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Toward Cognitive Development through Field Studies

Introduction

Although field study is as ancient as the apprenticeship concept, field study programs have been recreated in recent years as innovative features of many colleges and universities. These programs are as diverse as the institutions that sponsor them. Some are part of cooperative education plans whereby students alternate between a term on campus in regular classwork and a term off-campus in paid employment. Others combine working and studying in the same term. Nearly all have as a primary objective exposing students to a world or perspective beyond the traditional classroom, usually for the purpose of advancing career planning.

Evaluation of such programs in terms of reported outcomes and the achievement of objectives is far less developed than the programs themselves. Similarly, the relationship of field studies to the traditional goals of postsecondary education has been ambiguous and even discordant, and educators involved in such programs express concern about "bridging the gap" between academic and work settings [15].

What is needed is more detailed documentation of the dynamics of field experience education and some specification of the relationship between those dynamics and the outcomes purportedly achieved in the classroom. In this article, the authors attempt to address those needs by reporting data that have been collected over a span of four years on a particular program design developed at Northwestern University. The design is discussed, observed dynamics and outcomes are presented, and the data are compared to selected theories that attempt to describe the psychologi-

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cal development of students during college. Particular attention is also given to defining sociological dynamics, particularly role-related phenomena, which, according to the data, appear to be causally related to those outcomes.

Method

The authors have been collecting qualitative data on several Northwestern field programs in an effort to articulate the dynamics and the outcomes of the programs in both sociological and psychological terms [1,8]. Illustrative of this data base, the present paper describes a program that occurred in the spring of 1977: the "San Francisco Community Services Program," enrolling nineteen students. Additional data are drawn from a "Field Study in Communication," enrolling twelve students, which also took place in Chicago in spring, 1977.

The data collection effort for both programs included the following components: (1) pre- and post-questionnaires designed to tap the students' attitudes toward classroom work, professors and other authority figures, and the degree of perceived connectedness between academic work and experiences outside of college; and (2) pre- and post-interviews following a loosely structured protocol to allow for the emergence of issues that the students regarded as most important. In the San Francisco program there was, in addition, an analysis of the students' written work for evidence of cognitive growth and the degree to which they could integrate their field work with academic perspectives.

These approaches were selected based on three years of observation and interviewing initially using a "grounded theory" method [6]. That research revealed certain recurrent patterns revolving, in particular, around issues of authority, reciprocal influence, the management of role discontinuity and conflict, and ability to see connections between disparate frames of reference [2]. These patterns lend themselves well to comparison with existing theory and research, specifically (*a*) the models of cognitive development generated by Perry, Loevinger, and Kolb, and (*b*) the empirical results of role theory research summarized by Thomas [14].[1]

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[1]What we must be alert to as we discuss a progression toward growth or toward what Loevinger [11] would call ego development is that many theorists have traced the stages of character development and have used the same term, e.g., autonomy, to describe somewhat different characteristics. Rather than trying to trace a step-by-step process that matches a particular theory, we compare our observations to selected aspects of several theories relating to cognitive development.

The Students

The preprogram interviews and questionnaires revealed that the students who were attracted to the two programs were fairly representative of the general student body at Northwestern. As a group, they had had only a small amount of experience with urban agencies, usually in the form of volunteer work or low-level summer jobs. They expressed a moderately positive attitude toward their college work, a submissive and naïve posture relative to college professors and an absence of perceived reciprocal influence with authority figures in general, a respect for theory tempered by an assumption that "real-life" problems are more straightforward than problems studied in the classroom, mixed feelings about the degree of connectedness between academic work and other endeavors, and uncertainty about their choice of majors and careers.

Examination of the reasons given by students for participating in the San Francisco and Chicago programs before the programs began reveals a combination of approach and avoidance motives. The approach aspect was the desire for practical experience in a particular profession or career that would confirm or expand a vocational inclination. This future career or vocational interest was by far the most frequently stated reason among students in both groups. In their applications for the program and in their preprogram interviews, seventeen of the thirty-one students said that they hoped the field experience would enable them to get a feeling for what they would face in a particular career: the tasks and demands, the kinds of people they were likely to encounter, the day-to-day practices. This vocational orientation also included the expectation that their internship experience would increase their "marketability" as one student succinctly phrased it. They anticipated that the internship, as an eight-week employment experience, would "look good" on their resumés, either to graduate schools or to prospective employers or to both.

