Spring term. Credit two hours. Prerequisite, Course 261 or equivalent. Not given in 1954-55.]

[R.E. 267. *THE LEGAL PROBLEMS OF THE SCHOOL ADMINISTRATOR*. Credit two hours. ———. Not given in 1954-55.]

[R.E. 268 *SEMINAR IN EDUCATIONAL ADMINISTRATION*. Spring term. Credit two hours. Associate Professor ELLIOTT. Not given in 1954-55.]

AGRICULTURAL EDUCATION

R.E. 131. *INTRODUCTION TO TEACHING VOCATIONAL AGRICULTURE*. Spring term. Credit one hour (part of the ten-hour unit). Required of juniors and others entering the directed teaching program in the senior or following year. M 2-4:30. Warren 201. STAFF in agricultural education.

A seminar type of course, with observations in near-by departments of agriculture, in orientation, preparation, and selection of the trainee for directed teaching in off-campus cooperating school centers.

R.E. 132. *METHODS, MATERIALS, AND DIRECTED PRACTICE IN VOCATIONAL AGRICULTURE IN THE SECONDARY SCHOOL*. Fall term. Credit nine hours. STAFF in agricultural education.

Directed participation in off-campus centers in the specific and related problems of teaching prevocational and vocational agriculture on the junior and senior high school levels.

R.E. 133. *SPECIAL PROBLEMS IN VOCATIONAL AGRICULTURE*. Spring term. Credit as arranged. STAFF in agricultural education.

Selected problems in vocational agriculture to meet particular needs of prospective teachers.

R.E. 134. *THE ORGANIZATION AND DIRECTION OF YOUNG FARMER GROUPS*. Fall term. Credit three hours. Professor HOSKINS and STAFF in agricultural education.

Directed participation in off-campus centers in problems that serve the needs of young men on farms. The planning of local programs; the evaluation of the qualifications and opportunities of young men for placement and progressive establishment in farming or in the related-farm occupations; and the training for leadership in other youth and adult organizations.

R.E. 230. *SEMINAR IN AGRICULTURAL EDUCATION*. Spring term. Without credit. Required of seniors, adult special, and graduate students in agricultural education. T 7-9 p.m. Stone 201. STAFF in agricultural education.

[R.E. 231. *SUPERVISION IN VOCATIONAL AGRICULTURE*. Fall term. Credit two hours. Professor SMITH. Given in alternate years. Not given in 1954-55.]

R.E. 232. *METHODS OF INSTRUCTION IN VOCATIONAL AGRICULTURE*. Fall term. Credit two hours. Open to students with experience in teaching vocational agriculture. S 9-11 a.m. Stone 212. Assistant Professor KUNSELA.

Consideration will be given to the selection of units of instruction, developing specific teaching objectives, analysis of farming problems, selection of teacher-pupil activities, and the evaluation of learning experience as applied to individual and group instruction.

R.E. 233. *SUPERVISED FARMING PROGRAMS IN VOCATIONAL AGRICULTURE*. Spring term. Credit two hours. T 4:15-6. Stone 201. Professor SMITH.

Meaning and function of farming programs; how they are planned and used as a means of instruction in vocational agriculture.

R.E. 234. *EDUCATION FOR LEADERSHIP OF FARM YOUTH AND ADULT GROUPS*. Fall term. Credit two or three hours. F 4:15-6. Stone 201. Professor HOSKINS.

Designed for leaders in the fields of agricultural education who are responsible for organizing programs. A consideration of objectives and trends in part-time education and in social-economic problems in rural areas.

R.E. 235. *THE PREPARATION OF TEACHERS IN VOCATIONAL AGRICULTURE*. Fall term. Credit two or three hours. Open to students with experience in teaching vocational agriculture or by permission. M 4:15-6. Stone 201. Professor SMITH.

[R.E. 236. *THE ORGANIZATION AND ADMINISTRATION OF VOCATIONAL AGRICULTURE IN THE SECONDARY SCHOOL*. Spring term. Credit two or three hours. Professor HOSKINS. Not given in 1954-55.]

R.E. 237. *PLANNING COURSES OF STUDY AND PROGRAMS OF WORK FOR VOCATIONAL EDUCATION IN AGRICULTURE*. Spring term. Credit three hours. Open to students with experience teaching vocational agriculture. Th 4:15-6 and one hour by appointment. Special trips to be arranged. Warren 201. Dr. NOAKES.

The development of basic and individualized courses of study and comprehensive

programs of work. An evaluation of the effectiveness of vocational education in agriculture in selected high school departments to determine patterns for course building and program planning.

R.E. 238. *MATERIALS OF INSTRUCTION IN VOCATIONAL AGRICULTURE*. Fall term. Credit two hours. Open to students with experience teaching vocational agriculture. M 7-9 p.m. Stone 201. Dr. NOAKES.

Consideration is given to the selection, preparation, adaptation, organization, and evaluation of instructional materials appropriate to teaching vocational agriculture.

R.E. 239. *PREVOCATIONAL AGRICULTURE IN THE SECONDARY SCHOOL*. Spring term. Credit two hours. W 4-6. Stone 201. Assistant Professor KUNSELA.

Consideration is given to curriculum problems dealing with explanatory prevocational instruction and to the responsibilities of agricultural teachers for general education.

CURRICULUM, ELEMENTARY, AND SECONDARY EDUCATION

Ed. 130. *THE ART OF TEACHING*. Fall term: credit ten hours; T Th S 10 and other hours to be arranged. Spring term: credit ten hours; T Th S 11 and other hours to be arranged. Students will register for either fall or spring term on the advice of course instructors. Assistant Professor HIXON, Professor JOHNSON, Assistant Professor KLEE, Miss DEPEW, Mrs. OCVRK, Mr. CATALFANO.

For seniors preparing to teach mathematics, English, social studies, science, languages, or art in the secondary schools. A study of general principles of teaching and of special methods of teaching each of these subjects. Opportunities to observe the work of experienced teachers and to do directed teaching in a secondary school.

[R.E. 246. *THE SUPERVISION OF THE ELEMENTARY SCHOOL*. Spring term. Credit three hours. Candidates for a principal's certificate may register for two hours credit. Assistant Professor WARDEBERG. Not given in 1954-55.]

R.E. 247. *SEMINAR IN ELEMENTARY EDUCATION*. Spring term. Credit two hours. S 9-10:40. Stone. Assistant Professor WARDEBERG.

[R.E. 263. *THE PRINCIPALSHIP OF THE ELEMENTARY SCHOOL*. Credit two hours. Assistant Professor WARDEBERG. Not given in 1954-55.]

