        This paper discusses "the classroom as a social system" as an idea which has
implications for teacher training. Reference is made throughout to the author's own
recent research (ED 003 449 and ED 017 965) and his teaching of undergraduate
and graduate educational psychology. Section 1, "The Conceptual Framework,"
includes (1) definition of the classroom as a social system, (2) description of a
teacher decisionmaking model based on a prediction system and a value system, and
(3) analysis of the importance of "initial teacher roles" with models depicting the
initiation of the activity structure and development of classroom control. Section 2,
"The Preservice Training Problem," (1) analyzes the special problems of the preservice
trainee and (2) discusses each of several program components which attack such
problems through focus on the interdependencies of the social system position:
microethnography of the classroom, educational psychology laboratory, and a
"two-by-two apprenticeship" (a semester practicum in which trainees spend two weeks
teaching each of nine grade levels). A brief section on inservice teacher training
describes a course (including specific writing exercises) in which teachers analyze
their own classrooms as social systems. The concluding section outlines a process
model of the "Phases and Emphases in Developing a Professional Teacher." A 34-item
bibliography is included. (JS)

CLASSROOM SOCIAL SYSTEMS IN TEACHER EDUCATION

by

Louis M. Smith
Central Midwestern Regional Educational Laboratory, Inc.

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INTRODUCTION

This paper is one of several which propose conceptual frameworks important in teacher education. The specific purpose of this presentation is to discuss aspects of *the classroom as a social system* and its implications for teacher training. While reference will be made to a variety of research and theory, the major ingredients will be generated by the author's own recent research (Smith and Geoffrey, 1965, 1968; and Connor and Smith, 1967) and the author's teaching of undergraduate and graduate educational psychology.

Briefly, because we will cite aspects of these documents at length, we need to introduce them further. The Smith and Geoffrey (1965, 1968) monograph is a report of an observational study of a seventh-grade classroom in the Washington School which was located in a slum neighborhood. Geoffrey was the teacher. He also kept notes of the events of the classroom. Smith was the outside observer who attended "all day-every day," sat at a table in the back of the classroom, and took careful field notes of the events of the classroom. From these "inside-outside" records the two investigators developed a description and conceptualization of the classroom structure and processes, or what they called *an analysis toward a general theory of teaching*. The Connor and Smith (1967) monograph was similar in approach (description and conceptualization) but studied the apprentice teaching program at City Teachers College (C.T.C.). The program was novel in that the apprentices spent two weeks at each grade level (K-8) in what Connor and Smith labeled a "two by two" program. Within the two-week period the apprentices observed the first day, taught one lesson the second day, two the third, and so on. On Wednesday of the second week they taught all day with the teacher in the classroom; on Thursday they taught all day, but alone. We utilized participant observation to understand the behavioral and experiental dimensions of the program in the lives of a small group of the apprentices. We were involved for a full semester once again.

Although of less significance for this document, we have used these techniques in two other settings: an innovative elementary school (Smith and Keith, 1967, 1969) and a high school science class (Smith and Brock, 1968). At times in this document we will quote or paraphrase aspects of this earlier work.

Briefly, the author's teaching relevant to this paper has included an undergraduate educational psychology course and a text (Smith and Hudgins, 1964) which reflects some of his early biases. At the graduate level, some five years ago he began teaching a course entitled *The Classroom as a Social System*, in which many of the present ideas have taken shape. In a sense, the ideas have been tried, revised, and retested against groups of experienced teachers. Finally, in a seminar of the same title, doctoral students have worked through research issues and topics related to the topic under consideration. Such is the context and basis of the analysis.

THE CONCEPTUAL FRAMEWORK

The Classroom as a Social System

In a brief presentation it is very difficult to present the wealth of ideas currently encompassed in the social system point of view. By system we mean an interdependent set of elements; by social we have reference to people. In a sense, this is redundancy or an accent, because people are one aspect of the elements. By classroom we refer to a unit of the school--usually, but not necessarily, the 30 x 30 cubicle with a teacher and 25 pupils.

The most useful general statement of the social system position is that of the sociologist George C. Homans in *The Human Group*. He introduces a number of concepts: group, environment, internal system, external system, social rank, norms, activities, sentiments, and interaction, which are useful in analyzing any particular social system. He builds his conception inductively by considering, sequentially, case studies of several groups: industrial, street corner, primitive society, and rural community.[3] He does not deal with an educational group. Smith and Geoffrey (1965, 1968) quite deliberately adopted the Homanian perspective in extending it to an elementary classroom in an urban slum. They accented further such concepts as teacher decision making, initial teacher roles, and pupil role structure, which seemed important in their data and useful for analysis of other educational settings.

Such a conception seems important because: (1) it accents a limited part of reality with which a teacher must deal; (2) it is important phenomenally, for principals, parents, pupils, and other teachers view it as an entity and, consequently, act with this, *i.e.*, Miss Brown's class, as a determinant of their own behavior; (3) it has boundaries both physically and psychologically; (4) typically, it has a time dimension, that is, a beginning in September, a development through the first few days and weeks of the fall, an equilibrium which carries through most of the year, and then a termination in the late spring.

For the teacher, system analysis has several other very important, if less obvious, qualities. In the words of A. W. Gouldner (1961):

1. *System models forewarn the applied social scientist
   of the possibility that a change in one part of the
   system may yield unforeseen and undesirable changes
   in another part of the system, due to the interde-
   pendence of its elements.*

2. *System models indicate that changes may be secured
   in one element, not only by a frontal attack upon
   it but also by a circumspect and indirect manipula-
   tion of more distantly removed variables. These,
   because of system interdependence, may ultimately
   produce the desired changes in the target variable.*

3. *. . . system analysis therefore directs attention
   to the multiple possibilities of intervention with
   respect to a single problem.*

Somewhat tongue-in-cheek, Simon (1961) takes the same kind of posi-
tion interdependency in the following anecdote:

> *There is a story to the effect that a statis-
> tician once found a very high correlation between
> the number of old maids and the size of the clover
> crop in different English counties. After puzzling
> over this relation for some time, he was able to
> trace what appeared to him to be the causal chain.
> Old maids, it appeared, kept cats; and cats ate
> mice. Field mice, however, were natural enemies
> of bumblebees, and these latter were, in turn, the
> chief agents in fertilizing the flowers of the
> clover plants. The implication, of course, is that
> the British Parliament should never legislate on
> the subject of marriage bonuses without first evalu-
> ating the effect upon the clover crop of reducing
> the spinster population.* (p. 82)

Another manner of labeling the Gouldner-type implications is that
of anticipated and unanticipated consequences. These terms grow out of
Merton's (1957) more general functional theory. For our purpose it is
important to realize that in a purposeful action system, such as a
classroom, individuals take action toward goals. The actions have
anticipated consequences which are subgoals or steps toward the more
remote goals. However, the action, because of the interdependence of
the elements, often will have an array of consequences which the actor
did not intend or anticipate. These unanticipated consequences will
often become highlighted as future problems about which decisions will
be made.

In short, the social system concept has a potency for a teacher
who must work with, influence, a totality such as a classroom. The
interdependency or mutual dependency of elements is its major thrust.

Teacher Decision Making[4]

A very important ingredient of the classroom social system is the position and role of the teacher. We are in agreement with Jackson's point of view:

> *From a clinical perspective the central 'causes' of behavior reside within the individual. A person does what he does, in this view, because of interests, needs, motives, values, and other internal motivational structures. Therefore, to understand behavior, the argument continues, it is necessary to reveal these hidden springs of action. . . .*
>
> *But the view of behavior gained from standing in front of a class is of quite a different order. From the teacher's perspective much of the behavior he witnesses seems to be 'caused' not by some set of mysterious driving forces hidden within his students but by his own actions as a teacher. If he tells his students to take out their spelling books, the spelling books appear, if he asks a question, hands go up, if he calls for silence, he usually gets it. In other words, many obvious and dramatic shifts in students' behavior are largely under his control. This is not to say that his students are merely marionettes who twitch on command. . . . But for the most part, classrooms, like churches and cafeterias, are such highly structured and coercive environments that the observer does not need a detailed knowledge of the internal states of the participants in order to understand what is going on there. Motives, interests, needs, and other psychic mechanisms surely affect behavior in these settings but the influence of these idiosyncratic motivational structures is greatly tempered and restrained by situational demands. The clarification and management of these demands make up a central part of the teacher's work. As he seeks ways of trying to do his job better, the teacher who turns to an intensive study of personality dynamics or psychological pathology may discover that he has learned more about alligators than he needs to know.*
> (Jackson, 1968, p. 172)

Further, it seems that a serious discontinuity exists within educational psychology. The language of learning theory--Hull, Mowrer, Skinner, or other behaviorists--used to analyze the behavior of children cannot easily be used by the teacher to analyze and alter his own behavior. In these theories the child's "rationality" and autonomy are minimized as the program and the reinforcing contingencies are accented.

The teacher, however, usually is implored to be rational, to plan carefully, to meet the child's needs, and so forth, as though the locus of control lay within himself. The teacher who thinks about his own behavior as a series of operants has difficulty in synthesizing these positions. We believe the issue lies fundamentally in the heart of contemporary social science theory, and we do not propose anything like a basic solution.

On the one hand, this has led us toward a broad social system conception of the classroom. Also, and as an extension of the Homans' framework, it has led us to a purposive framework, the perspective of the teacher as a decision maker. In the classroom much of the broader school policy and the substance of faculty norms reaches the classroom only as it is mediated by the teacher's personality, especially his decision making processes.

As we looked to more general theory on decision making, we found discussions of fact-and-value propositions, rationality, alternative, subjective probability, consequence, effectiveness, and so forth. Teaching often involves doing or not doing something, such as tossing or not tossing a chalkboard eraser to a child as a dramatic illustration of a direct object in language. *Choice behavior* is part of the decision maker's conceptual repertory. It is also part of the teacher's schema. Lying behind such a choice are the teacher's objectives in language arts for the morning. Objectives are goals and values to the decision maker. The teacher suspects that such action on his part will startle a few children, provide a concrete illustration of an important concept, and will give him a chance to compliment lightly or tease gently one of the boys for his skill or lack thereof. The decision maker, conceptually, refers to these suspicions as subjective probabilities. The several events that might occur are, to the theorist, consequences. Later, when the children report such an incident to their friends, within earshot of another teacher, other events may occur that the sociologists call latent and unanticipated consequences.

In addition to throwing or not throwing an eraser, the teacher also may dramatically snap a new Board of Education pencil into pieces, call a child up front and rap him lightly on the head with a flourish, or he may draw humorous stick-figure cartoons on the board. In the theorist's terms, any one of these are alternatives. They, too, have consequences. The consequences have several probabilities as seen by the teacher, and we might phrase his behavior as subjectively rational. Theorists might attack this illustration analytically with concepts such as objectively rational, organizationally rational, and so forth.

The Prediction System

Schematically, a cogent analysis of decision making has been made by Bross (1953). He suggests a model involving a prediction system and a value system. Very simply, in his diagrams the prediction system

choices lead to alternatives, and alternatives to consequences. The consequences have varying probabilities. Although his diagrams do not indicate them, arrows should run from Alternative A-1 to the Consequences following from A-2, and vice versa. The probabilities may be close to zero, but they should be indicated.

Insert Figure 1 about here

In addition, his figure should be elaborated to account for latent and unanticipated as well as manifest consequences.[5] Throughout accounts in the description of the development of classrooms, alternatives arise which seem plausible to the outside observer. On occasion, as these are suggested to the experienced teacher, he will react with an intuitive feeling that this would not be appropriate. In conversation, the teacher may elaborate a variety of consequences that an observer has only partially anticipated. An illustration of this occurred early in the semester in the Smith and Geoffrey report with the concept of *pacing* and the slow speed with which the children were introduced to academic content. The notes captured the teacher's reaction:

> His statement concerned earlier experience in which he tried
> to rush the children (and rush probably would be defined as
> moving them along faster than they would want to be moved by
> themselves). Moving more rapidly, in his experience, has
> often resulted in not getting very much farther in the long
> run, and at the same time, frustrating everyone, the children
> and himself, and creating, as a consequence, several emotional
> problems in the group. (p. 30)

The Conception of the Ideal as an Approach to the Value System

As we have elaborated, decision making involves what we have called, after Bross, the prediction system and the value system. The latter presented us with a number of difficulties. In most situations requiring a decision it is impossible to: (1) determine the desirability of each alternative; (2) compare these desirabilit'es and undesirabilities and combine them into a meaningful summary. Among the many reasons for this, the lack of scales with common meaningful zero points and units is among the most important. In wrestling with this problem, analyzing our own decisions, and attempting to order our data, we have found that a model involving a *conception of the ideal* makes a more satisfactory point of departure.

In the vernacular this might be phrased, *If you had your druthers how would you like things to be?* or *What is the best of all possible worlds?* Such a statement implies the following as a minimum:

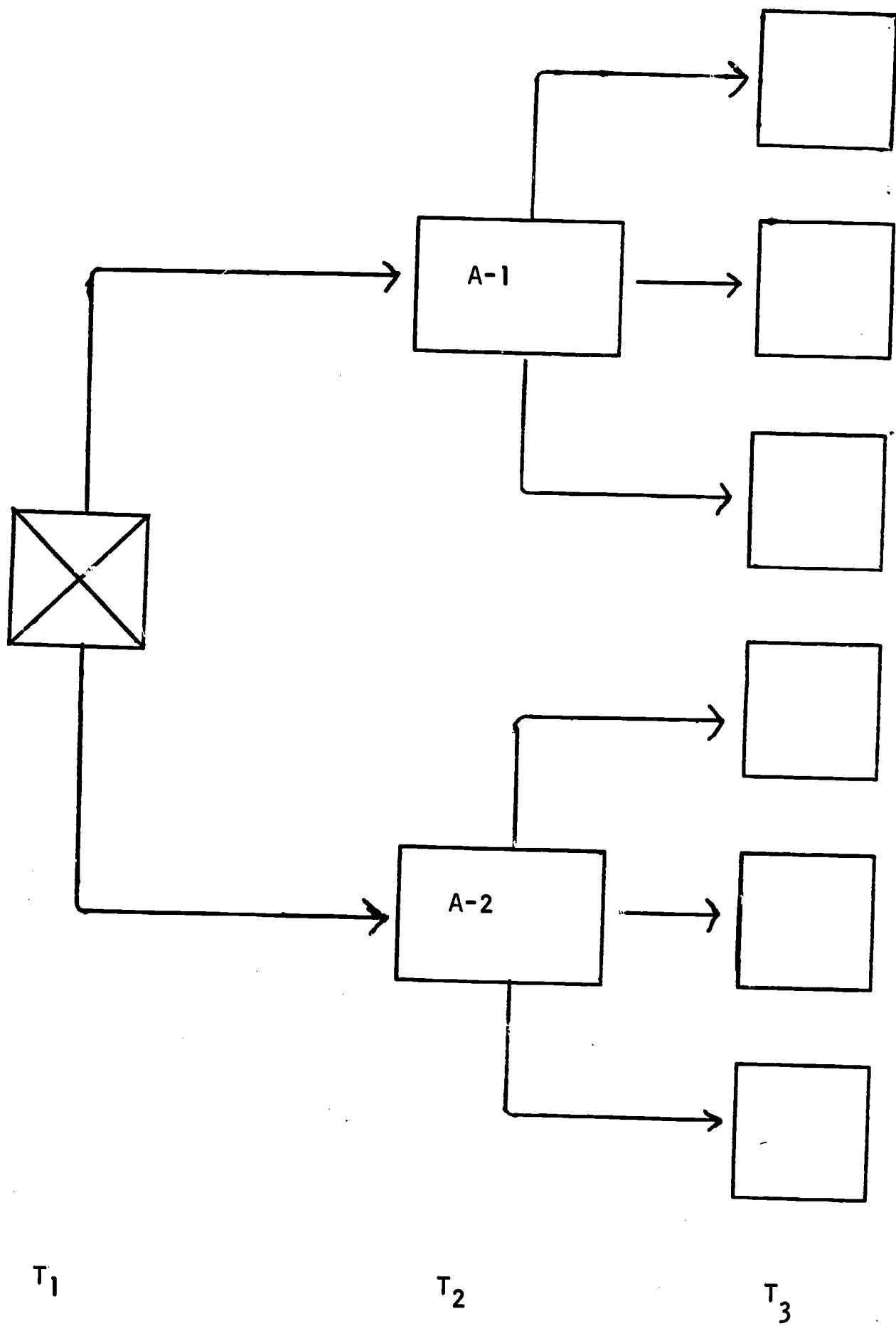1. An assessment of the desirable elements.

