Interlude Programs in U.S. Undergraduate Education

Terrence Cullinan

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INTERLUDE RESEARCH PROGRAM

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By:

Terrence Cullinan

National Information Center
for Service Learning
1954 Buford Ave, Room R290
St. Paul, MN 55108-6197

REPORT NUMBER: IRP-1

DECEMBER 1969

IRP DIRECTORS • TERRENCE CULLINAN • JANET ABRAMS

INTERLUDE RESEARCH PROGRAM
Post Office Box 423
Menlo Park, California 94025

NSLC
c/o ETR Associates
4 Carbonero Way
Scotts Valley, CA 95066
INTERLUDE PROGRAMS IN U.S. UNDERGRADUATE EDUCATION

By:

Terrence Cullinan

Prepared under a Grant from
the Internal Research and Development Program
of the Stanford Research Institute (SRI)

REPORT NO. IRP-1

DECEMBER 1969
The Interlude Research Program was initiated in 1969 with the stated objective of carrying out introductory research into:

* The present extent of, and status of, formal off-campus experiences as part of a college or university educational program in the U.S.

* The impact of such experiences on student participants' subsequent formal academic training.

Initiating funds were provided by the Internal Research and Development (IR&D) program of Stanford Research Institute, Menlo Park, California, under the leadership of SRI research executives Harry V. Kincaid and Harvey L. Dixon.

Four reports were produced in 1969. These included:

1. Interlude Programs in U.S. Undergraduate Education.

Results of a survey of all U.S. undergraduate institutions to determine their attitudes toward and present activities concerning "interlude" portions of an academic program. Responses from 917 U.S. colleges and university programs are included and analyzed.

2. Agenda for Interlude Learning Experiences.

Findings of an in-depth study of ongoing interlude programs, and suggestions for development of an agenda for institutions considering implementing such programs in a formal way. Covers both theoretical and practical problems of problem establishment and operation.

3. Attitudes of Returned VISTA Volunteers Concerning Impact of VISTA Interlude on Subsequent Academic Work

4. Attitudes of Returned Peace Corps Volunteers Concerning Impact of Peace Corps Interlude on Subsequent Academic Work

Reports covering results of surveys undertaken in mid-1969 of former VISTA and Peace Corps volunteers describing the perceived value of their experiences on subsequent education.

Directors of the Interlude Research Program for 1969 have been Terrence Cullinan and Janet F. Abram. Persons who have contributed to Program activities in a substantial way include David Ackerman, Mary E. Elsbach, Madeline B. Vivian, and Leatrice P. Wickert.
A survey was undertaken in the spring of 1969, as part of the Interlude Research Program, to (a) determine the attitudes of U.S. undergraduate institutions towards incorporation of formal off-campus experiences (academic interludes) as part of their educational program; (b) learn something about the current extent of ongoing interlude programs; (c) indicate some of the parameters of the ongoing programs; and (d) discover how some of those concerned with ongoing programs on individual campuses rate their own programs. The survey, based on responses to a questionnaire sent to as many four-year undergraduate (college and university) institutions as could be identified, resulted in the following general conclusions:

1. The incorporation of an interlude program into standard curricula has not yet been formally considered at a substantial majority of respondent institutions.

2. Where formal action has been taken on specific interlude initiation proposals, a very high percentage of proposal acceptance has occurred.

3. Most respondent interlude programs are experienced by a relatively small percentage of the institution's total undergraduate student body.

4. Most ongoing respondent programs have been in operation for a relatively short time.

5. Ongoing programs are seen by respondents as strongly favorable to development of student participants, and as widely approved both by students from the same campus who do not participate in the interlude opportunity and by those external to the campus who are familiar with them.

A total of 917 institutions responded to the survey. In addition to questionnaire results, this report discusses major interlude models, some ongoing research, and some political proposals concerning comprehensive programs for interlude activities which would involve all young people.
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School administrators (must) wake up to the healthy new needs of student participation and incorporate that activity into the learning process.

Richard M. Nixon
Radio Address of
October 17, 1968
I THE ACADEMIC INTERLUDE AS EXPERIENTIAL LEARNING

Pressures of the latter 1960's on colleges and universities in the United States have focused attention rather sharply on the very nature of education and the learning process. The academic community has responded in a variety of ways. One concept which has received considerable discussion is that of the academic interlude—defined, briefly, as experiential education which takes place off-campus, full-time, interspersed between periods of standard formal on-campus education on one or more occasions.

Academic Interlude Programs Defined

Any off-campus experience could theoretically be termed an academic interlude. For purposes of this study, interlude programs are defined as those which:

1. Require the student participant to live off-campus at least once for one consecutive month or more;

2. Are experiential non-classroom programs (i.e., not consisting primarily of formal classroom activities such as exchange programs or some study abroad); and,

3. Are formally linked to the educational offerings of the college or university.

A wide variety of programs obviously qualifies under these definitions. Independent study, community or societal action activities, and employer intern interludes can all satisfy these criteria in some cases. Programs may be compulsory (required of all students), selective (required of students in some fields), or completely voluntary. They can be of short (as long as the four weeks minimum is met) or of long duration. And they may be well or poorly organized.

Irrespective of these possible differences, off-campus experience is a consistent component of the academic interlude as defined above. On campus, even in a completely independent study program or a quasi-employment situation, the normal relatively isolative academic environment and pecking order familiar to the student remain. Off campus, the experiential form of learning becomes possible. With protective forces and the academic hierarchy absent, the student encounters a very different learning environment in the so-called "real world."
The Rationale for Experiential Learning

Experiential learning has at least three characteristics which differentiate it from the usual patterns of on-campus learning. These are:

1. Specific knowledge is gained through confrontations with real rather than theoretical or laboratory problems;

2. General knowledge of the problems, difficulties, demands, unreasonableness, and rewards of adult society is gained through experiencing that society rather than simply criticizing it from the comfort of a relatively closed peer group existence.

3. Attainment of personal growth and maturity are enhanced through the self-reliance and enterprise necessary in being on one's own away from either home or campus.

Experiential learning has had strong supporters since the beginning of the 20th century. William James declared these to be an irreplaceable value of experience and emotion in cognitive learning. In his philosophy, education limited to rational accumulation of facts was not adequate education. Through such rational study, the student learned to know about things, but he could not learn to know them. True cognition was dependent on experiencing as well as memorizing.* The educational philosopher John Dewey, noting the substantial learning achieved during the undirected activities of pre-school children, advocated the provision of much more sophisticated but essentially analogous opportunities for experiential learning at all levels of educational development.**


The U.S. Peace Corps and VISTA programs are among contemporary organizational proponents of experiential learning.* And the real or perceived values of experiential education may be beginning to reach the attention of the teaching profession at large and perhaps the general public as well. In a Life magazine survey in mid-May, 1969, 77 per cent of teachers and 48 per cent of parents interviewed thought students should do more fieldwork outside of formal school programs.

The Effective Interlude Program

The effective interlude program, whatever its nature, will satisfy the experiential learning rationale. More than that, it will almost certainly have a number of operational factors which are prerequisites to effectiveness. Foremost among these are (a) strong commitment of the college or university to the program, whether required for graduation or optional; (b) competent faculty with an equal strong commitment; (c) sound counselling for student participants; (d) adequate field supervision for those participants; and (e) sufficient funding for program operation.

Some of these matters are discussed elsewhere in this report series.** This particular report examines the extent to which interlude programs exist in U.S. undergraduate education at the present time, and attempts to provide some information on how those involved with on-going programs view them.

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* Two reports of this report series deal with the attitude of returned Peace Corps and VISTA volunteers concerning the impact of their interlude on subsequent academic work. Basically, these impacts are seen by respondents as strongly favorable, and the experience itself is perceived as giving much higher experiential education value to the participant than the value of the service given to others.

** A fourth report in this series discusses the "nuts and bolts" requirements which should be considered in establishing an interlude program.
II SOME STANDARD INTERLUDE MODELS

Before proceeding to a general survey of interlude programs in U.S. undergraduate education, it may be worthwhile to first outline some standard interlude models. These models are followed by numerous institutions in one way or another, and hence play important roles in the development of interlude theory and practice.

Three concepts are in particularly wide use. These are:

1. The Cooperative Education Program;
2. The College Work-Study Program; and,
3. The 4-1-4 Program

Each of these will be briefly discussed in this chapter. Length of treatment of each is based primarily on the temporal history and contemporary extent of each program.

The Cooperative Education Program

"Cooperative Education" is the system of college (and occasionally graduate) education whereby students go to school on-campus for one period and then go off-campus, full-time, for the next, on a continuing basis throughout their undergraduate years. Because the off-campus activities of many of these students require the cooperation of individuals or organizations not directly associated with the undergraduate institution, the term "cooperative education" is used. Five instead of the usual four years is generally required to complete an undergraduate education. Off-campus activities are scheduled to take advantage of student capabilities and experiential needs.