R.E. 276. *PRINCIPLES OF CURRICULUM BUILDING*. Fall term. Credit two hours. W 4-6. Stone 201. Associate Professor STUTZ.

A consideration of major problems, principles, and techniques in determining the school curriculum.

R.E. 277. *SEMINAR IN CURRICULUM*. Spring term. Credit two hours. Prerequisite, R. E. 276 or equivalent. W 2-3:30. Stone 201. Associate Professor STUTZ.

Ed. 278. *SEMINAR IN SECONDARY EDUCATION*. Spring term. Credit two hours. Assistant Professor HIXON.

Ed. 290. *SECONDARY EDUCATION*. Fall term. Credit three hours. T Th S 9. Assistant Professor HIXON.

A study of the nature, function, organization, curriculum, and extension of secondary education in its adaptations to present-day needs and conditions.

R.E. 292. *SEMINAR IN SOCIAL STUDIES EDUCATION*. Fall term. Credit as arranged. M 4:15. Stone 212. Associate Professor STUTZ.

A course designed for resident or extramural students who are working on special problems in social studies education.

EDUCATIONAL PSYCHOLOGY

R.E. 10. *PSYCHOLOGY*. Fall or spring term. Credit three hours. Recommended primarily for freshmen and sophomores. M W 10 and one hour to be arranged. Plant Science 233. Assistant Professor AHMANN.

Designed for students who are not preparing to teach. Should not be taken by students planning to take R.E. 111. Consideration of the outstanding psychological concepts that bear upon personal problems and upon business and social relationships.

R.E. 111. *EDUCATIONAL PSYCHOLOGY*. Fall or spring term. Credit three hours. Prerequisite, Human Development. Not open to freshmen. Lectures, M W F 9. Fall, Comstock 245; spring, Comstock 145. Professor GLOCK. (Same as Psych. 103.)

Consideration of the outstanding facts and principles of psychology bearing upon classroom problems.

R.E. 117. *PSYCHOLOGY OF ADOLESCENCE*. Spring term. Credit three hours. Prerequisite, a course in elementary or educational psychology. M W F 11. Warren 145. Associate Professor ELLIOTT.

A study of behavior during adolescence, of tasks involved in developing maturity, and of the effects on development of some social conditions.

R.E. 211. *EDUCATIONAL PSYCHOLOGY*. Fall term. Credit three hours. Permission of the instructor required. M F 11-12:20. Stone 201. Professor GLOCK.

For mature students with teaching experience. Special emphasis will be given to the topics of learning, adjustment, and evaluation, and their relationship to the teacher's problems.

[R.E. 213. *SEMINAR IN EDUCATIONAL PSYCHOLOGY*. Spring term. Credit two hours. To be alternated with R. E. 251. Assistant Professor AHMANN. Not given in 1954-55.]

[R.E. 218. *SEMINAR IN EDUCATIONAL PSYCHOLOGY*. Spring term. Credit two hours. Given every third year. Professor GLOCK. Not given in 1954-55.]

R.E. 251. *EDUCATIONAL MEASUREMENT*. Spring term. Credit three hours. Candidates for a principal's certificate may register for two hours' credit. To be alternated with R.E. 213. Prerequisite, a course in educational psychology or permission of instructor. T Th S 10. Warren 345. Assistant Professor AHMANN.

A study of the construction of achievement tests and the use of aptitude tests, achievement tests, and other measuring instruments in the classification and guidance of pupils and improvement of instruction.

R.E. 253. *INTRODUCTION TO EDUCATIONAL STATISTICS*. Fall term. Credit three hours. T Th 9-10:15. Warren 345. Assistant Professor AHMANN.

A study of common statistical procedures encountered in educational literature and research. The course includes the computation and interpretation of descriptive measures and tests of significance.

R.E. 254. *STATISTICAL INSTRUMENTS IN EDUCATION*. Spring term. Credit two hours. Prerequisite, R.E. 253 or permission of instructor. T Th 9. Warren 345. Assistant Professor AHMANN.

A study of the analysis of variance, the analysis of covariance, the discriminant function, test item analysis, and supporting topics.

R.E. 255. *USE AND INTERPRETATION OF TESTS IN GUIDANCE AND PERSONNEL ADMINISTRATION*. Fall term. Credit two hours. Open to students in guidance or personnel administration, other students by permission of instructor. Th 4-6. Stone 201. Assistant Professor ANDRUS.

This course deals with the development, use, and interpretation of aptitude tests as a basis for guidance and selection.

Ed. 313. *METHODS OF TEACHING READING*. Either term. Credit three hours. Time and place to be arranged. Miss MASTROTTO.

Designed for teachers, supervisors, and administrators in the elementary school. The basis for the improvement of reading instruction. Appraisal of teaching practices and instructional materials; group testing programs and individual diagnostic procedures; remedial and corrective reading techniques.

[R.E. 315. *READING IN THE SECONDARY SCHOOL*. Spring term. Credit two hours. M 4-5:30. Warren 31. Professor GLOCK. Not given in 1954-55.]

R.E. 316. *READING CLINIC*. Spring term. Credit two hours. Prerequisite, R.E. 313, R.E. 315, or permission of instructor. M 4-5:30. Stone 201. Professor GLOCK.

EXPERIMENTAL PROGRAM IN ELEMENTARY TEACHER EDUCATION

Ed. 248. *OBSERVATION AND STUDENT TEACHING*. Fall and spring terms. Credit ten hours each term. Professors KULP, KLEE, and STAFF.

Internship program of the Cornell experiment in the education of elementary teachers. Minimum of fifteen clock hours each week devoted to directed observations of and gradual induction into classroom teaching in elementary schools in Ithaca and surrounding communities. This internship phase of the program is closely coordinated with Ed. 249.

Ed. 249. *SEMINAR IN ELEMENTARY TEACHER EDUCATION*. Credit six hours. Professors KULP, KLEE, and STAFF.

Problems identified by the students in the internship phase of the Cornell experimental program in the education of elementary teachers will become focal points of discussion in the seminar. Essential understandings from the fields of Human Development, Curriculum Planning, History and Philosophy of Education, and Methods of Learning will be developed in relation to specific problem situations identified by the students in Ed. 248. Planned to meet certification requirements of the New York State Education Department.

EXTENSION, ADULT, AND HIGHER EDUCATION

R. E. 214. *COLLEGE TEACHING*. Fall term. Credit two hours. M 7-9 p.m. Warren 145. Professor WINSOR and others.

Designed for non-Education majors who plan to teach in higher institutions. Methods of teaching, organization of subject matter, motivation, learning, testing, grading, and similar problems will be treated.

