DOCUMENT RESUME

ED 092 531 SP 008 123

AUTHOR Scott, Myrtle
TITLE Interdisciplinary Doctoral Program on Young Children, Indiana University.
PUB DATE 74
NOTE 25p.; Paper presented at the Annual Meeting of the American Educational Research Association (Chicago, Illinois, April 1974)

EDRS PRICE MF-$0.75 HC-$1.85 PLUS POSTAGE
DESCRIPTORS *Child Development; Doctoral Programs; *Leadership Training; *Program Evaluation; *Skill Development; *Training Objectives

ABSTRACT

This document discusses the nature and objective of the Interdisciplinary Doctoral Program on Young Children (IDPYC), which is designed to prepare leaders to function as "interface" (or, catalysts) in settings that concern young children. This program trains them to attain the following characteristics: (a) a sound background and knowledge base in child development and in educational experiences most appropriate for young children under a variety of circumstances; (b) research and evaluation, program development, and implementation skills; (c) cognizance of the social and political issues relating to children; and (d) competence in leadership and change techniques. The IDPYC program is competency based, provides alternative routes to competencies, allows wide student choice, and has a strong experience component: its operation is interdisciplinary and structured for change. A discussion of the admission criteria for students and the status of the current students is included. The evaluation component in order of sequence is as follows: (a) "Short-Range Evaluation: Process Evaluation"; (b) "Intermediate-Range Evaluation: Product Evaluation"; (c) "Long-Range Evaluation: Follow-Up Evaluation"; and (d) "Schematic of Student Evaluation Sequence." (PD)

17.0

Interdisciplinary Doctoral Program on Young Children
Indiana University

Myrtle Scott

AERA Session 17.03

Interdisciplinary Doctoral Program on Young Children
Indiana University

Myrtle Scott

Interdisciplinary Doctoral Program on Young Children
Indiana University

Myrtle Scott

It is expected that this final paper will be more different from the others than they are from each other for several reasons. Firstly, it is addressed to the question of training rather than the question of practice per se. Secondly, the training program described is interdisciplinary in nature rather than emanating from only one discipline and that discipline being sociology. And finally, the training program described has a particular problem focus or task orientation, that of problems relating to young children, rather than a discipline orientation.

General Problem Background

Higher education has three courses of action available for addressing the needs of contemporary society. The first of these is to select a particular problem and deal with it as effectively and efficiently as current resources permit. There is certainly no dearth of problem foci.

A second course of action is to maximize the long-range payoff. This second strategy has the advantages of increasing the potential impact of a program or project and of extending this impact over a longer period of time.

A third, and perhaps ideal, course of action is to select a strategy which can do both. One strategy which clearly emerges as having greatest potential for addressing contemporary problems and at the same time increasing long-range payoff is a focus on young children. A focus on young children increases long-range payoff. The training of leaders for

areas of work with young children maximizes that payoff. Furthermore, if a training program is properly constructed, it may attack contemporary problems as part of its processes.

Specific Problem Background

A number of factors combined to make 1972 a critical year for the development and training of multi-faceted personnel to work with young children. Substantial amounts of evidence have been accumulating in the behavioral sciences over the past decade and half as to the crucial importance of the early years in the development of personal competence. Long-held beliefs in the relatively set pattern and pace of development have had to yield in the face of increasing evidence that the environmental circumstances play a major role in the shaping of both a developmental course and rate of the abilities required for environmental mastery. The accumulating evidence has had a dramatic effect on developmental theory which in turn has begun to affect practice. While earlier conceptions saw growth and development occurring according to a fixed genetic pattern and pace in a closed system, the evidence now seems to point to growth and development being an interacting process between the individual's genetic endowment and his environmental circumstances in an open system. This new conception will have a profound effect upon child rearing and educational practices in the development of a competent and productive citizenry.

A second factor affecting the need to provide advanced training for persons who wish to work with young children is the rapid proliferation of educational programs for children of younger and younger ages. Of the 25 million preschool children (0-6) in the United States, a little over

12 million are in the preprimary age bracket (three-, four- and five-year-olds). In 1964 it was estimated that 25.5% of the three- to five-year-old population was enrolled in prekindergarten and kindergarten educational programs. By contrast, in 1967 enrollment reached 31.6% of the age group. Headstart and programs for the disadvantaged under the elementary and secondary education act have been estimated to account for a large portion of this increase. Another large portion is due to nontargeted federally sponsored programs and other publicly and privately supported increases. Miller (1969) presents other similar data to document the vividly accelerated growth in the field of early childhood education since 1965. If one accepts a ratio of seven children to one adult in the classroom, as called by most guidelines, there was a minimum increase of 100,000 positions over this three-year span. Miller seems more than justified in pronouncing a staffing crisis in early childhood education. He goes on to point out that the number of higher education institutions offering advanced training in areas dealing with the development and educational programming of young children is very virtually nonexistent. While many universities are gearing up as quickly as possible to meet this crushing demand, none have been in operation long enough as yet for adequate evaluation.