There are presently some 141 U.S. colleges and universities with a cooperative education program, as indicated in Illustrations 1 and 2. Generally, these programs are voluntary and have between 10 and 30 per cent of the undergraduate student body participating in them. Some programs and some organizational participations are very large: Northeastern University (Boston) has 9,000 students in its cooperative education program at present and the Ford Motor Company utilizes more than 800 cooperative students at any one time.

Cooperative education has been growing rapidly since the middle 1960's. There have been, historically, three stages of growth: 1906-42, during which time 20 programs were started; 1943-62, during which an additional 50 began; and 1963-69, in which period 63 additional
As many of these 141 institutions, only some of the students are on the cooperative plan; it may be an optional plan, it may be offered in a departmental academic major, or it may be an honors plan. The interested student should write to the Admissions Office of the college or university in his choice requesting information about their program, and to secure specific information about the requirements for admission, scholarships and possible financial assistance.

**ALABAMA**
- Alabama Agricultural & Mechanical College, Normal
- Auburn University, Auburn
- Gadsden State Junior College, Gadsden
- Jefferson State Junior College, Birmingham
- Tuskegee Institute, Tuskegee Institute
- University of Alabama, University

**ARIZONA**
- University of Arizona, Tucson

**ARKANSAS**
- University of Arkansas, Fayetteville

**CALIFORNIA**
- California State College at Los Angeles
- California State Polytechnic College, Pomona
- College of San Mateo, San Mateo
- Foothill College, Los Altos Hills
- Golden Gate College, San Francisco
- San Jose State College
- University of California, Berkeley

**COLORADO**
- University of Denver

**CONNECTICUT**
- Central Connecticut State College, New Britain

**DISTRICT OF COLUMBIA**
- Howard University, Washington
- The American University, Washington

**FLORIDA**
- Florida A & M University, Tallahassee
- Florida State University, Tallahassee
- Florida Technological University, Orlando
- Monroe Junior College, Bradenton
- Miami-Dade Junior College - South Campus, Miami
- Pascack Junior College
- University of Florida, Gainesville
- University of Miami, Coral Gables
- University of South Florida, Tampa
- University of West Florida, Pensacola

**GEORGIA**
- Berry College, Mt. Berry
- Georgia Institute of Technology, Atlanta

**IDaho**
- University of Idaho, Moscow

**ILLINOIS**
- Bradley University, Peoria
- College of Du Page, Naperville
- Illinois Institute of Technology, Chicago
- Northwestern University, Technological Institute, Evanston
- Roosevelt University, Chicago
- Southern Illinois University, Carbondale
- Triton College, Melrose Park
- University of Illinois, Urbana
- Wilson Campus of Chicago City College

**LOUISIANA**
- Louisiana Polytechnic Institute, Ruston
- Louisiana State University, Baton Rouge
- Tulane University, New Orleans

**MASSACHUSETTS**
- Cambridge School, Boston
- Massachusetts Institute of Technology, Cambridge
- Northeastern University, Boston
- University of Massachusetts, Amherst

**MICHIGAN**
- Central Michigan University, Mt. Pleasant
- Delta College, University Center
- Detroit Institute of Technology, Detroit
- Ferris State College, Big Rapids
- General Motors Institute, Flint
- Grand Rapids Junior College, Grand Rapids
- Kalamazoo College, Kalamazoo
- University of Detroit
- University of Michigan, Dearborn
- Western Michigan University, Kalamazoo

**MINNESOTA**
- Concordia College, Moorhead
- University of Minnesota, Minneapolis

**MISSISSIPPI**
- Jackson State College, Jackson
- Mississippi State College, State College

**MISSOURI**
- Rockhurst College, Kansas City
- University of Missouri, Columbia
- University of Missouri at Rolla

**NEW JERSEY**
- Bloomfield College, Bloomfield
- Rider College, Trenton
- Rutgers University, New Brunswick

**NEW MEXICO**
- New Mexico Institute of Mining & Technology, Socorro
- New Mexico State University, Las Cruces

**NEW YORK**
- Adelphi University, Garden City
- Bard College, Annandale-on-Hudson
- Binghamton University, New York City
- City College of the City University of New York, N.Y.C.
- College of Insurance, New York City
- Cornell University, Ithaca
- Elmira College, Elmira
- Fashion Institute of Technology, New York City
- Keuka College, Keuka Park
- Mohawk Valley Community College, Utica
- Nassau Community College, Garden City
- N.Y.C. Community College of Applied Science & Arts, Brooklyn
- Pratt Institute, Brooklyn
- Rensselaer Polytechnic Institute, Troy
- Rochester Institute of Technology, Rochester
- Westchester Community College, Valhalla
Illustration 1 (continued)

PA

Pennsylvania
Drexel Institute of Technology, Philadelphia
St. Joseph's College, Philadelphia
Temple University Technical Institute, Philadelphia
The Pennsylvania State University, University Park

Rhode Island
Roger Williams Junior College, Providence

Tennessee
Tennessee A & I State University, Nashville
Tennessee Technological University, Cookeville
University of Tennessee, Knoxville

Texas
Lamar State College of Technology, Beaumont
Southern Methodist University, Dallas
Texas A & M University, College Station
University of Houston
University of St. Thomas, Houston
University of Texas at Arlington
University of Texas, Austin

Ohio
Antioch College, Yellow Springs
The Cleveland State University, Cleveland
(formerly Fenn College)
Kent State University, Kent
Ohio College of Applied Science, Cincinnati
Sinclair Community College, Dayton
University of Akron
University of Cincinnati
Wilberforce University, Wilberforce
Wilmington College, Wilmington

Oregon
Lane Community College, Eugene
Oregon State University, Corvallis
Southern Oregon College, Ashland

Vermont
Bennington College, Bennington
Goddard College, Plainfield

Virginia
Hampton Institute, Hampton
Virginia Polytechnic Institute, Blacksburg
Virginia State College, Petersburg

Washington
Washington State University, Pullman

West Virginia
Alderson-Broaddus College, Philippi
West Virginia University, Morgantown

Wisconsin
Beloit College, Beloit
Marquette University, Milwaukee
Milwaukee School of Engineering, Milwaukee
Stout State University, Menomonee Falls
University of Wisconsin - Milwaukee, Milwaukee
Wisconsin State University - Platteville, Platteville

Indiana
Indiana Institute of Technology, Fort Wayne
Indiana Northern University, University Park
Indiana State University, Terre Haute
Purdue University, Lafayette
Purdue University at Indianapolis
St. Joseph's College, E. Chicago
Tri-State College, Angola
University of Evansville

Iowa
Iowa State University, Ames

Kansas
Friends University, Wichita
Kansas State University, Manhattan

Kentucky
University of Louisville
Western Kentucky University, Bowling Green

Source: National Commission for Cooperative Education
<table>
<thead>
<tr>
<th>COOPERATIVE EDUCATION INSTITUTIONS BY FIELDS OF STUDY OFFERED</th>
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</table>

**ENGINEERING AND TECHNOLOGY** - University of Akron, University of Alabama, Alabama Agricultural & Mechanical College, Antioch College, University of Arizona, Auburn University, Orange College, California State College at Los Angeles, California State Polytechnic Institute, University of California at Berkeley, University of Cincinnati, The Cleveland State University, College of San Mateo, Cornell University, College of Denver, Detroit Institute of Technology, University of Detroit, Drexel Institute of Technology, University of Evansville, University of Florida, Florida State University, Foothill College, Gadsden State Junior College, General Motors Institute, Georgia Institute of Technology, Hampton Institute, Howard University, Houston University, University of Idaho, University of Illinois, Illinois Institute of Technology, Indiana Institute of Technology, Iowa State University, Kansas State University, Lamar State College of Technology, University of Louisville, Louisiana Polytechnic Institute, Louisiana State University, Marquette University, Massachusetts Institute of Technology, University of Michigan, Milwaukee School of Engineering, University of Minnesota, Mississippi State University, University of Missouri at Columbia, University of Missouri-Rolla, Mohawk Valley Community College, New Mexico Institute of Mining & Technology, New Mexico State University, Northeastern University, Northwestern University, Ohio College of Applied Science, Oregon State University, Pennsylvania State University, Pensacola Junior College, Pratt Institute, Purdue University, Purdue University at Indianapolis, Rensselaer Polytechnic Institute, Rochester Institute of Technology, Roger Williams Junior College, Saint Joseph's College, San Jose State College, Sinclair Community College, University of South Florida, Southern Illinois University, Southern Methodist University, St. Louis University, Temple University, University of Tennessee, Tennessee Technological University, University of Texas at Arlington, University of Texas at Austin, Texas A&M University, Tri-State College, Tulane University, Tuskegee Institute, Virginia Polytechnic Institute, Washington State University, West Virginia University, University of Wisconsin-Milwaukee, Wisconsin State University-Platteville.