R.E. 223. *SEMINAR IN EXTENSION EDUCATION*. Throughout the year. Credit two hours each term. W 2-3:30. Warren 260. Open to graduate students in extension education and others interested in extension education. Professor LEAGANS.

Provides opportunity for special study of individual problems, for group study of common problems, and for exchange of experiences among workers from various states and countries.

R.E. 224. *PROGRAM BUILDING IN EXTENSION EDUCATION*. Fall term. Credit two hours. T 2-3:30. Warren 160. For graduate students in extension education and others interested in adult education. Professor LEAGANS.

A study of the basic problems, principles, and procedures in the process of extension program building in both agriculture and homemaking.

R.E. 225. *TEACHING IN EXTENSION EDUCATION*. Spring term. Credit two hours. T 2-3:30. Warren 160. For graduate students in extension education and others concerned with teaching adults. Professor LEAGANS.

The course deals with the principles of teaching and learning and their application in extension teaching. Major problems, including the formulation of learning situations, selection and organization of learning experiences, selection and use of extension methods, and evaluation of teaching, are considered.

R.E. 291. *SEMINAR IN THE DEVELOPMENT AND EXECUTION OF EDUCATIONAL PROGRAMS IN UNDERDEVELOPED AREAS OR COMMUNITIES.* Fall term. Credit two hours. Th 2-3:30. Stone 201. Professor LEAGANS.

Designed for teachers, extension workers, missionaries, government workers, and others who expect to do educational work in underdeveloped areas of the free world. Analysis is made of the cultural, social, educational, and economic factors in selected areas as background for development of programs and teaching procedures.

[R.E. 293. *ADMINISTRATION AND SUPERVISION OF ADULT EDUCATION.* Credit two hours. Professor HOSKINS. Not given in 1954-55.]

R.E. 294. *PRINCIPLES AND PHILOSOPHY OF ADULT EDUCATION.** Spring term. Credit two or three hours. F 4:15-6:00. Stone 201. Open to undergraduates by permission only. Professor HOSKINS.

The course is designed for directors of adult education, teachers, extension agents, and other leaders of adult education. Emphasis will be placed upon the basic philosophies of adult leaders in the United States and other countries and the principles upon which successful programs and special offerings have been organized and maintained.

[R.E. 298. *RURAL EDUCATIONAL LEADERSHIP.* Spring term. Credit two hours. For graduates and advanced undergraduates. Especially appropriate for public school teachers, school principals, social workers, agriculture and home economics workers, and directors of adult education. Professor LEAGANS. Not given in 1954-55.]

[R.E. 401. *PROBLEMS IN HIGHER EDUCATION.* Spring term. Credit two hours. Not given in 1954-55.]

H.E. Ed. 432. *METHODS AND MATERIALS IN ADULT EDUCATION.* Fall term. Credit two or three hours. T 4:15-5:45. Van Rensselaer 117. Open to undergraduates with permission. Associate Professor PATTERSON. (See page 39 for description.)

(H.E. Ed. 437. *PRINCIPLES AND PHILOSOPHY OF ADULT EDUCATION.* Credit two or three hours. Associate Professor PATTERSON. Tentatively scheduled for fall, 1955.)

[H.E. Ed. 438. *TEACHING HOMEMAKING TO ADULTS.* Credit two or three hours. Associate Professor PATTERSON. Not given in 1954-55.]

H.E. Ed. 490. *TEACHING HOME ECONOMICS IN HIGHER EDUCATION.* Spring term. Credit two hours. T Th 10. Van Rensselaer 117. Associate Professor PATTERSON. (See page 40 for description.)

GENERAL

R.E. 190. *SOCIAL FOUNDATION OF EDUCATION.* Fall or spring term. Credit three hours. Must be approved by the instructor in charge. Fall term: M W F 10, spring term: M W F 11. Warren 231. Associate Professor STUTZ.

Evaluation of the school as a social institution and emphasis upon the role the school must play in a democratic society.

[R.E. 194. *PRINCIPLES OF VOCATIONAL EDUCATION.* Spring term. Credit two hours. Given in alternate years. Professor SMITH. Not given in 1954-55.]

R.E. 199. *INFORMAL STUDY IN EDUCATION.* Maximum credit, three hours each term. Members of the STAFF.

This privilege is granted to a qualified student of junior rank or above, when approved by his adviser from the education staff who is personally responsible for the study.

*Given in alternate years as H.E. Ed. 437 and R.E. 294.

R.E. 299. *EDUCATIONAL RESEARCH METHODS*. Fall term. Credit two hours. For graduate students preparing for or engaged in research in education. M W 11. Warren 345. Assistant Professor AHMANN.

Consideration of the basic research methods as applied to education and the principles of thesis writing.

R.E. 300. *SPECIAL STUDIES*. Credit as arranged. Members of the STAFF. Students working on theses or other research projects may register for this course.

The staff members concerned must be consulted before registration.

R.E. 400. *INTERNSHIP IN EDUCATION*. Fall and spring terms. Credit two to six hours as arranged. Members of the FACULTY.

Opportunity for apprentice or similar practical experience on the graduate level in administration, agricultural education, guidance, personnel administration, supervision, and other types of professional service in education.

Ed. 402. *FIELD LABORATORY IN STUDENT PERSONNEL ADMINISTRATION*. Throughout the year. Prerequisite, consent of the instructor. Credit and hours to be arranged. Assistant Professor PEARD.

Ed. 499. *INFORMAL STUDY IN EDUCATION*. Maximum credit three hours each term. Members of the STAFF.

Ed. 500. *SPECIAL STUDIES*. Credit as arranged. Members of the STAFF.

Students working on theses or other research projects may register for this course. The staff members concerned must be consulted before registration.

GUIDANCE AND PERSONNEL ADMINISTRATION

Ed. 280. *INTRODUCTION TO STUDENT PERSONNEL ADMINISTRATION*. Fall term. Prerequisite, consent of the instructor. Credit two hours. T 10-12. Conference Room, Day. Assistant Professor PEARD.

Development of the personnel point of view, relation of out-of-class life to the total education of the student in higher education.

Ed. 281. *ADMINISTRATION OF STUDENT PERSONNEL SERVICES*. Spring term. Prerequisite, consent of the instructor. Credit two hours. T 10-12. Conference Room, Day. Assistant Professor PEARD and STAFF.

Organization and function of student personnel services in higher education.

R.E. 282. *EDUCATIONAL AND VOCATIONAL GUIDANCE*. Fall term. Credit two hours. For graduate students only. S 9-11. Stone 201. Associate Professor NELSON.

Principles and practices of educational and vocational guidance. Historical and theoretical background of the guidance movement; educational, vocational, and community information needed; the study of the individual; group methods; counseling; placement and follow-up; and the organization, administration, and appraisal of guidance programs.

