Bibliography of Research in Experiential Learning, Internships and Field Studies

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PANEL Resource Paper #10

BIBLIOGRAPHY OF RESEARCH IN EXPERIENTIAL LEARNING, INTERNSHIPS AND FIELD STUDIES

Compiled by Jennifer Anderson with Leslie Smith

Jane C. Kendall, Series Editor
PANEL Resource Papers

Peer Assistance Network in Experiential Learning
National Society for Internships and Experiential Education

Jennifer Anderson is a Lecturer in Environmental Studies and the Coordinator of the Environmental Studies Internship Program at the University of California, Santa Cruz. Leslie Smith graduated with a politics major from UCSC and served as an intern for this research project. The bibliography was built upon the original work of the Research Committee for the University of California Systemwide Experiential Learning Project. This expanded edition by the National Society for Internships and Experiential Education was funded in part by a gift from Chevron U.S.A., Inc.
# TABLE OF CONTENTS

- Acronym........................................11
- Introduction.................................1
- Acknowledgments.............................4
- Research........................................5
- Related Research.............................15
- Models for Research..........................21
- Resources......................................29
- Author Index..................................32

# LIST OF ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAHE</td>
<td>American Association of Higher Education</td>
</tr>
<tr>
<td>AEE</td>
<td>Association for Experiential Education</td>
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<tr>
<td>AERA</td>
<td>American Education Research Association</td>
</tr>
<tr>
<td>AIN</td>
<td>Association of Interpretive Naturalists</td>
</tr>
<tr>
<td>CAEL</td>
<td>Council for the Advancement of Experiential Learning</td>
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<tr>
<td>EBCE</td>
<td>Experienced Based Career Education</td>
</tr>
<tr>
<td>ERIC</td>
<td>Education Resources Information Center</td>
</tr>
<tr>
<td>Ex-L</td>
<td>Experiential Learning Project, University of California System</td>
</tr>
<tr>
<td>GLCA</td>
<td>Great Lakes College Association</td>
</tr>
<tr>
<td>NSIEE</td>
<td>National Society for Internships and Experiential Education</td>
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<tr>
<td>PANEL</td>
<td>Peer Assistance Network in Experiential Learning</td>
</tr>
<tr>
<td>SIG</td>
<td>Special Interest Group</td>
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<td>UYA</td>
<td>University Year for Action</td>
</tr>
<tr>
<td>WICHE</td>
<td>Western Interstate Commission for Higher Education</td>
</tr>
</tbody>
</table>
This bibliography is designed to be a working tool for those interested in or involved in experiential education. It is not meant to be a static, definitive document, but a resource which is constantly growing and changing as it is used, and as new research becomes available.

The bibliography was originally compiled in 1979 by the Research Committee of the University of California Experiential Learning Project (Ex-L). Its purpose was to determine:

(a) the state of research related to experiential education; and

(b) research needs and directions which would further the understanding of experiential education and its appropriate uses in higher education.

The work of the Ex-L Research Committee was presented at the 1980 NSIEE Conference and, as a result of positive response to that session, a revision was completed during the next year and presented at the 1981 conference. NSIEE wished to further update and expand the bibliography and in May of 1982, funding from Chevron was received to support the 1983 publication.

In its initial work, the Ex-L Committee defined research as studies based on systematically collected empirical data. That definition continues to be used. In the first search, relatively little was found that fit this definition so other items that were both relevant and interesting were included. In subsequent revisions, some of these entries were dropped as more pertinent data became available. Therefore, the bibliography's format and content changed. For instance, this revision does not include the section "Research in Progress." It was originally included because so little research was available and it was an attempt to put investigators in touch with each other. As more research is being presented at professional meetings and is being published, a newer and more effective communication network is being developed.

Experiential learning in the context of this bibliography is limited primarily to sponsored field study, internship, or cooperative education experiences at the post-secondary level. This is not meant to make judgments about the importance of experiential learning at other levels or the usefulness of other types of experiential learning, but to provide a clearer framework within which to work. A sample of relevant work at other levels and in other fields has been included in the related research section. It is hoped that in
time new sections will be written which are specific to secondary and elementary levels as well as to outdoor, prior, and non-sponsored learning situations.

Each entry in the bibliography has been categorized in relation to a conceptual framework developed by Dennis Smith of Thomas Edison College and modified by the Ex-L Committee. It includes four sets of variables:

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<tr>
<th>#1</th>
<th>#2</th>
<th>#3</th>
<th>#4</th>
</tr>
</thead>
<tbody>
<tr>
<td>PARTICIPANT CHARACTERISTICS</td>
<td>DELIVERY</td>
<td>OUTCOMES</td>
<td>INSTITUTIONAL IMPLICATIONS</td>
</tr>
<tr>
<td>Demographic</td>
<td>Program designs</td>
<td>Learner</td>
<td>Retention</td>
</tr>
<tr>
<td>Attitudinal</td>
<td>Methodology</td>
<td>Employer</td>
<td>Enrollment</td>
</tr>
<tr>
<td>Cognitive</td>
<td>Evaluation</td>
<td>Faculty</td>
<td>Recruitment</td>
</tr>
<tr>
<td>Affective</td>
<td>Learning environment</td>
<td>Community</td>
<td>Impact on educational philosophy</td>
</tr>
<tr>
<td>Political</td>
<td>Course designs</td>
<td>Worksite characteristics</td>
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</tbody>
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The number(s) in the outside margin next to each of the entries corresponds with the number denoting each set of variables outlined in the framework. For example, F. Betts' study on "Assessing the Effects of Anxiety on Student Satisfaction..." examines the relationship between program design (a variable in DELIVERY, #2) and satisfaction (a variable in OUTCOMES, #3).

I am pleased to say that this framework did not work as well this time. Some of the new entries did not fit and I think this represents a change in the way we view ourselves and approach our research. For instance, Moore (1984) suggests that more work needs to be done on the actual learning experience and environment. Perhaps a whole new set of variables should be developed around this idea? Warner (1984) calls for a refocusing on process not product. And what do you do with a research piece on staff development? I have tried to add new categories to deal with these but the framework will need careful review in the next rewrite.