The avoidance dimension of the field study is revealed in the students' recurrently expressed desired to "get away." They spoke of getting away from classes in which they felt confined and "stilted," of getting away from books and from the pace of campus life ("too slow"). Some even spoke of getting away from parental influence which they felt was more apparent on campus than it would be during the field work.

The desire to "get away" from the academic world is very closely related to another pattern: the tendency to view the university and the world of work as two glaringly different worlds, with the latter perceived as the "real" world. Students spoke repeatedly of seeing the way things *actually* are, not the way they are presented in the classroom. Concepts

and theories were interesting, they maintained, but "one needs to see things first hand" to get "real life experience."

Just as they see the two worlds as separate and mutually exclusive, students anticipate that "real life experience" is different from the conceptualizations of the academic world. They had no sense, before the field study, of what Kolb [9] describes as four different modalities of a single learning process, in which people can move from active experimentation to concrete experiencing to reflective observation to abstract conceptualization. After the field study, however, many students had an appreciation for these modes of knowing as different aspects of a larger process.

Another important reason students gave for applying to the urban field program was to explore a new city, or, in the case of students in the Chicago program, to explore, in a new way, a city with which they were already somewhat familiar. A third appeal of the urban aspect of the programs as expressed by students, was the opportunity to learn about the political and social workings of a city. This was true for both San Francisco and Chicago students and would pertain to most urban-based programs.

Others spoke of how they expected field work to be different from classwork or from other jobs, that it would be more "meaningful," that they would be more "active" or have a more active part in the "real world" than they had in the academic world. Again, there was little or no awareness that active experimentation, which Kolb outlines as one of four stages in an experiential learning process, might be part of a cycle in which they were already engaged as college students.

In addition to the foregoing, there was a kind of moral fervor on the part of some students: a desire to "do good," to change the world, to make it better. Far more common, however, were statements that in general can be categorized as the desire to have an impact on one's own life, to change in a valued direction: to become more self-confident, more independent, more responsible, more self-disciplined. This, as will be seen, is an expectation that was met.

A final recurrently expressed expectation was centered on the kind of learning to take place. Several spoke of hoping to learn in new ways that were more "practical," "relevant," "applicable to people," than classroom "spoon-fed" learning. One student maintained that the de-emphasis on grades within the program would allow learning to take place for its own sake in a noncompetitive atmosphere, and that this could be "more worthwhile" than traditional academic experiences had been.

This last set of expectations is akin to some of the major steps of development or developmental tasks that Chickering [3] outlines as

preeminent during the college years, especially the "vectors" of competence, autonomy, and clarifying purposes. Chickering calls these "growth trends" [3, p. 8], and we could see the desire for such growth in the field study participants even before the programs began. What is interesting is that for many this growth process will be perceived by them as exceeding what they had initially anticipated.

Program Design and Role-Related Dynamics

The San Francisco Program selected primarily upper-class applicants during the winter of 1977, and, prior to the onset of the field study, provided orientation workshops to discuss placement opportunities, the thematic focus for the study, and selected field research methods. At the onset of the field experience, the students interviewed with preselected community service agencies until they reached a mutual agreement with an agency regarding an internship assignment. Thereafter, the students worked in the agency twenty to forty hours per week for approximately eight weeks. They simultaneously engaged in weekly seminars, required reading in theory and research, and assigned written work, including a field journal, two analytical papers, and a final project. The staff for the program consisted of one faculty director and two teaching assistants.

The Field Study in Communication followed a similar plan, except that the students found internship placements in Chicago, primarily in agencies devoted to legal aid and civil rights. The twelve students in this program continued living on campus but fully immersed themselves for ten weeks in internships of thirty-five to forty hours per week in the city. The staff consisted of two professors who conducted weekly seminars with the students.