Still a third factor which seems to mandate advanced work regarding young children is the current dilemma faced by education. The failure of the public school system in the United States is now a well documented fact. Alternate forms of education are being sought. A sound knowledge base must be urgently supported if these new forms of education are to be derived from the characteristics of the children whom they serve and if the

these new forms of education are to be derived from the characteristics of the children whom they serve and if the traps into which the previous system has fallen are to be avoided.

Nature and Objectives of Program

The Interdisciplinary Doctoral Program on Young Children (IDPYC) is an advanced graduate program of study leading to the doctorate for students interested in work with children of the approximate ages 0 through 8. The program is designed to prepare persons who will be leaders in the field and who have as a main career goal functioning as an interface person in settings which concern young children. By interface is meant (a) one who has a sound background and knowledge base both in child development and in the educational experiences which are most appropriate for young children under a variety of circumstances. By interface is meant (b) a person in whom both research and evaluation and program development and implementation skills reside. By interface is meant (c) one who is both cognizant of the social and political issues relating to children and who is competent in leadership and change techniques. A schematic which has been used heuristically to represent the conceptual logic of the Program is presented in Figure 1.

In order to design a graduate training program which will accomplish these objectives, several assumptions have been made.

Briefly, this program is (a) competency based, (b) provides for alternative routes to competencies, (c) allows wide student choice, and (d) has a strong experience component. Assumptions concerning the operation of the program are that it (e) should be interdisciplinary and that it (f) should be structured for change. For a full discussion of these assumptions

