The relationships between sociology and experiential learning are explored. This type of learning is central to applied curricula; yet, the teaching environments required for it do not resemble traditional classroom settings. This article argues that traditional and experiential learning are fundamentally different and that this difference has important consequences for the discipline of sociology as it is taught and practiced. Two models for curriculum integration are presented, and the consequences of each are discussed.

Sociology, Applied Work, and Experiential Learning

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Experiential learning settings (internships, practica, field placements) are no longer an educational experiment. They are found in secondary schools, colleges, and universities and are well established within departments of sociology (Satariano and Rogers, 1979). Furthermore, we can anticipate their expanded use in the future. Bradshaw and McPherron (1978) report in a national survey of undergraduate curricula that community college, four-year college, and university departments of sociology all expect to increase their use of field experience more than any other teaching technique.

Experiential learning is also the hallmark of curricula and training programs oriented toward applied work. The much-discussed relationship between applied and academic sociology revolves around a fundamental difference between experiential learning and traditional classroom learning. This difference and its consequences (stated below) provide the basis for a critical view of the relationship between experiential education (applied curricula and training) and the academic discipline of sociology.

(1) Experiential learning differs from classroom learning in both process and goal.

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(2) Expertise in classroom learning may be counterproductive to learning in an experiential setting; i.e., one does not necessarily facilitate the other.
(3) A successful integration of experiential learning into the sociology curriculum requires a reexamination of the discipline, its theoretical content, and the role of empirical research.

Two assumptions underlie the discussion that follows. First, the integration of experiential learning experiences into traditional curricula is desirable even as it prompts serious reflection on the purpose and function of the discipline as practiced and taught. Second, an essential element of experiential education is the bridging of academic and applied learning settings whereby the connections between theory and practice are investigated in some detail. Programs that do not fit this second assumption are not subject to the arguments made here, even though such programs may carry the word "experiential" in their titles. Before concluding I will suggest two routes to incorporating experiential educational programs into existing curricula, with attention to the consequences of each.

In order to explore the difference between experiential and classroom learning, I will use two models of the experiential learning process. The first is Coleman's (1976) and originates from his attempt to contrast experiential and classroom learning; the second model was developed by Kolb and Fry (1975) to illustrate their theory of learning styles. (See Figure 1.)

For Coleman (1976: 50-52) experiential learning is a four-step process.

(1) Action is taken and the effects of this action are observed.
(2) Effects are understood as the result of action taken in specific situations and anticipated if these situations are reproduced.
(3) A general principle is identified under which the observed actions and effects can be subsumed as a particular instance or type.
(4) The general principle is applied through action in a new setting.

This is learning through induction, but with a very distinct goal: the application of knowledge in new settings, rather than the

COLEMAN	KOLB & FRY
1. Action taken and effects observed;	1. Concrete Experience: Involvement in new experience;
2. Understand effects as a function of action under specific circumstances;	2. Reflective Observation: The use of various perspectives to understand these experiences;
3. Understand general principle which explains the effects as a specific case;	3. Abstract Conceptualization: The creation of concepts and theories;
4. Application of general principle through action in a new setting.	4. Active Experimentation: The use of theories to make decisions and solve problems.

Figure 1: Summary of the Coleman and Kolb and Fry Models of Experiential Learning

testing of generalizations through new data collection. It is easy to miss the importance of this distinction and to assume that testing and using concepts or generalizations are the same process.

Kolb and Fry outline their model of experiential learning in a fashion similar to Coleman but with some additional elements and hypotheses. For Kolb and Fry, learning consists of using four abilities, which are in tension and are individually appropriate depending upon the demands of the learning situation. These abilities are the following:

(1) concrete experience: the ability to involve oneself "fully, openly, and without bias in new experiences";
(2) reflective observation: the ability to "reflect on and observe these experiences from many perspectives";
(3) abstract conceptualization: the ability to "create concepts and integrate . . . observations into logically sound theories"; and
(4) active experimentation: the ability to "use these theories to make decisions and solve problems" (Kolb and Fry, 1975: 35-36).

PROCESS AND GOAL

The two models clearly state that the goal of experiential learning settings is the application of knowledge in a practical setting. The purpose of this application is to effect some change in that setting. This is quite distinct from the goal of classroom learning and, I would argue, different from the goal of academic inquiry and empirical research. Classroom learning focuses, at an introductory level, upon the transfer of information. Moving beyond that level, classroom learning increasingly strives to convey to students the ways in which valid and reliable knowledge is generated; and at the highest level this learning consists of students engaging in the research process, by which information is collected and analyzed and generalizations are made. The focus of this learning activity is the knowledge that results as a final product. The higher the level of this knowledge, the greater is its value—judged here by traditional criteria. Abstract generalizations that apply to a class of events and are formulated as theoretical statements are examples of such knowledge.