**LIBERAL ARTS** - University of Alabama, Alderson-Broaddus College, Antioch College, Auburn University, Bard College, Beloit College, Bennington College, Bloomfield College, California State College at Los Angeles, Cleveland State University, College of Insurance, Elmhurst College, Friends University, Goddard College, Golden Gate College, Illinois Institute of Technology, Jefferson State Junior College, Kalamazoo College, Keuka College, Manatee Junior College, Miami-Dade Junior College, University of Michigan, Mississippi State University, Northeastern University, Sinclair Community College, Southern Illinois University, University of South Florida, Virginia State University, University of West Florida, Wilberforce University.

**SCIENCE** - University of Alabama, Alderson-Broaddus College, The American University, Antioch College, University of Arizona, Auburn University, Beloit College, Berry College, California State College at Los Angeles, Central Connecticut State College, The Cleveland State University, Delta College, Drexel Institute of Technology, Florida A&M University, University of Florida, Florida State University, Georgia Institute of Technology, Goddard College, University of Houston, Illinois Institute of Technology, Indiana University, Indiana University, Jackson State College, Kalamazoo College, Lake Superior College, Lane Community College, Mississippi State University, Manatee Junior College, Miami-Dade Junior College, University of Missouri at Rolla, New Mexico Institute of Mining & Technology, New Mexico State University, Northeastern University, Pratt Institute, Rochester Institute of Technology, South Florida, Southern Illinois University, Southern Oregon College, Texas A&M University, University of St. Thomas, University of West Florida, Virginia Polytechnic Institute, Wilberforce University.

**BUSINESS** - Adelphi University, Graduate only, University of Alabama, Alabama Agricultural & Mechanical College, Alderson-Broaddus College, Antioch College, Auburn University, Borough of Manhattan Community College, California State College at Los Angeles, Cambridge School, Central Connecticut State College, University of Cincinnati, City College of New York, The Cleveland State University, College of Insurance, College of San Mateo, Concordia College, University of Detroit, Detroit Institute of Technology, Delta College, Drexel Institute of Technology, Ferris State College, Golden Gate College, Grand Rapids Junior College, Hampton Institute, Illinois Institute of Technology, Indiana State University, Jackson State College, Kent State University, University of Miami, Michigan State University, Mohawk Valley Community College, Nassau Community College, New Mexico State University, N.Y.C. Community College of Applied Science & Arts, Northeastern University, Rider College, Rochester Institute of Technology, Rockhurst College, Sinclair Community College, University of South Florida, Southern Illinois University, Southern Methodist University, Southern Oregon College, St. Louis University, University of Tennessee, Tennessee Technological Institute, Tri-State College, Virginia Polytechnic Institute, Western Kentucky University, University of West Florida, Western Michigan University, Wilberforce University, University of Wisconsin-Milwaukee.

**EDUCATION** - Alderson-Broaddus College, Antioch College, Beloit College, California State College at Los Angeles, Central Michigan University, The Cleveland State University, Delta College, Drexel Institute of Technology, Keuka College, Mississippi State University, New Mexico State University, Northeastern University, Rutgers University, University of South Florida, Southern Oregon College, St. Louis University, University of Tennessee, University of West Florida, Wilberforce University, University of Wisconsin-Milwaukee.

**NURSING** - Alderson-Broaddus College, Northeastern University, Keuka College.

**PHARMACY** - Auburn University, Northeastern University.

**PRE-MED** - The Cleveland State University, Northeastern University, Southern Oregon College, University of Tennessee.

**HOME ECONOMICS (Including Dietetics)** - Drexel Institute of Technology, Stout State University, Tennessee Technological Institute, University of Houston, University of Massachusetts, New Mexico State University, Westchester Community College.

**ADVERTISING DESIGN** - University of Cincinnati, Drexel Institute of Technology, Mohawk Valley Community College.

**INDUSTRIAL DESIGN (Fashion and Interior)** - Auburn University, University of Cincinnati, Drexel Institute of Technology, Fashion Institute of Technology, University of Massachusetts, Mohawk Valley Community College.

**ARCHITECTURE** - University of Cincinnati, University of Detroit.

**COMMUNITY PLANNING** - University of Cincinnati.

**AGRICULTURAL SCIENCE** - Mississippi State University, Southern Oregon College.

Source: National Commission for Cooperative Education
institutions adopted some cooperative program. There are reportedly more than 200 institutions waiting for enactment of funds budgeted in President Johnson's final budget to supply other schools desiring coop options with capital for implementation. In the neighborhood of $75,000 could be made available to each of the 200 schools for program design and startup under Part IV-D of the 1968 amendments to the Higher Education Act.

Current Extent of Cooperative Programs

More than 70,000 college and university students are currently participating in some sort of coop program. Those whose off-campus periods include remuneration from corporations, organizations, or others, earn cumulatively more than $125 million a year toward the cost of their higher education. Length of the off-campus interludes vary from as little as 13 weeks to as much as two years. As part of his undergraduate education program, any one student may undertake from one to as many as six different activities.

Cooperative education began at the University of Cincinnati in 1906 when engineering students were placed in industrial roles to learn the practical as well as theoretical aspect of their profession. Antioch College (Ohio) in 1921 extended the concept to non-engineering students, and now requires all of its approximately 1800 students to undertake a series of off-campus interludes of at least three months each prior to graduation. Interlude experiences have included activities as probation assistants, newsroom copyboys, overseas teachers, and independent poetry writing where such experiences were judged related to participants' theoretical on-campus education. Cooperative education in general is still particularly strong in engineering fields, but there have been substantial increases during the 1960's in the number of programs related to education, business, liberal arts, and other non-technical areas.

Those students who need the coop income earn a healthy amount as individuals. Engineering students nationwide average some $9,000 in total earnings while in coop programs. (Georgia Institute of Technology's 1,000 engineering coop students combined earn about $3,000,000 annually, an average of $3,000 each. Its president says that if Georgia Tech had to provide scholarship funds equal to these earnings, the school would need an additional $75,000,000 in endowment. Liberal arts coop students average about $7,000 in total undergraduate years earnings. Studies have shown that conventional
college students do not, on the average, earn as much as do coop students, who both have the aid of their institution in finding suitable positions and do not all seek jobs in the summer.

Coop administrators point out that while these funds in many cases help students to finance their education, the purpose behind all cooperative programs is education, and not finance.

As expressed by Dean Roy L. Wooldridge of Northeastern's cooperative program, the nation's largest:

"The big purpose of cooperative education is enrichment of experience; incidentally students earn money. Cooperative education is based on the principle that well-educated individuals can be best developed through an educational pattern which, at periodic intervals, dips them into the reality of the world beyond the boundaries of the campus. Through these controlled and structured experiences the students bring an enrichment to the classroom which enhances their total development."

Program Characteristics from Institutional and Off-Campus Viewpoints

Cooperative education may bring some practical benefits to institutions which sponsor it. With a sizeable number of students away from the campus at all times, physical facilities can serve a considerably expanded number of students. As Dean Wooldridge puts it:

"We at Northeastern University have 9,000 students on the cooperative plan. If the plan were dropped, the next Monday morning 4,500 of our students would have no place to sit."

Institutional equipment expenditures may be reduceable under cooperative education. Corporation participants in the off-campus interlode phase have pointed out that since companies' equipment must generally be extremely modern, the university can be relieved to some extent of the necessity of purchasing expensive contemporary equipment which becomes obsolete within a few years. Of course, there are some increased costs associated with a coop program, particularly in provision of the full-time coordinators who provide liaison between the institution and cooperating off-campus interludes, and keep active
contact with both the academic and off-campus worlds. On balance, though, studies have shown that savings outweigh the costs.

Cooperative education can also benefit off-campus entities in a number of ways. Among these are: (a) provision of manpower; (b) opportunity (for corporations and other organizations) for recruitment of working coop students after a leisurely two-way lookover process; (c) a continuing relationship with new academically-based techniques; and (d) a chance to assist academic institutions in a self-serving way. Data is not available on long-run benefits to nonbusiness organizations from coop participation, but several studies have shown that students tend to join business organizations with whom they have spent one or more off-campus interlude periods. A University of Cincinnati survey found over 60 per cent of Cincinnati engineering graduates taking career employment with one of their off-campus organizations—a very high proportion, since many of the other 40 per cent went into either the armed services or graduate school.

The Ford Motor Company has kept careful records of its coop participants since 1960. Nearly 60% of the more than 1,000 Ford coop students between 1960 and 1969 came to work permanently at the company after graduation. As mentioned earlier, Ford now has some 800 coop students who have not yet graduated working with company personnel; 57 different schools are represented in this group. The quality of graduates of the coop programs, as measured by academic achievement, has always compared favorably with college graduates hired through Ford’s regular on-campus recruitment program (average grade point for coop hires in 1968 was 2.34 on a four-point scale). Other Ford studies reportedly have shown that 70 per cent of coop students hired upon graduation remain with Ford at least five years and that longer-term retention rates are also high compared with those of other employees.