Given that most students were enthusiastic about departing from conventional classrooms and undertaking an independent existence in an urban environment, it is not surprising that the first two weeks of the programs were characterized by intensive investment of energy in exploring the city, learning the bus routes, and inventing patterns for handling daily living necessities. Both programs had deliberately refrained from structuring these necessities in order to maximize student autonomy. Students who had been living in residence halls reported that this was the first time they had experienced such a cluster of responsibilities all at one time; and it may be observed, therefore, that the experience represented significant role discontinuity for the majority of them. Abruptly, they were responsible for themselves—for legal contracts, for handling their own finances to cover subsistence and recreation, and for finding their own way around. While this challenge was less pronounced for the Chicago

group than the San Francisco group, most of the same feelings were reported.

The students were also confronted during this time with the need to visit various agencies to interview for internship positions. Thus they assumed the role of "job applicant" for a time, and were forced to conceptualize and articulate their interests and capabilities to a potential supervisor. This too was a new phenomenon for many of the students.

As placement decisions began to be made, the students began assuming roles as paraprofessionals in community service agencies. The agencies had been preselected by the programs to insure that the internship experiences would afford opportunities for significant involvement in their functioning rather than assignments as clerks, menials, or secretaries. In reality, the placements approached this goal in varying degrees, such that some students were given more status and authority than others.

All participants, however, were confronted with the need to establish quasi-collegial relationships with their supervisors and co-workers in the agency; in short, they were expected to function as working adults. Again, the role discontinuity was evident, especially in light of the fact that the interns interacted with the *clients* of the agencies. This further emphasized the need for students to function as responsible adults, or in some cases, even as authority figures. The interaction with clients was probably the most significant departure from previous roles the students had enacted, and it precipitated a major shift in the students' self-concepts as time went on.

It also precipitated considerable exploration of what it meant to be an "adult" and what forms of behavior were needed to function as paraprofessionals in community service agencies. It was clear that new forms of behavior were needed—the old "student" behaviors, such as receiving assignments, taking notes, reading extensively, following directions, and considering information from the unidisciplinary perspectives of academe were of considerably less utility when the task at hand was to solve a real-life problem for a client or join in staff deliberations on agency policies.

The students developed a variety of patterns of "adult functioning," as might be expected when a diverse group is confronted with fairly dramatic role discontinuity. All, however, exhibited some new forms of behavior, as revealed by the post-interview in which all conceptualized initial contrasts between the role of "student" and the role of "intern."

After the first two weeks of the program, the students began to encounter other types of role challenges, precipitated largely by the on-site presence of the academic component: required readings, written work, and seminars conducted by the teaching assistants and/or program direc-

tors. In the weekly seminars, students were once again reminded of their role as students, even though the staff endeavored to avoid "traditional" classroom norms. The students thus experienced days when they moved from an orientation as a quasi-authority figure during the day to an orientation as a student for the evening seminar, a role conflict of noticeable order. Again, this was a phenomenon that was new to most of the students.

The students also had to struggle with the two facets of their functioning as participant-observers. They initially were intent upon assuming the role of participants as a result of their predispositions for engaging in field work. Yet the academic components compelled attention to certain forms of observation and scholarly analysis. Thus, the students fluctuated between postures of giving, relating, helping, doing, on the one hand, and taking, learning, objectifying, analyzing on the other.[2] Since this dilemma is not easily resolved even by professional social science scholars [5], it is important to note the role conflict implications it presented to undergraduates.

This situation was further exacerbated in the San Francisco Program by the academic requirements that caused the students to write three analytical "perspective" papers about the functioning of the agency: one from the point of view of the professionals in the agency, one from the point of view of the clients, and one from the student's point of view. This forced the students to confront the different perspectives in systematic ways and thereby conceptualize the vicissitudes of role differentiation. As often as not, the students' reactions to this requirement were characterized by puzzlement if not protest. However they complied with remarkably faithful representations of the different perspectives.

Reported Outcomes

The post-program interviews revealed several recurrent patterns in the students' reports of outcomes. Vocational goal direction, though a predominant reason given for participating at the onset, was viewed as *one* learning experience among many and not so central as students had anticipated. What was far more central than had been expected was each student's learning about herself or himself. In moving outside of and beyond the role of "student," many participants experienced an expanded self-concept or identity and dimensions of power or ascendancy. Chickering [3, pp. 54–77] would label this the developing of autonomy.