R.E. 283. *COUNSELING METHODS*. Spring term. Credit two hours. For graduate students only. Prerequisite, Courses 255 and 282 or equivalent. T 2-4. Warren 201. Associate Professor NELSON.

Techniques for counseling with individuals concerning various types of educational, social, and vocational adjustment problems. Case studies.

R.E. 284. *GROUP TECHNIQUES IN GUIDANCE*. Spring term. Credit two hours. S 9-11. Warren 260. Associate Professor NELSON.

Methods and materials for presenting occupational and orientation information to students. Deals with classes in occupations, orientation groups, field trips, clubs, work-experience programs, and other group methods.

R.E. 285. *OCCUPATIONAL AND EDUCATIONAL INFORMATION*. Fall term. Credit four hours. Prerequisite, permission of the instructor. T Th 1. Field trips on Monday afternoons. Stone 201. Associate Professor NELSON.

Survey and appraisal of occupations and training opportunities; study of sources of educational and vocational information; job analysis; vocational trends. Field trips to places of employment.

R.E. 289. *SUPERVISED PRACTICE IN TESTING AND COUNSELING*. Either term. Credit to be arranged. Prerequisites, 255, 282, 283, or their equivalents, and the permission of the instructor. For advanced graduate students only. Hours for observation and practice to be arranged. W 5. Associate Professor NELSON.

Practice in the administration, scoring, and interpretation of psychological tests. Observation and supervised experience in counseling at the Cornell Guidance Center. Case conferences and assigned readings.

Ed. 380. *ADMINISTRATION OF EXTRACURRICULAR ACTIVITIES*. Fall term. Prerequisite, consent of the instructor. Credit two hours. T 2-4. Conference room, Day. Dean BALDWIN, Professor BROOKS, and STAFF.

Theory and philosophy of extracurricular activities in higher education, application of principles of leadership; campus clubs, student unions, student government.

Ed. 381. *SEMINAR IN STUDENT PERSONNEL ADMINISTRATION*. Spring term. Prerequisite, consent of the instructor. Credit two hours. T 2-4. Conference room, Day. Professor BROOKS.

Trends in higher education, relation of personnel office to other offices and agencies, the field of personnel.

HISTORY AND PHILOSOPHY OF EDUCATION

Ed. 244. *PHILOSOPHY OF EDUCATION*. Spring term. Credit two hours. For mature students, preferably with teaching experience. W 4. Assistant Professor HIXON.

A critical consideration of educational philosophies which are generally recognized as significant influences upon education in the United States.

[R.E. 296. *HISTORY OF AMERICAN EDUCATION*. Fall term. Credit three hours. For seniors and graduate students. Prerequisite, consent of the instructor. T Th S 9. Associate Professor STUTZ. Not given in 1954-55.]

R.E. 297. *HISTORY OF EDUCATION IN THE MODERN PERIOD*. Spring term. Credit three hours. For seniors and graduate students. T Th 9-10:30. Stone 201. Associate Professor STUTZ.

A survey of education from the beginning of the seventeenth century to the present, with emphasis on public education and on historical trends affecting contemporary educational policies and practices.

NATURE STUDY, SCIENCE, AND CONSERVATION EDUCATION

[R.E. 106. *OUTDOOR LIVING AND CAMP ADMINISTRATION*. Fall term. Credit three hours. Registration by permission of instructors only. Assistant Professor FISCHER and Dr. NOAKES. Not given in 1954-55.]

R.E. 107. *THE TEACHING OF NATURE STUDY AND ELEMENTARY SCHOOL SCIENCE*. Spring term. Credit two hours. Open to juniors, seniors, and graduate students, particularly those who are preparing to teach or supervise nature study or science. Lecture, S 8. Practical exercises, S 9-11:30. Stone 7. Associate Professor GORDON.

The content and methods of nature-study and elementary-school science with field work and laboratory experience useful in classroom and camp.

R.E. 108. *FIELD NATURAL HISTORY*. Fall or spring term. Credit two hours a term. Open to juniors, seniors, and graduate students, and to sophomores by permission of the instructor. Field work, T 2-4:30, primarily for undergraduates; F 2-4:30,

primarily for graduates. Lecture, T or F, 4:30-5:20. Stone 7. Assistant Professor FISCHER.

Field trips and lectures devoted to a study of the natural history of several ecological units under different seasonal conditions, with special emphasis on the teaching of science and conservation. May be taken one or both terms.

R.E. 128. *METHODS OF TEACHING SCIENCE IN SECONDARY SCHOOLS*. Spring term. Credit three hours. Permission of the instructor. For seniors and graduate students. Th 2-5:30 and additional hours to be arranged. Stone 7. Professor JOHNSON.

A consideration of methods and materials useful in teaching science in secondary schools. Observation of the work of experienced teachers constitutes an important part of the course.

R.E. 129. *PRACTICE IN TEACHING SCIENCE IN SECONDARY SCHOOLS*. Fall or spring term. Credit four hours. Prerequisite, Rural Education 128 or 207 and permission of the instructor. For seniors and graduate students. Hours to be arranged. Stone 7. Professor JOHNSON.

R.E. 202. *NATURE LITERATURE*. Fall term. Credit two hours. Given in alternate years. Open to seniors and graduate students interested in science and science teaching. Lectures, T Th 10. Stone 7. Associate Professor GORDON.

A survey of nature and science prose and poetry, with attention to their significance at elementary and secondary school levels, and for leisure reading.

[R.E. 203. *RESEARCH AND WRITING IN NATURE AND CONSERVATION EDUCATION*. Spring term. Credit two hours. Not given in 1954-55.]

R.E. 205. *THE TEACHING OF CONSERVATION*. Spring term. Credit two hours. T Th 10. Stone 7. Assistant Professor FISCHER.

Consideration of the principles, materials, and methods of conservation education useful to teachers and others engaged in teaching wise use of the resources of the nation.

R.E. 207. *METHODS AND MATERIALS FOR THE TEACHING OF SCIENCE IN SECONDARY SCHOOLS*. Fall term. Credit two hours. Registration by permission only. Th 4-5:30. Stone 7. Professor JOHNSON.

A consideration of problems of selection and organization of subject matter, of choice and use of materials, and of methods of teaching earth sciences at the secondary school level.

[R.E. 209. *THE DEVELOPMENT OF NATURE AND SCIENCE EDUCATION IN THE UNITED STATES*. Fall term. Credit two hours. Associate Professor GORDON. Given in alternate years. Not given in 1954-55.]