Figure 1   An adaptation of a decision tree from Bross (1953)

2. A pattern including an ordering or priority of the elements indicating their importance.
3. The pattern of one system, for example, one's job, must be articulated ultimately with other systems, family, "self" as a person, and so forth.
4. The ideal may change momentarily or over long periods of time.
5. The system may be congruent or in conflict with systems of other individuals, groups, or institutions.

In essence, this involves a careful elaboration of an individual's goals. As value premises these are statements of wishes and desires. The ultimate goal, whether it is a well-considered philosophy of life, religious position, or ethical social-political framework, is a statement of first principles, which, because they are first principles, by definition are not derivable from other propositions. Classroom goals and conceptions of the ideal must necessarily fit into this and relate to it with varying degrees of probability. Classroom ideals must also effect a compromise among personal, group, organizational, and community positions. In a sense, we are arguing that posing an optimizing criterion before settling for a satisfying solution permits a broader and more creative analysis and synthesis.

Combining the Prediction and the Value Systems

In one sense, decision making involves a very simple judgment as to whether the prediction system surrounding one alternative or chain of alternatives corresponds more closely to the ideal conception than does the prediction system following the selection of another alternative. Obviously, decisions are not that easy.

For example, one teacher (Smith and Geoffrey, 1968) had to decide, after a month of school, which children would be sent to the next teacher and which children would remain with him due to a closing of a room in the school. As he later commented on the decision, the prediction and value elements stand out rather dramatically:

> I decided to send to her the group I had received at the beginning of the year--mostly repeats from Rooms 13 and 14 and new students who had come in. I kept the other natural group--those who had come to me from Room 16. I did this because the group I sent her was older than the Room 16 group, and I felt the seventh-grade group would fit better with the sixth graders than would the other group . . . . the numbers were okay per the instructions from the office . . . . I was sensitive to what had happened the previous year. I chose the simplest way administratively and one which I thought she would have the least complaint about.

And in regard to the complications arising from the fact that several groups of siblings were involved:

> Some of these kids had been together anyway. Since I made the decision by groups I saw no particular reason to make any exceptions . . . . After all, I had both Allison and Edwin together anyway, and she (another teacher) had had both Patty and Rose together. All-in-all, again, I took the simplest way to a decision—by the groups in which the children came to me.

Strategically, we would hypothesize that the process proceeds more effectively when one frames his ideal or value system *first*. By asking for an organized statement of ends, conditioned by the time, place, and circumstances in which decisions must be made, one introduces what is usually called flexibility and rationality. Then, as soon as alternatives are raised at any choice point, one can compute probabilities of an alternative aiding the attainment of a goal or subgoal. Future research needs to verify hypotheses in teacher attempts to combine prediction and value systems.

Operationalizing the Decision-making Model

The decision-making model has tremendous possibilities in linking conceptually such diverse influences on the classroom as the formal curriculum guides, the faculty peer group beliefs and norms, and the composition of the class itself, and treating teaching functionally rather than just structurally. To make the conceptual models viable, operational techniques become mandatory. For a long period of time we had considerable difficulty in thinking through concrete ways in which we could implement the model in field research with ongoing classes. While our discovery, if it be that, sounds simple as hindsight, the process of arrival was slow and difficult. The lead we see here combines several elements: first, one must establish several *natural* units in teaching—the lesson, the day, the week, the unit or the semester. It is our belief that the unit will vary with a number of conditions: for instance, some spelling programs have basically a weekly rhythm within which there are also daily regularities. Some activities, the independent reading, library books, and book reports, have a semester unit as the rhythm.

If we select a single lesson in a subject such as geography we can illustrate further. The model requires that the teacher be quizzed via questionnaires or interviews concerning his goals (the value system) and the means (the prediction system) for reaching the goals in the geography lesson. An alternative, which has the beauty of objectivity and ease of access, is to make the age-old "lesson plan" into a functioning research tool.[6] In the case of many an experienced teacher, the lesson plans in geography lay in his head, in the text, and in assignments registered in his plan book, which many teachers are supposed to keep up to date.

After selecting the unit and obtaining quantifiable statements of plans and intentions, the third step, careful observation of the lesson--with a move toward reliable quantifiable schedules--would then occur. Fourth, post-lesson interviews or questionnaires concerning altered goals and means and cues that suggested to the teacher the need for alterations could be obtained. As a number of teachers in varying situations are studied, verifiable principles should be generated.

Such a mode of research would allow comparisons between school and teacher goals, would begin to clarify our concept of functional equivalents, would move away from an overall "good-bad" assessment in favor of more of the ebb and flow of teaching which many of our analyses have missed up to this time as we have focused on what the teacher does independent of his thought processes, and analyses of what he thinks, independent of what he actually does. Such research also provides a means of attacking the problems of inservice education and altering teaching in mutually desirable directions.

Additional implications

With the model in hand, we began to see a number of additional implications in difficult problems. We entitled these: legitimizing the *What do I do?* question, the best of a bad situation, congruence with teacher schema, model of the teacher training product, and treating children as decision makers.

The *What do I do?* Question. By legitimizing the *What do I do?* question we mean that for many years, in our experience, teachers have been asking the question, *What do I do with this child, this situation, or this problem?* For as many years, in our experience, psychologists and teacher-educators have parried the questions by remarking, *It's impossible to respond to such a question; answers aren't that simple.* The teachers complain to their colleagues about unhelpful experts. The psychologists and teacher-educators talk to their colleagues about the teachers wanting *something practical, wanting a push-button psychology,* or *wanting recipes.* The hypothesis we would offer is that the decision-making model legitimizes the teacher's question. By this we mean there is a basic psychological theory where such a question is not heresy, but in its more abstract form it holds a central position. For instance, in a literature lesson, *What goals do I have? What are the specific ways I can present this material? What probabilities of success exist for changed attitudes? for increased information? for improved reading skills?* A research-supported theory of teaching will indicate the probabilities of these relationships.

The Best of a Bad Situation. The best of a bad situation suggests another group of difficult problems faced by the teacher. For example, a teacher may be faced with the dilemma of giving or not giving homework assignments. Part of his thinking may be predicated on such propositions as (1) these children are academically behind for their age and

grade; (2) additional work beyond class time is necessary to maintain progress as well as to cancel the increasing discrepancy; (3) the kids are apathetic and will do little homework; (4) the parents are disinterested in school and will not support the teacher's efforts; (5) assignments which are made but not carried out will weaken the teacher's power and control in future situations. As one analyzes such complexities in assignment making, one might ask what would the *good teacher* do in this instance. The decision model point of view suggests that each alternative or pattern of alternatives has outcomes scalable in desirability as well as probability. On occasion the range is from low or moderately undesirable to extremely undesirable. The solution rests in picking an alternative which, while not desirable in some absolute sense, is relatively more desirable than other alternatives. In the teacher's terms, you *make the best of a bad situation*. Such an analysis fosters rationality, suggests pertinent research programs, and lessens the load of guilt carried by many teachers. Obviously one must guard against restriction in alternatives considered and rationalization in logical analysis.

Congruence with Teacher Schema. Congruence with teacher schema concerns the consequence of making the model conscious and explicit. If it can be established that teachers implicitly operate within this framework, then we may have an important vehicle for moving from the *real world* to one we might call, on some grounds, more ideal. Specifically, we are thinking here of long, involved discussions that we have had with students who reject Skinner's image of man as it is presented in *Walden Two* and *Science and Human Behavior,* and who have difficulty thinking of classroom problems in behavioristic terms. Some early field notes from the days in the Washington School cast it this way:

The model that keeps getting reiterated in the discussions of the teachers and the discussions of the pupils and the threats and warnings, the pleading, the arguing, is almost universally a responsibility model. In effect, it goes something like this: You as pupil are responsible for your own behavior, for getting your lessons, for getting to school, for doing the homework, and so forth. When you don't do these things, then you are liable to certain kinds of consequences that follow directly from not doing these things. You should be able to perceive these consequences, you should be able to plan for them, you should be able to alter your own behavior to handle the contingencies as they arise. This model seems to pervade everything that goes on in the schools. It is the kind of model that the Skinnerian approach has put into considerable doubt.

If the shifts in teaching and learning one is trying to make do not demand reorganization of lifelong basic dimensions of teachers' personal conceptual systems, the probability for alteration and innovation in teaching should be higher. Such an hypothesis in a psychology of teaching needs evidence.

The Product of Teacher Education.   The model provides, for us, a
clearer image of the product of a teacher education program and suggests
some experiences, role playing, simulation, and successive approximation
in classroom behavior, as vital but not currently prevalent.   As we dis-
cuss later, we are planning currently to build situations and problems
from our data and present these in our teacher training program.   We hope
this will have a number of affective as well as cognitive effects upon
our undergraduates in the preservice program.

The Child as Decision Maker.   Another implication upon which we are
working is this--in some contexts teachers treat the children as deci-
sion makers.   The act, both verbally and nonverbally, as if the children
have choices, for instance, to attend or not attend, to behave or not be-
have, to do their work or not.   They are held responsible, accountable
for their actions.   Often the teacher indicates the consequences that
follow such choices on their part and which consequences he has control
over--that is, which are alternatives in his own repertory.   For pur-
poses of the present discussion, we would hypothesize that the conception
of the child as a decision maker is a different conception from the child
as a product of operant and respondent conditioning.   We state this a
bit hesitantly for earlier we wrote an educational psychology text in
which we took, in part, a strong Skinnerian bias (Smith and Hudgins,
1964).   Also, we are hesitant in that we have not pushed, as yet, the
comparison at any length or depth.   On the positive side, it helps us
integrate two aspects of the counseling and mental hygiene literature.
Ralph Ojemann's (1958) *causality training* and E. G. Williamson's (1950)
clinical counseling attempt to make clients more rational seem closely
aligned with the decision making point of view.   Mental health problems,
we have argued, are an important dimension of the reality of the class-
room (Smith, 1958).   Insofar as these psychological positions can be
integrated conceptually, they can be drawn upon for help.

Conclusion: Situational Thinking, Process, and the Larger Structure

As we have sketched the prediction system and the value system,
we have implied another set of considerations in decision making.   These
include situational thinking, process over time, and the larger struc-
ture.   By larger structure we mean the context in which the problem
resides.   As we have described a teacher's thinking about the children
who would be sent to the next room, the context includes the teacher who
would receive the pupils, the formal regulations, the informal staff and
pupil norms, repercussions on the children, and so forth.   In effect, we
are asking for many additional items that would make more specific, com-
plex, and elaborate the prediction and value systems.   The benefits of a
general theory of teaching arise here, for the necessary aspects and
dimensions would be included, tentatively at least, in such a general
theory.

The concept of situational thinking accents the momentarily impor-
tant aspects in time and space. For instance, in our Washington School
data Mr. Geoffrey and one of his colleagues postponed some cooperative
teaching plans in arithmetic and geography because they did not want to
add another problem to the burden the principal carried at the moment,
for he was busy with a variety of difficult and time-consuming issues.
Also, they discussed, in terms of who had made the most demands recently,
which of them would broach the subject. While this was cloaked in humor
and repartee, it did not veil the intuitive understanding each had for
the way the system worked.

Finally, the model stresses a time dimension, and consequently
accents processes as well as structure. Each decision rests upon a
past and has implications for the future. Related to this aspect of
the process is the further notion that forces outside the teacher's
immediate control influence the system and, as time moves on, the situ-
ation will be different and must be reanalyzed.

The Initial Teacher Roles

One of the most understudied phenomena in the psychology of teach-
ing is the way in which teachers begin the school year. How do class-
room systems get started? What are the problems teachers face? What
consequences occur from different initial decisions and the tentative
stances teachers take? As we have indicated, very little data exist.
For our comments here we will appeal again to the analysis made by Smith
and Geoffrey (1965, 1968). They argue that the teacher faces two major
problems: initiation of the activity structure and development of class-
room control. By the former they mean that an instructional program
must begin and that the teacher has major responsibility for this begin-
ning. By establishing control they mean that the pupils comply with
requests, instructions, and directions given by the teacher. The Smith
and Geoffrey data are limited by the fact that the children were from a
low s-e-s area, and it can be argued are much less receptive to the
teacher's efforts in each area. Consequently, the tactics suggested may
be more illustrative than compelling. The general position seems con-
gruent with points of view other teachers have taken.

Establishing the Activity Structure[8]

In the beginning of school the teacher has many problems. From the
organization's perspective the key directive for the teacher concerns
the establishment of the activity structure. As we have understood
sociologists such as Homans (1950), an important part of the social struc-
ture of a group is the activity of the group, the transactions of the
group with the physical facilities and environment. In the classroom, it
is the *work* to be done. A major and often neglected part of classroom
social system analysis is the structure of activities. Activity is one
of our basic dimensions. As we watched Mr. Geoffrey's class, we found

that the children did a *variety of things* and this variety had special patterns. In the words of the teachers and the children, they studied a number of subjects. This simple taxonomy of the curricular areas, reading, writing, arithmetic, and so forth, represents the public schools' attempt to order the *structure of knowledge* that has been accumulated in Western Civilization and to which the growing child must be socialized. In Big City, the school says there are eight of these areas for the seventh-grade teacher and their varying importance requires a set distribution of time.