After the field study, although there were many remnants of thinking

about the "real" world and the academic world as two separate and mutually exclusive domains, there was a noticeable shift in how reality was to be defined. Several students reported, particularly in their final papers, that even in the so-called "real world," what is *real* depends on whom one talks to. There was a noticeable appreciation for conflicting perspectives; as, for example, in one student's report on professionals in two different agencies that were in competition for federal grant money. For many students, the original dualistic division into "real" and "unreal" had to be relinquished.

This capacity to move fluidly and deliberately across two or more perspectives may be defined as "decentering" [2, 13], and it was very much in evidence by the conclusion of the field programs. Although decentering can take many different forms, a relevant conceptualization has been offered by Perry [12], i.e., abandonment of dualistic (black/white) thinking in favor of multiplistic or relativistic thinking. The internship experience per se, insofar as the intern is exposed directly to both clients and professionals associated with a community service agency, is conducive to an awareness of multiple perspectives. Added to that were the academic requirements that specifically focused attention on multiple perspectives: the perspective papers in the San Francisco program and the seminars in the Chicago program. These academic requirements are seen as crucial in developing students' abilities to shift from one perspective to another, thus approximating Loevinger's conscientious stage of development [11, p. 20].

Typically this shifting took the form of switching sides in questions of innocence or guilt, right or wrong, good or bad. More significantly, it also took the form of standing back and not taking sides at all because of a new awareness of the complexity of the problem. One intern, in the Office of the Public Defender, reported that before the field program she would have sided with the public defender, but could now see the other side. Another said that she saw the question of guilty or not guilty as "more complex than (she) had originally thought" and now had to think twice about it. These comments depict the cycle that Kolb describes as reflective observation that can lead to the formation of abstract concepts and to the testing of such concepts in new situations.

Students reported various shifts in their own opinions, usually characterized as the appreciation of shades of grey in what was formerly a black/white way of thinking. One student said she had learned that there "aren't simple black/white decisions," and another reiterated that observation: "It's slow and frustrating... things aren't so clear cut." This suggests Loevinger's autonomous stage [11, p. 23] in which the tolerance

for ambiguity is increased, and people can transcend thinking in terms of polarities. Perry characterizes the same dynamic as the transition from dualism to multiplicity [12].

In some ways these manifestations of decentering are related to what we have earlier called the moral fervor of some students before the field studies began. Some of that fervor is based on a simplistic and ingenuous approach to complex problems that was rarely in evidence at the conclusion of the program. Interns reported that they learned, all too painfully, that there is no one ''right'' answer or that the ''system'' cannot be bucked, that it is inherently complex and many-sided. One remarked that she had learned from her supervisor to be more critical and to realize that ''change is possible but not immediate revolutionary change.'' According to Loevinger, seeing reality as complex and multifaceted is a very late stage of character development and one that many adults never achieve. Thus, it is especially noteworthy that these awarenesses are reported by students after the field programs.

Several students reported that they had learned to shift perspectives in problem solving—to approach problems from points of view other than their own. Some said that they had learned to weigh alternatives that they would not have considered before, especially in relation to what they came to see as conflicts of interest between clients and professionals.

Many students used their final papers as an opportunity to look critically and analytically at problem solving, usually though not always within the context of the agencies in which they had interned. This final paper was an important link between theory and practice, and it should be noted that for some at the outset, it was the *only* immediately apparent link between the academic component of the programs and the experience as interns. Though the field programs, particularly the San Francisco Community Service Program, had as a stated objective helping students to see connections between theories and practical applications in the field, initially interns saw little relationship between the day-to-day problems of their agency and the readings and writing they were assigned by the program director. The final paper, however, was the capstone on opportunities to reflect on problem solving and institutional functioning. These papers epitomized the cognitive shifting called decentering and provided an opportunity to operationalize Kolb's experiential learning theory [9].

One student, for example, focused on the competitive tension and conflict between a planning agency and an economic council of the mayor's office in San Francisco. He was able to blend his empirical observations as an intern with resources such as sociological readings in community organization practices, notes from talks given at program

seminars, and personal interviews he conducted with those involved in the interagency feud. After conceptualizing the differences between a "planner's perspective" and an "economist's perspective," he concluded: "Widely different professional perspectives could be combined to give a well-rounded and comprehensive approach to a problem. An individual professional could get helpful tips or ideas from professionals in agencies other than his own who may have experience or special training in the area in which he is working."