The current bibliography is divided into four categories which are more fully described in the introduction to each section. Of the eighty-eight entries, over one-third (thirty-one) are new and they are as follows:

(a) Research


(b) Related Research


(c) Models for Research


(d) Resources


Five of the new entries found in the models for research section are self-critical examinations of the current research. They call for more and different studies and suggest new methodologies, strategies and agendas. The response to some of these suggestions is reflected in the recent entries which tend to utilize more sophisticated and in-depth approaches to research. Another reflection of this trend is the fact that special interest groups (SIG) on research have now been formed in the Association for Experiential Education (AEE), Association of Interpretive Naturalists (AIN), Council for the Advancement of Experiential Learning (CAEL), and NSIEE; in addition, the American Education Research Association now has an SIG in experiential learning. There are also other efforts to tighten up the quality of research as practitioners are calling for the publication of more refereed articles.

This is indeed an exciting time in experiential education. I hope that the bibliography can play a small part in this by meeting its intent of keeping researchers and administrators aware of relevant data and each other's work. Its effectiveness depends upon input from its users. All comments, additions, and help are welcome.

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ACKNOWLEDGMENTS

I would like to acknowledge and thank the members of the original Ex-L Research Committee whose initial work served as the basis for this bibliography: Julie Gordon, University of California, Berkeley; Linda Hughes, University of California, Davis; and, especially, Jane Permaul, University of California, Los Angeles, for her continued support and guidance, particularly when I got bogged down.

Thanks are also extended to Jane Kendall, who sent everything my way that looked like research and helped with editorial decisions, and to all those who responded to my requests for information and feedback. Gretchen Miller deserves special thanks for her expertise with the computer, her patience, and her assistance with proofing, typing, and questions of style and content.

This revision was partially supported by a gift from Chevron. The funding, which was earmarked for hiring an intern, allowed me the pleasure of continuing to work with Leslie Smith. Because of her interest in the field, she stayed with the project even though she graduated from the University in spring of 1984.

Jennifer Anderson
October 1985
RESEARCH

The entries in this section are studies based on empirical rather than impressionistic data. The earlier studies were primarily motivated by the need to evaluate existing programs and, for the most part, they dealt with cause and effect relationships; that is, program design and its impact on the learner. Since much of the information was program specific, only a random sample of this type of evaluation was selected. If there were several articles describing the same research project or program, they may not all have been included.

The more recent studies focus on developmental changes in the participants and on the learning environment—what is being learned, how, and in what context. They use methods and instruments which can be applied to a wider range of programs. This makes it possible to repeat studies to validate findings and to create a larger data base from which to draw conclusions.


This study identifies the attitudes of students participating in the Urban Semester program. A pre- and post-experience questionnaire revealed no significant differences at the start of the study between off-campus students and those who remained on campus. However, at the end of the study, learners "in the field" demonstrated more competence in social and personal efficacy, as indicated by an increase in levels of assertiveness and a decline in anxiety levels.


This case study of the Urban Semester program examined the program's potential impact on the hostility, depression and anxiety levels of participating students. The program's staff was concerned with effects of the semester in addition to the recognized goal of "increased personal and social efficacy." Using the Multiple Affect Adjective Check List, the author found that "the results indicate a significant decline in anxiety levels associated with program participation and varying results with regard to depression and hostility levels."


This study analyzes data collected from seven field study programs. It identifies the two processes of reciprocity and decentering as key elements which, when integrated, allow the
potential for significant affective and cognitive growth in individuals. The authors found that field study can provide the vehicle for this integration. Traditional liberal arts goals of objective thinking, integration of diverse materials and ideas, and effective problem solving were possible outcomes achieved through successful field study experiences.


2 This study examined the perceptions of program administrators as to the processes and outcomes in the preparation of portfolios for prior learning assessment, and the development of learning contracts for sponsored programs. Based on responses to four questionnaires, the authors concluded that the most important types of learning are in areas of personal growth and critical thinking development. Individual contact with faculty and formal instruction were considered essential.


2-3 A national study of cooperative and non-cooperative education alumni examined the impact of cooperative education and field experience programs on career patterns of college graduates in the classes of 1965, 1970 and 1974. The report addressed alumni viewpoints concerning the following: undergraduate career preparation, first full-time job, current employment, avocational activities and attitudes toward his/her college. The research details the differential impact of cooperative education on women and members of minority groups and also discusses the effects of participation over a period of time.


1-2 A total of 629 female graduates of the classes of 1965, 1970 and 1974 participated in this study examining the impact of work experience and academic major on the career choices of college women. Results indicate that involvement in cooperative education programs has some influence on whether alumnae pursue non-traditional or traditional occupations upon graduation from college. The study also implies that for maximum benefits to be derived from an undergraduate work experience, a student's program should be guided and monitored by a member of the college staff.

This study at Chatham College looks at the relationship between academic internship and students' knowledge of careers. Through a pre- and post-test study questionnaire the authors determined that significant growth occurred in the areas of knowledge of work, educational preparation for work and personal development for students who participated in internships.


This pre- and post-test study compared participants in a career exploration class to students in a traditional college psychology course. The purpose of the research was to measure the former groups' level of internal locus of control and cognitive development through the implementation of a career development model. The hypothesized differences between the two groups did not prove statistically significant.


The authors assessed the Pennsylvania Department of Education Internship Program, which places students in government internships, with respect to three major questions: 1) Did the program provide a broader learning experience for students? 2) Did it promote student knowledge of and involvement in government processes? and 3) Did it encourage the personal growth and development of the students? The evaluation consisted of supervisor and student responses to four questionnaires. An overwhelming majority of students rated the internships as superior to a semester on campus and reported increased understanding of government processes, gaining a career perspective, and developing professional skills as important outcomes.


After completing a short-term work experience, participants were asked nineteen questions about the value of the program in providing various benefits. The most positive responses were to items related to personal development and vocational information. The authors indicated that the objectives of both liberal learning and vocationalism can be jointly pursued through work-learn programs, but that "work experience in itself is not sufficient." The work must challenge the student's abilities and be integrated with classroom knowledge to provide personal growth.
The long-term impacts on students who participated in University Year for ACTION programs from 1973 to 1976 were examined in this study. In retrospect, those who were surveyed had strong positive feelings about having participated in the program and cited "the responsibility given" or "doing something that made a difference" as critical factors. In comparison to a non-UYA group, the UYA students represented a larger proportion of women and minority students, were more directed in career plans upon graduation, indicated a stronger preference to human service careers (taking their first jobs in this field) and devoted more time to service activities in their communities. This study shows strong correlation between internship participation and post-graduate pursuits and the authors suggest that this may also be the case in programs deliberately designed with another focus.


The Applied Learning Program offered paid internships to "economically disadvantaged students" in a broad range of professional and business occupations. A pre- and post-participation questionnaire revealed that internships are an effective means for upgrading the career effectiveness of students with backgrounds of economic deprivation.