The organization's official form for activity structure is the *Teacher's program*. Directions are explicit for each of the three parts of the form. In Part A the teacher is instructed to:

> *Give the curricular area or subject studied in each period. Show your full school day including recess.*[9]

The several columns require the teacher, as we have indicated in Figure 2, to indicate time of day, length of period, and subject taught each day of the week.

Insert Figure 2 about here

In Part B of the official form, the directions read:

> *Summarize under the proper area the approximate number of minutes per week devoted to each area as shown in Part A of the program. Total each curricular area.*

Geoffrey did this. The areas include fine arts (composed of music and art), language arts (which includes reading, language, spelling, and writing), mathematics, social studies, science, physical well-being (including recess and physical education), practical arts (not given in the fall in the seventh grade) and organization. The latter are those minutes at the beginning of each day in the morning and just after recess and lunch when "chores" are to be done.

The final part of the form, Part C, operates by implication and assumption. Its directions are:

> *Copy the time allotment for each area from the <u>Superintendent's Circular</u> or from the <u>Handbook for Beginning Teachers and Substitutes</u>.*

Geoffrey did this. The form included: fine arts, 180 (minutes); language arts, 520; mathematics, 240; social studies, 300; science, 90; physical well-being, 260; practical arts, 110; and organization, 100.

Time of day	Length of period	M	T	W	T	F
8:30 – 8:35	5			Organization		
8:35 – 9:30	55			Reading		
9:30 – 10:15	45	Gym	Science	Gym	Science	Social Studies
10:15 – 10:30	15			Recess		
10:30 – 10:35	5			Organization		
10:35 – 11:15	40			Language		
11:15 – 12:00	45			Social Studies		
1:00 – 1:05	5			Organization		
1:05 – 2:00	55			Arithmetic		
2:00 – 2:30	30			Spelling and Writing		
2·30 – 3:30	60	Music	Art	Music	Art	Health

Figure 2   Copy of Mr. Geoffrey's teaching program as filed in the
permanent records

Interpretively we are saying several things at this point. First,
a major part of classroom structure has its origins in the organiza-
tion's primary purpose--fostering academic learning. Second, some degree
of goal displacement occurs with the emphasis on the time allotments
teachers spend in each category of activities. The system does test, at
regular intervals, the achievement of pupils, but these results are con-
founded by pupil abilities and social-class factors that vary signifi-
cantly across the city. Third, the implication exists in Part C that
the teacher's program should be similar to the time allotments in the
Superintendent's Circular. Fourth, the actual time of various activities
varied markedly from the program as filed. For the moment, we would note
that the pupils seldom were in the class before 8:37 in the morning and
it was almost always 8:45 or later before attendance and lunch money
collections had been completed. As Smith and Geoffrey indicate in
their monograph, organizational problems arose all semester. Also as
they examine in considerably more detail, variations exist in the heavy
3 R's orientation, especially in language arts, which go far beyond the
stated time allotments. Fifth, the teacher has freedom to arrange these
areas into the day and week as he desires. It should be noted that his
options do not include the time of the year--in the sense of doing the
year's work in arithmetic in the fall and all the language arts in the
spring. Similarly, limits exist in the degree to which the pupils have
a voice in what activities are to be studied. Sixth, within the activity
a large number of options exist in the sequence one might use in the
presentation or the discovering of the accumulated knowledge. In the
Washington School generally, and in Mr. Geoffrey's case in particular,
this part of the sequence was determined by the authors of the textbooks.
In effect, Mr. Geoffrey and the children moved through the texts page by
page and, usually, problem by problem. Presumably this is one set of
meanings to such phrases as *textbook-oriented curriculum, systematic
teaching, traditional teaching,* and so forth. Insofar as the text authors
can clearly see their domain, this puts meaning into the activities.
Insofar as one follows regularly through the text, this puts a procedural
clarity into the activities. Pupils know what to expect. Most teachers
at the Washington School believed that this is especially important for
children with limited ability, with limited auxiliary skills (for instance,
use of reference materials and related reading techniques), with limited
motivation, and with limited self-control, all of which are alleged to
be part of the syndrome of cultural deprivation. These implications are
sketched in Figure 3.

Insert Figure 3 about here

In short, as the semester begins, one of the teacher's responsibil-
ities involves the establishment of an activity structure. We would
phrase this as an important initial teacher role. The first few days
contain the teacher's gambits into the several curricular areas. Prior
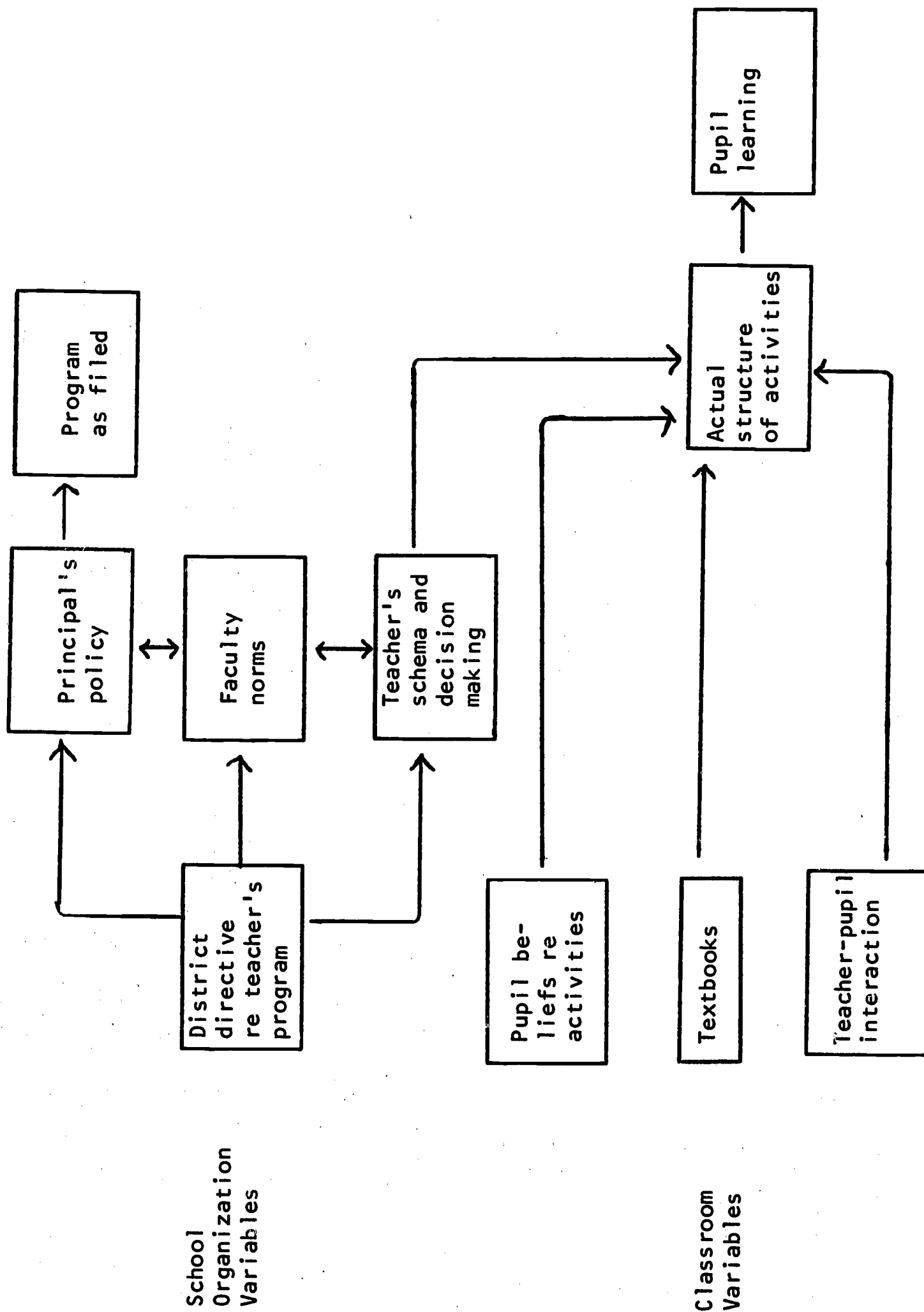experience "in school" has long since developed pupil beliefs and norms

Figure 3   A tentative model of the place of activity structure in the school

regarding the activities to be undertaken. The only novelty resides in a particular teacher's idiosyncratic ways of structuring the activities. As we have indicated, the central office directives and the faculty norms to which he must be sensitive often make his choices reasonably uniform.

Establishing Control[10]

Frequently teachers refer to a phenomenon which they label classroom control. Most educational psychology discussions do not make clear what teachers mean by this term. Instead they move into discussions of discipline problems, mental health outcomes, and terminological confusion centering on *democracy* in the classroom. The thesis we wish to state is quite simple: classroom control refers to the relationship between teacher direction, usually verbal, and a high probability of pupil compliance. If we separate teachers into those who have control and those who do not, then we have situations where pupils acquiese and follow direction or they do not. The dichotomy may be thought of as a continuum. We may raise the question concerning compliance by the total class, various subportions of the class, and individual pupils. Further, we can subdivide according to situations ranging from the imperative of the fire alarm to chewing gum. And we may distinguish between responses to direct commands by the teacher and responses mediated by an activity suggested or imposed by the teacher; for example, does the child answer questions and carry out exercises in spelling as these were outlined and set in motion three weeks before? Finally, an array of antecedents and consequences of this multidimensional phenomenon can be investigated.

Once again, for illustrative purposes we appeal to illustrations from the Smith and Geoffrey monograph in which they describe these aspects of classroom life in that one slum school. The particular approach of Geoffrey's might well serve as a defined position against which to contrast other defined positions. The literature presents little detail of this kind. Verificational research does not exist except for the exciting exploratory work of Gump and Kounin (1958).

Grooving the Children: Achieving Clarity in the Role. Mr. Geoffrey saw this problem clearly and in quite simple terms. He acted upon the conception in a manner that we have called *grooving the children*. Specifically, during the first few days he gave literally dozens of orders, to individuals and to the total group, which involved a number of trivial items. For instance, he handled the distribution of books by assigning each person a number, then calling out the numbers of the books from the storage cabinet, and having each child walk up and get his book. Later he modified this with "runners," children who distributed books to those children who raised their hands as he had instructed them. Next, he utilized the word "permission" over and over again. In the field notes, recorded before 9:00 A.M. on the first morning, "Permission phrase appears and reappears." Interestingly, Geoffrey's statements showed situations requiring permission differentiated from those not requiring permission: *"If you wish to leave the room to go downstairs,*

you must ask permission." And later, *"For occasional borrowing you don't need my permission."*

Theoretically, we would argue that these interactions moved within the pupil group toward a belief system: *The teacher gives directions and the pupils follow them.* The immediate consequence of such a belief is the additional belief that future order-giving-and-following will occur in the same fashion. This eliminates questioning by the pupils and extended teacher explanations. It eliminates, also, rewards for compliance as well as punishments for noncompliance. This point is most important for a distinction between bureaucratic versus personal authority. One can see another long-term consequence which revolves around the implications for critical and creative thinking that demand that one doubt and question before one acts. The social structure ramifies throughout the total learning environment.

The development of this belief system seemed to capitalize on several items: (1) the requests themselves were individually quite insignificant; (2) they dealt mostly with activities in which teachers are expected to be involved; (3) they were asked of everyone; consequently, to refuse would be to cast oneself in a special light; (4) the situations were cloaked with individual attention, warmth, and humor; (5) they often involved activities such as getting up and moving about, which was a pleasurable alternative to being seated for a long period of time; and (6) many of the requests involved volunteering and special, favorable attention. Some of these points are seen in the following episode from the Washington School:

> "Do I have any good pencil sharpeners?" Several boys raise their hands. He picks two who didn't pass out books. He directs them, "Out in the hall."

Beyond the development of the belief system as a relatively emotionless organization of cause-effect relationships, the association with conditions of positive emotion moves toward what we call a classroom norm containing both beliefs and sentiments.

In short, classroom control may be viewed as an important aspect of classroom social structure. In this sense it becomes a goal the teacher strives to reach. Our analysis has suggested that the teacher is faced with the problem of developing such a belief and normative system within the classroom. This time, however, the beliefs and norms center about his own role in the classroom. As we have analyzed our data, we described an interactional sequence, *grooving the children*, in which Geoffrey gave orders and obtained compliance in a variety of mundane and critical situations. As these accumulate, they develop into belief systems—*"this is the way it's done"* and ultimately into normative systems—*"this is the way it should be done."* Achievement of this goal has a number of potentially positive and negative consequences for further long-term goals. Figure 4 contains our summary model.