The recruiting cost to organizations for recruiting the coop student has also been found relatively low compared to other hires, since companies using coop students have part of their screening done for them by the college or university. Certain industries—the power industry, for example—have reportedly found use of coop students a means of "selling" themselves vs. the glamour industries like electronics. The benefits are, of course, two-way. Antioch refers to the 500 business and professional organizations which currently engage that College’s coop students as "our field faculty."

Cooperative education may attract students from lower socio-economic groups, where families do not have a tradition of going to
college, to a greater extent than do traditional courses. According to George E. Probst, Executive Director of the National Commission for Cooperative Education:

"About one third of cooperative students and graduates come from the lowest socio-economic third of the population, contrasted with about 20 per cent of the students and graduates of traditional colleges... they and their parents can see more sense in this kind of education... this lessens the temptation to get a job right after high school.

"But cooperative education has also proved its worth for students who do not need to rely on the earnings potential of the program. Two thirds of the cooperative students come mostly from middle-class families, with a minority from upper-class homes."

Those who may initially be attracted solely by cooperative education's fiscal benefits often find the primary educational purpose as relevant to them as to others not so financially concerned. A Tennessee coop student has said that cooperative education "... makes me want to learn more, and that's something I couldn't have said before. Now I'm beginning to understand the true purpose of the program and its real value, the $$'s are rapidly being replaced by ????'s"

Research on the Impacts of Cooperative Education

A study of cooperative education was carried out in 1958-60 to evaluate its impact on participants. Dr. Ralph W. Tyler, Chairman of the National Commission for Cooperative Education, was chairman of the two-year study. He has summarized study findings as:

"Cooperative education gives a student an education qualitatively superior in some respects to a conventional college education. Comparative students become more mature; and their records in graduate school in employment show that cooperative education is a first-rate education."

Among the advantages for cooperative education when compared to standard curricula as found through this study were: (a) closer inter-relationship of academic theory and practice; (b) greater student development of human relations skills; and, (c) stronger student motivation toward studies. Coop and non-coop students were shown to be
similar in academic ability and achievement (as the Ford Motor Company studies have also found). Cooperative students felt they had had greater opportunity to practice the application of concepts and principles to concrete situations than other undergraduates had felt. Seventy per cent of coop student respondents found the relationship between concept and practical experience strong, and about the same percentage agreed that the cooperative experience produced greater involvement in and motivation for academic work.

Trend for Near-Term Future

The near-term future of cooperative education appears likely to be one of continued growth. In addition to the Government funds which should become available in fiscal 1971, the Ford Foundation is supporting some new programs. Selective service has granted coop students draft deferments. The whole coop philosophy may benefit from undercurrents for "student power" and for "relevance" in education. The idea of academic and other communities working together to mutual advantage should be quite compatible with the Nixon administration's concern with creating partnerships of private and public interests.

At least three organizations currently serve as clearing houses for information on cooperative education principles and techniques. They are:

The National Commission for Cooperative Education
52 Vanderbilt Avenue
New York City, New York 10017;

The Cooperative Education Association
Drexel Institute of Technology
Philadelphia, Pennsylvania 19104; and

The Center for Cooperative Education
Northeastern University
Boston, Massachusetts

The Center, established in 1965, provides consulting services for colleges and universities which have adopted cooperative education or are

* Wilson, James W., and Edward H. Lyons: Work Study College Programs (New York: Harper and Brothers, 1961; copyright Thomas Alva Edison Foundation.)
interested in it.* The Association is the professional society for both faculty specializing in cooperative education and off-campus utilizers of coop students. It publishes a biannual Journal of Cooperative Education summarizing ongoing research and developments.

The College Work-Study Program

The College Work-Study Program (CWSP) provides through Federal government sources the substantial part (80 to occasionally 90 per cent) of funds paid qualifying students for part-time or summer employment with either (a) their college, or (b) an off-campus public agency or private non-profit enterprise. Off-campus activity is required to be in the public interest. This program, initiated in 1964**, was envisioned as serving two purposes: (a) providing financial assistance to needy students and (b) involving these students in meaningful community activities. Approximately $255 million is authorized to be appropriated for the fiscal year ending June 30, 1970 and $285 million for that ending June 30, 1961. More than 2,000 colleges and universities in the U.S. currently share in these funds (see illustrations 3 and 4), and some 350,000 students have the opportunity through CSWP to work on or off the campus during their college career. Funds for different types of activity are available on a pay scale comparable to that in the local community, which in practice ranges from about $1.30 to about $3.50 per hour.

* An excellent source reference for the coop student is The Student in Society, by Dr. D. Keith Lupton (Littlefield, Adams & Co.; Totowa, New Jersey; 1969; 344pp.). It contains articles by nearly 40 educators, employers, and government officials, and deals with all aspects of the cooperative experience. It has the particular added attraction of being "cooperatively" priced, at $4.95.

** These is some difference between cooperative education programs and the work-study program. As explained by Dr. Lupton in his book (see above): "Many cooperative education programs were for years referred to as 'work-study' programs, reflecting the alternation of terms of work with terms of study . . . (because of the CWSP), the term 'work-study' now implies student financial aid to the needy students and such programs, while very worthwhile and beneficial, are not cooperative education programs. Cooperative education programs are educationally motivated with financial advantages considered as fringe benefits. Work-study programs are financially motivated with educational value a fringe benefit." If new U.S. Commission of Education James Allen Jr., has his way, however, (see continuation of text) this distinction may become increasingly blurred.
# State-by-State Analysis of CWSP Grants