The value of multiple perspectives is affirmed and shared by other students as well. By several it was described as a "broadening" of their own way of thinking, an expansion of their former relatively narrow frame of reference. For some, this took the form of a new desire to take courses outside of their majors. One remarked that the field experience had shown her that what she needed in her field (radio/TV) was not more technical courses as she had thought, but rather courses in psychology and sociology that would help her understand the people she would be encountering. Another said that the major isn't all that important: "What you learn and how you put it together is most important."

One of the most noteworthy and prevalent changes reported by field study participants was a new appreciation of themselves as active rather than passive. They said they had learned to take initiatives, to take responsibility for themselves, to be more autonomous and independent. Several spoke of feeling more "in charge" or in control. Others reported an increase in self-confidence. One student attributed this to "encountering experiences instead of reading about them." Such descriptions very closely resemble Chickering's characterization of autonomy, particularly the dimension that he terms "instrumental independence" [3, p. 12].

One way of describing this change is to understand these young people as moving outside of and beyond the role of "student." Many reported that they were viewed by their supervisors and by co-workers in the agency as responsible adults. They were treated as people and in many instances established person-to-person relationships with supervisors, exchanging views and occasionally establishing friendships. For some the relationships with professors directing the program also reflected this change. They reported relating to professors more "as equals" and behaving more informally than would be "encouraged or proper" on campus.

Another factor that may be contributing to the sense of personal expansion is the increased awareness about particular careers, which had been a high priority item for participants from the beginning of the programs. Having a chance to examine community law or city planning "firsthand"

enabled many interns to have a stronger commitment to a particular vocation and thus a clearer sense of their own direction in terms of immediate and long-range goals. Or, on the contrary, some interns learned what they wished to avoid in terms of a career. Some supervisors served as negative role models, although more frequently they were viewed as good examples of professional service workers. Some of the supervisors helped interns to see new career possibilities. For Chickering a major constellation of development during adolescence is clarifying purposes. One important domain in this area is increasing clarity and conviction with respect to vocational plans.

Several interns were quite pleased that they had successfully passed a "test" of whether or not they were suited to a particular vocation. They viewed the internship as a kind of trial run which, in most cases, was successfully completed. Several reported more motivation or a stronger sense of purpose in preparing for their future careers, together with an improved ability to select future coursework, both inside and outside of their majors, with an eye toward effective preprofessional development.

Analysis and Discussion

The findings reported thus far afford a useful commentary on the value of field programs such as the ones described at Northwestern University. However, it remains to be specified, in logical sequence, *why* these outcomes occurred given the particular circumstances. A satisfactory answer to that question is needed in order to provide a theory generalizable to other programs, and/or to allow for the collection of quantified data through quasi-experimentation. In this section, therefore, we attempt to explain how certain role-related phenomena, on a sociological level, can precipitate cognitive development on a psychological level.

The body of knowledge known as "role theory" provides a number of constructs and empirical findings that are highly relevant to understanding the dynamics of the Northwestern field studies and perhaps others as well. Role discontinuity—the abrupt transition from one role to another—is of course an obvious component in field programs. Role conflict—the simultaneous performance of two or more discrepant roles—was also a significant reality in the Northwestern program design. Other constructs such as "role ambiguity" and "role overload" were operating as well. Each of these phenomena has predictable effects upon individuals, according to role theory research [14]. It is these effects that probably best explain the outcomes the students reported.

The role discontinuity that students experienced when they moved from

the classroom to the field created a need for them to cast around for new ways of defining themselves and selecting their behaviors. They initially experienced role ambiguity—i.e., unclear role definition. They in essence had to "negotiate" with their agency supervisors to identify their role and stature in the agency. They also had to try out new and unfamiliar forms of adult behavior as they undertook to regularize their living situations.

As suggested by role theory, this discontinuity and ambiguity engendered in students an attentiveness to new points of view. They were extremely alert to receive cues as to how they should behave as independent adults. They "understudied" their supervisors to perceive the professionals' viewpoints. They were confronted with certain role expectations "sent" to them by clients, and hence were motivated to understand the clients' viewpoints. Likewise, they were attentive to the expectations of their landlords, their roommates, and natives of the city, based on the assumption that no one wishes to behave like a naïve tourist.