Faculty clique norms

Geoffrey's schema

Teacher-pupil interaction

Pupil belief systems

Time

The teacher should run the class

The teacher should run the class

Grooving the children

Classroom control

Past years of experience

Beliefs about
1. teacher roles in general
2. Geoffrey's reputation

Beliefs about teacher-pupil relations

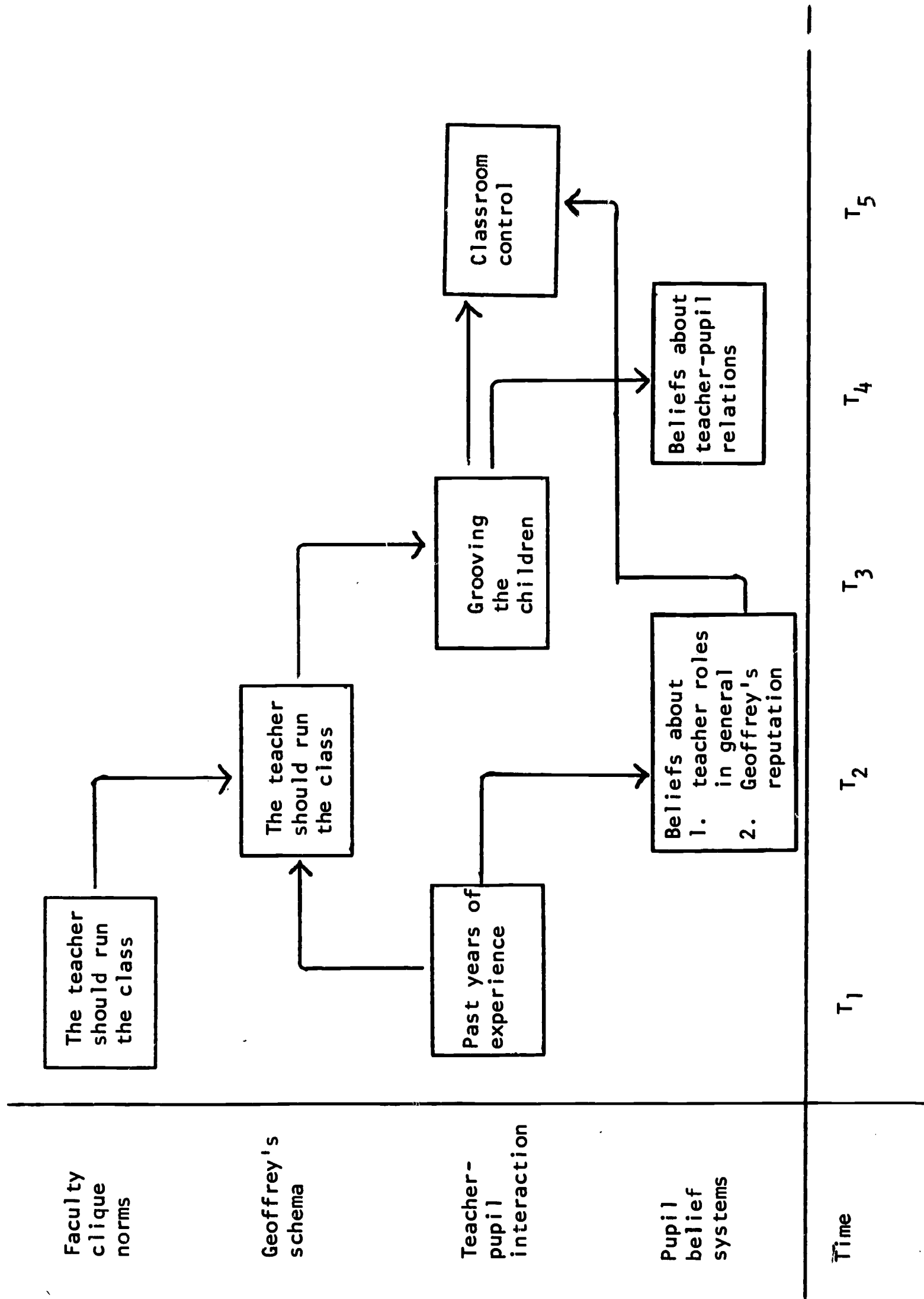T_1 T_2 T_3 T_4 T_5

Figure 4 A model for analysis of initial steps in classroom control

I Mean It: Second Steps in Establishing Belief Systems. Most of
our examples have emphasized clarity of presentation of those aspects of
behavior that Geoffrey wanted built into the belief and normative system
of the classroom. Beyond clarity, Geoffrey's behavior contained an *"I
mean it"* quality, which one might interpret as a threat or as a state-
ment of cause-effect relationship. Our interpretation suggests that the
teacher's performance needs analysis for implications in establishing
the social structure of the classroom; in other words, threats must be
distinguished as to whether they suggest cause-effect consequences that
may or may not be punishing, or those that reflect punishment per se.
The former seems evident in Geoffrey's interaction with Susan.

> "Who's been eating sunflower seeds?" Susan says she has.
> "Don't dine on them in the school room. I'll confiscate
> them. Who knows what confiscate means?" (Keep them.)
> "Anytime I collect food you'll be lucky to see it again."
> Geoffrey moves about checking papers. (9/10)

Following Through: A Third Step in Establishing Beliefs. Another
anecdote illustrates beautifully the connecting link between dimensions
of teacher performance, things a teacher does, and a major consequence
or function of his behavior firmly supporting the developing belief
system. What we call *following through* is another dimension of teacher
performance. Its meaning lies in the combination of an earlier state-
ment of intent, frequently a warning or test situation, as in the sun-
flower seed episode, and now a demand that the pupil behave in accord
with the rule. In a way, the simple behavior of Eileen's walking to the
board carries considerable import for the classroom system.

> Few questions about letters. Sarah asks about "trachery."
> Geoffrey sends Eileen up to correct and to make it "treachery."
> (LMS--This seems very critical also. Without fanfare Geoffrey
> always sends the erring one back to correct his or her own
> mistakes. Implicit rule--if you don't do it right you'll do
> it again. Expand and interrelate.) (9/10)

A similar situation occurs with Sam. At approximately 11:25 during
a language arts lesson:

> "How many are through? Those who are please wait patiently and
> quietly. Sam!" Geoffrey walks around the room, gives Allison
> a look. Stops to talk to Sam. (Can't pick up conversation
> except some about staying busy, book report. Sam protests that
> he has finished and is ready to give report.) Discussion--not
> quite banter--occurs between Geoffrey and Sam. (9/10)

Three minutes later:

> "Sam! All right, that's enough. Turn around. All the way."
> He does. (9/10)

Two minutes later Sam volunteers to go to the board and work a problem.
Geoffrey lets him. Later, as we will see, Geoffrey is not averse to
putting further punitive teeth into his demands. The occasions for that
kind of behavior are important for our analysis.

The Shift from Beliefs to Norms: Softening the Tone of Classroom
Management. If our analysis is correct, that norms must be distinguished
from beliefs, and that the distinction involves the incorporation of sen-
timent into the belief, then we can talk about *acceptance of belief* as
equivalent to the concept of norms. Part of the teacher's task is not
only to have the pupils know what they *should* do but be be *willing* to do
it. In Geoffrey's class, humor seemed to be a major dimension of his
performance that carried these implications. Late one afternoon, he
received a memorandum from the office regarding some insurance forms to
be taken home. In the course of the discussion the following notes were
made:

> "Let me have your attention. I have some material for you."
> Raises accident insurance materials. Indicates parents are
> to make decisions about materials and not the kids. "Don't
> mutilate. Stop work and listen. Know what I have done on
> occasions with someone who wouldn't stop working? Don't
> guess. Ask someone who knows me." Geoffrey goes through
> insurance form carefully. (9/10)

A similar illustration, which we have already used, applies to
softening the tone of classroom management. It indicates Geoffrey's
concern for establishing not only a belief but a norm as well. Many
times he seemed to feel the need to make rules and regulations clear.
He often did this dramatically. However, when his point was made, he
usually softened the criticism and maintained the task-oriented quality
of the group through drama, humor, and incidental learning. The records
are replete with illustrations of this sort, and the incident with Susan
and the sunflower seeds typifies them.

In our framework a belief is a generalized perception of what exists,
while a norm is a generalized or group expectation of what *ought* to exist.
As Geoffrey made the class rules clear, he was dealing with belief sys-
tems; as he tried to build an emotional commitment on the part of the
children to these beliefs, he was engaged in the more complex task of
shaping normative structure.

Insert Figure 5 about here

Additional Aspects of Classroom Social Systems

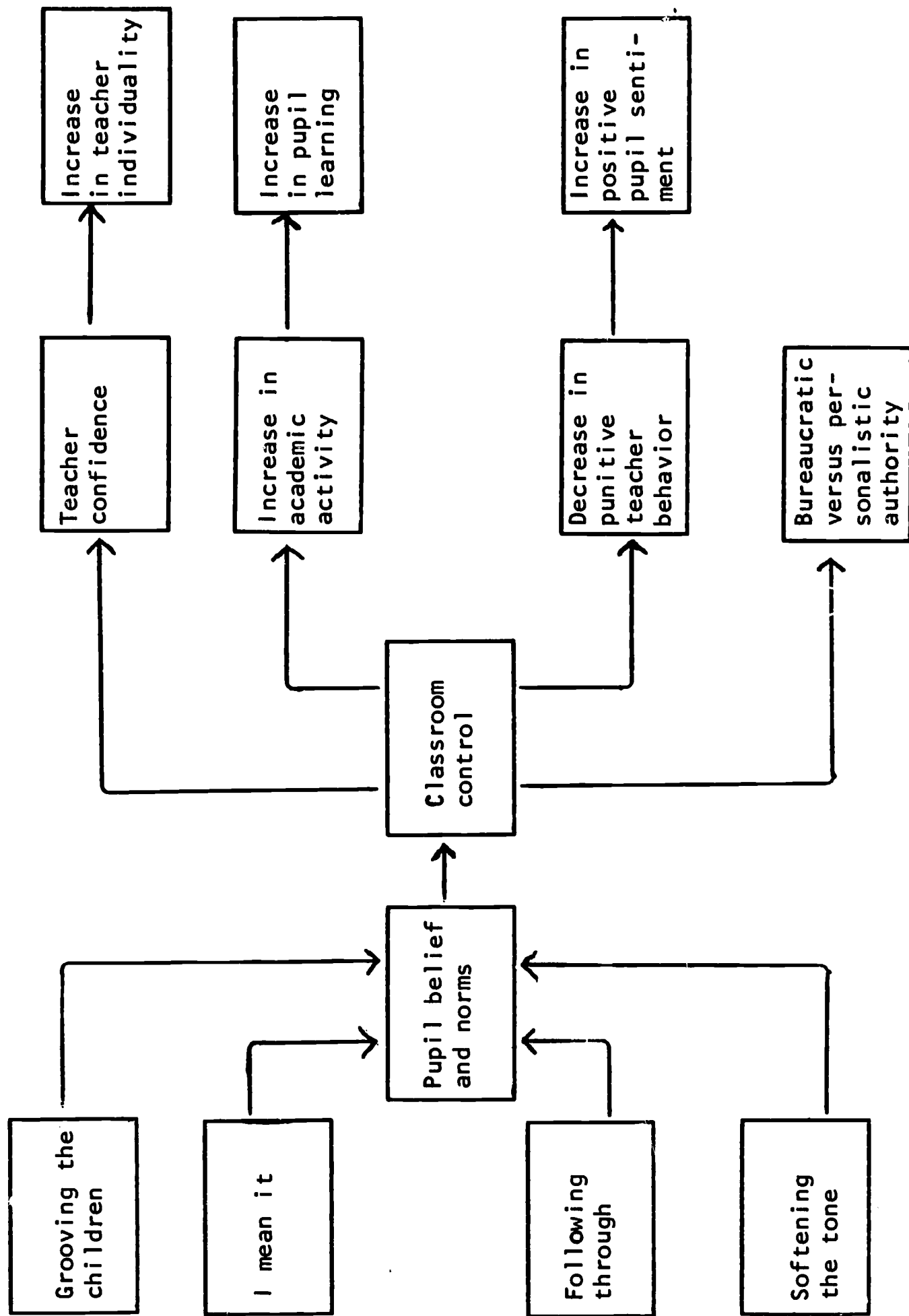While the concepts of interdependence, teacher decision making, and

Figure 5   Summary conceptualization of antecedents and consequences of classroom control

initial teacher roles are very critical, and we have tried to clarify
them in some detail, a number of additional aspects of classroom social
systems need to be mentioned briefly, if not indicated in detail. The
further aspects of teacher-pupil interaction include such important ideas
as awareness, continuity, banter, and drama. The social structure of
the pupil world can be discussed as conceptually independent of the
teacher, even though he is a major figure in its actual determination.
We are convinced of the potency of such concepts as *pupil roles* and see
such important ones as monitor roles, sex roles, and individual roles.
The latter would include phenomena as *court jester* (see Smith and
Geoffrey, 1968, pp. 54-58), *non-worker: troubled and troublesome,* and
on contract. The sentiment structure (acceptance and rejection) and the
subgroup interaction structure are important conceptions as well. The
concern about *lessons* leads us into considerable further analysis toward
a conception of activity structures.

In conclusion, our conceptual stance of the classroom as a social
system is reflected most completely in two volumes, *The Human Group* and
The Complexities of an Urban Classroom. It is impossible to indicate
briefly and adequately here the breadth and depth of the position taken
in those discussions.

THE PRESERVICE TRAINING PROBLEM[11]

Introduction

We have considered in great detail several of the intellectual
threads of the conceptual position, the classroom as a social system.
In great brevity, we have indicated further necessary aspects of the
position. At this point our purpose moves into issues in teacher train-
ing relevant to the social system stance. Specifically, we will work
toward a context which we call *phases and emphases in developing a pro-
fessional teacher.* In route toward that goal, we will raise aspects of
the special problems of the preservice teacher and several programmatic
tasks which focus specifically on the interdependencies of the social
system position and the characteristics of the individuals in the preser-
vice program. In much less detail, because of time and space limitations,
we will speak to the issues of inservice training which have their own
exciting quality.

The Special Problems of the Preservice Trainee

Concrete Perceptual Images

Several interconnected major problems face the preservice teacher.
Much of the dissatisfaction often attributed to teacher education seems
to occur because the major efforts of teacher trainers focus elsewhere

than on these problems. First, most preservice teachers have very limited perceptual backgrounds and images of classroom life--especially as these images occur from the position and role of teacher. Attempts to talk and theorize about classroom events without building such images are fruitless. This point arose vividly in our apprenticeship study (Connor and Smith, 1967).

The "two by two" program had a number of latent consequences which were not anticipated in our inductive approach to the program. The concrete perceptual images dimension arose from an early observation of one of the apprentices' logs and from a conversation with a principal. The field notes stated it this way:

> To this point I've made arrangements to see two of the appren-
> tices at City Teachers College on Friday morning. They seem
> most willing and cooperative in this endeavor. Both of those
> that I've had a chance to talk to and make such arrangements
> have also carried out several of the daily writing assign-
> ments. As I scan briefly a couple of Miss Frank's it is very
> interesting the mundane kind of percepts that are getting
> built. One of them, for instance, centers around the fre-
> quency of the kids crying and the advice of the teachers not
> to pay any attention to it or otherwise you'll have a whole
> lot of it. How we will eventually categorize and organize
> these remains a very interesting kind of question. (9/16)

Our notes are replete with the filling in of the vague, the general, the abstract with the specific, the particular, and the concrete. Our apprentices absorbed these details as does the proverbial sponge.

> The Principal used also the word "smattering" to describe
> the City Teachers College program. Apparently she has some
> questions about what is accomplished more long-term wise in
> this short "2 x 2" program. Part of the argument we might
> make here concerns the state of the apprentice and what
> might and should be learned. The high number of varying raw
> perceptions that are created as you go through the whole
> school in various styles may be most appropriate as a sort
> of "background experience" with the necessity of the long-
> term apprenticeship coming later. It could be argued that
> the longer term experience would then be handled in some-
> thing more like a paid internship. Similarly, it might be
> argued that the "2 x 2" experience could well be in the
> form of a teacher's aide. You do what you can and you pick
> up what you can and in between that experience, or concurrent
> with it, you take the related courses in the theory of
> pedagogy. (9/21)

Presumably ways of measuring such experiences could be developed, and if one decided the experience was important, then ways could be developed to phase apprentices through the total process.