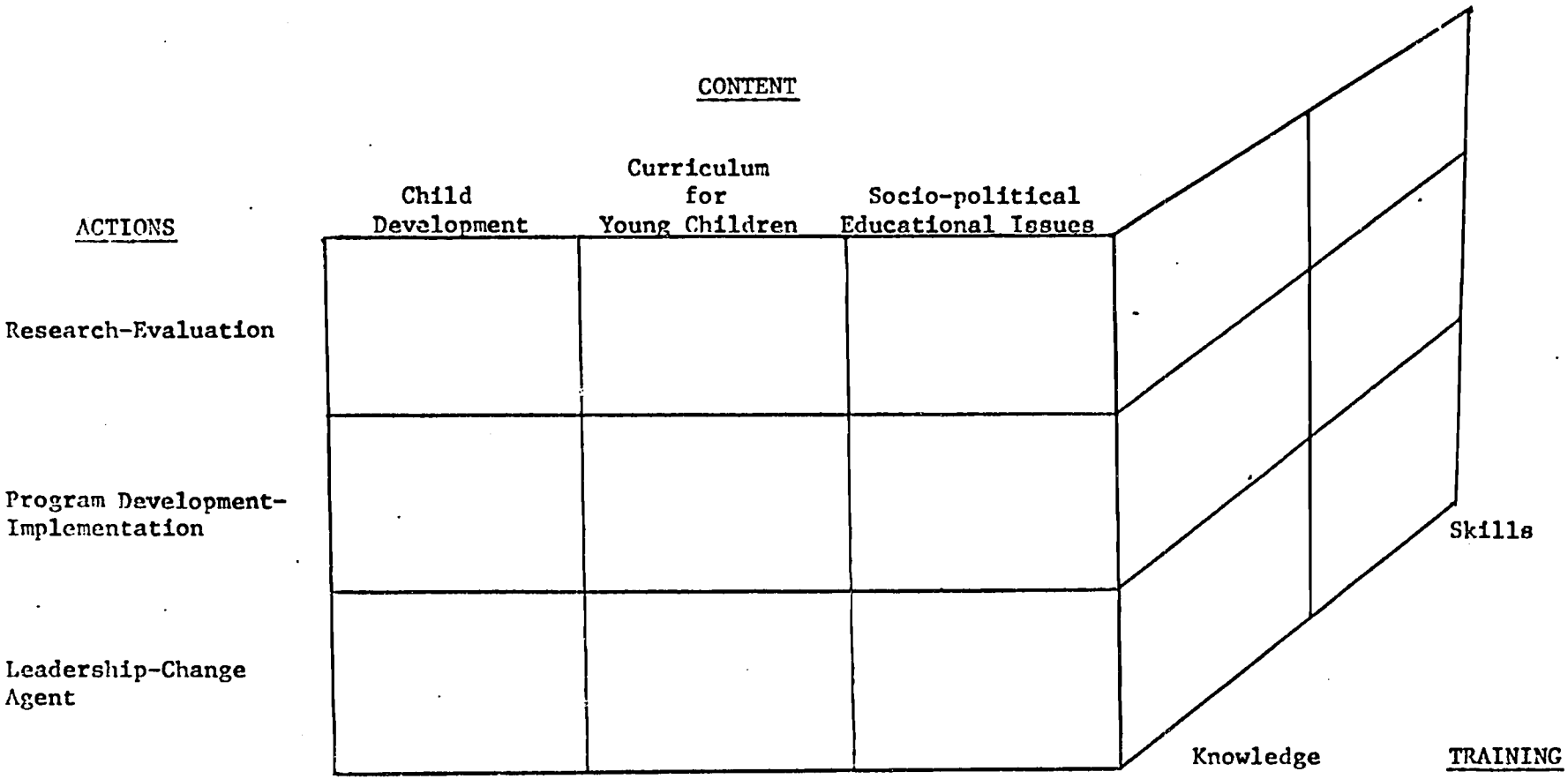

Fig. 1. Schematic of IDPYC.

and the rationale underlying each, the reader should consult the main Program description document.

The Interdisciplinary Doctoral Program on Young Children is a complex training program designed to train complex persons, yet its training mechanisms may be parsimoniously described. They have been derived out of the basic assumptions on which the program rests and are perhaps most easily described and understood in that light.

I. Competency Base. A training program by definition assumes transfer. Transfer is maximized with increasing similarity between the training task and the criterion task. It is for this reason that a competency based curriculum has been elected for the Interdisciplinary Doctoral Program on Young Children.

The chief problem with a competency based curriculum at the present time is that the exact competencies required of this interface person are not known. Criticisms of competency based education have focused on this dimension (Postman, Wiengartner, Silberman, Toffler, Goodman). Such criticisms have been well founded in cases where the competencies which were being acquired were not relevant to or commensurate with the later performance competencies required of the person being trained. Validation of the exact competencies required of an interface person will proceed as one aspect of program evaluation. The interim strategy is to develop a pool of competencies generated from several sources. It includes (a) competencies which are, in the best judgment of the university faculty, most likely to be needed in the job situation, (b) competencies thought by external groups such as agencies operating in the field to be relevant

to job success, and (c) emergent competencies generated by the interaction of the student with faculty, the literature and external agencies. This competency pool might be represented schematically as seen in Figure 2.

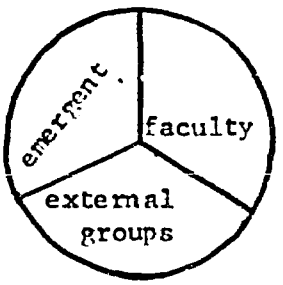

Fig. 2. Schematic of Competency Pool.

ASSUMPTION 1: A competency based curriculum has highest probability of maximizing transfer from training task to criterion task in job performance.

Several mechanisms have been provided to implement this competency based strategy.

A. The major dimension of the program is stated in terms of functions. These functions are intended to serve as the broad general competencies toward which students work.

B. A number of more specific knowledge and skill competencies have been layed out along each dimension. Several criteria have been developed in regard to the use of these knowledge and skill competency lists.

1. Firstly, these lists are intended as a guide to aid the student and his committee in selecting individual competencies toward which he will work. They are not intended as a program of study. A student develops his own individual competency list in conjunction with his committee. He may begin to develop this list by selecting from the knowledges and skill competency guide.
2. Secondly, it is expected that each student will add competencies to his own list which are appropriate to his own needs, interests,

and ultimate career goals. It is possible for example, that a student, after some experience in the field, might identify a need for a particular set of skills which are not included in the formal description of the program. He would then specify this as one of his individual competencies and outline a mechanism for attaining that competency. Student-defined competencies have only one limitation: They must be consistent with the main dimensions of the program. (That is, were a student to define a needed competency as "expertise in ceramics" because he is having difficulty communicating with an art teacher, it is unlikely that this would be approved by the student's committee as a legitimate competency within the main dimensions of the program.)

3. Thirdly, the knowledge and skill competency lists themselves will be in a state of continual review and will be revised at regularly stated intervals. While these lists represent the best thinking available to date regarding a population of knowledges and skills which will move a student toward achievement of the program's objectives, they are not complete. Work on better specification of these competencies will continue as a major program task. Further, such regular periodic revision provides one mechanism for continually updating the program.