Thus, it seems clear that the role discontinuity and ambiguity that were inherent in the programs created in students a pronounced "readiness for learning," an openness to new perspectives and new information, and the need to experiment with new behaviors in order to function adequately in the situation. This is dynamically similar to Lewin's concept of "unfreezing" [10, p. 129] as a necessary component in the process of planned change. This, in and of itself, may explain why the Northwestern students reported such outcomes as an expanded self-concept and a new awareness of complexity. It may also be generalizable in explaining why cooperative programs have such a maturational effect upon students.

The attentiveness to new perspectives fostered by role ambiguity vis-à-vis agency professionals and clients, and the resultant need to empathize with more than one perspective in order to understand how to behave, enabled students to conceptualize the importance of both role and perspective differentiation in human social systems. To the extent that students learned to manage the multiple perspectives in problem-solving efforts, i.e., to decenter, they learned an important skill which traditional, unidisciplinary classrooms seldom convey.

However, the Northwestern design involved an additional set of dynamics. Unlike most cooperative programs, the Community Services Program and the Field Study in Communication both included an on-site academic component. Seminars, readings, papers, and instructors were present to prevent the students from assuming an uninterrupted role as interns. Instead, the programs caused them to fluctuate between the new

roles of adult/paraprofessional and the role of "student" which was inevitably rekindled every time they attended a seminar. The academic component, in emphasizing the "observation" element in the participant-observer role, further interfered with simple immersion in the internship experience. It is tempting to think that the academic component provided valuable academic perspectives with which to interpret the field experience. Indeed, this position is taken by Heskin in his assertion that "Without the input of the instructor... experience can do little than occupy time and create a blur of color and light" [7, p. 123]. It is more probable, however, that the academic component, although no doubt valuable, simply created a classic instance of role conflict because the behaviors that accompany the role of student and the role of adult are, at least in common practice, incompatible. As interns the students needed to be active, productive, and, in some cases, authoritative. The student role had usually involved being passive, receptive, and submissive to authority.

This role conflict created frustration and tension, as is predicted by role theory [14], which in turn created in students the need to reduce the tension. The only effective way to reduce tension was to reduce the apparent conflict between the roles/perspectives of student and adult. This meant searching for the common denominators between the two roles: to wit, (*a*) modifying the role of student toward that of scholar, i.e., one who, as an adult, is interested in learning things in systematic ways (actively, productively, and even authoritatively); and (*b*) emphasizing in the role as paraprofessional such capacities as systematic (rather than hunch-based) problem solving, informed (rather than speculative) decision making, effective communication, and periodic distancing in order to maintain objectivity and allow for careful observation of events (rather than subjective identification with them).

To the extent that students achieved this reconciliation of roles, they experienced considerable agency success and a corresponding increase in self-confidence as students *and* as paraprofessionals. This self-confidence helps to explain why students reported a decreased intention to rely on "major" coursework upon their return to campus. They had discovered there is no corner on career-specific expertise, and thus the mystique had been removed from career-specific coursework. Their increased interest in liberal arts courses—in being well-rounded in order to be effective problem solvers—follows logically from the demystification of the career and the discovery that "holism" was useful, and in fact necessary, in paraprofessional experience.

In a similar sense, this exercise in identifying common denominators increased the students' ability to see connections, to empathize, and to coordinate multiple perspectives in coming to grips with reality-based problems. Given that multiple perspectives were emphasized, and given that the students-qua-interns had to *act* nonetheless, following *some* perspective, the students were motivated to develop ways of organizing the varied perspectives. This meant creating metaperspectives, or more abstract conceptual schemes against which to classify or manage the many available perspectives. Such metaperspectives were necessary to afford principles for (*a*) assessing the utility of various perspectives for specific problem-solving efforts, (*b*) assessing the relevance of alternate perspectives to decision-making processes, (*c*) integrating multiple perspectives or bringing them to bear on one another, and (*d*) identifying common denominators or connections between disparate frames of reference. It is this ability to develop metaperspectives—the capacity to think about thinking—which distinguishes relativism from multiplicity, in Perry's terms [12].