**July 1, 1969 – December 31, 1969**

<table>
<thead>
<tr>
<th>State</th>
<th>1969</th>
<th>1968</th>
<th>Change 1969 % of 1968</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALABAMA</td>
<td>$2,576,668</td>
<td>$1,782,172</td>
<td>44.5%</td>
</tr>
<tr>
<td>ALASKA</td>
<td>133,844</td>
<td>65,321</td>
<td>104.9%</td>
</tr>
<tr>
<td>ARIZONA</td>
<td>856,363</td>
<td>711,477</td>
<td>120.3%</td>
</tr>
<tr>
<td>ARKANSAS</td>
<td>1,869,023</td>
<td>1,573,204</td>
<td>118.8%</td>
</tr>
<tr>
<td>CALIFORNIA</td>
<td>10,220,954</td>
<td>7,455,118</td>
<td>137.0%</td>
</tr>
<tr>
<td>COLORADO</td>
<td>1,488,121</td>
<td>1,120,927</td>
<td>132.7%</td>
</tr>
<tr>
<td>CONNECTICUT</td>
<td>1,224,327</td>
<td>1,018,251</td>
<td>120.2%</td>
</tr>
<tr>
<td>DELAWARE</td>
<td>141,163</td>
<td>173,883</td>
<td>81.1%</td>
</tr>
<tr>
<td>D. C.</td>
<td>906,839</td>
<td>338,233</td>
<td>267.8%</td>
</tr>
<tr>
<td>FLORIDA</td>
<td>2,767,480</td>
<td>1,957,226</td>
<td>141.3%</td>
</tr>
<tr>
<td>GEORGIA</td>
<td>1,897,108</td>
<td>1,293,104</td>
<td>146.7%</td>
</tr>
<tr>
<td>HAWAII</td>
<td>399,495</td>
<td>240,587</td>
<td>166.0%</td>
</tr>
<tr>
<td>IDAHO</td>
<td>401,491</td>
<td>332,887</td>
<td>120.6%</td>
</tr>
<tr>
<td>ILLINOIS</td>
<td>3,933,688</td>
<td>3,848,506</td>
<td>102.2%</td>
</tr>
<tr>
<td>INDIANA</td>
<td>1,744,989</td>
<td>1,457,736</td>
<td>119.7%</td>
</tr>
<tr>
<td>IOWA</td>
<td>1,409,829</td>
<td>1,194,601</td>
<td>118.0%</td>
</tr>
<tr>
<td>KANSAS</td>
<td>1,186,820</td>
<td>978,994</td>
<td>121.2%</td>
</tr>
<tr>
<td>KENTUCKY</td>
<td>1,713,068</td>
<td>1,579,372</td>
<td>108.4%</td>
</tr>
<tr>
<td>LOUISIANA</td>
<td>1,970,513</td>
<td>1,648,010</td>
<td>119.5%</td>
</tr>
<tr>
<td>MAINE</td>
<td>599,761</td>
<td>478,974</td>
<td>125.2%</td>
</tr>
<tr>
<td>MARYLAND</td>
<td>1,082,731</td>
<td>853,114</td>
<td>126.9%</td>
</tr>
<tr>
<td>MASSACHUSETTS</td>
<td>5,182,142</td>
<td>3,507,862</td>
<td>147.7%</td>
</tr>
<tr>
<td>MICHIGAN</td>
<td>3,538,808</td>
<td>2,907,969</td>
<td>121.6%</td>
</tr>
<tr>
<td>MINNESOTA</td>
<td>2,150,169</td>
<td>1,568,109</td>
<td>137.1%</td>
</tr>
<tr>
<td>MISSISSIPPI</td>
<td>2,238,181</td>
<td>1,573,392</td>
<td>142.2%</td>
</tr>
<tr>
<td>MISSOURI</td>
<td>2,254,088</td>
<td>1,716,345</td>
<td>131.3%</td>
</tr>
<tr>
<td>MONTANA</td>
<td>2,249,413</td>
<td>1,860,429</td>
<td>120.9%</td>
</tr>
<tr>
<td>NEBRASKA</td>
<td>800,480</td>
<td>756,785</td>
<td>105.7%</td>
</tr>
<tr>
<td>NEVADA</td>
<td>212,879</td>
<td>153,690</td>
<td>138.5%</td>
</tr>
<tr>
<td>NEW HAMPSHIRE</td>
<td>544,196</td>
<td>367,343</td>
<td>148.1%</td>
</tr>
<tr>
<td>NEW JERSEY</td>
<td>2,326,422</td>
<td>2,023,512</td>
<td>114.9%</td>
</tr>
<tr>
<td>NEW MEXICO</td>
<td>910,077</td>
<td>604,861</td>
<td>150.4%</td>
</tr>
<tr>
<td>NEW YORK</td>
<td>7,060,948</td>
<td>5,719,414</td>
<td>123.4%</td>
</tr>
<tr>
<td>NORTH CAROLINA</td>
<td>3,348,490</td>
<td>2,877,249</td>
<td>116.3%</td>
</tr>
<tr>
<td>NORTH DAKOTA</td>
<td>567,424</td>
<td>400,788</td>
<td>140.7%</td>
</tr>
<tr>
<td>OHIO</td>
<td>3,523,585</td>
<td>2,898,880</td>
<td>121.5%</td>
</tr>
<tr>
<td>OKLAHOMA</td>
<td>1,418,514</td>
<td>1,190,013</td>
<td>119.2%</td>
</tr>
<tr>
<td>OREGON</td>
<td>2,531,756</td>
<td>2,026,828</td>
<td>124.9%</td>
</tr>
<tr>
<td>PENNSYLVANIA</td>
<td>3,827,699</td>
<td>4,232,789</td>
<td>90.4%</td>
</tr>
<tr>
<td>RHODE ISLAND</td>
<td>443,338</td>
<td>319,420</td>
<td>138.7%</td>
</tr>
<tr>
<td>SOUTH CAROLINA</td>
<td>1,043,836</td>
<td>828,989</td>
<td>125.9%</td>
</tr>
<tr>
<td>SOUTH DAKOTA</td>
<td>565,648</td>
<td>392,232</td>
<td>144.2%</td>
</tr>
<tr>
<td>TENNESSEE</td>
<td>2,752,225</td>
<td>2,295,468</td>
<td>122.0%</td>
</tr>
<tr>
<td>TEXAS</td>
<td>5,568,463</td>
<td>4,712,246</td>
<td>118.1%</td>
</tr>
<tr>
<td>UTAH</td>
<td>798,666</td>
<td>735,646</td>
<td>108.5%</td>
</tr>
<tr>
<td>VERMONT</td>
<td>288,336</td>
<td>212,317</td>
<td>135.8%</td>
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<tr>
<td>VIRGINIA</td>
<td>1,358,592</td>
<td>979,497</td>
<td>38.7%</td>
</tr>
<tr>
<td>WASHINGTON</td>
<td>2,067,502</td>
<td>1,487,133</td>
<td>139.0%</td>
</tr>
<tr>
<td>WEST VIRGINIA</td>
<td>1,199,597</td>
<td>1,102,732</td>
<td>108.7%</td>
</tr>
<tr>
<td>WISCONSIN</td>
<td>2,845,802</td>
<td>2,041,511</td>
<td>129.6%</td>
</tr>
<tr>
<td>WYOMING</td>
<td>334,412</td>
<td>212,134</td>
<td>157.6%</td>
</tr>
<tr>
<td>GUAM</td>
<td>66,472</td>
<td>37,861</td>
<td>75.5%</td>
</tr>
<tr>
<td>PUERTO RICO</td>
<td>313,615</td>
<td>349,289</td>
<td>89.5%</td>
</tr>
<tr>
<td>VIRGIN ISLANDS</td>
<td>9,100</td>
<td>10,080</td>
<td>90.2%</td>
</tr>
</tbody>
</table>

**TOTALS**   $102,662,178 $82,196,284 124.8%

Source: U.S. Office of Education
### SCHOOLS RECEIVING LARGEST CWSP GRANTS
**July 1 - December 31, 1969**

<table>
<thead>
<tr>
<th>SCHOOL</th>
<th>CITY</th>
<th>AMOUNT 1</th>
<th>ENROLLMENT 2</th>
<th>PER CAPITA GRANT</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of California at Berkeley</td>
<td>Berkeley, California</td>
<td>$879,898</td>
<td>28,863</td>
<td>$ 30</td>
</tr>
<tr>
<td>Boston University</td>
<td>Boston, Massachusetts</td>
<td>787,227</td>
<td>23,011</td>
<td>34</td>
</tr>
<tr>
<td>San Jose State College</td>
<td>San Jose, California</td>
<td>765,597</td>
<td>26,675</td>
<td>28</td>
</tr>
<tr>
<td>Northeastern University</td>
<td>Boston, Massachusetts</td>
<td>741,759</td>
<td>34,831</td>
<td>21</td>
</tr>
<tr>
<td>Ohio University</td>
<td>all campuses</td>
<td>686,007</td>
<td>21,858</td>
<td>31</td>
</tr>
<tr>
<td>University of Montana</td>
<td>Missoula, Montana</td>
<td>657,951</td>
<td>6,655</td>
<td>98</td>
</tr>
<tr>
<td>Montana State</td>
<td>Bozeman, Montana</td>
<td>655,992</td>
<td>6,888</td>
<td>95</td>
</tr>
<tr>
<td>University of Washington</td>
<td>Seattle, Washington</td>
<td>622,877</td>
<td>30,357</td>
<td>20</td>
</tr>
<tr>
<td>Michigan State University</td>
<td>East Lansing, Michigan</td>
<td>602,695</td>
<td>38,758</td>
<td>15</td>
</tr>
<tr>
<td>San Diego State College</td>
<td>San Diego, California</td>
<td>586,646</td>
<td>22,355</td>
<td>26</td>
</tr>
<tr>
<td>University of Minnesota</td>
<td>Minneapolis, Minnesota</td>
<td>558,286</td>
<td>58,304</td>
<td>9</td>
</tr>
<tr>
<td>University of California at Los Angeles</td>
<td>Los Angeles, California</td>
<td>554,483</td>
<td>29,070</td>
<td>19</td>
</tr>
<tr>
<td>Central YMCA Junior College</td>
<td>Chicago, Illinois</td>
<td>546,558</td>
<td>3,826</td>
<td>142</td>
</tr>
<tr>
<td>Portland State College</td>
<td>Portland, Oregon</td>
<td>535,100</td>
<td>9,479</td>
<td>56</td>
</tr>
<tr>
<td>Oregon State</td>
<td>Corvallis, Oregon</td>
<td>531,650</td>
<td>13,319</td>
<td>39</td>
</tr>
<tr>
<td>University of Oregon</td>
<td>all campuses</td>
<td>512,078</td>
<td>15,207</td>
<td>33</td>
</tr>
<tr>
<td>Rutgers University</td>
<td>(New Jersey) all campuses</td>
<td>505,806</td>
<td>30,319</td>
<td>15</td>
</tr>
<tr>
<td>Harvard</td>
<td>Cambridge, Massachusetts</td>
<td>503,860</td>
<td>19,135</td>
<td>26</td>
</tr>
<tr>
<td>Bishop</td>
<td>Dallas, Texas</td>
<td>499,367</td>
<td>1,598</td>
<td>312</td>
</tr>
<tr>
<td>University of Utah</td>
<td>Salt Lake City, Utah</td>
<td>498,546</td>
<td>18,488</td>
<td>26</td>
</tr>
<tr>
<td>Mississippi State University</td>
<td>all campuses</td>
<td>496,016</td>
<td>9,114</td>
<td>54</td>
</tr>
<tr>
<td>University of Alabama</td>
<td>University, Alabama</td>
<td>461,515</td>
<td>13,235</td>
<td>34</td>
</tr>
<tr>
<td>Miami-Dade Junior College</td>
<td>Miami, Florida</td>
<td>460,835</td>
<td>23,325</td>
<td>19</td>
</tr>
<tr>
<td>Yeshiva University</td>
<td>New York, New York</td>
<td>456,686</td>
<td>5,528</td>
<td>82</td>
</tr>
<tr>
<td>Ohio State University</td>
<td>all campuses</td>
<td>465,982</td>
<td>42,205</td>
<td>10</td>
</tr>
<tr>
<td>Indiana University</td>
<td>all campuses</td>
<td>450,700</td>
<td>47,006</td>
<td>9</td>
</tr>
<tr>
<td>Columbia University</td>
<td>New York, New York</td>
<td>442,628</td>
<td>17,450</td>
<td>25</td>
</tr>
<tr>
<td>University of Missouri</td>
<td>Columbia, Missouri</td>
<td>431,000</td>
<td>20,945</td>
<td>20</td>
</tr>
<tr>
<td>Wilberforce</td>
<td>Wilberforce, Ohio</td>
<td>345,206</td>
<td>914</td>
<td>377</td>
</tr>
<tr>
<td>Temple University</td>
<td>Philadelphia, Pennsylvania</td>
<td>329,615</td>
<td>33,824</td>
<td>9</td>
</tr>
</tbody>
</table>