In the October field notes (Connor and Smith, 1967) items with a sensational dimension appeared as the apprentices traded stories:

> It's now 11:10 and I'm on my way back from my usual Friday morning meeting with the four apprentices. They are all full of vitality and excitement about what they are doing and what they are learning and the experiences they are having.
>
> While I'm beginning to sound like a broken record, it seems to me that many of the ideas that we've generated about the importance of concrete images and the trying one's wings in the role of teacher, these seem to keep coming through very strongly. For instance, Miss Charles mentioned with some feeling of having missed an important event, the fact that one of the boys in her last class had a seizure this Monday, the morning after Miss Charles had left the room. There was no question that she felt strong sympathy and feeling for the boy who has epilepsy; at the same time, this kind of unique new experience was one that she hadn't had and she wondered what one would do about the child to keep him from biting and swallowing his tongue, etc. Similarly, Miss Frank commented about the fact that she probably will get playground duty this next week, even though she's not supposed to have it. Some of this arose in the discussion with a young man, who was not part of our sample, who reported the same kind of "jungle" occurring at the north side Roosevelt School, wherein one kid stepped on another kid's face. The apprentice had to break it up. The senior lounge is a haven for this kind of discussion on Friday mornings when the apprentices come in from the schools. (10/8)

Need and Desire for Skills

Our experience has been that productive thinking in a field often proceeds through the use of analogies. By this we mean that the knotty problems in one area often are unraveled a bit by using concepts and modes of approach from more highly developed fields. As we observed our apprentices, we were impressed with what looked like the development and learning of a skill. Hypothetically, if one poses the problem of teaching as a skill, then the literature and mode of approach from the skill learning area might provide a fruitful way of exploring what it means to learn to teach. In the Connor and Smith study (1967) the first meeting we attended redintegrated earlier and related ideas on such a possibility. The field notes conveyed this early reaction.

> The supervisor has an elaborately worked out document which she passes out to each apprentice. This includes

the schedules, three forms, and a variety of general
advice. There are long lists of do's and don't's. She
picked out and highlighted a few of these. Some of them
are as mundane as handwriting, penmanship and talking to
the class rather than to the chalk board. One of my
major impressions here was the notion that teaching is
really a craft or a trade and that the apprenticeship is
a very relevant word. All of this carries overtones of
Dan Lortie's analysis of teaching as sub-professional, a
craft. Another way of putting the issue is that teach-
ing is considered a complex psychological, social, and
psychomotor skill. As in many skills, there are a whole
variety of very small, mundane things that one has to do,
to coordinate, and to attend to if one is to do it cor-
rectly. Within this same analogue there seems also to
be a pretty clear criterion statement of performance.
In a sense, I would guess that the cooperating teacher
and City School District has a pretty clear idea of what
it considers to be good teaching. Whether this image
relates significantly to any or all kinds of pupil
learning is an open question. In some senses, however,
from the teachers' and the apprentices' points of view,
it's an irrelevant question. One of the issues that
seems to me to be a good problem at this point is the
characterization of this image of "the good teacher."
(9/14)

On occasion, as one observes in a naturalistic setting, the seed of
an idea which has the potentiality of providing a framework or thesis
for ordering a series of phenomena arises and grows. This occurred in
the analogy of teaching as a psychomotor skill during the apprenticeship
study. While the notes contained a few precursors, the idea bloomed
most dramatically late in September. The field notes summarizing an
hour with Miss Charles, one of the apprentices, carry the idea.

As this discussion went on I was struck by the analogy
of teaching and psychomotor skills. This, it seems to
me, is a very good lead and one that warrants consider-
able attention. As the cooperating teacher was describ-
ing the way things went there were overtones of sequencing,
coordination, perception of minimal cues, of behaving in
kind of an intuitive free and easy style with much less
of a cognitive component. I am reminded here of the child
psychologist John E. Anderson's old comment that once
you get a psychomotor skill, such as a well-learned
golf swing, then you don't want to think about it at all.
You just want to do it. This was very heavily the kind
of thing that the cooperating teacher was saying about
teaching. Specifically, she thought Miss Charles wrote
very beautiful lesson plans but was perhaps too fixated,

and that's my word, on the plan so that she couldn't
move easily and improvise as other situations arose.
She was most clear in stating that you had to have
an idea of what you wanted to do and where you wanted
to go and have that clearly in mind, but that you
shouldn't be bound to it. She had a good bit of
difficulty putting this into words as she tried to
say it. Another illustration that she gave concerned
the break between each lesson and the fact that they
should "melt," and that was her word, together. In
her words also, some of this would "come with prac-
tice." In short, a good bit of this ties in with the
notion of teaching as a craft or a skilled trade or
an artistic performance.

Another concept that came up repeatedly was that of
"losing the pupils." This was in reference to a long
reading lesson, approximately 45 minutes, which Miss
Charles taught. The cooperating teacher was willing
to entertain the reasons that the lesson was so long,
and Miss Charles had really very few except that she
wanted to finish one section and she hadn't really
noticed how long it was taking. At the same time,
she commented that part of teaching is knowing when
to stop and the "losing them" perception is one of
those times. She indicated also that it is important
to have "something tucked away" that the teacher can
move into in such circumstances.

Around the *losing them* phenomenon were further images of the artistry
and the notion of teaching as a skill.

Another comment of the cooperating teacher concerned
the "lack of confidence" and fearfulness which she
thought Miss Charles had. Again, she saw this as
perfectly normal and one of the kinds of things that
apprentices have to get over. This kind of inhibition
continually gets in the way of the smooth performance
of any kind of sequenced skill. This also seems to
be a part of the cooperating teacher's general posi-
tion on the development of apprentices. She sees these
issues as a series of problems that the apprentice must
face and must work with and that over time, and what
she would describe as the normal processes of learning,
one comes to acquire them. She, herself, doesn't seem
much agitated or much in a rush for them to be mastered
for once and for all, but rather she acts much like
some of the child development people when they talk
about a young child gradually maturing and coming to
take his place as a well socialized being in the group.

She would fit, I think, quite nicely as an illustration
of Stephen's (1968) conception of spontaneous schooling
as this might apply to the learning problems of the
apprentice.

In short, our field notes and interpretations suggest a number of
implications concerning the *performance* dimensions of teacher training.

Confidence and Anxiety

Most teacher trainees carry strong adient-avoidant motivations re-
garding their ability to carry out the day-to-day processes and skills
of teaching a group of children. In the adient sense, the trainees want
to try their hand at *making the animal behave*. By this we mean they are
eager to teach lessons in reading, arithmetic, and the other curricular
areas, and they are eager to test their abilities in what we have called
the core interpersonal skills of teaching. On the avoidant side of the
motivational coin, almost all are at least somewhat fearful that they
will not succeed--at least as well as they would like--and some are
extremely anxious about any success whatsoever. In this situation, ex-
tended discourse about teaching bores those who are essentially adient
and frightens those who are essentially avoidant. With some trainees,
the usual education course--be it methods, psychology, or foundations--
does some of each. In our apprenticeship study, we accented what we
called *the psychomotor analogy* to explore this issue.

The psychomotor literature suggests that confidence in one's self
is a most necessary ingredient in performance of a skill. As one *loses
confidence*, becomes anxious, the collapse of even well-practiced habits
can occur. Similarly, the physical educator speaks of individuals and
teams which are beaten before they start. Anxiety is an emotional re-
action characterized by experiential components of discomfort, general
malaise, inadequacy and dread of unknown consequences. Psychologically
the reactions include accelerated heart beat, perspiration, tremor, and
muscular tenseness. Some people, and at least one of our apprentices
seems to qualify in this regard, carry a good bit of this reaction with
them all the time. Most people experience some of the reaction in new
situations for which they have little available responses. This seemed
to be true of almost all of our apprentices as they moved into teaching.
If we ask our data--*Of what importance was confidence and anxiety in
our apprentices?*--we find several significant generalizations. First,
our apprentices varied markedly in the place they found on this continuum.
Second, it seemed linked tightly into complex configurations of vari-
ables--both theoretically and practically. Third, the "two by two" sys-
tem seemed to present only a few possibilities for altering anxiety into
confidence.

As we have already indicated, some persons carry with them what the
psychiatrists call basic anxiety or free floating anxiety. As such, it

is readily available to be attached, associated or conditioned to any aspect of the environment which comes along. In addition, we have alluded to the fact that the demands of any new and difficult task for which one does not have readily available and appropriate responses produce stress, frustration, and generalized emotional reactions. In addition, as we educationists are prone to say, the individual brings his total personality to the learning situation. Most specifically, he brings his good standing with his peer group. To maintain that standing, and peers means a society of equals, you must perform in that range of tolerable behavior which the norm defines as acceptable. The potency of this for the child with his gang or the adult with his social group is not to be scoffed at nor denied by disparaging references to fallacies in "other-directness" or conformity. We all have our reference groups and even though one may be different from another and the other's group does not seem so important, one should not be misled. It is there, and it is important. Without elaborating, one's family--parents, siblings, spouse, etc.--provide for most learners an important reference group, and for our argument here, a source of anxiety if one does not attain to the degree the group defines as adequate.

Phrased more positively, confidence spirals into permitting one to try the unusual, the novel or the difficult. It gives a clarity to one's action and a flair to one's performance. It has a self-fulfilling quality about itself. These factors lead to success and to increments in confidence. We have diagrammed these relationships as Figure 6.

Insert Figure 6 about here

The teacher-pupil relationship literature is cluttered with emotional appeals to the need for warmth and pupil centeredness. The essence of this, as we look at the psychomotor phenomenon, is that failure and unsuccessful trials are going to occur. The child misses the ball with the bat and strikes out, or a ball is hit and he drops it in the field. He does not need someone to tell him he erred or to harangue him for erring. All that is very clear. In our judgment, what he needs is someone to be there, to support him and to localize the issue to that time and place and that particular skill and episode. The key issue reflects the demand that the failure and lack of success does not generalize to the total activity and precipitate the child's quitting, or engaging in any one of a variety of defense mechanisms, *e.g.*, *"She's a lousy teacher,"* or *"She yells at us,"* or *"Who cares?"* It is in this sense, the pervasiveness of anxiety, fear and negative emotions, that the principle of warmth and supportiveness becomes very apparent. We, as accepting observers outside the authority structure of the program, found ourselves playing a major and unanticipated role in the lives of the apprentices. The cooperating teachers, supervisors, and principals played similar roles in varying degrees; they often were hampered by status differentials and evaluation
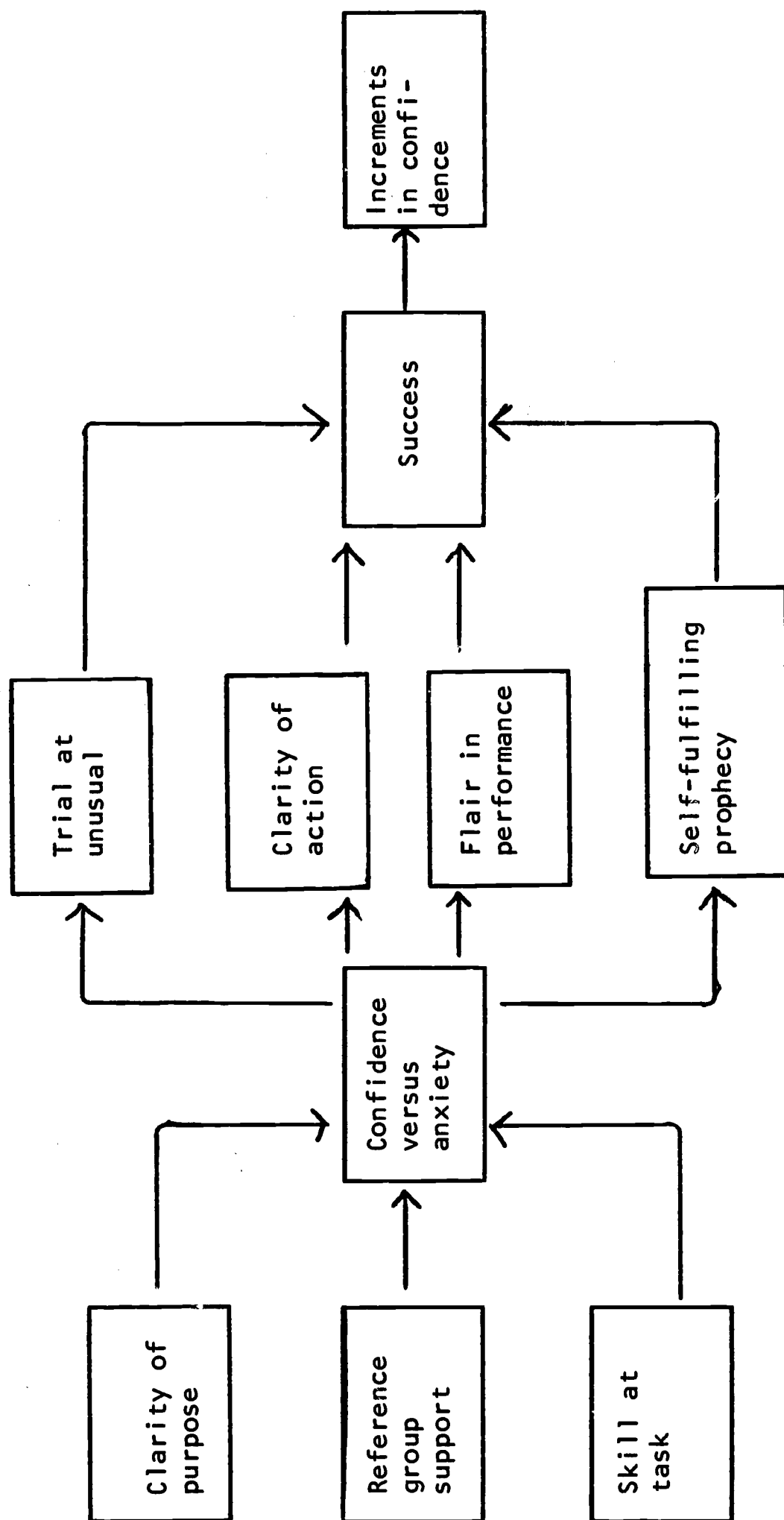
Figure 6   Antecedents and consequences of "confidence" in teaching

responsibilities. Ultimately training programs must recognize these dimensions of the system and build mechanisms to alter the more debili- tating consequences.

<p style="text-align:center">The Microethnography of the Classroom:
an Approach to the Image Problem[12]</p>

Perhaps we are committing the error of the cultist who perceives his own limited perspective to be the panacea which will solve all prob- lems, but our teaching experience--not our research--suggests that pre- service students become highly involved both motivationally and cogni- tively in becoming *microethnographers*.