The goals, then, of experiential and classroom learning are quite different. The former aims at effecting change in a practice setting; the latter focuses upon the understanding of and eventual ability to contribute toward the development of valid theoretical statements. One operates in the arena of action, the other in the arena of ideas. One uses ideas, theories, and hypotheses only insofar as these are effective in assisting desired action; the other systematically collects data—sometimes in natural, action settings—for the purpose of developing and refining the validity of theoretical statements. One abandons specific ideas and theories when they are not useful to action; the other suspends judgment about the validity of theoretical statements until all available data are analyzed, and amends these statements on the basis of these data.

There is an argument within academic circles that periodically tries to link these two goals by suggesting a similarity between the process of action informed by generalized knowledge statements and the process by which such statements are tested for their validity. Briefly put, the argument suggests that theories needing empirical testing might use action in problem-solving settings as a data base. Action taken on the basis of a theory might function as a test of that theory. While this is possible, I maintain that it is highly improbable. Indeed, if we look at how persons—engaged in generating knowledge through the development of theories—test those theories, this form of testing almost never occurs.

Hypothesis testing requires relatively high degrees of control over independent variables, over the testing environment (such that the effect of uncontrolled variables can be randomized), and over the setting in which measurements will be taken so that data can be recorded in a systematic fashion. Such degrees of control are at minimal levels in settings where the goal of action is problem solving. The very fact that one must cope with problems in applied settings suggests the absence of such control. The method (process) of operating in a problem solving setting requires the eclectic use of concepts and theories when and where they appear applicable, the adjustment or abandonment of ideas that do not prove useful, and continuous adaptation to a fluid environment in which the resources for action may abruptly

change, thereby affecting the priority of goals and chances of problem-solving success.

In sum, traditional learning and knowledge producing activities heighten the learner/researcher's control over the environment. Experiential learning settings assume a minimum of control and focus upon a process of adjusting to continual change while striving toward the solution of specific problems. Learning takes place in both situations, and I do not suggest here that one type of learning is better than the other. The processes involved in each are vastly different, however, and tend to push the two types of learning apart rather than smoothly linking them into one intellectual enterprise.

COUNTERPRODUCTIVE LEARNING STYLES?

Returning to the model by Kolb and Fry (1975: 37), these authors suggest the four abilities noted earlier divide into two dimensions: concrete experience versus abstract conceptualization, and active experimentation versus reflective observation. The elements within each dimension are in tension with one another such that the learner must decide which element to emphasize in dealing with issues and problems; i.e., will the focus be at the concrete or abstract level; is the most appropriate orientation one of action or reflection? Kolb and Fry argue that distinctive learning styles develop as actors choose between elements on these dimensions. They identify four such styles as evidence by measures of the ways in which individual subjects approach learning/problem-solving situations. These are (1) the "diverger," which combines the learning abilities of concrete experience and reflective observation; (2) the "assimilator," which combines the learning abilities of reflective observation and abstract conceptualization; (3) the "converger," which combines the learning abilities of abstract conceptualization and active experimentation; and (4) the "accommodator," which combines the learning abilities of active experimentation and

concrete experience (Kolb and Fry, 1975: 37-39). Figure 2 presents these four learning styles as they combine the four learning abilities.

Two conclusions can be drawn from a look at this typology of learning styles and the educational system in which they are developed. First, formal education in the social sciences places great stress upon reflective observation and abstract conceptualization, i.e., the assimilator style. These skills, when highly refined, lead directly to the goals of traditional learning and intellectual inquiry. Experiential education requires the integration of concrete experience and active experimentation—i.e., the accommodator style—not for the purpose of generating sophisticated understanding or contributing to a body of knowledge, but for the immediate goal of problem solving. Second, the Kolb and Fry model portrays assimilator and accommodator learning styles as polar opposites, thereby suggesting that the development of traditional learning skills is different from, and quite possibly counterproductive to, the development of skills associated with experiential learning. Blending experiential learning, therefore, with curricula and cognitive styles based upon an empirical science model is problematic to say the least (for a similar interpretation, see Harrison and Hopkins, 1971).