This study examined the impact of internship experiences upon career development among 64 undergraduates at Michigan State. Pre- and post-internship questionnaires assessed the career development needs, expected goals and demographic characteristics of each participant. A required Pre-Field Experience Seminar proved to have a more profound impact on career development than did the field experience itself. The authors suggest that the seminar, in providing students with "skill acquisition in self-understanding relative to career preparation, pursuit and placement, adds meaning to the actual intern experience."

Gryski, G. S., Johnson, G. W., & O'Toole, L. J. Jr. "Undergraduate Internships: An Empirical Review." Auburn University:
This survey sought to analyze the organization and administration of internship programs offered by political science departments at major universities throughout the country. The study identified nineteen different types of internship opportunities with variety in curriculum, grading procedures, staffing, special programs and intern compensation. The report concluded by saying that diversity in organization is the norm and by suggesting that a more qualitative analysis be done to determine which structures contribute to high quality and productive internships.


This pre- and post-test study compared the knowledge and attitude test results between a group of college students exposed to a traditional classroom approach to a human ecology course and those participating in an experientially based course. While both courses appeared to increase group knowledge of human ecology, the rate at which student understanding of concepts increased was greater in the traditional classroom. Nevertheless, both courses were effective in developing positive attitudes towards selected problems in human ecology.


This report details the results of a field-based exploratory career program designed for college entry-level students which accentuates both self-knowledge and career-related skills. A questionnaire, administered to the participants on four separate occasions, assessed their changing attitudes towards the field experience as well as self perceptions related to career choice. Results indicate that exploratory career programs increase the student's confidence in making career decisions.


The authors state that the study examined the effects of combining on-the-job learning with course work for a group of 26 students enrolled in the University Year for Action Program. Results indicated that, although participants evaluated the agency learning environments much more positively than parallel classroom experiences, participation in the program had relatively little impact on variables such as concept knowledge and
moral judgment, which were hypothesized as relevant outcome dimensions. Students' direct evaluations of their year-long experience provided information which has been used in modification of the program.


2-3 This experiential learning study assesses both overseas and U.S. off-campus programs. Results from the Individual Opinion Inventory suggest that the impact of a field experience is dependent on psychological factors (e.g., individual receptivity, motivation and openness) rather than the factor of location. Statistical analysis focused on learning outcomes that could be measured in terms of group data.


1-2 This paper evaluates two field-study programs at Northwestern University involving 31 students. Focusing on role theory and cognitive development, the authors describe and analyze the programs, the participants and various outcomes. Surprisingly, each student's learning about herself or himself was found to be a more valued and central outcome than the obtaining of a vocational goal direction.


2 This report summarizes the results of individual interviews with instructors who have included community based learning activities as part of their social science and humanities courses at the post-secondary level. The interviews focused on identifying the skills, attitudes and resources perceived by instructors as necessary in order to perform effectively. Problems encountered during implementation were addressed. Additionally, suggestions and recommendations were elicited during the interviews.


1-2 This research paper identifies and examines the educational benefits derived from a state-wide service learning program.
The goals of this study were to: 1) define the learning outcomes that can be reasonably associated with service learning experiences; 2) identify, empirically, the important variables that determine learning; 3) develop and test a theoretical framework that associates learning outcomes with the varieties of service learning experiences.


2 This report examined current standards for the assessment of experiential learning and recommended changes in the setting of standards. CAEL members, in response to a mail survey, were asked to identify which method of assessment they used. The researchers expressed concern at the high percentage of institutions which awarded credit for experiential learning on the basis of experience rather than learning. Fremer's criteria for judging the adequacy of standards was cited as a useful framework.


2 Using task and context-analysis methodologies, the author examines dimensions of experiential education in an attempt to develop a coherent portrait of a learning environment. This study includes extensive interviews, field observation and document analysis in thirty-five resource settings.


2 The author examined the social processes which occur in workplace settings in hopes of constructing a theory appropriate to the study of education in non-school settings. By focusing on single-task episodes at many different sites, Moore attempted to identify their educational properties. He acknowledged the rudimentary nature of his research and argued that we must continue to explore different features of tasks and the social means by which those tasks are accomplished. This type of research will yield information about the experiential learning environment.


2 The author reviewed extensive literature on the role of experience in the learning process as a framework for evaluating a
community college cooperative education program. This evaluation consisted of interviews with twenty students about the nature of their internships and their attitude toward learning. Mulcahy found a tremendous discrepancy between learning theory and program implementation. He suggests, "...that stronger orientation sessions, more thorough planning, and better quality role models are required if students are to derive any benefit from experiential learning programs." This work also provides models for further research.

Murphy, C. "Integrating the Community and the Classroom: Instructors Describe the Results." San Francisco: Far West Laboratory for Educational Research and Development, 1981.

2&4 This report examines the implementation of post-secondary courses in the humanities and social sciences which include a field-experience component. Sixty-eight faculty members were interviewed to determine the impact of these courses on the students, instructors, community agencies and educational institutions. The interview questions addressed some of the following course factors: demographics, goals, individual roles and responsibilities, and the potential for expanding the experiential approach. Rather than evaluating any of the learning activities, this study addresses the specific needs of faculty and administrators.


1-2 This study compared female college-age students who completed a structured cooperative experiential education program with those who completed an unstructured program. The Career Orientation Scale, the Rokeach Value Survey and the Minnesota Importance Questionnaire were three of the devices used to measure behavioral and attitudinal changes within the two groups. Students who participated in programs structured along guidelines developed from relevant research tended to show more satisfaction with their selected majors and more interest in their careers than those completing unstructured programs. They also showed more confidence in their ability to perform after college and to be successful in interviews. This may have implications for women who wish to enter managerial fields.


2-3 This article provides information on the developmental impact of a service/learning program on students at a private liberal arts college. The Student Development Task Inventory was used in a pre- and post-test study to determine what, if any, changes took place on the developmental variables of the SDTI. A number of significant changes did occur with the
experimental group which went to Jamaica while the control
group experienced no changes during the program's tenure.

Somers, C. N., & Bridges, J. A. "Experiential Learning Programs and
Liberal Studies. An Exploratory Model of Post-Graduate Suc-
cess." Central Michigan University: Michigan Consortium for
the Evaluation of Nontraditional Educations, 1981.

Six post-secondary institutions in Michigan cooperated in this
study. They looked at the post-graduate development of parti-
cipants in programs which integrated liberal studies and
experiential learning. The programs represented sponsored
learning (cooperative education or internship experiences) and
unsponsored learning which was assessed by either portfolio
development or a test. The demographics of the students in
each type of program were examined as well as elements of per-
sonal development, professional development, and success in
continuing education. They found that internship and coop type
programs serve students who are younger or more inexperienced,
primarily unmarried, more likely to be women, with incomes of
$7-10,000 or less a year than those served by the portfolio and
testing programs.