Initially we had tried having teachers make a brief observation of an elementary or secondary classroom as a prelude to discussions in edu- cational psychology. More recently we have elevated such a task to a major focus in the program. Roughly, the trainee spends four or five clock hours over several consecutive days in the same classroom. During his stay he collects careful field notes of the events of each hour. His primary purposes are to produce a description of the classroom in what we have called the everyday or *lay* language and to produce an ini- tial set of concepts and hypotheses which will help him explain what he has seen. While this sounds simple, it can be extraordinarily difficult and challenging to trainees of varying abilities, backgrounds, and in- terests.

To facilitate independent work on such an observational project, we have concurrently described and analyzed in detail some of our own ex- periences as they have been reported in Smith and Geoffrey (1968), es- pecially Chapter One and the Appendix. We raise our conception of theoretical models and a variety of suggestions for making the approach productive. The major aspect of our model building is to urge upon our trainees the need to focus upon antecedents and consequences. In part, this is an elaboration of such widely accepted general positions as searching for causes and the multiple causation of educational and psych- ological events. The concern for consequences has been a much less ac- cented point of view in educational psychology (in contrast to sociologi- cal functionalism). Finally, we have urged our students to present their ideas figuratively, in diagrams, much like those presented earlier in this report. The ability to scan a system this way seems most helpful in making meaningful the more linear prose.

Several interrelated phenomena seem to be critical if one is to find microethnography a productive approach for classroom analysis. Lying behind the deceptively simple appearance of the method, the several con- ditions we have found to be important are (1) foreshadowed problems, (2) an attentive ear, (3) interpretive asides, and (4) vivid and con- crete data. Briefly, these may be phrased in the following fashion.

Foreshadowed Problems

Foreshadowed problems are those knotty questions, the toughest ones you can find, which you keep asking the data to answer. In his monograph, *Argonauts of the Western Pacific*, Malinowski (1922) states his perception of the issue.

> The Ethnographer has not only to spread his nets in the right place, and wait for what will fall into them. He must be an active huntsman, and drive his quarry into them and follow it up to its most inaccessible lairs. And that leads to the more active methods of pursuing ethnographic evidence . . . . The Ethnographer has to be inspired by the knowledge of the most modern results of scientific study, by its principles and aims. I shall not enlarge upon this subject, except by way of one remark, to avoid the possibility of misunderstanding. Good training in theory, and acquaintance with its latest results, is not identical with being burdened with 'preconceived ideas.' If a man sets out on an expedition, determined to prove certain hypotheses, if he is incapable of changing his views constantly and casting them off ungrudgingly under the pressure of evidence, needless to say his work will be worthless. But the more problems he brings with him into the field, the more he is in the habit of moulding his theories according to facts, and of seeing facts in their bearing upon theory, the better he is equipped for the work. Preconceived ideas are pernicious in any scientific work, but foreshadowed problems are the main endowment of a scientific thinker, and these problems are first revealed to the observer by his theoretical studies. (pp. 8-9)

The central thrust of the *foreshadowed problem* is that it selectively guides one's perception and thought while one is in the field. For instance, in our Washington School study (Smith and Geoffrey, 1968) I was continuously asking myself, *How does one manage them? How do you get them to listen to you? What's it like to be in the class hour after hour, day after day? What are the satisfactions and the frustrations?* As these questions keep turning over and over in one's thoughts one is continually jotting down the concrete overt behavior of the teacher and children. *Who said what? Who is where? Who is moving about, talking, playing, reading, and so forth?* Such foreshadowed problems, whether cast in lay language or cast in more abstract formulations, are different from having preconceived ideas or solutions. The *preconceived ideas*, in one instance, were cast as a standing joke between Geoffrey and me. When he was faced with difficult choices he would ask, with a twinkle in his eye, *"How does the 'good teacher' handle this?"* or *"What does Education 101, The Principles of Teaching, say about that?"*

The Attentive Ear

As one has unanswered questions lying in the novel setting which one is observing, it seems to create a listening set in the observer, an attentive ear. Not only as one observes the processes of interaction but as one talks with the persons involved in the organization, one asks them in a myriad of ways to *tell me what it's really like down here*. We have found that the attentive ear is a major reinforcer to participants. It is also a gold mine for *classical solutions* to one's foreshadowed problems. And even more critically, the attentive ear elicits new defi- nitions of those problems as well as many more problems worthy of being foreshadowed but which the field has not begun to analyze. These may be serendipic or latent and unanticipated, to use the "good" words of the field. For instance, an upper-grade teacher, one of the most gracious women I've ever met, told me about the difficulties she had in learning to live in a slum school. She related the disbelief held by her physi- cian that one so gentle and shy as she could handle a group of youngsters with reputations such as those at the Washington School. On one occasion, a time of serious crises in the school, we observed her discipline a big, rough 15-year-old who was six inches taller and 50 pounds heavier than she. She verbally went through him like a flame-throwing tank. From such incidents we are developing testable conceptualizations for issues in personality theory which will handle the integration of such divergent components of self, social conceptions to describe the settings when such behavior is "necessary," and the degree to which the latter is a norm or a rationalization within the faculty group. These issues also provide a starting point for involved discussions of teaching.

The Interpretive Asides

As we observed we found that aspects of our foreshadowed problems kept arising as insights, guesses, and hunches. We tried to jot these, in parentheses, into the notes. These turned out to be invaluable points of departure, key concepts which later were to carry a heavy burden in the analysis. For instance, we have puzzled for some time over aspects of teacher directiveness and indirectiveness, the Anderson, Withall and Flanders tradition, and we had been asking ourselves, *"How does this fit in the Washington School?"* Our notes contained an episode surrounding Geoffrey's setting up a recess coffee table for the teachers. Quoting from the notes:

> Billy and Edwin bring in a table . . . Geoffrey tells Sandy to move assignment board sometime during the day--to accom- modate the coffee table. Looks for a coffee monitor . . . No volunteers. Geoffrey comments: "Don't everyone volun- teer at once." Oliver suggests that Mr. Geoffrey volunteer. Geoffrey goes along moving materials. He <u>does</u> <u>not</u> push, ask, or plead. (LMS--This seems very significant. Pick up later in the notes as to how it works out. This is part of his aloofness, powerfulness, or autonomy.)

Out of this came the hypothesis, which we now are trying to verify more generally: within a traditional self-contained classroom, teachers who solicit volunteers rather than direct pupils in those situations outside the commonly accepted province of the teacher's role *qua* instructor are held in higher esteem than those who do not. We are trying to pose problems to operationalize the direct versus indirect influence, trying to build measures of teacher esteem, and trying to ascertain situations that qualify as within and without the teacher's instructional role. The interpretive aside in the note helped us in our later conceptualizing the complex phenomenon of teacher-pupil interaction. It cues a series of relevant propositions.

Vivid and Concrete Data

One of the most fascinating aspects of the methodology has been the vividness and concreteness of the raw data with which one works. As one moves into problems at this level, beneath the glittering abstractions and the prescriptive generalizations so characteristic of education and psychology, we have a strong emotional reaction of being involved with a kind of "bed rock reality." While that may be true or false, the data have a hard quality which we have found most engaging and productive as we have tried to build back to more abstract formulations. The consistent attempt to stay away from prescriptive generalizations and to talk about antecedents and consequences has been aided by the flow of the data, the processes, and by the complexities of the problems as we have looked at the concreteness of this part of the world. For instance, during an early morning reading lesson on word analysis, the observer made the following notes:

> Geoffrey offers the general principle: syllabicate to
> help us read words we know in our speaking. Geoffrey
> presents "unmanliness." Asks Joe K. about the word;
> he's stuck. Has Harry analyze it into syllables, then
> has Joe K. pronounce it. He comes very close. Then
> enters into "manly" to get "like a man" and "un" as
> not. Through most of this Harry is most help. He
> knows root and prefix as conceptual labels. (LMS--
> The trick here, in part, is using the able kids to
> start discussions and to use on rough and difficult
> points. As the others can respond (easier points,
> continuity, etc.) you call on them. If the lesson has
> appropriate difficulty level, you have got to tax the
> average student and gradually extend him to be dif-
> ferentiated and shaped. The responses of able kids
> serve as prompts to less able; start the processes
> and permit reinforcement. This is pertinent to group
> structure, its development and its use.) (10/21)

In short, grappling with the concrete has seemed most provocative,

for it gives the general issues a flint-like response when struck against. One cannot conceptually slip and slide about so easily when one translates into who said what to whom, in a particular sequence, and in a known context. Trainees find this to be exciting when it is their images, ideas, and conceptualizations which are up for analysis.

In short, the problem of concrete perceptual images about classroom systems--teachers, pupils, activities, interactions--receives strong emphasis in this kind of training task. Further, the student is impressed immediately with theoretical problems, that is, the need for a clear, consistent, fruitful language to ulitize in analyzing his own data and in communicating with his fellows who have not observed the same episodes. Putting the responsibility upon the student to construct his own models, congruent with his data and his reading, seems appropriate also in the climate of our undergraduate times in which high student involvement is the *sine qua non* of instruction.

The Educational Psychological Laboratory:
Elaborating Images and Ideas

In moving from initial images and ideas of the classroom as a social system to further refine and extend them we have aspirations toward setting up an Educational Psychology Laboratory; since time and financing have not enabled us to institute this aspect, our comments in this section will be brief and speculative. The core of the idea is to make a second part of the educational psychology and principles of teaching block of work into an experimental laboratory experience.[13] Social psychology has moved in recent years to more and more sophistication in laboratory experimentation. Aspects of this work can be introduced into the teacher training program. To this point we have utilized materials in classroom exercises but not to the desired point of actual experimentation by the students.

Ideally, as concepts and hypotheses are generated from the micro-ethnography activities, the trainees would extend their knowledge by trying to operationalize their positions in laboratory experiments and emulate the mode of inquiry of the laboratory psychologist. For instance, considerable interest among students exists in teacher styles and classroom discussions. As class experiments we have replicated a number of N. R. F. Maier's multiple role playing experiments (Maier and Solem, 1956; Maier, Solem, and Maier, 1957) in which techniques for handling minority opinions, developmental discussions, and creative solutions were central issues.[14] Involving students in designing and carrying out simple experiments as part of their training program will hopefully make some of their reading less an exercise of verbalisms and more a meaningful way of extending images and ideas about classroom social systems.[15]

Simulation of Classroom Decision Making

Another major technique which we see as important in developing an understanding of classroom processes with teacher trainees is through complex simulation activities. Our particular intent, and once again we have not implemented the approach, accents the decision making skills of the teacher trainee. The format seems exceedingly important for developing sophistication in making the student aware of multiple consequences of action and in moving many issues from the *latent and unanticipated* category to that of manifest and manageable.

Our interest in this part of the training sequence grows also out of the data which we have accumulated in our research. For instance, our long sojourn at the Washington School (Smith and Geoffrey, 1968) left us with a richness of specific detail and a breadth of events in the classroom, the school, and the district from which we could build real problems with real and reasonable alternatives and their consequences that would prove difficult and interesting to the most sophisticated trainees. Further, it would permit the sequencing and development of alternative structures which would extend over the several months of the semester. For instance, the attention that one pays to careful records would have implications for the grading one does, for the occasional visits by central office supervisors, and for interviews with hostile parents. Each of these consequences would intertwine with the social roles pupils play in the class, the classroom authority structure, control, the faculty social structure and one's position in it, and ultimately the learning, promotion, and retention of individual children.

The momentary resolutions but ultimate *cul-de-sacs*, the momentary unpleasantness but long-term resolutions, and so forth, seemingly could be programmed so well that a wiser and more rational teacher could be developed in the preservice period. As one teacher expressed it, there are the kinds of things one usually finds out painfully by experience. With the advances being made in computer technology the exercises could well be instrumented in the form of computer assisted instruction. The problems existing in implementation are those of time, money, and technical knowledge, all of which are resolvable.

In summary, the technique--simulation--relates to a fundamental conception--decision making--in the social system model. At the same time, it has a practical cast to it. This blending of theory and specific training tasks toward relevant goals seems to be a much needed integration in conceptualizations of teacher training programs.

Micro-teaching: Skills Based upon Confidence and Decisions

The reports emanating from the Stanford University program on micro-teaching suggest that the technique of building micro-experiences into

teaching is quite fruitful (Allen *et al.*, 1967). Micro in this sense
means limited purposes, limited time and limited class size. I have
had no personal experience with the technique, but find it theoretically
very compatible with our analysis of teacher decision making, with the
issues of confidence and anxiety in apprentices and with the conception
of skill components in teaching.

The major weakness in the approach at this point seems to lie in
the kinds of skills upon which the micro-lessons focus. From our anal-
yses (Smith and Geoffrey, 1968; Smith and Keith, 1967; Smith and Brock,
1968; and Connor and Smith, 1967) we think we have developed ideas sus-
ceptible to micro-teaching, but which have higher potency as variables
within the classroom as a social system. We are in the process of trying
to build situations involving ringmastership, continuity, drama, per-
sonalized interaction, and so forth.

Further, a possible sequencing of tasks which we intend to try next
year involves first, the intensive microethnography experience. Each
trainee then selects from his conceptual analysis an important teaching
skill which he then operationalizes into a micro-teaching lesson. The
usual possibilities of video taping, discussion with instructors and
classmates, and reteaching would be integrated. If the idea remains
important and the trainee is inclined, further exploration could be made
in the experimental educational psychology laboratory. Or, the trainee
could move into specially selected sequences of the total battery of
micro-teaching problems on file in the training program library. The
obvious advantages occur in furthering general objectives of inquiry
about teaching, images of the teaching process, and skill and confidence
in teaching. Opening several options seems a most important aspect of
dealing with the varying interests and abilities of the trainees. Again,
we have not yet tried to implement such a program; at the speculative
stage it seems very intriguing.

A Modified Two by Two Apprenticeship[16]

As our analysis has progressed we have been concerned with a social
system stance in teaching and with a total training program which devel-
ops, at least hypothetically, the teacher into the kind of person to
carry out the task demanded. In recent years, as on many occasions in
the past, these issues are not only in debate among teachers, teacher
educators, and members of the more general establishment, but also within
the general public.