Kolb and others have used this model to identify differences in learning style by type of academic training and preference for research or applied work settings. For a sample of managers who reported their undergraduate majors, history, sociology, engineering, and business majors correlated with the learning styles of diverger, assimilator, converger, and accommodator, respectively (Kolb and Fry, 1975). A survey of senior medical students found that preferred learning style correlated with career choices. Accommodators (with emphasis on action and concrete experience) chose a career in family medicine and primary care, while assimilators (with emphasis on abstract reflection) chose academic medicine (Plovnick, 1975). A more recent study of doctors who chose to specialize in family practice confirms the predominance of an accommodator learning style (Wunderlich and Gjerke, 1978). Longitudinal data are neeed to trace the development of

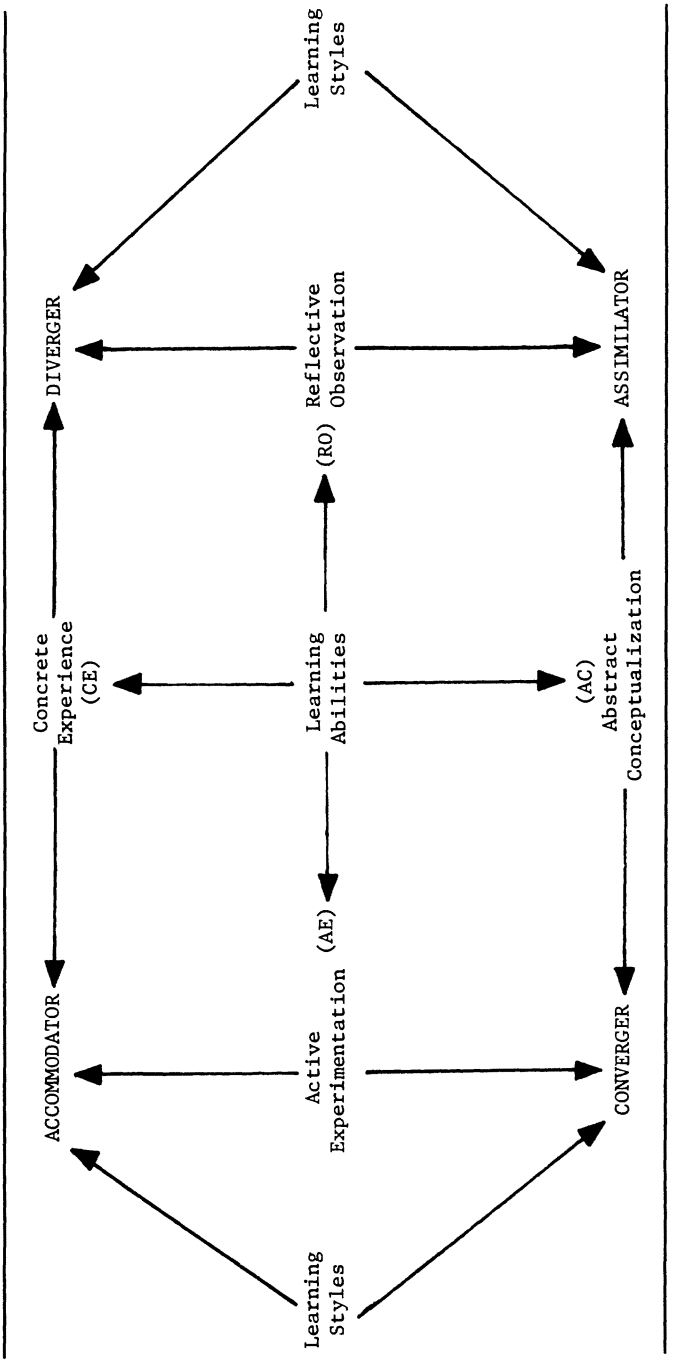

Figure 2: Four Learning Styles as Combinations of Four Learning Abilities

learning style over time and to pinpoint whether the development of one learning style affects the ability to use alternative styles. The information available to date strongly suggests that the various learning abilities summarized in these measures of learning style do not automatically reinforce one another, and may present a situation of "trained incapacity," whereby specialized development of abilities at one extreme of these learning dimensions (abstract and reflective) inhibits the use of alternative abilities (concrete and active).

CURRICULUM INTEGRATION

A fundamental assumption of this article is the desirability of integrating experiential-education learning opportunities into existing curricula. However, if the above comments on tensions between experiential and traditional learning are valid, such an integration will pose significant problems for the discipline as we now practice and teach it. In attempts to deal with these problems, I propose two methods by which experiential learning can be made part of the sociological enterprise.