R.E. 226. *RESEARCH IN NATURE STUDY, SCIENCE, AND CONSERVATION EDUCATION*. Fall or spring term. Credit one hour a term. F 12. Stone 7. Professor JOHNSON, Associate Professor GORDON, Assistant Professor FISCHER.

A seminar dealing with special problems.

CHILD DEVELOPMENT AND FAMILY RELATIONSHIPS

C.D. & F.R. 450. *SEMINAR: CHILD GUIDANCE*. Spring term. Credit two hours. Prerequisite, some work in Child Development and Family Relationships. First meeting W 4-6. Time to be arranged. Van Rensselaer G60E. Professor WARING.

C.D. & F.R. 475. *METHODS IN FAMILY LIFE EDUCATION*. Fall term. Credit three hours. Registration by permission of the instructor. W 2-4:30. Van Rensselaer 121. Assistant Professor FELDMAN.

This course is designed to acquaint students with the objectives and methods of family life education. A variety of methods will be explored, such as the lecture, group discussion, role taking, panel, and their applicability to a variety of situations

and media will be discussed. In addition to class meetings, students will take part in one or more practical demonstrations either in college classes, community groups, leadership training sessions, or radio programs.

HOME ECONOMICS EDUCATION

H.E. Ed. 110. *HOMEMAKING EDUCATION AND THE COMMUNITY*. Fall term. Credit one hour. T Th 11. Van Rensselaer 124. Associate Professor HOEFER.

This course is offered to help the student who is planning to be a homemaker to understand the place in which she may serve in educational programs in her community. It will also give her a basis for understanding ways in which home economics serves all members of the family. It may help her in making a vocational choice. Opportunity will be given to observe homemaking programs which are being conducted by the extension service, public schools, and other educational agencies.

H.E. Ed. 300. *SPECIAL PROBLEMS FOR UNDERGRADUATE STUDENTS*. Fall and spring terms. Credit and hours to be arranged. DEPARTMENT STAFF.

For students recommended by advisers and approved by the head of the department and the instructor in charge for independent, advanced work not otherwise provided in the department.

H.E. Ed. 310. *THE HOME ECONOMIST AS A TEACHER*. Spring term. Credit two hours. T Th 11. Van Rensselaer 124. Open to upperclassmen. Associate Professor HOEFER.

This course is designed for home economics students who plan to be dietitians, social workers, homemakers, and others who will be working with groups of people on an informal basis, and so will be concerned with the educational process. The course will include study of educational objectives, factors affecting the learning process, various methods of instruction applicable to informal groups, demonstrations and discussions of group teaching, conferences, and committees.

H.E. Ed. 320. *EXTENSION EDUCATION*. Fall term. Credit two hours. Open to juniors and seniors preparing for 4-H Club or home demonstration work. This course must precede Extension Education 321. Discussion period, F 2-4. Van Rensselaer 3M11. Associate Professor HOEFER.

Opportunity will be provided to observe extension and other community programs.

H.E. Ed. 321. *EXTENSION EDUCATION*. Fall and spring terms. Credit eight hours. Associate Professor HOEFER. Supervised field experience for one-half of the term in a selected county and conference periods for one-half of the term. Prerequisite, Extension Education 320. During this term students will take Homemaking Apartments 302. Students live in the Homemaking Apartments for seven weeks and in the county in which they are doing extension work for seven weeks.

Students are assigned to cooperating counties where opportunity is provided to work with the county extension staff and to gain experience in 4-H Club and/or home demonstration work. They live in the county and work under the direction and guidance of the local extension agents. A member of the college staff supervises this field experience. Students observe, assist, and participate in the program of the county extension groups. They should gain experience in teaching 4-H Club and/or home demonstration groups, in office management, radio, newswriting, and working with other county agencies, and in others of the usual activities of an extension agent.

H.E. Ed. 330-331. *THE ART OF TEACHING*. To be taken in two successive terms. Open to juniors and seniors preparing to teach home economics in the public schools. Associate Professor MOSER, coordinator, assisted by Associate Professor PATTERSON, Assistant Professor ENGBRETSON, MRS. CORNELIUS, Miss ELLIOTT, and cooperating teachers.

Student teachers have an opportunity to study the community and the place of home economics in the total educational program of the community. They observe

and participate in community activities in the total school program, and in the home economics program.

330. Fall and spring terms. Credit two hours. This course must precede Home Economics Education 331. Discussion period. T Th 8. Room 3M11. Field work one-half day a week. Students visit schools for the purpose of studying homemaking programs.

331. Fall and spring terms. Credit eight hours. Directed teaching for one-half of the term and general conferences throughout the term. Hours and room to be arranged. This course is a continuation of Home Economics Education 330. During this term the student registers for only one other course, Home-making Apartments 302. Students live in the Homemaking Apartments for one-half of the term and in the communities in which they teach for the other half of the term. Student teachers are assigned to cooperating schools within a reasonable distance of Ithaca. They live in the communities and work under the guidance of the local homemaking teachers and under the supervision of the Home Economics Education staff.

H.E. Ed. 403. *SPECIAL PROBLEMS FOR GRADUATE STUDENTS*. Fall and spring terms. Credit and hours to be arranged. DEPARTMENT STAFF.

For graduate students recommended by their chairmen and approved by the instructor in charge for independent advanced work.

H.E. Ed. 407. *THESIS AND RESEARCH*. Fall and spring terms. Credit and hours to be arranged. Registration with permission of the chairman of the graduate committee and the instructor. Professor HUTCHINS, Associate Professors HOEFER, MOSER, and PATTERSON, Assistant Professors BLACKWELL and ENGEBRETSON.

H.E. Ed. 432. *METHODS AND MATERIALS IN ADULT EDUCATION*. Fall term. Credit two or three hours. T 4:15-5:45. Van Rensselaer 117. Open to undergraduates with permission. Associate Professor PATTERSON.

This course is planned for teachers, directors of adult education, extension agents, and leaders in other agencies concerned with adult education. Emphasis will be placed on appropriate methods and teaching aids in adult education, such as effective use of an advisory committee; handling large groups, program service, forums, workshops, discussions; publicizing and interpreting the program; teaching through mass media; organizing neighborhood groups; nongroup methods, including conferences and home visits; the importance of suitable audio-visual aids. Special attention will be given to the use of local community resource materials for enriching the program. Students will have an opportunity to observe adult groups and to study methods and materials being used.

(H.E. Ed. 437. *PRINCIPLES AND PHILOSOPHY OF ADULT EDUCATION*. Credit two or three hours. Associate Professor PATTERSON. Tentatively scheduled for fall, 1955.)

[H.E. Ed. 438. *TEACHING HOMEMAKING TO ADULTS*. Credit two or three hours. Associate Professor PATTERSON. Not given in 1954-55.]