Wagner, J., & Ehrensaft, D. "Integrating Theory and Practice."
Unpublished study. Berkeley: University of California Field
Studies Program, June 1979. Available from PANEL Services at
NSfEE.

This study examines student responses to courses with field
work components and analyzes the integration of the classroom
seminar and field work. The authors found that the most effec-
tive integration occurred when the instructor had a strong
classroom presence. Also, journals proved more valuable in
integrating course work than did a final paper.

Williams, T. J. "Faculty and Student Attitudes Toward Intern

This article focused on student and faculty attitudes toward
evaluating and assigning a grade for internship experiences.
In responding to an open-ended questionnaire, faculty and stu-
dents were first asked to identify criteria to be considered in
the final evaluation of an internship. They then ranked each
criterion and specified the percentage of the final grade to be
determined by each criterion. Both students and faculty recom-
mended that 60 percent of an intern's final grade be calculated
by the final report and evaluation of the work supervisor.
Students also tended to stress field visits and discussions
with their advisors, whereas faculty frequently mentioned stu-
dent evaluation.

Williams, V. "A Comparison Among Three Experimental Education Pro-
This study compared and contrasted the impact of three different experimental programs on the fostering of logical thought, ethical development, academic aptitude and career planning among post-secondary participants. The author examined the following three programs: 1) Centennial Program, a residential project integrating living and learning; 2) ADAPT (Accentuating Development of Abstract Processes of Thought), a curriculum based on Piagetian notions; and 3) Freshman Human Services, a program which places students in community agencies. In order to assess a diversity of characteristics, scores were elicited from the American College Testing Program, the Tomlinson-Keasey test, the Watson-Glaser Test of Critical Thinking as well as the Perry Scale of intellectual and ethical development. Students in each experimental program performed best in areas emphasized by that program.
Many research projects deal with experiential learning but fall outside the stated bounds of the bibliography (sponsored learning at the post-secondary level) and relevant samples have been included here. Of particular note are those concerning high school programs and adult learners. There are also studies on college-age students which have implications for experiential educators. The ones listed here focus, for the most part, on the questions: Who is the learner? and, How does learning occur?


As the author states: "The purpose of this book is to answer questions about the effects of college on beliefs, attitudes, and knowledge, and to answer them on the basis of the first ten years of an ongoing research program designed to overcome the limitations of earlier studies and to produce data for definitive studies of college impact."


In this study, researchers set forth a general rationale for learning from games. The main purpose of the study was to address the question of, "how do games create and influence learning?" This paper elaborates on two processes of learning, defined as "experiential" and "information processing." While most school learning involves the latter process, this study demonstrates the particular value of an experiential approach. The authors conclude that the effectiveness of a game or simulation in altering attitudes or behaviors is contingent upon the extent to which the activity requires players to use knowledge or skills related to the attitude or behavior.


Researchers conducting the Evaluation of Experiential Learning Project found that thirty high school experiential learning programs had a positive impact on the social, psychological and intellectual development of participating students. The research, "included tests of moral reasoning, self-esteem, social and personal responsibility, attitudes towards adults and others, career exploration, and empathy/complexity of thought." The authors found that the most most valuable programs include a reflection component, give students substantial
responsible, last at least one semester and involve participants in the community four or five times a week.


1 Using multivariate statistical techniques, the authors compared the motivating factors for Chicano college students with those of Anglo college students in regard to performing volunteer work. The study found ethnicity to be a significant variable affecting attitude and behavior toward volunteer work. For Chicano students, there was a strong positive correlation between hours volunteered and altruistic motivations for doing so, a relationship that did not occur within the Anglo group. For Anglos, the more politically liberal they were, the more time they volunteered.


2-3 This study investigated the effect of local government internships on high school students' knowledge of and attitudes about government and citizenship. Pre- and post-tests were administered to students participating in four internship programs. The study also included a delayed treatment group, as well as a group enrolled solely in conventional classroom civics courses. Additionally, the authors interviewed four program coordinators, reviewed participants' journals, used questionnaires to gain interns' opinions about the program, and observed the program in action. The report's statistics indicate that internship programs lead to greater knowledge of local government as well as increased political efficacy. They found that learning benefits are increased when students are able to interact personally with agencies and to participate actively at the internship site. The authors also affirmed the importance of a reflective component within experiential programs.


2-3 Twenty-four college students participated in an experiment during one academic quarter to determine the effects of long term group experiential learning. Twelve students were members of a joint experiential learning and traditional academic program while twelve others were undergraduates selected at random from the same college population. Both groups were administered a comprehensive battery of psychological inventories at the outset of the quarter, and again just before the final examination period to determine impact of their respective experiences. Major changes were found in the groups' responses,
particularly in mood states. The more subjective self-report measures revealed greater differences than the objective standardized inventories. A major variable in the groups' reactions to their experiences was found to lie with their expectations.


Students enrolled in a typical academic course of study who chose to participate in a coordinated term of experiential activities designed by Outward Bound were evaluated for change in three domains: personal, behavioral, and environmental (social). They were tested before, during and six months after the experience and specific components of the program which affected change were analyzed in comparison to existing programs on campus. The researchers found, for instance, that living together was the least effective program property for producing change while structured small group experiences was the most powerful. Other implications for program development and analysis of changes in individuals are included.


Prior studies have found that there is more potential for affective development of residential college students than for commuting students. This study tests the affective development of adult, non-resident students of Empire State College.


This study examined the relationship between different forms of field excursions and the retention of verbal knowledge and skills. Based on Gagne and White's proposed model of memory, this research tested the impact of three different instructional methods on the achievement levels of eighth- and ninth-grade geography students. In addition to a classroom component which all students experienced, the first group participated in a field excursion in which they were required to observe, sketch, record and actively explore their immediate environment. In contrast, the second group's field excursion was a passive experience while the third group's instruction occurred completely within a traditional classroom. The results of students' performance on a test of retention of knowledge indicated that fieldwork which encourages active processing is superior to fieldwork which does not. Both fieldwork groups had higher achievement results than the third group which had instruction without fieldwork.
This book presents extensive findings on how students' learning and development are influenced by characteristics of their classroom and living group settings. It also explains how social climate and student behavior in a college living group are affected by such factors as room design, location of study and recreation areas, student-staff relationships, frequency of house athletic activities, and the ability levels and majors of students.


