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A needs assessment study to provide guidelines for an inservice elementary teacher program in southeastern Massachusetts.

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A NEEDS ASSESSMENT STUDY TO PROVIDE GUIDELINES FOR
AN INSERVICE ELEMENTARY TEACHER PROGRAM
IN SOUTHEASTERN MASSACHUSETTS

A Dissertation Presented
By
Hamilton M. Brush

Submitted to the Graduate School of the
University of Massachusetts in partial
fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

April   1976
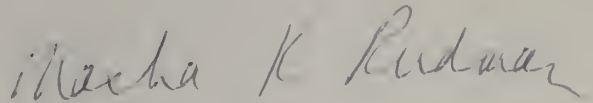
Elementary Education

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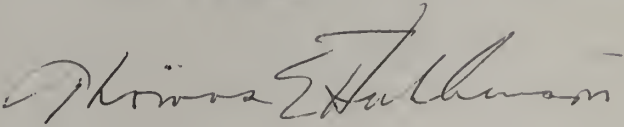IN SOUTHEASTERN MASSACHUSETTS

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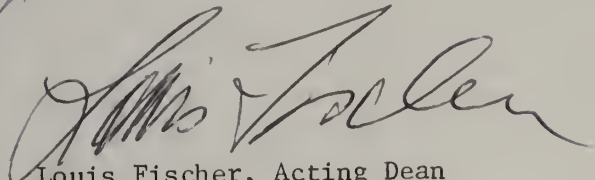Approved as to style and content by:
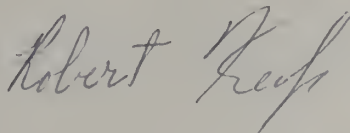
Masha K. Rudman, Chairman of Committee

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April, 1976

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ABSTRACT

This study is built on two premises: (a) inservice education is
a growing, necessary institution, a potentially strong design in the
fabric of American teacher education; and (b) in order to make in-
service educational programs effective, teachers' specific needs
must be addressed. To ascertain these needs in order to design appro-
priate inservice programs, moreover, a valid instrument must be
devised.

The writer did research within the field of inservice education
to demonstrate that inservice education of teachers is an imperative
in their continuing growth. No longer is the preservice portion of
their training the be-all and end-all of their education. Since
the 1930's and World War II, such an abundance of new educational
techniques, new and revised concepts of child development, new theories
of classroom organization, and new demands by federal, state, and com-
munity agencies has come into being that teachers in service cannot
afford to rely solely on their preservice training to equip them for
understanding how to act within these demands upon their professional
lives. Moreover, in Massachusetts, forward-looking legislation like
Public Law #766 requires teachers to think more and more in terms of
individual needs of students, and at the same time the non-professional
community is more sharply seeking accountability in the spending of
its tax dollars.

If individualization is a viable concept in the education of
American youngsters, it is equally viable for the education of adults.

It is important for administrators seeking to devise useful inservice educational programs for teachers to ascertain the specific needs of those teachers. No longer is it educationally right or helpful for administrators to assume they know those needs and to make up inservice programs solely on their assumptions. Therefore, the writer researched the field of needs assessment in order to devise a model which could be used to assess needs of elementary teachers for inservice programs in the region of Southeastern Massachusetts.

The field of needs assessment is even more in its infancy than that of inservice education. Whereas a number of needs assessments have been conducted, particularly in the past decade, prompted primarily by requirements for such assessments by the Elementary and Secondary Education Act of 1965, these assessments have been characterized by three factors which have placed limitations on this study: (a) most of them have been developed by state or city departments of education chiefly for elementary and secondary students; (b) the literature describing them has shown them to be largely first attempts in each case, with little or no research to form a rationale for their procedures; and (c) none that this writer could discover deal specifically with assessing needs of teachers for inservice education.