II. Alternative Routes. A second assumption upon which the IDPYC is based is that there are alternative methods, techniques and strategies which lead to the achievement of the same or similar competencies. Due to the phonomenon which has been popularized as the "knowledge explosion,"

acquisition of all knowledge in any given broad area is no longer possible. In-roads are fast being made in this regard into certain specific areas as well. Therefore, the selection of a particular subset of knowledge in an area becomes more or less an individual matter.

Given that it is not possible for any single student to acquire all the competencies in the pool, individual students then sample from this pool. Further, the sample selected may be different for students 1, 2, . . . n. Using the competency pool illustration in Figure 3, sample selection from this competency pool might be represented as seen in Figure 3.

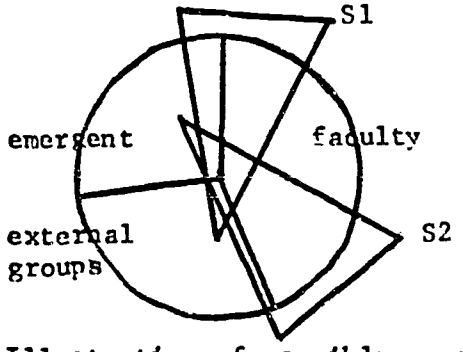

Fig. 3. Illustration of possible sampling of competencies by any given S1 and S2.

Again, the validity of this assumption will be assessed.

ASSUMPTION 2: A number of alternative routes are available which will lead to equivalent functional competency.

The Program is structured to provide number of alternative routes to move a student toward any given competency. There are no specifically required courses for all students in the program, once a student has met the apprenticeship, practicum and seminar requirements which are described below under experience base. Each individual student negotiates with his advisor and committee an individually tailored program appropriate to his own needs, abilities, interests, and career goals. Furthermore, he nego-

tiates this program on the basis of competencies not courses. He then proceeds to outline with his committee a series of routes which may be expected to move him toward these competencies. A wide range of options is open to the student in regard to virtually every knowledge and skill competency in the program. A specific example in regard to one knowledge competency may prove helpful in demonstrating how the program works. The student prepares to move toward the following competency: "Have a sound background in child development generally." A number of alternative routes are available. A wide range of work is already available at I. U. which may prove compatible with the individual's personal learning modes. The student might take any one or several of the courses, child development, advanced child development, child psychology, advanced child psychology, or others. A second route to achieving this competency would be to do individual in-depth work with a particular professor. This work, which might be done under an independent study, would be explicitly designed to help the student meet this specific competency. Still a third route which a given student might find more compatible with his own individual learning modes would be to develop his own independent study in preparation for meeting this competency.

III. Student Choice. A third assumption of the IDPYC is that there should be wide opportunity for student choice. Information has been available for some time concerning the direct relationship between an individual's increased effectiveness and diligence in working toward a goal and his initial involvement and participation in selecting that goal. Permitting the student to make these choices also tends to increase the relevance of

the choices for particular career goals.

Still another reason for implementing a graduate training model based on student choice is related to the leadership mission of the Program. A major component of leadership is the ability to make a decision in light of all the information available at the time, to devise a strategy to implement this decision and to evaluate both the decision and the strategy once it has been carried out. Since these functions are clearly part of the job tasks of the IDPYC graduate, the training program should include them again, in order to maximize transfer.

> ASSUMPTION 3: Wide latitude for student choice will produce greater ego involvement and hence better work on the part of the student. Further, it will increase the relevance of training components for individual career goals and will increase transfer from training to job in terms of the leadership function.

The Program provides for wide choice on the part of the student in generating his own program. The choices which are available to a student may be outlined fairly specifically, however. At the very beginning a student makes a choice as to the major functional dimension on which he will focus. Within both this dimension, as well as the alternate dimension of the program, he then makes choices as to the knowledge and skill competencies most appropriate in his own case to lead to broad functional competency. And finally the student chooses for himself among alternative routes leading to the knowledge and skill competencies. These choices are made in conjunction with the student's advisor and/or committee but the burden is clearly on the student for identifying issues and questions relating to the choice and for presenting data and evidence relating to the particular choice which he makes. This series of choices which the

student makes and the strategies which he outlines to acquire the competencies then becomes a contract between the student and his committee for his graduate study. As early as possible in his second year and no later than mid-year, the student then finalizes these contracts into his graduate program plan. The graduate program plan, like the contracts, may be renegotiated in whole or in part upon the request of the student.

In the view of the planning committee, a program which encourages wide student choice works best if it is counterbalanced with a strong accountability function. A series of mechanisms have been built into the program to aid the student and the university in achieving this joint accountability. These mechanisms are best represented in relation to the time dimension and are presented in the flow diagram in Figure 4.