In the first part of this study, forty-eight employers were asked to identify the skills and attitudes of a successful applicant for a non-technical, professional, entry-level position. Employers cited "adaptive skills," or the manner in which employees interact with their work environment, as an area in which most new employees are deficient. However, a majority of those surveyed postulated that these skills could be acquired and practiced during college. Internships, cooperative education programs and field studies were cited as useful in acquiring these skills and aiding students' transitions into the work world. In the second part of the study, a group of six postsecondary faculty and administrators were asked to respond to the employers' suggestions. Both groups agreed upon the importance of including "employability development" in general studies curriculum.

Newmann, F. M., & Rutter, R. A. "The Effects of High School Community Service Programs on Students' Social Development." University of Wisconsin Center for Education Research, 1983. Available from PANEL Services at NSIEE.

This study of eight high school community service programs addresses the following questions: 1) How do programs respond to students from diverse socioeconomic backgrounds and abilities? 2) Are program participants integrated into adult community life? 3) What impact do community service programs have on the social development of participants? Through the use of pre-test, midpoint and post-tests, the authors gathered data on new student attitudes and program practices as they contribute to individualism, collectivism and pluralism in the society.

Career Education (EBCE) studies on pilot and demonstration sites, graduate follow-up and special populations. Synthesizing this material, Owens generalized about the ingredients necessary for a successful program by addressing staff development and worksite characteristics. For those not familiar with the EBCE project, this article gives a short history of its work and related research.


This article describes the findings of a questionnaire study administered to 218 students in eight EBCE programs in five states. The study addressed the following questions: 1) What distinguishes an excellent community learning experience from an unsuccessful program? 2) What is the impact of the community upon such experiences? 3) Do young women's and men's perceptions of successful and poor EBCE programs differ? Students rated "hands-on learning" as the most important aspect of a community experience.


This study recognized the need to identify the impact of job site as a factor contributing to the learning involved in experienced-based programs. Questionnaires were administered to over one thousand high school students enrolled in EBCE programs. Students felt that the most important factor for insuring an outstanding job-site experience was the opportunity to try out work on their own. The results suggested several ways in which experiential education staff can improve the learning potential of a community experience including: group counseling about the work experience, hands-on learning opportunities, and freedom for student exploration.


This project resulted in the creation of a standardized questionnaire, entitled, "College Student Experiences." This test was used as a means for measuring the "quality of effort" in learning. The study indicates that the quality of effort, rather than time, is a more important factor in accounting for student learning and development.

Pascarella, E. T., & Terenzini, P. T. "Student-Faculty Informal Relationships and Freshman Year Educational Outcomes." Journal
This study investigates the informal relationship between student and faculty and three freshman year educational outcomes: 1) cumulative freshman year; 2) grade point average; and 3) self-perceived intellectual and personal growth.


Tough's research focuses on the adult learner specifically in relation to self-direction and group learning.
This section includes models that can be used as the basis for designing and conducting further research on experiential learning. Some models are based on prior research from a wide variety of disciplines, while others have been developed from close evaluation by practitioners in the field. Those with a research base are indicated with an asterisk. As more models based on tested methodologies become available, previous entries which are primarily descriptive or self-reported are deleted.

This is not an exhaustive listing, but a sample of projects by people who have received attention from and have had an influence on experiential learning. As mentioned in the introduction, five of the new entries in this section give an overview of research and suggest many new models for further work: Anderson, Hughes & Permaul (1984); Hamilton (1980); Moore (1984); Owens (1980); and Warner (1984).


Based on a review of this research bibliography and a questionnaire sent to selected practitioners, the authors concluded that the current state of research on experiential learning is very limited and focuses primarily on program evaluation, career development, and personal-life skills development. They offered three broad agendas for additional work: the first would test the current theories in the field in an attempt to identify common elements in experiential learning; the second would look at the effectiveness and impact of experiential learning as it relates to the teaching and learning of specific subject matter; and the third would focus on characteristics of the learner and the learning environment which produce successful learning experiences. An appendix is included which annotates methodological tools available to researchers.


3 This paper presents a model for identifying and measuring individual interpersonal competence and a description of a testing procedure that has been implemented. Argyris defines interpersonal competence and justifies the allocation of educational resources towards future research on this subject.

This guide is intended to serve the needs of students interested in experiential learning. It has two general goals: 1) to provide information about the nature and types of interpersonal competence; and 2) to provide some suggestions about the application of this information either to planning self-directed learning experiences and preparing for assessment, or to meeting the requirements established on campuses for personal or professional learning of interpersonal competence.


This handbook is designed to help faculty members and administrators with four primary tasks: 1) incorporating the subject of interpersonal competence into the programs of post-secondary institutions; 2) developing theoretical foundations for the teaching and assessing of interpersonal competence; 3) administering programs of experiential learning; and 4) assessing experientially acquired interpersonal competencies.


This volume discusses the ways that experiential learning can be used as an instructional tool to provide career-related experiences, service-learning opportunities, a chance to test theory in the field and to, as the title suggests, enrich the liberal arts.


In this chapter, Chickering examines the motives and learning styles of college students in relation to an understanding of adult development and cognitive styles. He addresses this question in two parts: first by describing major dimensions of adult development, and second by indicating some of the implications for education.


This research addresses the problem of relating learning styles to different teaching modes. The first half of this book includes a description of several diverse learning models. In the second section, the authors discuss the dynamic between
administrative response and instructional change. These
instructional changes are examined from the perspective of stu-
dents, teachers and institutions.

Cross, K. P. Accent on Learning. San Francisco: Jossey-Bass,
1976.

1-2 Cross has compiled information from over one thousand studies
of teaching, learning and student development programs. In
this book, she offers practical strategies for facilitating
student learning. She also suggests a model of education that
encourages academic achievement while acknowledging student
differences.

*Druian, G., Owens, T., & Owen, S. *"Experiential Education: A
Search for Common Roots." *Journal of Experiential Education,
Fall 1980. Complete report available from Northwest Regional
Educational Laboratory, Portland Oregon.

2 This study focused on the issue of commonalities among
experiential education programs. The authors produced a nine
dimension framework for identifying essential and common
characteristics of three different programs: Experience-Based
Career Education, Foxfire, and Outward Bound. These dimensions
included learning strategies, program outcomes, characteristics
of participants and instructor roles. Over thirty essential
elements were hypothesized within these nine dimensions.

Duley, J., & Gordon, S. College-Sponsored Experiential Learning.