In traditional classrooms, the development of metaperspectives can be avoided. In the internship, however, there was an emphasis on action. Without developing metaperspectives, students either were immobilized by the existence of competing perspectives, or had to act upon simplistic perspectives. Both approaches quickly proved unsatisfactory, thus precipitating a search for an alternative.

This set of dynamics went beyond the well-known cooperative model in that the role conflict engendered by the on-site academic component led to greater gains in decentering ability, greater apprehension of complexity, and an increased tendency to return to school with the orientation of an adult or scholar, i.e., a commitment to learning with *purpose* but in broad-minded, rather than narrowly vocational, ways.

Summary

To reiterate this in terms of generalizable theory, the explicit conflict in perspectives engendered by role juxtaposition in the field precipitates complex forms of cognitive development resembling those articulated by several theorists. Directly addressed is Perry's scheme [12]. The field experience seems to facilitate movement from dualism through multiplicity toward relativism. Using Kolb's nomenclature [9], it was necessary for students to diversify their learning styles to incorporate not just concrete experiencing and active experimentation, but also reflective ob-

servation and abstract conceptualization. In Loevinger's terms [11], this resembled achievement of the autonomous stage of ego development in which inner conflict is acknowledged and coped with, and the tolerance for ambiguity is increased.

Thus the outcomes of this field study design appear to correspond well to forms of development valued in traditional, campus-based education. Additional studies are being conducted to further test the notion that cognitive development is facilitated by field programs that embody role/perspective conflict. This research will also focus on the residual effects of field experiences after students' return to campus. Such studies are strongly indicated by the data upon which this report is based and may well yield the finding that field studies are central to what undergraduate education is thought to be.

References

1. Borzak, L. "Some Antecedents and Consequences of Group Members' Perceptions of Reciprocal Influence." Ph.D. dissertation, Northwestern University, 1974.
2. Borzak, L., and B. Hursh. "Integrating the Liberal Arts and Preprofessionalism through Field Experience: A Process Analysis." *Alternative Higher Education,* II (Fall 1977), 3–16.
3. Chickering, A. *Education and Identity.* San Francisco: Jossey-Bass, 1969.
4. Cytrynbaum, S. "Project Outreach: An Approach to Human Relationships, Experiential Learning and Community Action in the Introductory Psychology Course." ERIC Reprint #ED043915 (September 1969).
5. Gans, H. "The Participant Observer as a Human Being: Observations on the Personal Aspects of Field Work." In *Institutions and the Person,* edited by H. S. Becker. Chicago: Aldine Press, 1968, pp. 300–317.
6. Glaser, B., and A. Strauss. *The Discovery of Grounded Theory: Strategies for Qualitative Research.* Chicago: Aldine Publishing, 1967.
7. Heskin, A. D. "The Field Study Program." *Alternative Higher Education,* II (1977), 119–33.
8. Hursh, B. "Field Study and the Liberal Arts: Student Participation in an Off-Campus Internship Program." Ph.D. dissertation, Northwestern University, 1975.
9. Kolb, D. "The Learning Style Inventory." Presentation at the Society for Field Experience Education annual convention, Indianapolis, Indiana, October 1977, based on *The Learning Style Inventory Technical Manual,* by David A. Kolb. Boston, Massachusetts: McBer and Co., 1976.
10. Lewin, K. "Frontiers in Group Dynamics." *Human Relations,* I (1947), 5–41, quoted in Ronald Lippitt, Jeanne Watson, and Bruce Westley. *The Dynamics of Planned Change.* New York: Harcourt, Brace, and World, Inc., 1958, p. 129.

11. Loevinger, J. *Ego Development*. San Francisco: Jossey-Bass, 1976.

12. Perry, W. G., Jr. *Forms of Intellectual and Ethical Development in the College Years*. New York: Holt, Rinehart and Winston, Inc., 1968.

13. Piaget, J. *To Understand Is to Invent: The Future of Education*. New York: Viking Press, 1972.

14. Thomas, E. J. "Role Theory, Personality, and the Individual." In *Handbook of Personality Theory and Research,* edited by E. F. Borgatta and W. W. Lambert. Chicago: Rand McNally, 1968, pp. 691–727.

15. Wirtz, W. *The Boundless Resource: A Prospectus for an Education-Work Policy*. Washington, D.C.: New Republic Book Co., 1975.