In devising the design for this study, then, the writer took what he considered to be the valuable ideas from a great many models described in the literature of the past thirty years, with particular reliance on the methodology designed by Coffing and Hutchinson (1973; 1974). The design was implemented first by a series of four group

interviews in each of five Southeastern Massachusetts communities.
The participants in these interviews, to help define the needs of
elementary teachers in the communities for inservice education, were
(a) the elementary teachers themselves, (b) administrators who worked
closely with these teachers, (c) parents of these teachers' elementary
students, and (d) fifth and sixth grade students of these teachers.

From the research on needs assessment, it was seen that strati-
fication was a valuable component in the assessment process. Strati-
fication is a device to divide a group by its important characteristics.
In this study, such characteristics as these were considered important:
grade level taught by teachers; for the parents grade level of their
children; years of experience of administrators; and sex, ethnicity,
and urban or non-urban locale of all groups.

In most of the needs assessment models in the literature stratifi-
cation was planned in advance of the assessment process itself. In
the design used in this study pre-assessment stratifying was not
possible. The writer as Needs Analyst had to take whomever the admini-
strators of a given community arranged to attend particular interviews.
The important characteristic stratifications of each of the four inter-
view groups, taken as a whole over the five communities, were well repre-
sented in most cases. Exceptions were as follows: (a) not as many
teachers attended as the Needs Analyst would have preferred; (b) the
parent groups were almost all female; and (c) students from the fifth
grade were almost as numerous as those from the sixth.

Over six thousand needs were generated from the interviews.
Through the processes of prioritization and analysis, these were syn-
thesized into fifty-six needs statements. From the latter, a forty-
item questionnaire was devised and disseminated to a random sample of
elementary teachers in Bristol County, Massachusetts.

The data from this questionnaire were then analyzed to provide
guidelines for inservice educational programs. The top ranking twenty
needs were dealt with in three steps: (a) four ways of dealing with
students' cognitive and affective needs were matched with four types
of inservice programs, categorized generally by number of teachers
attending, kinds of implementers, and locale of presentation; (b) the
stratification breakdown (grade levels taught, years of experience,
and major locale of experience) was applied to the top twenty needs
individually, so as to designate which kinds of teachers would likely
attend specific programs; and (c) two kinds of measurement for need
fulfillment were suggested as ways of eliminating the necessity for
implementing certain items.

The study concluded with an evaluation of its design, its use,
and its effectiveness, as well as recommendations for further research.
It was the belief of the writer that both the methodology outlined for
the original design and that employed in the revised design were sound,
in terms of the valid aspects of needs assessment taken from the litera-
ture and of the results of implementing the methodology in Southeastern
Massachusetts. Recommendations were made in the evaluation for modi-
fying both designs in order to tighten control of certain variables
and to clarify the directions.

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THE IMPORTANCE OF INSERVICE EDUCATION AND
NEEDS ASSESSMENT IN AMERICAN EDUCATION

Part 1 The Importance of Inservice Education

"If 'civilization is in a race between education and catastrophe,'
man's fate is inevitably determined by the quality of his educational
institutions" (Leland and Harder, 1971, p. 1). The authors go on to
say that "teacher education in the 1970's has no options. It must
focus its attention on the production of excellent, professionally
competent teachers" (Childress, 1969).

> The importance of inservice education for all educational
> personnel is recognized throughout the literature of the
> teaching profession: in popular articles, in textbooks,
> in special publications, and in research studies . . .
> The rapid expansion of knowledge, which has been reported
> extensively over the past several years and its effects on
> changing methods and in developing technology utilized in
> the classroom, are major factors in making the inservice
> education of this group necessary (p. 645).

Roy Edelfelt (1974) avers that the "inservice education of teachers
will be the major focus in teacher education for the next decade."
He justifies his claim by "the condition of the teaching profession,
the state of education, the plight of teacher education, and the will
of the public" (p. 250). As President Nixon said to introduce his
Education Message of 1970, "American education is in need of urgent
reform." "Inservice education" is used in this dissertation to re-

fer to formal and informal education programs, courses, workshops, conferences, etc., whose purpose is to inform, train, or give experiential opportunities to professional educators in order for them to grow in knowledge and expertise and thus to become better educators.