It has long been recognized in the field of teacher education that
the practice teaching or clinical aspect is crucial. In fact, histor-
ically, the methods of teaching, observation and demonstration, and
practice in teaching have been the most dominant elements of preparing
for teaching. The practice in teaching has occurred under a number of

formats--known variously as practice teaching, apprentice teaching, and the internship. The last of these patterns is comparatively recent in origin, although with some attempts as early as 1895, 1904, and 1919. However, it is in the 1930's that most of the internship programs were developed (Shaplin and Powell, 1964). In all instances the emphasis appears to be on *practice* in *realistic* situations with increasing responsibility being given to the student for the conduct of teaching. The nature of the organizational pattern for *practice in teaching* does not necessarily tell us what is, or ought to be, the major focus of the experience. The format does not tell us what is to be learned; what kind of a teacher we wish to develop through time; what outcomes are to be desired concerning continued growth in teaching; what conceptions of teaching behavior and resulting pupil behavior are deemed to be desirable as a consequence of engaging in the *deliberate* education of the young. An answer to these latter queries may help us to give more nearly effective structure to the practice experience; may aid us in defining the kinds of activities we wish practice teachers to engage in; and may aid us in better defining the roles of the multiple persons (and the interrelationship of roles) as they converge in the total educative process for pupils, student teachers, cooperating teachers, and administrators, and college personnel concerned with both the clinical and theoretical aspects of the education of teachers and pupils in the schools.

The many advantages and limitations of the "two by two" apprentice have been recounted in Connor and Smith (1967). At this point, we will be concerned with only one aspect, the *nine trials* phenomenon. The reader will recall that the apprentices spent an intensive two weeks teaching each of nine grade levels, K-8, during his semester's practicum. One of the latent aspects of the "two by two" program is the ability to practice skills and apply generalizations, for one has nine trials at new groups of children. One focus was on the problems of learning elements of discipline, especially setting up an authority structure, as we reflected on the experience of one of our apprentices, Greg Jennings. The field notes conveyed it this way:

> One of the morning-after residual impressions I have of
> Greg Jennings centers around the phenomenon of "discipline."
> He seemed to be saying to me . . . that the apprentice's
> problem was to work out a means whereby when he gave a
> verbal order, command, suggestion, or as he or a teacher
> would probably put it--a simple direction, the pupils
> would follow it with a high degree of probability. Ini-
> tially he seemed to operate on the assumption that if the
> kids liked him they would follow these orders. In the
> Kindergarten he made it a point of individually getting
> to know, and be friendly with, the kids. This didn't
> work. His move toward the collectivity and toward firm-
> ness was his attempt to set up the intervening condition
> that would establish the authority structure . . . .

An additional aspect of the "2 x 2" program is the experi-
ence that it provides not only as we were pointing out
yesterday, with new groups to start on when you have dif-
ficulty with past groups, but it also provides an attempt
to practice any growing generalizations and points of view
such as this one. In effect, the apprentices get nine
shots at trying to establish an authority structure. This
is a tremendous amount of experience, literally nine year's
worth, in contrast to the experience of apprentices from
other programs. The potential kicker in this is that the
"2 x 2" may force the individual, because of the brevity
of the period of time the system operates, into very di-
rective techniques which then will inhibit certain kinds
of academic learning, particularly intellectual skills
such as critical and creative thinking, and potentially
some of the affective goals of self-discipline and group
responsibility and consequently have some very negative
long-run consequences. (9/23)

While we have illustrated the "two by two" with data related to
establishing an authority structure, a variety of other aspects grew
out of our analysis. Briefly, as Figure 7, we would indicate some of
those points which integrate with the more general arguments in the
present paper.

Insert Figure 7 about here

The possibilities of blending this kind of student teaching format
with the more typical extended exposure to one teacher and one group of
children have not been explored. Similarly, the phasing of ethnographic
analysis and micro-teaching with this kind of student teaching has not
been carried out. Such conceptions are open to exciting verificational
experiments across programs and institutions. Finally, a synthesis with
the intership type program, which is in some vogue in professional edu-
cation today, has not been carried out.

Conclusion

The preservice program regarding classroom social systems has been
based on the conceptual elements within this theoretical domain and the
special characteristics which seem to typify many inexperienced teacher
trainees. In the usual teacher training instructional sequences many
of the tasks fall within the educational psychology and principles of
teaching block of courses. That this should remain the format is not a
necessary assumption in the present analysis. In fact, our growing be-
lief is that the conservative forces of established professional disci-
plines, course definitions and descriptions, and hallowed textbooks
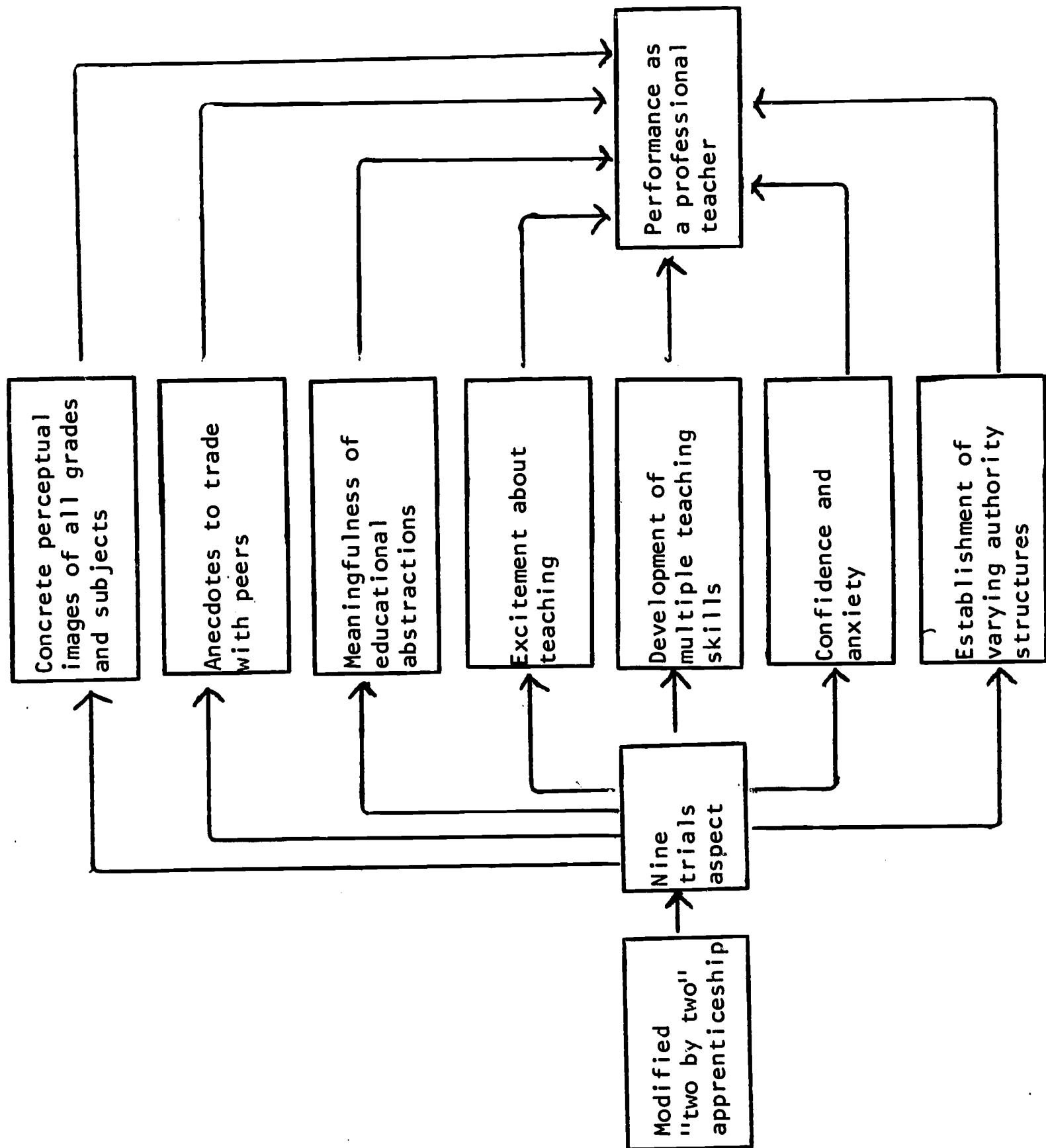
Figure 7   Aspects of the modified "two by two" apprenticeship

represent major entrenched special interests with which the broader reformulation of teacher training must deal.

INSERVICE TEACHER TRAINING

Our intent had been to include an extended essay on problems of inservice teacher training in the social system area. Neither time nor space permits. Briefly, in outline fashion, several items have grown out of our experience at Washington University. Many of these have been made concrete in the form of a graduate course, *The Classroom as a Social System,* taught by the author for about six years.

The students have been M.A. and doctoral students in a variety of programs: educational psychology, elementary education, secondary education, and so forth.

The intellectual content of the course was developed along two interweaving strands, that of social psychology, and educational theory and research. The social psychological ideas were carried in part by two texts, Cartwright and Zander's *Group Dynamics* and Homans' *The Human Group*. These materials gave emphasis to the experimental verificational tradition and to the model building field tradition. The educational ideas were developed out of general research in educational psychology, and, more specifically, *The Complexities of an Urban Classroom*. In sum, the several sources provided a theoretical context to which we could continually refer.

The Homans' book provided the additional thrust of showing the teachers how to think in case study terms and how to move from the descriptive to the conceptual levels. This served as background for the major "applied" aspect of the course, the description and analysis of one's own class. To implement these aspects we devised a series of probes demanding that the teachers examine their own teaching and the setting in which the teaching occurred. Figure 8, *The Environment of the Classroom*, presents one such problem. This exercise carries the students into the heart of the *external system* concept and makes relevant and meaningful a host of illustrative material from the text (factories, boys' gangs, south sea island life). It permits development of concepts of bureaucracy, social norms of the faculty, reference groups, and so forth.

Insert Figure 8 about here

Illustrative of the attempt to blend our own research into teaching are the probes in Figures 9 and 10. Earlier in this essay we described

The unique dynamics and structure of a particular group are, in
part, a function of the particular environment in which it resides.
This is a basic principle which is often ignored by parents, teachers,
and supervisory personnel. Homans (1950) uses the concept external
system to help organize observations relevant to the principle. I
would like you to develop an essay indicating your observations of
the applications of this principle in your own setting. While there
are many ways in which responses to this assignment may be organized,
and I would hope you would respond as inventively and originally as
possible, please attend to these points as a minimum: (1) the physical
layout of the school building, (2) general system-wide school policy,
(3) the principal of your school, (4) the group of teachers in your
building, especially those who teach the same grade level as you and
those immediately below and above you, and (5) the student body of the
school.

Figure 8   The Environment of the Classroom

issues from Smith and Geoffrey (1968) regarding establishing the author-
ity structure and initiating the activity structure. In the essays
stimulated by "The first few days" we have very successfully brought
forth an array of alternative approaches which can be analyzed, evalu-
ated, and synthesized. Parenthetically, it should be mentioned that one
agreement between the course instructor and the experienced teachers in
the class is that the content of the essays are confidential. The in-
structor does not raise any specific point of illustration in class dis-
cussion until it has been introduced first by the individual class member
who reported it.[17] This understanding is made in the context of report-
ing what "teaching's really like" rather than what some text or ideology
says teaching ought to be. We have had no difficulty in maintaining
such confidences nor in engendering productive class discussion. Most
students find their peers accepting and respectful of diverse positions
and interested in the "whys and wherefores" of these approaches.

Insert Figures 9 and 10 about here

Implicitly in Figure 9 is another of our basic intellectual concerns,
the decision making conception within the social system stance. Also the
process elements, changes over time, are implicit. The essay enables
these issues to be raised with some force.

Figure 10 is a direct outgrowth of our research. In raising *the
contract* for this kind of discussion we found widespread validation for
the kind of analysis made in Smith and Geoffrey (1968, pp. 151-153).

One final illustration, Figure 11, *The Teacher's Concept of Power*,
is an attempt to reach several goals in helping teachers inquire about
social systems: first, the essay stresses more careful definitions and
the move toward more rigorous propositions. Zetterberg (1965) has been
our model here. Second, the essay enabled us to move into a provocative
discussion of the quite technical French and Ravens bases of power paper
in Cartwright and Zander. Third, the focus is upon the teacher as an
agent in the system utilizing concepts which have analytical power in
molding the system.

Insert Figure 11 about here

In conclusion, most of the students (experienced teachers) find the
inquiry emphasis stimulating. Most find the readings novel and new,
with the consequence of high interest. The problems we pose for analy-
sis of their own situations and experience are very time consuming as
they become entranced with making the nuances clear and understandable.

Many teachers have commented to me "The first few days of school are the most important; you've got to get off on the right foot." The explicit meaning attached to the proposition is generally not clear in the educational and psychological literature. Essentially, the intent of this paper is an analysis of what you think about this statement. I would like you to tell me in as practical and as specific a manner as possible how you stand on the issue. While you may organize your paper in any fashion you desire, I would like for you to comment at some point on (1) the goals you have for the first few days or weeks of school; (2) the plans you have for reaching the goals; (3) anything about the school where you teach or the children you teach which are special or important to keep in mind as you set your goals and plans; and (4) the specific aspects of the class which you keep alert to during this time which serve as cues for modifying plans or goals.

Figure 9   The First Few Days

Recently, in the course of observing several classrooms, I have noted that some teachers have established an informal contract with certain pupils. "If you don't bother me or the class, I won't bother you," describes the relationship. Essentially, the pupil attends class and does little or none of the assigned work; the teacher does not call on him nor get involved with him in any extended way. I am interested in your experience regarding such a relationship. Have you ever been involved in such a "contract" or have you known teachers in such a relationship? What consequences do you see for the pupil and the classroom as a unit? I would like you to describe in as much detail as possible such a phenomenon.

Figure 10   The Contract

Consider the following concepts and their definitions: (1) Psychological change is the alteration of an individual's behavior, opinions, goals, values, etc., or the alteration in the elements of a group or social system. (2) Influence is the process by which an individual or group brings about the change in another individual or group. (3) Power is the potential ability of one individual or group to influence another.

In the teacher-pupil relationship these concepts might be applied in this manner. Frequently teachers engage in altering--in directions they see as desirable--pupil cognitive behavior and pupil social behavior. To carry out such influence attempts requires power. Although I do not have data, it seems to me that a reasonable case can be made for these propositions: (1) Teachers vary in the amount of power they possess. (2) Teachers differ in their conceptions of the bases or sources of their power. (3) Teachers utilize different strategies to augment or increase their social power.

I would like you to write an essay making reference to (1) the relevance of the concept of power in teacher-pupil relationships, (2) your conception of your power as a teacher, (3) your conception of the sources of this power, (4) the strategies you have found successful and unsuccessful in increasing power in your particular situation(s) past or present, and (5) other aspects of the problem which seem relevant to you.