IV. Experience Base. A fourth assumption of the IDPYC is that there should be a strong experience component to training. Such experience base provides a student an opportunity to try out and practice competencies toward which he is working in a relatively protected setting where increased feedback and correction are available in contrast to a job situation. Secondly, in such experiences a student may assess the validity of a given competency in relation to a particular field setting. Thirdly, a strong experiential component increases the probability that research and theory will be tied to reality.

One example of the need for an experience component occurs in regard to the issue of community involvement. Community control may be a reality, at present, in only a few locales, but community concern is much more widespread. A person attempting to function as a leader without experience in

the political, social and cultural arenas of communities is certain to be rendered impotent. A program operating without an experiential component can at best produce what Illich (1970, 1971) has termed the new alienation: the separation of man from his knowledge such that he learns about the experience, not from it.

> ASSUMPTION 4: A strong experiential component to graduate training increases the probability that functional competency will be reached. It also increases the probability that research and theory will be tied to reality. Further, it provides a student a means of assessing the validity of the competency toward which he is working at an intermediate point in his training.

This basic assumption concerning the need for an experience base generates one of the few requirements of the program. The inclusion of this experience base in the student's program is operationalized in the following way. It is expected that a student will take an apprenticeship or practicum in his major functional dimension each of the semesters he is enrolled in the program. He will also take an apprenticeship or practicum in his alternate functional dimension approximately one-half of the semesters he is enrolled in the program. For example, if a student opts for the R & E functional dimension of the program as a major focus, he would take an Apprenticeship or Practicum in Research and Evaluation with Young Children each semester he is enrolled in the program. He would then also take an Apprenticeship or Practicum in Program Development and Implementation with Young Children approximately one-half of the semesters he is enrolled in the program. The reverse is true if the students opts for the program dimension as his main functional dimension.

The student has an opportunity to integrate these experiences in several ways. Firstly, the student participates in the Interdisciplinary

Doctoral Seminar on Young Children every semester he is enrolled in the program. The seminar is offered jointly by all of the faculty of the Interdisciplinary Doctoral Program on Young Children and is designed as an open forum for the discussion of work in progress of all of the faculty and students of the program. In addition, major issues and problems associated with or anticipated in the field will be given systematic attention in the seminar. Examples here might include analysis of current trends in education, social and political issues, analysis of leadership models, implementation of community models, etc. Secondly, the students' own apprenticeship and practicum experiences are specifically designed for the integration of knowledge and theory with practice. Thirdly, the major area papers (qualifying papers) which the student writes early in his program are designed to produce further integration of specific areas of the field and in turn integration of these areas with the field at large.

V. Interdisciplinary Nature. Assumptions one through four are related to the design of a curriculum for advanced graduate training of an interface person between child development and early childhood education as well as between research and development and program development and implementation. Because of the newness of this interface role as well as the unique nature of the training program, two other assumptions have been made in regard to the operation of the program.

A fifth assumption upon which the IDPYC is based is that the graduate training faculty should be interdisciplinary. The interface person is by definition and training an interdisciplinary person. His ability to

function effectively at this interface of the two disciplines depends on the acquisition of a significant number of knowledges and skills from both disciplines. The representation on the faculty of both of these disciplines as well as others whose domains are pertinent to questions arising at the interface is thought to be related to acquisition by students of this interdisciplinary view as well as the relevant knowledge and skills. It is thought that no single department can provide all of the experiences required for all of the routes through the program. Several departments might be sufficient for any given person, but these several departments would not necessarily be the same ones for any two individuals. Since the program is attempting the rather arduous and speculative tasks of preparing persons for roles which are new and unique, it is designed to maximize utilization of all of the resources of the university.

> ASSUMPTION 5: An interdisciplinary faculty will increase the probability that students will acquire knowledge and skills of both parent disciplines (as well as others) rather than the knowledge and skills of either one to the exclusion of the other. Further, an interdisciplinary effort will maximize utilization of all the resources of the university.

On the basis of this assumption, several disciplines play a role in the training of doctoral students who wish to pursue careers concerned with young children. There are two disciplines whose exclusion either singly or collectively would constitute a logical inconsistency because their work is so closely tied to the main functional dimensions of the program. These are, of course, child development and early childhood education.

Several other disciplines have considerable investment in work with young children or in problems associated with such work. These include

medicine, psychology, sociology, anthropology, special education and linguistics, as well as the various other related areas of education and specific content specialities such as reading, etc.

In short, while some disciplines are more easily identified as being appropriate candidates for involvement in a program of graduate training for persons who will pursue careers concerned with young children, there is no absolute boundary. The inclusion of a given discipline is based on two factors: (a) the appropriateness of its current work to the goals and objectives of the Program, and (b) the interest of individuals from that discipline in becoming involved in such a joint endeavor.