2 This handbook is designed for faculty as well as other profes-
sionals concerned with developing effective programs of off-
campus experiential learning and assessing the outcomes of
these programs. The authors provide theoretical background for
sponsored off-campus programs, but place the major emphasis
upon pragmatic problems of defining educational objectives,
developing placements for students, and preparing those stu-
dents for effective learning experiences.

*Faught, W. S. A Model for Self-Developed Undergraduate Liberal
Arts Internships in Business and Industry. Master's thesis,
University of San Francisco, 1980. Available from PANEL Ser-
vices at NSIEE.

2 Finding entry level jobs in business and industry has been a
difficult task for liberal arts graduates, and yet, skills that
liberal arts students possess are sought after in business
fields. In this thesis, the author describes a model for a
course which addresses this apparent dichotomy. Extensive
interviews with business executives and a self-developed
internship proved to be successful vehicles for bridging the
gap between the needs of the students and those of industry,
This study was undertaken to assess the effects on undergraduates of participation in a limited experiential learning program offered as part of an academic course. Analyses were carried out to assess the variables of participation in the course on perceptions of education, and on the lasting effects of the course on its students. Data were collected from four questionnaires, two of which were answered by members of the class in the fall while it was being offered and two were answered one year after the course was offered. Mean scores were computed and analysis carried out on those questions which appeared to have significant differences between the groups. Many results were found but they offer no definitive conclusions; rather, possible interpretations and further directions for study are discussed.


The author described a "setting and behavior instrument" (SBI) which could be used to both quantitatively and qualitatively assess post-secondary internships. By looking at the social, physical and noetic properties of a learning environment, Grannis assessed the conditions associated with different levels of intern performance. The model was tested on inner-city high school seniors involved in the Secondary Education through Health Program (SETH) in New York. Results obtained over a three-year period proved the instrument's applicability in a variety of research settings.


After reviewing the research Hamilton states that the claims for experiential learning have not been grounded solidly in research. In this article, he defines the properties, forms and purposes of experiential learning, proposes a framework for its assessment by reviewing selected evaluation studies, and then offers recommendations for further research that would guide program development and increase knowledge about the learning and socialization process. He feels that more valid instruments need to be developed to measure the effects of experiential learning and urges researchers to use experimentation in program design and evaluation as an exploratory strategy.

Keeton, M. & Associates. Experiential Learning: Rational,

This important source book on experiential learning includes many articles noted in other sections of this bibliography. Some of the articles not noted could possibly serve as important models for further research.


This compendium provides an introduction to techniques that can be used to assess student "learning by doing." This model can evaluate post-secondary learning by students during participation in a variety of social, artistic, political, cross-cultural or work activities off campus.


This guide to the theory and practices of learner-centered adult education focuses on the differences between adult learners and traditional college students. It includes numerous examples of materials developed at a variety of institutions.


In this chapter Kolb re-examines his own theory of experiential learning in relation to other research, theories of cognitive development and styles of learning. Investigators have found stage theories (particularly Loevinger's work on ego development and Kohlberg's work on moral development) a useful tool in looking at affective and cognitive growth which occurs in field-based learning situations.


In this chapter, Kolb and Fry outline their important theory of experiential learning in a four-stage cycle: "Immediate concrete experience is the basis for observation and reflection. These observations are assimilated into a 'theory' from which new implications for action can be deduced. These implications or hypotheses then serve as guides interacting to create new experiences."

2 The author of this article presents a clear and practical model for debriefing that follows a three-session format. Sample work tools are included.


2 This casebook has been designed to provide information on internship education for interns, program staff, faculty, agency sponsors, students and researchers. The authors discuss procedures used by selected programs, analyze various administrative models of programs and examine six case studies of internship programs.


2 The author presents a background for, and a model of, "sandwich courses" in Great Britain (courses normally of four-years duration of which one to two years are spent in supervised industrial experience). The study included a sample assessment form and a discussion of areas of assessment.


1-2 The authors argue that a knowledge of experimental design techniques makes obvious the need for a major revision in the methodology of field experience evaluation. They suggest that studies of field experience may be organized according to three states of the experiential process: 1) selection factors prior to the experience; 2) immediate change due to the experience; and 3) the persistence of change following the experience. Compared to traditional campus activities, field experiences appear to have some significant impact on college students.


2 The lack of collective coherence and the use of inadequate methods may be the two biggest stumbling blocks for researchers of experiential education states David Thornton Moore in his critique of current work in this field. He feels that too much of the research is focused on input/output variables and not enough examines the actual field experiences of students and the environment in which those take place. He calls for more work on process and feels the three areas of ethnographic, developmental and pedagogical studies will be helpful in developing a coherent inquiry with this focus. Many research
models, with proven methodologies, are suggested for further work in this important area.


Four strategies are outlined which the author feels can be particularly useful in conducting research on experiential education: student case studies, content analysis, focused survey, and concept analysis. He defines each of these strategies, gives a specific example of its application, and discusses the strengths and weaknesses for its use in experiential education. All of these have been or are being used at the Education and Work Program in association with Experienced-Based Career Education (EBCE).


2 This collection of articles is designed to facilitate the exchange of information between the curriculum worker and the educational evaluator. Areas covered include: curriculum and instructional evaluation, identification of relevant educational goals and objectives, measurement techniques and problems associated with curriculum evaluation projects.


2-3 This report has three major objectives: 1) to identify specific learning competencies; 2) to identify judges of these competencies, their qualifications, and their roles; and 3) to develop assessment procedures using these judges.


1 This book presents a methodology for evaluating students' development during college. It takes their individual experience into account, and looks at how perspective changes during four years in a liberal arts curriculum. The methodology is based on yearly interviews in which students recount their experiences. These are then looked at in terms of a progression of forms in which experience is construed.


2 In this article the author presents a model by which a volunteer experience can be processed and measured. Current
research and theory is used as a basis for this model.


2-3 The taxonomy presented in this book provides a structured approach to incorporating experiential learning into curriculum. The authors feel this approach can be used with any subject at any grade level. They contend that experience can be divided into five categories (exposure, participation, identification, internalization and dissemination) and that the taxonomy can be used to deal with issues of program planning, developing critical thinking, problem solving, and evaluation of both the learning and the teaching. The authors have tested their contentions in a variety of settings and out of this research have been able to make additional suggestions for implementation. Although their work was done primarily in K-8 classrooms, career education programs and handicapped education programs, it has clear implications for post-secondary work.