The integration of experiential and traditional curricula means the joining of educational tasks that develop learning abilities on two dimensions: the ability to act at the concrete level as well as reflect at the abstract level. One approach to this goal might model itself after the way in which theories within sociology are examined for validity, i.e., the way in which they are tested against empirical data. This testing procedure involves operationalizing theoretical concepts, such that identifiable empirical indicators can be measured so as to test the relationship between concepts at a concrete, empirical level. There are few guidelines for operationalizing concepts, and much depends upon the clarity of the concept itself and the ingenuity of researchers as they attempt to identify empirical indicators that represent the meaning of the concept as accurately as possible.

Operationalization is one of the four steps in hypothesis testing basic to the empirical method, beginning with the identification

and interrelation of concepts in a theoretical framework and moving to acceptance/revision/rejection of this framework based upon data analysis. The first of two methods that might integrate traditional and experiential curricula mirrors the four steps in hypothesis testing but substitutes "translation" for operationalization. (See Figure 3.) It begins with the problem at hand, in terms of its primary elements, and identifies sociological concepts that encompass these elements as specific cases. The movement from problem statement to conceptual framework requires that the problem be translated up to an abstract level. The third and fourth steps of this method examine the chosen concepts, explore their possible relationships, and finally project the consequences of these relationships between elements of the original problem. Students may gain experience in the translation process by writing brief position papers outlining a problem and identifying relevant sociological concepts. Such papers would be motivated by experience in a real—as opposed to academic—setting, and there would be pressure to write such papers quickly in order to keep pace with the dynamics of the problem setting. Later reports on the utility of the student's translation efforts could be written at greater length, as the fruits of these efforts are observed in the context of the problem-solving effort over time.

Note the important differences between operationalization and translation. First, the former is a process carefully thought out, informed by extensive review of available literature, and assisted by the pretesting of instruments to ensure a strong linkage between empirical indicators and the meaning of theoretical concepts. The latter, however, takes place with minimum time for preparation and research and little opportunity to pretest or experiment with the utility of initially chosen conceptual frameworks. In addition, unpredictable changes in the problem definition over short periods of time may alter the concepts into which problem elements are originally cast.

Second, operationalization is successful insofar as it contributes toward the empirical testing of hypotheses, the results of which refine and clarify the validity of theoretical propositions. Operationalization is a part of the process that contributes toward the

TRADITIONAL LEARNING	EXPERIENTIAL LEARNING
1. Explication of theoretical framework and relationships between concepts;	1. Statement of problem and its constituent elements;
2. OPERATIONALIZATION of concepts, i.e., formation of working definitions which allow for identification of empirical referents to abstract concepts; hypothesis formation;	2. TRANSLATION of problem elements into corresponding concepts within sociological theory;
3. Data collection and analysis;	3. Investigation of concepts and exploration of their relationships;
4. Relation of findings to hypotheses; acceptance/revision/rejection of original theoretical framework.	4. Relation of conceptual framework to original problem; action recommendations based upon this analysis.

Figure 3: Comparison of Operationalization and Translation in Traditional and Experiential Learning

generation, testing, and validation of generalized knowledge statements. Translation is not concerned with the validity of conceptual frameworks and is unable to function as a tool in testing specific hypotheses. Its purpose lies in facilitating the understanding of immediate problems and potential solutions.

Herein lies the potential threat to sociology of curricula that incorporate the translation process, i.e., experientially based applied programs. There is no guarantee that problems in real-life settings are dealt with in such a manner that concepts from the discipline are directly relevant. Just as some concepts are very difficult to operationalize, so problem elements may be very difficult to correlate with the conceptual baggage of the discipline. Even if problems are translated into appropriate conceptual/theoretical frameworks, these frameworks may have little to say about the problem and how one is to deal with it. Recognizing that theory is not developed for the purpose of application, finding theory that has relevance for specific problems may be the exception rather than the rule.

If such is the case, experiential learning settings that involve the student in the translation process may lead to a rejection of sociology, not based upon simple dislike of or disinterest in subject matter, but founded upon a careful look for relevance and utility. While I do not expect the discipline as a whole can be rejected out of hand by persons concerned with social problem solving, I do find it quite possible that any one instance of seeking a linkage between sociological concepts and a specific social problem may lead to an abandonment of sociology as a fruitful arena for useful understanding. (For a more negative view, see Mazur [1981]).

A second method of integrating experiential and traditional curricula is more radical in form and more direct in its attempt to incorporate concrete action within the sociological enterprise.[1] It draws upon a background of action and advocacy research as well as phenomenological critiques of the discipline (Sandberg, 1976; Fay, 1976). This background and critique argues that sociology is too often irrelevant to social problem solving because the discipline has separated itself from the world it purports to

understand. This separation is carried out through a positivism that constructs a body of information, largely artificial due to the fact that it is based upon definitions of the world that are imposed by social scientists. To bridge this gap between the discipline and the social world it attempts to understand, sociology must alter its essential purpose. It must seek not to build a valid body of theoretical knowledge, but attempt to change the world through action within it. In the process, generalized understandings will develop, the validity of which is determined by their utility. Social science knowledge is not imposed upon social reality, but grows out of it and is linked with a realm of action that constantly forces abstract conceptualization to conform to real-life experiences in order to be accepted.