Figure 11   The Teacher's Concept of Power

The several problems presented here are just a sample of several dozen on file from which we can select depending on the particular group and the kind of focus which grows out of the discussion. Such a reservoir permits capitalizing on the momentary issues and the uniqueness of any one group of students and prevents the instructor or class from getting bored with a routine set of exercises.[18]

While the experience seems to have been very successful in terms of student interest, conceptual development and analytical skills, that is, helping teachers inquire into social system dimensions of education, the major limitation lies in advanced skill training. For instance, we have not had a "teaching hospital" (Knowles, 1966 and Bolster, 1967) type facility with children and technical equipment (such as video recording) available. To be able to move from some of the new concepts to their utilization in day-to-day activities would add a powerful increment to the experience.

Also, and at a more general level in teacher training, we have not invented a mechanism to maintain contact longer than one semester with the experienced teachers. The advantages of direct extended contact into new groups of children and new kinds of problems seems very important. As illustrations, both Geoffrey and Brock, with whom I've collaborated intensively over several years, I met originally in class. The benefits seem mutual and very great in both instances. A means of maintaining a contact similar in kind if not in intensity with larger numbers of students would seem very desirable. The usual university courses and degree programs have minimal flexibility in this regard.

GENERAL CONCLUSIONS[19]

Phases and Emphases in Developing a Professional Teacher

Various teacher educators have made comments, proposals and critiques relevant to some of the ideas presented in our analysis. For instance, in his monograph, *The Professional Education of Teachers,* Combs (1965) makes a telling comment as he criticizes the *competency* approach to developing a teacher education program. He states:

> . . . *it is a fallacy to assume that the method of the experts either can or should be taught directly to beginners. It is seldom that we can determine what should be done for the beginner by examining what the expert does well.* (pp. 4-5)

In general, the implications of this specific point seem far reaching and underestimated in teacher education. In his comment regarding the *static affair* of teaching, Schaefer (1967) offers a different critique in the consideration of the competencies approach and suggests the

inquiry model in the context of the long-range development of the professional teacher.

> *If teaching is an essentially static affair, the various pedagogical skills required are best learned by apprenticeship under a master teacher. A particular preparing institution, if it wished to cater even further to the vocational motivations of its students, might also provide an orientation to the job through a historical or sociological look at the school as a social institution, a 'practical' review of human development and of learning principles, and a repertoire of techniques and procedures proved useful by experience.*
>
> *If, on the other hand, preservice teacher education is intended to provide a foundation for career-long development as an inquiring scholar-teacher, initial training must emphasize ways of knowing. There must be less concern for job information already discovered and far more interest in the strategies for acquiring new knowledge. Philosophy of education would include epistomology and an introduction to the philosophy of science. Studies in psychology might furnish a working knowledge of research methodology and of experimental design, observational categories for observing and recording the behavior of children, and an introduction to the complex problems of measurement and evaluation. Courses in educational sociology would develop analytical tools for understanding student sub-cultures and the characteristics of pupils in a particular school. Courses in methods of teaching would eschew talk about techniques and procedures--laboratory experience and apprenticeships would be relied upon to develop these skills--and would focus upon the critical analysis of teaching behavior and a beginning approach to the logic of pedagogical strategies. In short, teacher education must seek to prepare teachers not as complete and polished practitioners but as beginning professionals who possess the trained capacity and the attitudes requisite to lifelong learning. (pp. 69-70)*

Such thoughts as the above, our developing research, and our experience in teacher education have led us toward a process analysis--teacher training with a time dimension. This might be phrased as *phases and emphases in teacher training*.

If a teaching career is spread over a time line and units struck off at the pre-practicum period, the apprenticeship, the first year of

teaching, the probationary period, and finally the long span of the professional career, it is possible to view teacher training in a larger context. If we trace across this time line a half dozen categories of events important to teaching perhaps we can lay the groundwork for the richer analysis of teaching.

In Figure 12 the abscissa is the time line focusing on the college and career years. The ordinate represents the amount of emphasis, roughly gauged from low to high, of six threads within teacher training. The six threads are: (1) general liberal arts education and academic specialization; (2) concrete images of teaching; (3) core interpersonal survival skills; (4) idiosyncratic style of teaching; (5) analysis, conceptualization, and inquiry about teaching; and (6) nonclassroom roles in teaching.

Insert Figure 12 about here

More specifically we have engaged in little discussion of the liberal arts and substantive knowledge, strand one in Figure 12, in this paper. However, our belief is that the high school and first years of college must be devoted heavily to such training. This emphasis in the first few years drops off sharply at the time of the apprenticeship and presumably remains low through the probationary period. Training for higher degrees, general maturation, travel, and experience should see it rise again and presumably level off during the long years of the professional career. One aspect of this about which we gathered "an observation" during our apprenticeship study (Connor and Smith, 1967) might be called difficulties in inservice training in the long attempt of teachers to reach a more sophisticated level of performance.

> There was a bit of discussion about a science program
> in astronomy for seventh and eighth grade teachers.
> The man who taught it was from Aerospace Inc. and head
> of their Optics Department. Apparently the whole three
> hours was over the head of this particular teacher and
> from the comments that were made about his telling the
> principal and he in turn calling the instructor, there
> were a number of other people who thought so also. In
> this there was a tremendous anti-intellectual flavor.
> It was of the order that this guy was way above us and
> impressed us but didn't help us at all. It raises, in
> part, some of the issues of inservice training and a
> very difficult job to gear the ideas and the materials
> to the teachers who then in turn can gear it to the
> pupils. This teacher saw it as pointless and compara-
> ble to the pointlessness of the prior year's "new math"
> inservice training. (10/7)

1. General Liberal Arts Education and Academic Specialization
2. Concrete perceptual images of teaching
3. Core interpersonal survival skills
   3.1 Classroom control
   3.2 Implementation of the activity structure
   3.3 Confidence
4. Idiosyncratic style of teaching
5. Analysis, conceptualization, and inquiry about teaching
6. Non-classroom roles in teaching

Hi

Lo

Kind and Amount of Career Emphasis

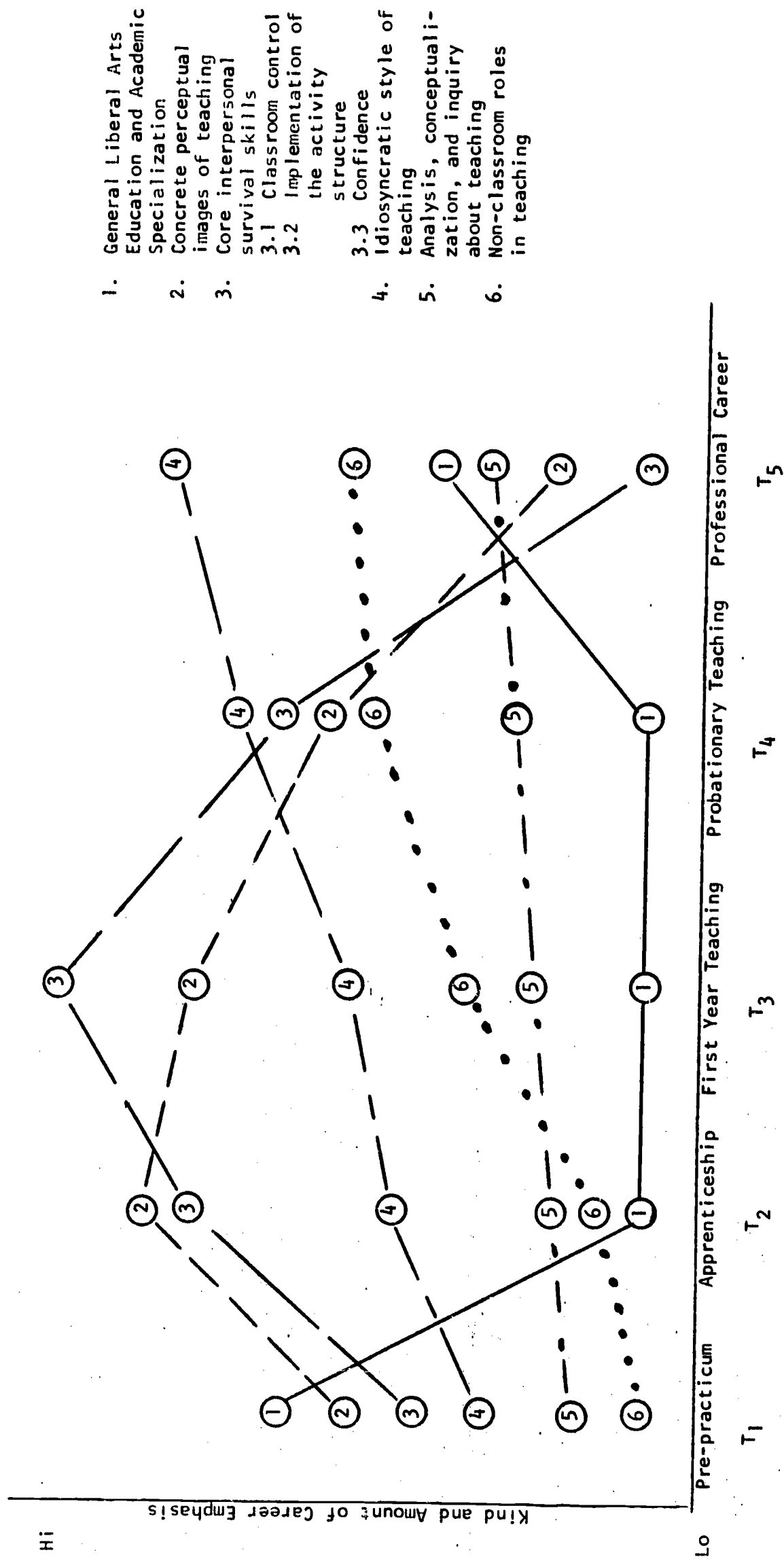| Pre-practicum	Apprenticeship	First Year Teaching	Probationary Teaching	Professional Career
T_1	T_2	T_3	T_4	T_5

Figure 12 A preliminary model of phases and emphases in developing a professional teacher

The varied possibilities in extending the knowledge and intellectual competencies of teachers are under development in local programs such as these and in federally financed institutes. The latent functions and dysfunctions seem ripe for analysis.

We have made a strong point regarding the development of concrete perceptual images during the apprenticeship, strand two in Figure 12. Presumably this begins before the apprenticeship, reaches a maximum in the practicum and the first year or two of teaching, and drops off over time. In our research the apprentices kept reporting the mundane and the significant events which they had not been privy to before. The perceptions were of children and their families, teachers and class-rooms, principals and school organizations. They were many and varied.

A broad category of *core interpersonal survival skills*, strand three, seems a major component of the apprenticeship: less important in the prior years, most important in the first year of teaching and hypothetically solved in the probationary period, and of little impor-tance in terms of new learning over the long career period. We analyzed these in great detail earlier and we accented such items as classroom control (the authority structure), implementing the activity structure (initiating and maintaining the instructional program) and the develop-ment of confidence in playing the teaching role. These are particularly relevant to the classroom as a social system.

The idiosyncratic styles of teaching, which we have not emphasized explicitly but which we hope are implicit throughout this paper, would be in gradual development from the first experiences in teaching and should continue to blossom long into one's career as new emphases in curriculum, in instructional processes, and in the psychological and social foundations arise on the broader scene and as one builds them into or reformulates one's practices. In a fundamental sense the artistry of teaching should be a major focus and satisfaction in the profession of teaching. In our research we obviously do not have direct data on this from our dozen apprentices. More indirectly, the cooper-ating teachers seemed quite varied in this regard, although our data are not good in that we did not observe them teach to any great extent. Further examination of idiosyncracy as a means and as an objective in a psychology of teaching seems very important.

The analysis and conceptualization of teaching stressed throughout this paper was not accented by the apprentices in our research (Connor and Smith, 1967). The scholar-teacher conception, for good or ill, seemed foreign to many of the people and settings in which our appren-tices interacted. The schools seemed to have too many children, too many immediate problems, and too little time for reflection about teach-ing or curricular innovations. Our apprentices were not inclined in this direction. They defined the task of the semester to get as much practical experience in teaching--presenting lessons--as possible so that they would be prepared for Thursday, and eventually for next year. The degree to

which it is possible--or desirable--to alter the system is, at this point, a matter of speculation, debate, and exhortation. Little data exist. Still less data are available when juxtaposed against the value statements.

Finally, strand six, the nonclassroom roles in teaching--conferring with parents, working on curriculum committees, playing a role in school and educational organizations--are parts of the career which become important, presumably only as one is a practicing professional. We have suggested that such roles are important in teaching and that social system concepts such as environment, reference groups, external system, normative structure, and teacher decision making aid in the theoretical analysis of those day-to-day problems.

FOOTNOTES

[1]Prepared initially as one part of project *A Conceptual Model of Teacher Education,* principal investigators Joyce, Foshay, and Weinstein of Teachers College, Columbia University, July 1968.

[2]On leave of absence as Professor of Education and Psychology from Washington University, St. Louis. At CEMREL he directs the Psychology of Teaching project.

[3]We will explore this in more detail as we indicate training procedures at the inservice level in a later portion of this document.

[4]This section draws heavily on Chapter Four of Smith and Geoffrey (1968).

[5]In another project, *Social Psychological Aspects of School Building Design,* (Smith and Keith, 1967) we made an intensive analysis of this conception.

[6]Incidentally, the research literature on lesson plans is almost barren. Conceptualization also provides possible articulation with the volume by Miller and others, *Plans and the Structure of Behavior.* New York: Holt, Rinehart and Winston, Inc., 1960. Currently we are underway with this kind of research, *Teacher Plans and Classroom Interaction* (Smith and Brock, CEMREL, 1968).

[7]One of the major exceptions to the shying-away tendency has occurred in the efforts of Fritz Redl and his colleagues, especially *The Aggressive Child* (1957).

[8]These materials are abstracted almost verbatim from Smith and Geoffrey (1968, pp. 83-86).

[9]These quotes and the following are from the official record forms used by Geoffrey.

[10]These materials are abstracted almost verbatim from Smith and Geoffrey (1968, pp. 67-72).

[11]This section draws heavily upon the discussion in Connor and Smith (1967) and upon conversations with faculty colleagues at Washington University.

[12]These materials draw heavily upon Smith (1967).

[13]In contrast to the naturalistic laboratory of the ongoing classroom described in the microethnography discussion.

[14]Similarly, Luchins' (1957) work on first impressions has been a provocative class experiment for another set of issues.

[15]The fruitfulness of this in the discussion of children's learning and intellectual development seems even more impressive than in the social system area.

[16]These materials draw heavily upon Connor and Smith (1967).

[17]While it has not been stressed in this essay, the problems of anonymity and confidentiality in field work, such as participant observation or microethnography of the classroom, are very important and not to be underestimated nor ignored.

[18]It should be noted that building and teaching this course has been the author's most exciting teaching experience. The reader can discount the hyperbole and encomium.

[19]These conclusions draw heavily upon Connor and Smith (1967), especially pages 278-282.

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