2-3 Warner looks at the history of experiential learning programs and describes how the gulf between research and practice has produced a weak research literature. He encourages experiential educators to break away from past research trends and concentrate on evaluation research which would be developmental and experiential in nature and focus on process looking specifically at concrete behavior and accomplishments. He suggests numerous models which can be used and calls for more diversity in evaluation methods.


2 The purpose of this report is to summarize in outline form what CAEL has come to view as sound procedure in the assessment of experiential learning. It provides a distillation of CAEL research findings with appropriate references to fuller discussion.
RESOURCES

This section will assist those interested in research on experiential learning in identifying centers where the work is being done and publications in which the articles occur. In addition to the centers mentioned below, many studies are undertaken by educational research departments of universities, by the experiential learning programs themselves, and as masters or doctoral dissertations.

It is important to note that the new entries in this revision of the bibliography occurred in several journals not previously consulted. I feel that this is indicative of the new linkages being made between professional organizations and also with established academic disciplines. In addition, it may reflect the movement toward drawing on proven methodologies used in other fields. The new journal titles are listed below with an asterisk and, combined with those from the initial development of the bibliography, they form a comprehensive list of publications in which research articles on experiential education occur.

Alternative Higher Education
*American Educational Research Journal
*American Journal of Education
Capsule
Change Magazine
*Child and Youth Services Journal
Cooperative Education Research Center, Northeastern University
Council for the Advancement of Experiential Learning (CAEL)

Special mention should be made of the CAEL bibliography and the supplement (Stutz & Knapp, 1977, 1978). They were extremely helpful and comprehensive and contain valuable references to philosophical and descriptive information which was not included in this bibliography, but which is important to those involved in the field of experiential learning.

Dissertation Abstracts International
Educational Researcher
*Environment and Behavior
Far West Laboratory for Educational Research and Development
Harvard Educational Review
Innovative Higher Education
(Formerly Alternative Higher Education; name change 1984)
Jossey-Bass Publications
(Including New Directions for Experiential Learning Series)
*Journal of Applied Behavioral Science
*Journal of College Student Personnel
*Journal of Cooperative Education
Journal of Educational Research

- 29 -
Thirty-six research projects were supported by the U.S. Office of Education from 1973 through 1979 to contribute to the "improvement, development and promotion of cooperative education." This volume summarizes the methodology and findings of that research, its quality and accomplishments. Overall generalizations and recommendations for further work are also included in the last chapter.


This resource book is a compilation of nine different case studies of post-secondary field experience programs. Most of the programs are implemented in conjunction with liberal arts curricula and may serve as models for program development. The case studies address such concerns as preparation of students, program goals, assessment and evaluation, as well as questions about what constitutes college-level learning. Also of note are the appendices which analyze the programs and which include an annotated bibliography on field experience education research.


This annotated bibliography contains research studies from 1965 to 1985 and is particularly useful in providing information on unpublished PhD dissertations and on recent work (since 1980) which is not included in Brown's Federally Supported Research into Cooperative Education (1980).

A list of about 280 references touching on a variety of important aspects of experiential learning and its assessment. All publications included were sorted into categories and judged according to the following criteria: relevance to experiential learning, usefulness, availability, and uniqueness.


This edition is a supplement to the 1977 Guide. It does not duplicate the content of the earlier document but rather provides a completely new set of references. This supplement is organized into five parts: experiential learning and experiential education, literature on assessment, an alphabetical listing of all annotated references, a list of references received too late to annotate, and a subject index.


This work is a compilation of research articles, reports and dissertations on the cooperative education aspect of experiential education. Included in this fifth edition are articles on the different roles of the faculty, student, employer, administrator, coordinator and the federal government in facilitating cooperative education. Also included is information on evaluation and assessment, cost analysis, funding, and international cooperative education.
## INDEX OF AUTHORS

<table>
<thead>
<tr>
<th>A</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Anderson, J.</td>
<td>21</td>
</tr>
<tr>
<td>Althof, J. E.</td>
<td>22</td>
</tr>
<tr>
<td>Argyris, C.</td>
<td>21</td>
</tr>
<tr>
<td>Astin, A. W.</td>
<td>15</td>
</tr>
<tr>
<td>Avakian, A. N.</td>
<td>17</td>
</tr>
<tr>
<td>B</td>
<td></td>
</tr>
<tr>
<td>Bell, M. R.</td>
<td>28</td>
</tr>
<tr>
<td>Betts, F. M.</td>
<td>5</td>
</tr>
<tr>
<td>Borzak, L.</td>
<td>5, 10</td>
</tr>
<tr>
<td>Breen, P.</td>
<td>6, 21, 22</td>
</tr>
<tr>
<td>Bridges, J. A.</td>
<td>13</td>
</tr>
<tr>
<td>Brooks, S. E.</td>
<td>22</td>
</tr>
<tr>
<td>Brown, S. J.</td>
<td>6, 30</td>
</tr>
<tr>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Carver, J.</td>
<td>6</td>
</tr>
<tr>
<td>Chickering, A. W.</td>
<td>22</td>
</tr>
<tr>
<td>Claxton, S. S.</td>
<td>22</td>
</tr>
<tr>
<td>Coleman, J. S.</td>
<td>15</td>
</tr>
<tr>
<td>Conrad, D.</td>
<td>15</td>
</tr>
<tr>
<td>Cordisco, J.</td>
<td>6</td>
</tr>
<tr>
<td>Crommett, M.</td>
<td>7</td>
</tr>
<tr>
<td>Cross, K. P.</td>
<td>23</td>
</tr>
<tr>
<td>D</td>
<td></td>
</tr>
<tr>
<td>Donlon, T. F.</td>
<td>21, 22</td>
</tr>
<tr>
<td>Drulian, G.</td>
<td>23</td>
</tr>
<tr>
<td>Duley, J.</td>
<td>23, 30</td>
</tr>
<tr>
<td>Ehrensaft, D.</td>
<td>13</td>
</tr>
<tr>
<td>Enright, R.</td>
<td>9</td>
</tr>
<tr>
<td>Faught, W. S.</td>
<td>23</td>
</tr>
<tr>
<td>Fenton &amp; Fenton</td>
<td>7</td>
</tr>
<tr>
<td>Fletcher, S.</td>
<td>6</td>
</tr>
<tr>
<td>Fry, R.</td>
<td>25</td>
</tr>
<tr>
<td>Gansneder, B.</td>
<td>7</td>
</tr>
<tr>
<td>Gansneder, N. J.</td>
<td>8</td>
</tr>
<tr>
<td>Garza, R. T.</td>
<td>16</td>
</tr>
<tr>
<td>Gillenson, A.</td>
<td>24</td>
</tr>
<tr>
<td>Gordon, S.</td>
<td>23</td>
</tr>
<tr>
<td>Gottsdanker, J.</td>
<td>8</td>
</tr>
<tr>
<td>Grannis, J. C.</td>
<td>24</td>
</tr>
<tr>
<td>Griffore, R. J.</td>
<td>8</td>
</tr>
<tr>
<td>Gyski, G. S.</td>
<td>8</td>
</tr>
</tbody>
</table>