**Sources**

1. Work-Study Reports No. 29 (4/18/69); Supplement No. 1 (5/5/69); Supplement No. 2 (6/6/69); U.S. Office of Education

New Emphasis on Off-Campus Programs

The great majority (about 75 per cent) of CWSP funds are currently used for on-campus employment. The advantage to the college or university in using Federal funds to supply campus labor (in libraries, maintenance work, etc.) has been too tempting for most institutions to encourage CWSP recipients to leave the campus. Under new U.S. Commissioner of Education James E. Allen, Jr., however, this pattern is likely to be upset. Speaking to the opening session of the Atlanta Service-Learning Conference on June 30, 1969, Commissioner Allen said:

"The need is to concentrate on ways of helping the young to realize the potential of their new sense of purpose and spirit for service. . . It places upon our colleges and universities the obligation to examine their policies and practices and to make those adjustments necessary for the proper exercise of student participation. . . . Of the 350,000 young people taking part in the College Work-Study Program, most have been employed on their campuses. We would like to see the ratio reversed, with the majority working off-campus."

To help those colleges and universities in exercising their obligation, Warren T. Troutman, chief of the CWSP Branch of the U.S. Office of Education, urged colleges to reallocate substantial portions of their CWSP allocations to off-campus public service programs. In a letter to all college and university student financial aid officers, he first warned that:

". . . the year 1970 may witness some shifting of emphasis in the College Work-Study Program, involving a keener look at the off-campus kind of College Work-Study job and the value of such jobs to both the community and the student, as well as its relevance to the institution's place in the community."

A few teeth were then added for further encouragement. The Office of Education established a new set of guidelines for allocating CWSP grants to colleges for fiscal year 1970-71. In order to obtain any substantial increases in funding from 1969-70 expenditure levels, individual institutions will be required to significantly increase off-campus involvement, or to actively recruit disadvantaged students.
Specific inquiries concerning the interpretation or applicability of CWSP funds to any particular existing or planned interlude program should be referred to:

Bureau of Higher Education
Attn: College Work-Study Branch
U.S. Office of Education
Washington, D.C. 20202

which also publishes the College Work-Study Program Manual.

Additional monographs on the legalities of CWSP funds usage for specific interlude programs have been prepared by:

The Urban Corps National Development Office
250 Broadway
New York City, New York 10007

Support at Different Levels

According to Commissioner Allen, there is no trend in education more promising than work-study programs. The Federal Government, at least under the present administration, is expected to support such programs strongly. Quoting again from Dr. Allen's remarks in Atlanta:

"Secretary Finch and my colleagues in the Office of Education are convinced advocates of the work-study concept, and the Department of Health, Education and Welfare is actively involved in promoting it."

James Moore, Director of the Office of Education's Division of Student Financial Aid, indicated in a recent Senate hearing that the CWSP had important local government support as well. Speaking of New York City, which in one year has utilized some 1,500 CWSP-funded students from 75 colleges and universities:

"As Mayor (John V.) Lindsay has indicated to me, if this program is operated properly, these students (after graduation) will then turn around and go to work for the City of New York. It is quite obviously a manpower recruiting device, and I think one which may be very effective. The Mayor believes he has a crying need, and I think he is right, for young, smart, capable college people in the public service of that city."
The 4-1-4 Program

The 4-1-4 Program is so named because it calls for an interlude period of approximately one month between the first and second semesters (each of which lasts about four months) of semester-system schools. During this interlude, student and faculty participants concentrate on some particular project, experience, or area of study. Students and faculty can leave the campus for the entire period; since there is no formal academic schedule, classes may be held where and when appropriate, or not at all. Institutions may place, if desired, very little restraint on student or faculty participants' organizing whatever meaningful program for learning appears worthwhile.

Interinstitutional cooperation possibilities

The 4-1-4 academic calendar, effectively a standardizable one for semester schools, may encourage significant interinstitutional cooperation in interlude programs. The brevity of a 4-1-4 interlude allows for cautious experimentation and for collaboration at a simple level. There would be extremely low risk to any one school for participation in a joint effort. More extensive or longer-term collaboration could grow from successful initial experiences.

Additional learning dimensions could be supplied through program participation by students from more than one institution. New ideas, new geographic viewpoints, and total resources not available at any one school could be brought together. Faculty exchange is also possible, at least to the extent of faculty from one institution supervising the work of students from several institutions who are working in one locality. To date, some collaboration has taken place in foreign-based programs, although not very much has occurred in ones situated in the United States.

The best-organized domestic collaboration is the five-member Upper Midwest 4-1-4 Consortium (Macalester, Gustavus Adolphus, St. Olaf, Luther, and St. John's colleges). This group has a constitution, board of directors, and half-time program coordinator. Regular meetings establish new and evaluate ongoing jointly-sponsored courses. A knowledge of each other's faculties has resulted in a 15-course interlude curriculum for January, 1970, with a budget of over $300,000 and utilization of three chartered planes. Information on the Consortium is available from:

The Director, Upper Midwest 4-1-4 Consortium
International Center
Macalester College
St. Paul, Minnesota
There is presently a "4-1-4 Conference" which provides information exchange and coordination among schools either having or looking into the possibilities of establishing a 4-1-4 calendar. The Conference publishes a newsletter and holds periodic meetings. It will hold its annual meeting for 1970 in Chicago, in early March.

The Conference has also published a Cooperative Listing of Interim Term Courses, and is planning a repeat booklet for spring, 1970. The Cooperative Listing includes three categories of course offerings for the interlude month: (a) On-campus programs; (b) Off-campus U.S. programs; and (c) Foreign-based programs*.

Florida Presbyterian College has taken the lead in establishing and carrying on the activities of the ongoing Conference. The Conference address:

Coordinator of 4-1-4 Conference
Florida Presbyterian College
St. Petersburg, Florida 33733

The 4-1-4 Conference and the Cooperative Education Association (see p. 12) are in the process of establishing collaborative efforts in the area of interlude program development.

Research on the impacts of the 4-1-4 experience

No study of 4-1-4 experience has been carried out that is comparable to the Study of Cooperative Education described on page 11. A localized study was carried out on Lakeland College (Wisconsin) in 1968-69, and it may be useful to quote from that study below. Lakeland has had a 4-1-4 program since 1964. The interlude month, called

* The 4-1-4 concept is not wholly a U.S. one. The Brazilian government's Projecto Rondon (named after Brazilian explorer Candido Mariano da Silva Rondon) encourages Brazilian students to take a one-month interlude among the poor and impoverished of that country's Amazonia and Northeast provinces. No pay is offered. Primary attention is given to medical and teaching assistance, engineering projects, formation of cooperatives, school-building, and similar projects. Student participants work in groups of up to twelve. Participation is voluntary, but 15,000 applied for the 4,500 places available during the 1968-69 Brazilian university year. In an interesting additional program component, the Brazilian government has decreed that preference to Rondonists will be given in hiring for permanent federal positions.
the "Winterim" at Lakeland, was evaluated by John W. Lind, Chairman of the College's Department of Sociology, in a May, 1969, report. Some excerpts follow:

Dr. Lind's comments

"The overwhelming reaction of the students, faculty, administration, and trustees, is that the Winterim provides a unique educational opportunity with unlimited possibilities."

"There seems to be an eager anticipation for the coming year to learn about and be able to participate in the programs that are being developed. Planning these programs, which originally (1964) involved a modest expenditure of time, now takes a year and longer in many cases."

"Students returned to the Lakeland campus with an enthusiasm I have never seen before in students after the completion of a course."

"Students put in more time... than they would have in a course on campus. And, their involvement was their own choice... They chose to forget about any free days. Nobody had to force them to do their work, because they wanted to do it... They accepted a challenge."

"Higher education in America must be meaningful and relevant. If students can see the value of what they are doing, learning can be accomplished and knowledge acquired. Much of the restlessness characteristic of youth will be removed."

Student comments

"You can talk about it, but you must see it."

"You have to think on your feet. In class you take notes and learn before the examination. At Winnebago you learn how fast you can think. Unlike classroom tests you find the results of your efforts right away."

"Some approaches found in textbooks did not always work in person and we had to be ready. It was a test of creativity and stability on our part."

"All of a sudden it's there. You've got to face up to it and do the best possible."
"Life is no picnic."