VI. Program Structured for Change. The planning committee has felt very strongly that the experimental nature of the IDPYC mandates a structure which can accommodate to change. Any program which defines itself as having a large experiential component, as interdisciplinary, which allows wide student choice, which allows multiple routes to the same goal is already structured for change to a higher degree than most programs. It remains only to build into its structure a mechanism or set of mechanisms for changing the structure of the program itself as new needs arise and new competencies are called for in order to make the program a dynamic rather than a static one. The importance of this element cannot be underplayed. Such a structure will permit the program to develop solid empirical foundations in its initial stages as its prior assumptions are validated. In succeeding stages it will permit the program to maintain current empirical bases and to avoid obsolescence. The faculty administration of the program must be alert to developing needs and alter the program accordingly. Curative programs for full

blown needs have been implemented at tremendous costs, both in dollars and personnel, and have met with something less than total success.

ASSUMPTION 6: The extent to which the program is structured for change will be related to its ability to self-correct over time.

Each of the components is related to every other in some specific ways. While each does represent a separate entity in and of itself, they are inextricably bonded to each other in the actual training program. For example, along the functional dimension each of the functions is seen as interacting with each other. The same is true of the content dimension. This functional relationship between the components of each dimension is graphically represented in Figure 5.

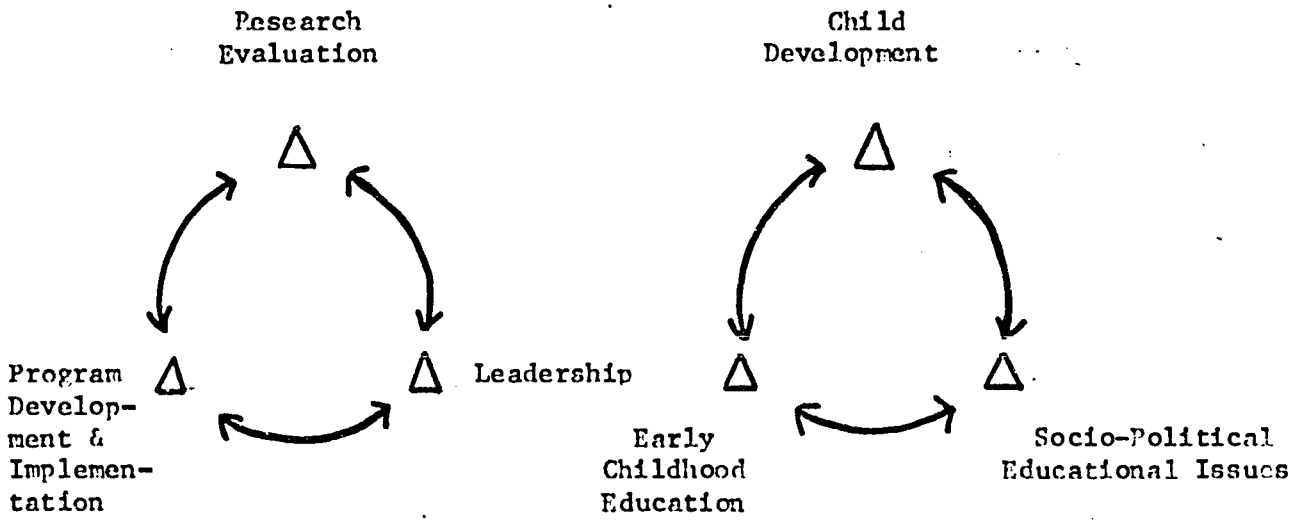

Fig. 5. Schematic representing the functional relationship between dimensions in the IDPYC.

Furthermore, since knowledge and skill are also thought to have some amount of overlap, the functional relationship of all three dimensions might be represented by the schematic in Figure 6.