- 32 -
<table>
<thead>
<tr>
<th>Name</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hamilton, S.</td>
<td>16, 24</td>
</tr>
<tr>
<td>Harmon, S. K.</td>
<td>9</td>
</tr>
<tr>
<td>Heck, S.</td>
<td>9</td>
</tr>
<tr>
<td>Hedin, D.</td>
<td>15</td>
</tr>
<tr>
<td>Hendel, D. D.</td>
<td>9</td>
</tr>
<tr>
<td>Hughes, L.</td>
<td>21</td>
</tr>
<tr>
<td>Hull, W. F.</td>
<td>10</td>
</tr>
<tr>
<td>Hursch, B. A.</td>
<td>5, 10</td>
</tr>
<tr>
<td>Jacobs, P. I.</td>
<td>11</td>
</tr>
<tr>
<td>Jenks, L.</td>
<td>10, 18</td>
</tr>
<tr>
<td>Jernstedt, G. C.</td>
<td>16, 17, 24, 26</td>
</tr>
<tr>
<td>Johnson, B. T.</td>
<td>16</td>
</tr>
<tr>
<td>Johnson, G. W.</td>
<td>8</td>
</tr>
<tr>
<td>Keeton, M.</td>
<td>22, 24</td>
</tr>
<tr>
<td>Kiel, D. H.</td>
<td>10</td>
</tr>
<tr>
<td>Kingston, P. W.</td>
<td>8</td>
</tr>
<tr>
<td>Knapp, J. E.</td>
<td>11, 25, 30, 31</td>
</tr>
<tr>
<td>Knowles, M. S.</td>
<td>25</td>
</tr>
<tr>
<td>Kolb, D. A.</td>
<td>25</td>
</tr>
<tr>
<td>Laramee, W. A.</td>
<td>25</td>
</tr>
<tr>
<td>Lemke, W. H.</td>
<td>10</td>
</tr>
<tr>
<td>Lipsett, A.</td>
<td>17</td>
</tr>
<tr>
<td>Lipton, J. P.</td>
<td>16</td>
</tr>
<tr>
<td>Little, T. C.</td>
<td>7</td>
</tr>
<tr>
<td>Livingston, S. A.</td>
<td>15</td>
</tr>
<tr>
<td>MacKenzie, A.</td>
<td>17</td>
</tr>
<tr>
<td>Markwood, R.</td>
<td>26</td>
</tr>
<tr>
<td>Marshall, V. C.</td>
<td>26</td>
</tr>
<tr>
<td>McGovern, J. S.</td>
<td>24</td>
</tr>
<tr>
<td>McHugo, G. J.</td>
<td>17, 26</td>
</tr>
<tr>
<td>Miko, M. B.</td>
<td>27</td>
</tr>
<tr>
<td>Moore, D. T.</td>
<td>11, 26</td>
</tr>
<tr>
<td>Moos, R.</td>
<td>18</td>
</tr>
<tr>
<td>Mulcahy, K. F.</td>
<td>11</td>
</tr>
<tr>
<td>Murphy, C.</td>
<td>10, 12, 18</td>
</tr>
<tr>
<td>Newmann, F. M.</td>
<td>18</td>
</tr>
<tr>
<td>O'Toole, L. J.</td>
<td>8</td>
</tr>
<tr>
<td>Owen, S. K.</td>
<td>19, 23</td>
</tr>
<tr>
<td>Owens, T. R.</td>
<td>18, 19, 23, 2</td>
</tr>
<tr>
<td>Pace, R. C.</td>
<td>19</td>
</tr>
<tr>
<td>Pascarella, E. T.</td>
<td>19</td>
</tr>
<tr>
<td>Payne, D. A.</td>
<td>27</td>
</tr>
<tr>
<td>Name</td>
<td>Page(s)</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Pedra, J. D.</td>
<td>17</td>
</tr>
<tr>
<td>Pettit, J. S.</td>
<td>21, 27</td>
</tr>
<tr>
<td>Perry, W.</td>
<td>27</td>
</tr>
<tr>
<td>Persell, D. E.</td>
<td>8</td>
</tr>
<tr>
<td>Peterson, V.</td>
<td>27</td>
</tr>
<tr>
<td>Pyle, R.</td>
<td>12</td>
</tr>
<tr>
<td>Ralston, Y.</td>
<td>22</td>
</tr>
<tr>
<td>Rutter, R. A.</td>
<td>18</td>
</tr>
<tr>
<td>Sharon, A.</td>
<td>25</td>
</tr>
<tr>
<td>Somers, C. N.</td>
<td>13</td>
</tr>
<tr>
<td>Steinaker, N. W.</td>
<td>28</td>
</tr>
<tr>
<td>Stull, W.</td>
<td>30</td>
</tr>
<tr>
<td>Stutz, J. P.</td>
<td>30, 31</td>
</tr>
<tr>
<td>Terezini, P. T.</td>
<td>19</td>
</tr>
<tr>
<td>Tough, A.</td>
<td>20</td>
</tr>
<tr>
<td>Wagner, J.</td>
<td>13</td>
</tr>
<tr>
<td>Warner, A.</td>
<td>28</td>
</tr>
<tr>
<td>Warren, J. R.</td>
<td>6</td>
</tr>
<tr>
<td>Weible, T.</td>
<td>9</td>
</tr>
<tr>
<td>Whitaker, U.</td>
<td>21, 22</td>
</tr>
<tr>
<td>White, R.</td>
<td>17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whitten, C.</td>
<td>31</td>
</tr>
<tr>
<td>Williams, T. J.</td>
<td>13</td>
</tr>
<tr>
<td>Williams, V.</td>
<td>14</td>
</tr>
<tr>
<td>Willingham, W. W.</td>
<td>28</td>
</tr>
<tr>
<td>Wilson, J.</td>
<td>31</td>
</tr>
<tr>
<td>Wilson, R.</td>
<td>31</td>
</tr>
<tr>
<td>Zanville, H.</td>
<td>26</td>
</tr>
<tr>
<td>Zeldin, R. S.</td>
<td>16</td>
</tr>
</tbody>
</table>