"I learned more during that one month than in all my other college work combined."

Comments by off-campus organization with which students were placed

"The structured classroom setting of the college campus provides students with the theoretical, scientifically oriented materials so essential for the development of sound professional practice. Our Lakeland Winterim students, however, had the opportunity to go beyond these materials and participate in the day to day sights, sounds, and feelings of institutional life; to not only intellectualize about the development of meaningful treatment relationships, but to actually experience the many frustrations and joys associated with this work."

"For the past month, our program has been enriched by their presence and in the future will continue to grow and improve because of the constructive suggestions for possible change which they made. All the students appear to be very much in tune with the problems of our current society. This empathetic concern for the needs of others is perhaps the most important trait which one can possess if he is to go on into any of the helping professions."

"We look forward to the placement of additional student groups from Lakeland in our program in the months and years to follow."

Comments from the community

"In this day of student unrest, with picketing, burning, and a general rebellious image of colleges being painted for the American public, it was gratifying to know that some schools were still turning out such fine caliber students."
As indicated in the Forward to this report, a questionnaire was distributed in early 1969 to all known four-year undergraduate institutions (college or university) in the United States inquiring about each recipient institution's attitudes toward, and present activities concerning the interlude concept in its academic program. For purpose of this survey, the definition of academic interlude program found on page 10 of this report was used; that is, interlude activities were defined as those which:

1. Require the student to live off-campus for one consecutive month or more;

2. Are experiential non-classroom programs (i.e., not consisting primarily of formal classroom activities such as exchange programs or some study abroad; and,

3. Are formally linked to the educational offerings of the college or university.

A total of 917 utilizable responses were received, and this chapter summarizes those responses.

Attitudes of U.S. Undergraduate Institutions Towards Formalized Interlude Programs

Of the 917 survey respondents, the idea of the formalized interlude program had been considered at 349, or 38 per cent. Institutional administrations or official faculty groupings were the most prevalent entities who had done the consideration:
Table I

Entity or group which considered interlude programs at institutions at which such programs have been considered

<table>
<thead>
<tr>
<th>Entity or Group</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration (Deans, Staff, etc.)</td>
<td>66%*</td>
</tr>
<tr>
<td>Formal faculty group (Academic Senate, etc.)</td>
<td>51%</td>
</tr>
<tr>
<td>Students (Student Government, Newspaper, etc.)</td>
<td>26%</td>
</tr>
<tr>
<td>Individual academic departments</td>
<td>24%</td>
</tr>
<tr>
<td>Board of Trustees or other Governing Board</td>
<td>8%</td>
</tr>
</tbody>
</table>

* Of respondents from institutions which had considered programs. Action may have been considered by more than one group; hence %'s add to more than 100%.

Trustee groupings are evidently not involved in this particular kind of curricular policy-making at formative stages to a significant extent.

Formal action decision-making

Program consideration led to actual formal action on a specific proposal in slightly more than half of the reported instances—56 percent of the time. When formal action was taken, administration or official faculty groups again were most prevalent among those taking the action:
Entity or group which took formal action on proposal for interlude programs at institutions at which such programs have been considered

<table>
<thead>
<tr>
<th>Entity or group</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration (Dean, Staff, etc.)</td>
<td>67%*</td>
</tr>
<tr>
<td>Formal faculty group (Academic Senate, etc.)</td>
<td>52%</td>
</tr>
<tr>
<td>Individual academic department</td>
<td>44%</td>
</tr>
<tr>
<td>Board of Trustees or other Governing Board</td>
<td>30%</td>
</tr>
<tr>
<td>Students (Student Government, Newspaper, etc.)</td>
<td>27%</td>
</tr>
</tbody>
</table>

* Of respondents from institutions which had taken formal action on program proposal. Action may have been considered by more than one group; hence, %'s add to more than 100%.

Participation of trustee groupings in finalizing actual policy decisions rose considerably.

Acceptance coefficient

Where formal action was taken, the percentage of program acceptance was extremely high. More than 95 per cent of interlude programs proposed were accepted and adopted into the curriculum of the institution concerned.

Support coefficient

Among respondent institutions which did not have a formal interlude program, 54 per cent indicated that they supported and encouraged non-credit interlude activities. A significant number of the remaining respondents indicated that they had not given much thought to the matter one way or the other.
Level of Participation Required in Existing Interlude Programs

Respondents from those institutions which reported having an interlude program were also asked at what levels program participation was required for at least some of that institution's students. Nearly two-fifths of those responding indicated that participation was a graduation requirement for some portion of their students:

Table 3

Levels of required interlude activities for students at institutions with interlude programs*

<table>
<thead>
<tr>
<th>Requirement Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual requirements--tutorials, independent study, etc.</td>
<td>43%</td>
</tr>
<tr>
<td>University graduation requirements</td>
<td>38%</td>
</tr>
<tr>
<td>Department requirements</td>
<td>38%</td>
</tr>
<tr>
<td>Course requirements</td>
<td>21%</td>
</tr>
</tbody>
</table>

* Requirement levels differ for students with majors in different fields, etc. Any one institution may have required participation for at least some of its students at each of the four levels indicated. Hence, %'s add to more than 100%.

+ Some colleges assign normal grades for off-campus interlude activities, others use pass-fail bases at different levels. For example, Loretto Heights College (Denver) recognizes four different levels for credit: (a) Field terms--integrated off-campus experiences directed and approved by the college through the Dean of Off-Campus Programs; (b) Practicums--laboratory or in-field experience accredited by individual academic departments for departmental requirements; (c) Independent Study--approved and directed by a faculty consultant from an interested academic department; and (d) Individual Study--a less intensive study than (c) and one not listed in regular course offerings. Loretto Heights maintains parallel cross-cultural programs domestically and abroad--in Pueblo, Colorado, and La Paz, Bolivia.
Extent of student body participation

Respondents were also asked to indicate the number of undergraduate students who had participated in their interlude programs. In general, programs appear to be relatively small:

Table 4

<table>
<thead>
<tr>
<th>Number of Undergraduate Students</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 500</td>
<td>12%</td>
</tr>
<tr>
<td>101 to 500</td>
<td>24%</td>
</tr>
<tr>
<td>51 to 100</td>
<td>16%</td>
</tr>
<tr>
<td>Less than 50</td>
<td>48%</td>
</tr>
</tbody>
</table>

Nearly 80 per cent of respondents reported the number of undergraduate students who had participated in ongoing interlude programs to be less than one-fifth of the total undergraduate student body. Just 10 per cent indicated that more than 40 per cent had participated.

Length Existing Interlude Programs Have Been in Operation at Respondent Institutions

One possible explanation for the apparent small relative percentage of undergraduate students in respondent institutions who had participated in ongoing interlude programs at those schools is the general newness of such programs to respondent campuses. Nearly one-third of the programs had been going less than one year, and more than half for less than two years:
Table 5
Length of time respondent interlude program had been in operation in spring of 1969

<table>
<thead>
<tr>
<th>Time Interval</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than one year</td>
<td>32%</td>
</tr>
<tr>
<td>Less than two years</td>
<td>24% (56%)*</td>
</tr>
<tr>
<td>Less than five years</td>
<td>19% (75%)</td>
</tr>
<tr>
<td>Less than ten years</td>
<td>11% (86%)</td>
</tr>
<tr>
<td>More than ten years</td>
<td>14% (100%)</td>
</tr>
</tbody>
</table>

*Cumulative percentages

Experimentation with the interlude concept is apparently experiencing a contemporary increase.

Rating of Existing Interlude Program by Respondents

Respondents from institutions with existing interlude programs were asked to rate those programs for five different characteristics. Results are listed in Table 6, below:

Table 6
Rating of existing interlude programs by respondents, five different characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Excellent</th>
<th>Good</th>
<th>Poor</th>
<th>Not relevant to goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student development--increased awareness, maturity, independence, responsibility</td>
<td>69%*</td>
<td>27%</td>
<td>1%</td>
<td>3%</td>
</tr>
</tbody>
</table>

*Percentages sum to 100% horizontally
Student benefits from interlude activities were rated as quite high. More than 97 per cent of respondents felt student benefits were either excellent or good. Reactions of those who came in contact with interlude participants—whether off-or on-campus (after participant return to campus) were almost equally as strongly favorable.

The only characteristic to receive a significant—though just 14 per cent—"poor" rating was faculty participation and reaction. The interlude concept is not in the tradition of strict formal education, and the group among which opposition to the concept is most likely is the institution's faculty—at least among those members who feel threatened by experiential rather than traditional education, or simply do not find it acceptable within the narrow classical concepts of abstract education. Interestingly, however, respondents rate the percentage of faculty with "excellent" reaction to the interlude program as higher than the corresponding percentage for campus students who do not participate in the interlude opportunity. This may be because those students most inclined to enthusiasm over the program will most likely be participants in it.