(H.E. Ed. 439. *THE TEACHING OF HOME ECONOMICS*. Credit three hours. Associate Professor PATTERSON. Tentatively scheduled for spring, 1956.)

[H.E. Ed. 449. *CURRICULUM PLANNING IN HOME ECONOMICS*. Credit two or three hours. Assistant Professor BLACKWELL. Not given in 1954-55.]

H.E. Ed. 459. *EVALUATION*. Spring term. Credit three hours. M W F 10. Van Rensselaer 3M11. Assistant Professor BLACKWELL.

For teachers, extension agents, and educational research workers. Basic principles of evaluation will be studied in relation to specific methods of appraising educational programs or individual achievement. Opportunities will be given for constructing and using evaluation instruments.

(H.E. Ed. 469. *SUPERVISION OF HOME ECONOMICS EDUCATION*. Credit two hours. Professor HUTCHINS. Tentatively scheduled for summer session, 1955.)

H.E. Ed. 480. *SEMINAR IN HOME ECONOMICS EDUCATION*. Fall and spring terms. No credit. M 4. Van Rensselaer 117. DEPARTMENT STAFF. Fall, emphasis on philosophy, Associate Professor Patterson, coordinator. Spring, emphasis on research, Professor Hutchins, coordinator.

H.E. Ed. 485. *SUPERVISION OF THE RESIDENCE EXPERIENCE IN HOME-MAKING*. Spring term. Credit two hours. T 9-11. Apartment B, Van Rensselaer. Instructor's permission required at preregistration. Assistant Professor ENGBRETSON.

This course is planned for home management house advisers and others preparing for this type of teaching. Attention is focused on organization, supervision, and methods of teaching a residence course.

H.E. Ed. 490. *TEACHING HOME ECONOMICS IN HIGHER EDUCATION*. Spring term. Credit two hours. T Th 10. Van Rensselaer 117. Associate Professor PATTERSON.

This course deals with (a) the contributions of Home Economics at the college level; (b) the philosophy involved in cooperatively planned programs; (c) factors affecting student learning; (d) principles influencing the choice of teaching procedures and materials for college teaching; (e) the educative values of group processes.

INDUSTRIAL AND TECHNICAL EDUCATION

The program in industrial and technical education is designed to prepare persons for administrative and supervisory positions in the field of industrial and technical education in the public schools, and for positions in training departments in industrial establishments.

DEVELOPMENT OF COURSES OF STUDY IN INDUSTRIAL EDUCATION (ILR) 332. (Open to advanced undergraduate and graduate students.) Credit two hours. Summer term.

Study of the principles and procedures of course-of-study development. Content will include objectives of general and vocational education and their bearing on courses of study; controls which influence courses; interrelationships of courses within the curriculum; evaluation of courses of study. Emphasis will be placed upon the development of specific courses based upon occupational and other analyses.

DEVELOPMENT OF WRITTEN INSTRUCTIONAL MATERIALS (ILR) 333. (Open to advanced undergraduate and graduate students.) Credit two hours. Fall term.

Study of the various types of written instructional materials used in educational programs, with emphasis on the procedures and techniques used in their preparation. The course deals with the application of educational principles to written instructional materials; analytical and other techniques used in developing the course of study or the outline of the content; formats; writing the manuscript copy; illustrating the instructional manual; reproduction processes for instructional materials; and the preparation of copy for the printer. The course content is applicable to the development of training manuals in industry, instruction manuals for vocational schools, textbooks, and other types of written instructional materials.

CONFERENCE LEADERSHIP AND OTHER INSTRUCTIONAL METHODS (ILR) 334. (Open to advanced undergraduate and graduate students.) Credit three hours. Fall term.

Study of the various methods of instruction applicable to adult groups, with special reference to workers and supervisors in industry. Content will include a review of educational objectives and principles of learning; demonstration and discussion of

on-the-job training, group teaching, conferences, panels, symposiums, role playing, and other methods; applications of these methods to specific situations. Special emphasis will be placed on group discussion leadership, and students will be expected to lead group discussions on current topics and problems.

INDUSTRIAL AND TECHNICAL EDUCATION ON THE POSTSECONDARY LEVEL. (ILR) 336. (Open to advanced undergraduate and graduate students.) Credit two hours. Summer term.

A study of the historical background, present development, and trends in industrial education for adults and for recent high school graduates. Deals with technical institute education; industrial and technical education in the community college; pre-employment and occupational extension programs, including apprenticeship; patterns of organization and administration; relationships of these programs with the high school and the college; legislation; and a comparative study of developments in this field in various parts of the United States.

TRAINING IN INDUSTRY (ILR) 364. Credit three hours. Spring term.

A study of the concepts and means used by management to develop skills, understandings, and attitudes of employees. Consideration is given to planning and administering training programs, including policy formation, coordination, staffing, selection of facilities, preparation of budget, use of records and reports, evaluation and publicity; and to both intermittent and continuous programs, including apprenticeship, job instruction, orientation, supervisory and executive development, and general education courses. Attention is given to determining training needs, objectives, and schedules, and to the selection of effective methods, devices, and incentives.

INDUSTRIAL EDUCATION (ILR) 530. Spring term.

A graduate course providing a broad overview of educational principles and practices pertaining to training within industry, workers' education, and industrial education in public and private institutions. Basic principles of adult education; methods of teaching adults; development of courses of study; appraisal and development of instructional materials; organizational patterns of program; legislation affecting industrial education; interrelationships between public industrial education, management, and organized labor.

SUPERVISION OF INDUSTRIAL EDUCATION (ILR) 630. Summer term.

Study of the nature and purpose of educational supervision of industrial education programs and fundamental principles of supervision; techniques and methods of supervision; the planning and organization of a supervisory program; the supervisor's responsibility for appraising the adequacy of equipment, materials, and supplies for instructional purposes; relationships of the supervisor to administrators and teachers; evaluation of student and teacher achievement.

INDUSTRIAL EDUCATION (ILR) 631. Spring term.

A graduate seminar dealing with problems of special importance in the field of industrial education within industry and in public industrial and technical institutions at the present time.

ADMINISTRATION OF INDUSTRIAL EDUCATION (ILR) 632. Summer term.

Study of administrative practices in industrial and technical schools. Relationships of the administrator with other school officers; advisory committees and their functioning; public relations; problems of plant and equipment; budgetary procedures; staff personnel relations; teacher selection and induction; student personnel procedures; evening school organization and administration.

INDUSTRIAL EDUCATION IN SMALLER COMMUNITIES (ILR) 634. Summer term.