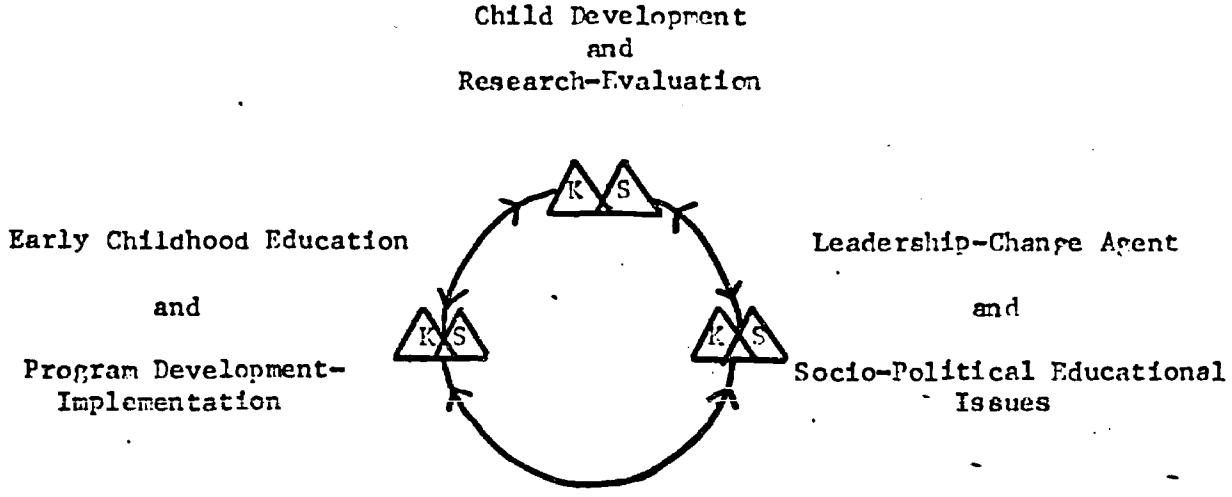

Fig. 6. Schematic representing the functional relationship between the main dimensions of the IDPYC in terms of knowledge and skills training.

Students

Admission Criteria. Several criteria are considered to be prerequisite to a reasonable expectation of success in the Interdisciplinary Doctoral Program on Young Children. They constitute the admission requirements of the Program.

1. The prospective student must produce evidence of high intellectual ability. A total score on the Graduate Record Exam of 1000 is considered as such evidence.

2. The prospective student must show evidence of scholarship. Academic record is reviewed in this regard as are recommendations from persons who know the student's work. GPA of 3.0 or higher in the last two years (60 hours) of work is taken as evidence here. Some of the recommending persons may be contacted directly.

3. The prospective student must show evidence of commitment to the area of work with young children. The applicant should provide a statement

of his career goals. He should also submit as part of the application a vita. A personal interview is required of the applicant with some member of the IDPYC faculty. Recommendations from persons who know the applicant are also considered here.

4. The applicant must show evidence of leadership potential. All of the information provided above is considered here.

5. The applicant must have completed or expect to complete before admission a bachelor's degree.

6. In the absence of any corroborating data concerning the relationship of these admission criteria to achievement of program objectives, a student may be admitted provisionally upon review of credentials and affirmative vote of two-thirds of the steering committee.

Current Students. The majority of IDPYC students tend to far exceed the basic admission requirements of the institution. Eighteen students have been admitted to the IDPYC over the past two years. These students ranged on the GRE from 1580 to 920 with a mean of 1279. GPAs ranged from 4.0 to 2.49 with a mean of 3.66. In the first year of operation the modal student was male, in the second year female. Two blacks were among the 18 admitted. The disciplines from which the students come has ranged widely. Undergraduate majors of IDPYC admittees were English (4), elementary education (4), psychology (3), political science (3), sociology (2), philosophy (1), and secondary education (1). As can be seen from these data, only eight students (44%) came fromdisciplines of psychology and education which might be predicted as major suppliers.

Evaluation

It was the thinking of the committee that a program which is both competency based as well as individualized should have a strong evaluation component. Such evaluation provides for appropriate accountability of the program. This evaluation component may be layed out as a fairly specific sequence. This sequence is as follows:

Short-Range Evaluation: Process Evaluation. A student's progress through the program will be monitored by the student's advisor until such time as the student has formed his committee. Information will be collected on the work which the student does as he proceeds through the program in regard to the following areas:

1. Course work, independent studies and other didactic work.
2. The experiential components, e.g., apprenticeship, practicum.
3. The Interdisciplinary Doctoral Seminar on Young Children.

Intermediate-Range Evaluation: Product Evaluation.

1. Achievement of the knowledge competencies of the program will be assessed by the student's production of three monographs, one each in child development, curriculum for young children and socio-political educational issues. These monographs will be evaluated by two faculty members, at least one of whom must be a faculty member of the IDYC and both of whom may be.

2. Achievement of skill competencies of the program are thought to be more difficult to evaluate than are knowledge competencies. The exact techniques and sequences for this section are not as yet complete. Evaluation measures which are being considered are as follows:

a. Field experience/practicum evaluation by the faculty member(s) who are responsible for the supervision of this activity.

b. Evaluation by persons in agencies where the experience takes place.

c. Observation of behavior exhibited by the student, e.g., in working with parent groups, groups of educators, research specialists, etc.