---

Table 6 (Continued)

<table>
<thead>
<tr>
<th>Excellent</th>
<th>Good</th>
<th>Poor</th>
<th>Not relevant to goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree of participation and responsibility given students during interlude period</td>
<td>53%</td>
<td>43%</td>
<td>3%</td>
</tr>
<tr>
<td>Responses of communities, agencies, or employers utilizing students during interlude period</td>
<td>39%</td>
<td>44%</td>
<td>3%</td>
</tr>
<tr>
<td>Non-participant student campus reaction to interlude program</td>
<td>27%</td>
<td>44%</td>
<td>4%</td>
</tr>
<tr>
<td>Faculty participation in and reaction to, interlude program</td>
<td>36%</td>
<td>47%</td>
<td>14%</td>
</tr>
</tbody>
</table>

* Percentages sum to 100% horizontally
Implications for Higher Education

The implications for higher education which can be drawn from an essentially preliminary survey such as this are necessarily limited. It is clear, however, that respondents to the survey rate their own programs relatively strongly, and that this opinion seems to be shared by those who study or work with program participants. It is also evident that experimentation with interlude programs seems to be growing, perhaps as institutions seek to respond to the challenges of their restive undergraduate ranks for "relevance" and "meaningfulness" in education.

The positive reactions from respondents who have had experience with interlude programs contrasts in an interesting manner with the large percentage of respondent institutions who have not considered an interlude program to date. Perhaps more thought should be given to experimenting with some sort of experiential, off-campus activity as part of the formal academic program in those institutions not yet exploring interlude possibilities.

In a similar manner, if ongoing programs are generally viewed as successful, then it may be that those institutions with ongoing programs may want to consider expanding the number of their own students experiencing an interlude of some sort during the students' undergraduate years.
IV ONGOING ACTIVITIES AND INVESTIGATIONS

Interest in off-campus interludes is likely to continue at a relatively high level for the foreseeable future. On-campus pressures for educational relevance, continuing attempts by academic institutions to come to grips with complex social and other issues, and further Federal support of off-campus programs should give impetus to such interest. Ongoing activities and investigations are capable of yielding further impetus.

Extended Research Programs

Four extended research efforts may provide useful compendium-type information for those interested in the interlude concept:

1. The Atlanta Service-Learning Conference has as its goal the thorough study of the concept of service-learning in a concentrated local application. The Conference, which began in mid-1969, functions primarily through work groups, each undertaking to explore in depth and to produce a report on one assigned function of the concept of service learning. The several functions assigned include: service, learning, curriculum, inter-institutional collaboration, research, finance, and methods and programs. The Atlanta Urban Corps comprised principally of students funded by the Federal College Work-Study Program (see pp.13-17), is serving as a practical laboratory for the Conference. Mailing address for the Conference is:

Atlanta Service-Learning Conference
30 Courtland Street, N.E.
Atlanta, Georgia 30303

2. The University of Minnesota is carrying on a survey and study of out-of-classroom and off-campus credit programs with particular interest in the methods, policies, and procedures for the actual granting of credits. The study includes all manner of off-campus interludes--independent study, interim periods, work-study programs, internships, overseas study, and community involvement. Address for information:

University of Minnesota
Bureau of Institutional Research
Minneapolis, Minnesota 55414
3. The U.S. National Student Association's Community Action Curriculum Project attempts to monitor interlude programs in which students receive academic credit for volunteer work done in lower-and middle-class communities. The Project was established to encourage and aid colleges and universities in developing curricular programs in community action, to include training programs, evaluation seminars, and special sources which aid the student in the field. At least one compendium of existing programs has already been issued. Address for information:

Community Action Curriculum Project
National Student Association
2115 "S" Street, N.W.
Washington, D.C. 20008

4. The National Service Secretariat maintains listings of service organizations interested in having interlude participants' services. Specific names and addresses of several hundred organizations, listed by different categorizations, are provided. Address for information:

National Service Secretariat
5140 Sherrier Place, N.W.
Washington D.C. 20016

Other Investigations

Among the other activities and investigations currently underway, three may be worth brief citation here:

1. The Institute for Student-Urban Interaction is a proposal of the University of South Florida, and an outgrowth of that institution's experience with its multifaceted Off-Campus Term Program.* The Institute would be comprised

* South Florida's interlude program has options for (a) employer internships; (b) humanitarian community action; (c) foreign study/travel; (d) independent study and research; and (e) self-initiated employment or unusual opportunities. The objective of the program is "to take the 'island' thinking out of education, provide for deliberate interaction with society, and change the educational seat of learning from the classroom on campus to the laboratory of the streets, working world, foreign countries, as a purposeful and significant facet of education." While participation in the program is not required, it is strongly recommended of all of the University's undergraduate students.
of a series of centers located in urban areas (initially in San Francisco; Washington D.C.; and either Chicago or New York City). Each center would assist and supervise the activities of several hundred students, from any number of campuses, experiencing their off-campus interlude in that particular area. The Institute resembles in some aspects a similar program suggested in An Agenda for Off-Campus Learning Experiences, another report of the Interlude Research Program (see p. 45 ff. of that report). Address for information on the Institute:

Office of the Cooperative Education Program
University of South Florida
Tampa, Florida

2. The College-Level Examination Program is a relatively new activity of the College Entrance Examination Board, and provides, among other possibilities, (a) alternate channels for meeting general education requirements; (b) alternate means of satisfying specific course requirements; (c) measures of college equivalency for use by non-academic organizations. This program, used presently in one form or another by more than 300 colleges and universities, might be used to provide equivalent credits for certain on-campus courses and hence free time for off-campus interlude experience. John W. Gardner, former Secretary of Health, Education, and Welfare, has said when speaking of the desirability of the off-campus interlude:

"Many . . . wish to obtain academic credit. We shall serve these people far more effectively when we have devised a flexible system of credit by examination. Such a system would assess and certify accomplishment on the basis of present performance. The route that the individual had traveled to achieve competence would not come into question. . . leading universities . . . should be offering credit by examination in standard (on-campus) academic subjects." *

Address for information on the College Level Examination Program:

College Entrance Examination Board
Box 592
Princeton, New Jersey 08540

3. **Outward Bound**, the well-known outdoor physical/psychological testing experience, has recently begun structuring programs for colleges to bring the peculiar strengths of the Outward Bound experience to college-level students. Prescott College in Arizona and Dartmouth College in New Hampshire are two institutions which have incorporated Outward Bound courses in their own academic programs. For information:

Outward Bound  
Hurricane Island, Maine
V CONCLUSION: EXPERIENCE AND THE FRESHNESS OF KNOWLEDGE

The whole area of youth participation and learning is one which will see considerable discussion in the early 1970's. In 1969, both houses of Congress saw sweeping bills introduced to provide for young people's participation in a broad level. Senator Mark Hatfield's "Youth Power Act of 1969" (S 1937) calls for establishment of a National Youth Service Council and a National Youth Service Foundation to promote the voluntary involvement of young people in constructive public service activities. Fifteen Congressmen have proposed the creation of a Cabinet-level Department of Youth Affairs to coordinate and expand Federal programs drawing upon the talent and enthusiasms of the country's young people.

Colleges and universities have a relatively small segment of that youthful population with which to deal. Yet, Senator Hatfield's remarks as he introduced his Act are as applicable to the campus as to Congress:

"We are passing through a time when the temptation is great to adopt measures designed to repress the energies of young people. But we have to recognize that energy per se, is neither moral nor immoral. It is amoral. It can be used to shape a sword or a plowshare. By providing constructive ways for all young people to use their energies and talents, they will have a chance for a better life and a chance to relate to and serve their society--as well as to peacefully improve it where necessary."

Is Some Shifting in the University Model Necessary?

A much-cited monograph on the design of cross-cultural training* notes a significant difference between the university model of education and cross-cultural learning. The former emphasises critical detachment and abstract analysis. The latter is dependent on experiential self-sufficiency, the ability to understand others' emotions and attitudes, and the capability of coordinating emotional reactions and practical necessities for desirable ends. While the university model should not necessarily be devoted to cross-cultural learning, there is

clearly a large group of contemporary students who want to learn to some extent through direct experience. As the National Student Association Community Action Curriculum Project (see p.31) compendium puts it, however, "the choice is all too often narrowed down to pursuing academic study in the college or dropping out of school to do community work." Surely the model can somehow combine academic and experiential learning.

The Interlude Rationale: The Freshness of Knowledge

Alfred North Whitehead, while he did not dwell specifically upon academic interludes in any of his philosophical works, summed up the essence of the interlude rationale in one of his commentaries on the process of education:

"For successful education, there must always be a certain freshness in the knowledge dealt with. It must either be new in itself or it must be invested with some novelty of application to the new world of new times. Knowledge does not keep any better than fish. You may be dealing with knowledge of the old species, with some old truth; but somehow or other it must come to the students, as it were, just drawn out of the seas and with the freshness of its immediate importance."

The well-designed interlude program should be able to contribute some of this needed freshness to and in the learning process.