The organization and conduct of industrial education programs serving smaller high schools or consolidated school districts. Emphasis will be placed upon diversified

part-time cooperative programs, apprentice training classes and vocational schools, county unit programs, and intermediate school districts.

METHODS AND MATERIALS IN ADULT EDUCATION (ILR) 636. (Open to advanced undergraduate and graduate students.) Credit two hours. Summer term.

Deals with adult education from the standpoint of the teacher or group leader, in adult evening classes, extension programs, educational programs in industrial plants, and workers' education. Types of adult education service; course and program development; methods of instruction, including conference leadership and role playing; audio-visual and other instructional aids and their uses with adult groups; techniques in dealing with large groups.

SPECIAL STUDIES (ILR) 699.

Directed research in special problems.

INTERDEPARTMENTAL COURSES

Soc. 101. *INTRODUCTION TO THE STUDY OF SOCIETY*. Either term. Credit three hours. Open to all students, although primarily intended for freshmen. Fall term, lectures W F 12 or M W 2; spring term, lectures M W 2. Discussion sections to be arranged. Associate Professor DEAN, Assistant Professor STREIB and STAFF.

Sociological analysis of personality formation, social interaction, stratification, and the functioning of contemporary American institutions.

Soc. 201-202, and ILR 497-498. *METHODS OF RESEARCH IN THE BEHAVIORAL SCIENCES*. An interdepartmental course given cooperatively by the staffs of the departments and schools interested in coordinated research training. Throughout the year. Credit three hours a term. First term prerequisite to the second. Open to upperclass majors and graduate students. T Th 10 and a two-hour laboratory period to be arranged. Professors BRONFENBRENNER, DEAN, DEVEREUX, MOE, SUCHMAN, WILLIAMS, WHYTE, and other members of the cooperating departments.

Basic scientific methods used in current research upon human behavior. Course will include survey method, unstructured interviewing, participant field observation, content analysis, controlled and semicontrolled experiments, and the analysis of documents. Lectures, demonstrations, case materials, laboratory and field sessions.

THE NATURE OF MAN. This is a sequence consisting of the three courses described below. The aim of the sequence is to examine the interplay among biological, psychological, and social factors as determinants of human structure, function, and development.

Zool. 201. *THE NATURE OF MAN: STRUCTURE AND DEVELOPMENT*. Fall term. Credit three hours. Not open to freshmen. Prerequisite, a laboratory science, preferably general zoology or biology. Lectures, T Th 10; recitations, M 9, 10, 11, T 9, 11, W 8, 9, 10, 11, Th 8, 9, 11, or F 8, 9, 10, 11. Professor SINGER and assistants.

The aim of this first unit in the sequence is to give the student an understanding of structure, function, and development of the human body.

Psych. 301. *THE NATURE OF MAN: PERSONALITY AND CULTURE*. Throughout the year. Credit three hours. First semester, Psychology 301; second semester, Sociology-Anthropology 601. Prerequisites, at least two of the following, with all three strongly recommended: Zoology 201 (or equivalent), a course in Psychology, a course in Sociology-Anthropology, or consent of instructor. M W F 10. Professors BRONFENBRENNER, HOLMBERG, LAMBERT, and SINGER.

A study of facts and theories of personality development in our own and other cultures, approached from the perspectives of psychology, social psychology, comparative cultural anthropology, and biology, with representatives of these approaches all participating.

PSYCHOLOGY

Psych. 103. *EDUCATIONAL PSYCHOLOGY*. Fall term. Credit three hours. Primarily for undergraduate prospective teachers. Prerequisite, a first course in psychology. M W F 11. Professor FREEMAN. (Equivalent of R.E. 111.)

Psych. 351. *PSYCHOLOGICAL TESTS I*. (Tests of intelligence and specific aptitudes.) Fall term. Credit three hours. Not open to sophomores. Prerequisite, 6 hours in psychology and a course in statistics, or consent of the instructor. T Th S 9. Professor FREEMAN.

Basic psychological principles in the construction and use of individual and group tests of intelligence and specific aptitudes; theories of the nature of mental abilities; fields of application; intensive study of selected individual scales. Demonstrations in administering and interpreting individual scales.

Psych. 352. *PSYCHOLOGICAL TESTS II*. (Tests of personality and social behavior.) Spring term. Credit three hours. Prerequisite, Psych. 351 or equivalent, and consent of the instructor. T Th S 9. Professor FREEMAN.

Basic psychological principles in the construction and use of personality rating scales, personality inventories, projective techniques, and situational tests. Demonstrations.

Psych. 410. *INDIVIDUAL DIFFERENCES*. Spring term. Credit three hours. Prerequisite, Psych. 351 or equivalent, or consent of instructor. T Th 2-3:15. Professor FREEMAN.

The nature, causes, and implications of individual differences in human abilities and behavior. Study of atypical groups.

Psych. 411. *PROCEDURES IN CLINICAL PSYCHOLOGY*. Spring term. Credit three hours. Prerequisite, Psych. 351 and a course in personality development, or their equivalents. Primarily for graduate students. All students must have consent of the instructor. M 4-6 and conferences. Professor FREEMAN.

Procedures and instruments used with clinical cases involving problems of learning and behavioral adjustment. Study of case materials.

Psych. 543. *PRACTICE IN PSYCHOLOGICAL TESTING*. Either term. Credit to be arranged. Prerequisite, Psychology 351 or 352, or equivalent. For graduate students. All students must have consent of the instructor. Limited enrollment. Professor FREEMAN.

Practice in administering and interpreting individual tests of intelligence and personality, including projective techniques. Each student is expected to concentrate upon a single instrument in a given semester.

[Psych. 562. *SEMINAR IN HUMAN DEVELOPMENT AND BEHAVIOR*. Spring term. Credit two hours. For seniors and graduate students. Consent of the instructor is required. Professor FREEMAN. Not given in 1954-55.]

THE EDUCATIONAL PLACEMENT BUREAU

THE Bureau is the central office of permanent record and placement for qualified Cornellians from *all* departments of the University who wish to secure professional positions in either secondary schools or colleges. With the Bureau's assistance Cornellians are regularly placed as teachers, guidance counselors, student personnel workers, supervisors, school administrators, and research workers. Requests are received throughout the year from public high schools, private schools, junior colleges, technical institutes, colleges, universities, and teacher-training institutions. On the college level the Bureau's contacts are nation-wide.

Services provided include a permanent file of credentials, available throughout each registrant's professional career, and up-to-date information concerning current positions, salary ranges, certification requirements in each state, and placement trends and demands. Detailed information pertaining to all accredited colleges, universities, junior colleges, and private schools in the country is available for reference.