This second method of integrating curricula would place students in an action (nonclassroom) setting in which the needs and goals of a specific population would be explored. Once established, these needs and goals would be examined by both students and the population at hand in terms of viable options for and barriers to successful change. Attempts at understanding these barriers would incorporate sociological knowledge where and when it clarified why barriers exist and how they might be overcome. A seminar concurrent with this field experience would enable students to share their experiences and discuss the conditions under which conceptual and theoretical aspects of sociology are relevant to specific problems. Written analyses of when and how sociology becomes meaningful for these problems amount to case studies of social change in which sociological informed action is documented.

This second method is clearly a departure from sociology as we know it today and contains an important implication. In the long run this use of sociological knowledge will define the boundaries of the discipline and what will be accepted as valid—based upon a criterion of utility and relevance to actors in a social change effort. That effort is the primary objective; the development of a body of abstract knowledge emerges as a by-product. Traditional sociological inquiry has as its primary goal the development of a body of knowledge and assumes that the relevance and utility of

this knowledge will emerge at sometime in the future. The two, then, reverse the priority of knowledge production and knowledge application.

As an alternative to the translation process, this approach to experiential education is quite radical, precisely because it embraces concrete action as both the starting point and validating instrument for sociological work. There is no question that such an educational program would develop the ability to work at a concrete level more than is presently done in traditional curricula. Courses designed according to such a program, however, would run the risk of being tagged as outside the discipline, inappropriate for an academic institution, and clearly a threat to the goals of social science as presently taught.

CONCLUSION

What can be concluded from this look at sociology and experiential learning? Are the two incompatible? Are attempts at integrating them doomed to failure? I believe not; and especially as economic constraints force the discipline to explore realms of application in order to both attract students as well as place graduates, the mix of experiential and traditional curricula is bound to increase. What these comments do suggest, however, is that the problems we will continue to face go far beyond questions of curriculum planning and teaching effectiveness. They touch upon the very definition of sociology, its character as a science, and the professional norms and ethics that bind those who practice it. No doubt the resolution of conflicts outlined here will approximate a middle road of sorts. However, these conflicts cannot be shifted from the discipline to its individual members. The advent of experiential learning is tied to a much larger issue of defining and implementing varieties of applied sociology which have yet to be clarified. I strongly urge that persons who teach in experiential programs view their activity in terms of this larger issue. Anything less will miss the fundamental contribution that experiential learning and applied work can make to the discipline.

NOTE

1. The ideas in this paragraph are based upon Comstock (1979).

REFERENCES

BRADSHAW, T. and S. McPHERRON (1978) Data Report: Issues and Resources in the Undergraduate Sociology Curriculum. Washington, DC: ASA Teaching Resources Center.

COLEMAN, J. (1976) "Difference between experiential and classroom learning," pp. 49-61 in M. Keeton (ed.) Experiential Learning. San Francisco: Jossey-Bass.

COMSTOCK, D. (1979) "A method for critical research." Department of Sociology, Washington State University (mimeo).

FAY, B. (1976) Social Theory and Political Practice. New York: Holmes & Meier.

HARRISON, R. and R. L. HOPKINS (1971) "The design of cross-cultural training: an alternative to the university model," pp. 27-45 in D. A. Kolb et al. (eds.) Organizational Psychology: A Book of Readings. Englewood Cliffs, NJ: Prentice-Hall.

KOLB, D. A. and R. FRY (1975) "Towards an applied theory of experiential learning," pp. 33-57 in C. L. Cooper (ed.) Theories of Group Processes. New York: John Wiley.

MAZUR, A. (1981) "Evaluating the social sciences." Science 212: 875.

PLOVNICK, M. S. (1975) "Primary care career choices and medical student learning styles." J. of Medical Education 50: 848-855.

SANDBERG, A. (1979) The Limits of Democratic Planning: Knowledge, Power, and Methods in the Struggle for the Future. Stockholm: Liberforlag.

SATARIANO, W. A. and S. J. ROGERS (1979) "Undergraduate internships: problems and prospects." Teaching Sociology 6: 355-372.

WUNDERLICH, R. and C. L. GJERKE (1978) "Another look at learning style inventory and medical career choice." J. of Medical Education 53: 45-54.

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