3. A final evaluation checkpoint will be the production of the student's dissertation. This dissertation will be supervised and evaluated by the student's committee in the usual ways.

Long-Range Evaluation: Follow-Up Evaluation. The follow-up evaluation will be conducted on each graduate of the IDPYC. This follow-up evaluation is considered to be of major import in the revision and further development of the Program. A number of dimensions have been included in this evaluation in order to assess both the processes of training and their outcomes. The evaluation design for follow-up is a complex one and is detailed more fully in the main Program document.

Schematic of Student Evaluation Sequence. An overview of the student evaluation component was presented in Figure 4. Further representation of this sequence is seen in the flow diagram of Figure 7.

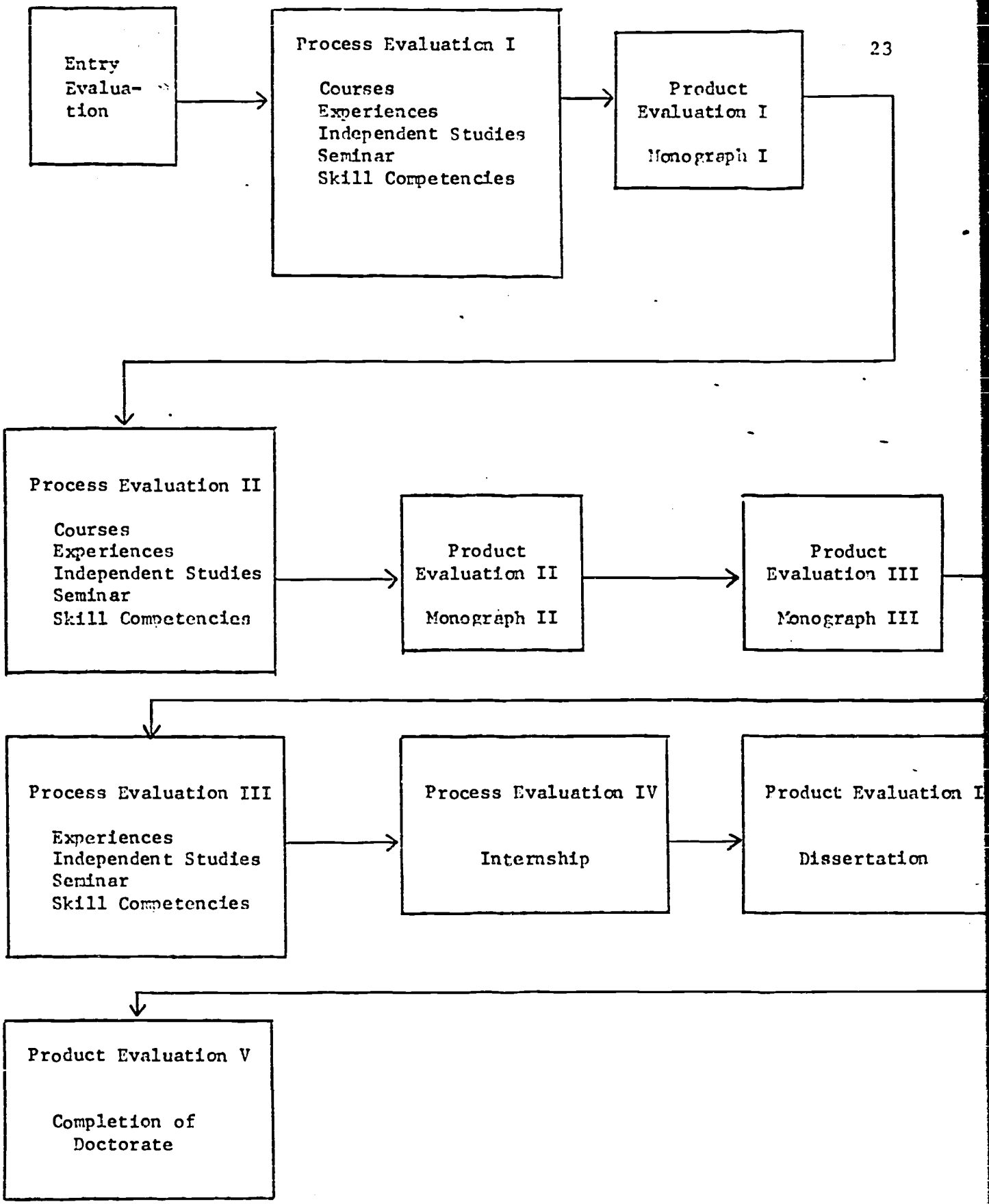

Fig. 7. Flow Diagram of Student Evaluation Sequence.