All Cornellians qualified and interested in school or college positions are invited to register with this office well in advance of the completion of their training. Credentials containing comprehensive information as to the personal and educational qualifications and experience of each registrant are compiled in conformity with standards established by the National Institutional Teacher Placement Association. With the cooperation of the registrant, this record is kept up to date at all times and is available to any educational institution or qualified official upon request. Heads of department and professors are invited to use this service in placing their graduates.

The Bureau is located in Room 104, Stone Hall.

ON-CAMPUS EMPLOYMENT

The University maintains a placement service in the office of the Dean of Men for handling requests for part-time employment. Opportunities arise for normal types of student employment.

THE EXPERIMENTAL PROGRAM IN ELEMENTARY TEACHER EDUCATION

THE SCHOOL of Education at Cornell University has launched a five-year experiment in the professional preparation of elementary teachers, supported by a liberal grant from the Fund for the Advancement of Education of the Ford Foundation. Instead of the usual curriculum based on accepted courses, a selected group of students have begun their training as interns under the direction of carefully selected elementary teachers. Problems that arise in connection with the internships are considered in an integrated seminar participated in by members of the University staff, supervising teachers, state specialists, and the student teachers.

Students who participate in this project must be graduates of approved liberal arts colleges, who have not taken professional courses in education and have not had formal teaching experience. Each must qualify for admission to the Cornell Graduate School. Men or women with this background of liberal arts education who have the essential personal qualifications for elementary teaching and are interested in such an experimental approach for their professional preparation, may apply for fellowships. Personal interviews will be requested whenever possible. Fourteen fellowships of \$1800 each are available to those who meet these requirements. A few students who meet all requirements may be admitted on a nonfellowship basis without a financial grant. Those who complete the year of graduate work successfully will be recommended for a Master of Education degree at Cornell and will be recommended to their respective state departments of education for certification upon graduation.

Persons interested in becoming interns for the 1954-55 school year should apply immediately for admission to: Professor Claude Kulp, Elementary Teacher Education Program, Barnes Hall, Cornell University, Ithaca, N.Y.

THE EXTRAMURAL DIVISION

CCOURSES are available through the Division of Extramural Courses to students interested in part-time study. These include the regularly scheduled on-campus offerings for students who can commute to the campus as well as courses in off-campus centers located to suit the convenience of a sufficient number of students to warrant the offering. Graduate credit may be earned in these courses. Credit is recorded in the Registrar's office the same as for full-time students. A candidate for an advanced degree in Cornell University may have such credit applied toward requirements for the degree on recommendation of his Special Committee. Candidates for degrees in other institutions should be guided by the regulations in those institutions.

Residence credit toward advanced degrees in Cornell University may be earned through extramural registration as follows:

1. At the discretion of the student's Special Committee, fifteen credit hours of graduate study earned on campus and/or in off-campus centers may be accepted as one residence unit in fulfillment of the requirements for the Master's degree. Two residence units may be earned in this manner by candidates for the doctorate.

2. Credit hours may be accumulated to make a block of six hours or the equivalent of two-fifths of a residence unit, the smallest fraction that will be recorded by the Graduate School toward fulfillment of the residence requirement for a degree. When a full unit of residence credit is earned through extramural registration the last three of the fifteen required hours also will be recorded.

3. The manner of satisfying the remainder of the residence requirement for a degree varies according to the degree. Students should consult the statement of residence requirements for the particular degree in question.

Students who wish to register for courses through the Division of Extramural Courses should apply for information to the Director of the Division, 207 Stone Hall.

THE SUMMER SESSION

THE Administrative Board of the Summer Session offers academic instruction for both graduates and undergraduates by members of the faculties of the Graduate School, of the Colleges of Arts and Sciences, Engineering, Agriculture, and Home Economics, and of the Schools of Education, Industrial and Labor Relations, and Hotel Administration.

This unification of the curricula and faculties of the several schools and colleges makes possible the adaptation of academic work to the special needs of summer students. Undergraduate courses are equivalent to required and elective collegiate courses leading to the baccalaureate. Advanced courses, seminars, and informal study, treating topics of concern to students with special interests, are designed with particular regard for what can satisfactorily be treated in a short term and in the summertime. The needs of teachers are met not only in the workshops, seminars, and professional courses in education, but also in departmental courses. A number of unit programs and special courses are offered for professional workers other than teachers.

All necessary facilities of the University are available to students registered in the Summer Session: libraries, classrooms, and laboratories; residence halls, dining rooms, and cafeterias; health services and medical care; counseling services; student union, chapel, playing fields, and recreational areas.

The Summer Session's purpose is to place the facilities of the University at the disposal of persons who can use them to good advantage and for serious purposes during the summer period. Admission will not be granted to persons who are inadequately trained for the work they propose, or whose records in Cornell University or elsewhere are unsatisfactory. Nor will admission be granted to persons whose purposes seem inadequate or inappropriate or better served by other work at other institutions.

The *Announcement of the Summer Session* and application forms for admission are available from the Director of the Summer Session. A student planning to become a candidate for an advanced degree from Cornell University should apply for admission not only to the Director of the Summer Session but also to the Dean of the Graduate School.

Registration for the six-week Summer Session in 1954 will take place July 6, and classes will begin July 7, extending through August 14.

THE UNIVERSITY TESTING AND SERVICE BUREAU

THE Bureau is designed to provide equipment and an organization whereby the various resources in the University can be utilized in the study of educational problems. These problems may arise in such areas as curriculum planning, testing and evaluation, administration and supervision, personnel management, youth adjustment, counseling, and psychological foundations of education. They may exist in any of the various colleges of the University, in the public schools, or in the communities of the state. In addition to the coordination of research, the Bureau offers statistical and clerical assistance to the staff and graduate student in their independent research studies.

The Bureau maintains an educational and vocational testing service for students referred by counselors of the Colleges, the Dean of Men, and the Dean of Women. Persons not enrolled at Cornell University may obtain such service upon referral from Professor A. G. Nelson, 215 Stone Hall.

Other forms of service include the maintenance of information concerning schools and colleges and related matters, teaching aids for use by the staff in the preparation of teachers, an extensive library of psychological and educational tests, and a small selected library of technical books and films dealing with research in education and psychology. There are numerous opportunities for graduate students in education to obtain practical experience in the various activities of the Bureau as part of their programs of study. Arrangements for such experience are made through the Director of the Bureau and the student's advisory committee.

Programs of reading improvement are conducted on a group basis for students within the University found to be in need of such training who request this service through their advisers.

Effort is made to offer educational service in harmony with recognized needs and developments. For that purpose suggestions as to improvement of the Bureau's program are constantly solicited.