The need for newly thought-out and fundamentally strong ways to train and re-train teachers is imperative. No longer is it credible that an accomplished teacher can be turned out by a four-year college training program. Like the students whom they serve, teachers need continual education so as to become more and more experienced and knowledgeable, not only in what they teach but in how they teach and in awareness of whom they teach. In the past decade particularly, the number of studies, reports, plans, programs, evaluations, and criticisms pro and con about the continuing education of teachers has mounted year by year. Wagstaff and McCollough (1973) summarize the need and direction of this thinking:

> The call for educational reform is both strident and clear.
> Reformers look in various directions for new ways to improve
> our schools. Some advocate their abandonment and a fresh start.
> But reality dictates that school systems cannot start from
> scratch . . . School systems as they are today must be the
> starting point for and provide the context within which reform
> takes place. But schools will not change unless educators
> change, not once but continually. Thus, the continuing edu-
> cation of educators themselves is at the heart of both school
> reform and consequently of the restoration of public confidence
> in our system of education (p. 1).

But with all the cry for reform and with the direction of that reform evident, i.e., in inservice education of teachers, there are mixed feelings about the viability of inservice education to do the job. Edelfelt (1971) sees inservice training of teachers as "both a

curse and a cure," full of shortcomings, stumbling from one focus to
another in order to solve social crises, lagging when it should bound
forward, but at the same time contributing "substantially to the de-
velopment of the profession" (p. 26). Mohr (1971) says that inservice
education is not the cure for all that is lacking in present-day in-
struction "but it does recognize the fact that the teacher is the
basic factor for improved instruction" (p. 1; stress added). Wagstaff
and McCollough (1973) quote Dr. Don Davies' report to a Senate Sub-
committee on Education:

> Inservice teacher training is the slum of American education--
> disadvantaged, poverty-stricken, neglected, psychologically
> isolated, whittled with exploitation, and broken promises
> and conflict.

After quoting Davies, the authors follow this with the pessimistic
avowal, "unfortunately, the situation described by Davies in 1967 has
not changed significantly" (p. 1).

In order to appreciate the vital place inservice education has
in the reform of education that is now going on apace, one needs to
understand something of the background of inservice education and the
problems it has had to face and is continuing to face. For there is
no doubt in the mind of this writer and in the minds of its greatest
critics and detractors that it is not the institution of inservice
education itself but the implementation of it that is the crux of
the matter. Inservice education is a fact and a necessary fact of
American teacher education. If many of the problems which now face
its effective implementation can be understood, collaboratively
worked upon, and quickly solved (albeit, it is agreed, a large or-

der), inservice education has the potential for becoming not only the "major focus in teacher education for the next decade" (Edelfelt, 1974, p. 250) but its whitest hope. The following problem areas and analyses are intended to point up where inservice education has been and where it is going and, hopefully indeed, must go.

1. The effect of different direction and planning upon inservice education. Six works, five in the past five years have made intensive search into the history of inservice education--Richey (1957), Rubin (1971), Tilley (1971), Yarger and others (1974), Toll (1974), and Edelfelt and Lawrence (1975). For a complete overview of that history the reader is urged to consult any of these works. Although inservice education has existed almost as long as public education, the significant history of American teacher education starts in the nineteenth century. In the beginning, the directors of inservice training were generally the town fathers who "took pains to advise and direct the teacher regarding the values to be inculcated in the town children" (Yarger et al. 1974, pp. 1; 3). Or, the directors were members of a church school board, "to which the teacher looked for any decision-making that was needed beyond the guidance of church policy" (Edelfelt & Lawrence, 1975, p. 6). If teachers were only somewhat well-educated themselves at the time, this was all that most school systems could ask. But of course many teachers were not particularly well-educated, and since there were no credentialing or licensing procedures, the mid-nineteenth century inservice programs

were largely geared to remedy "extensive teacher incompetence" (Toll, 1974, p. 18; Tilley, 1971, p. 4). A quote from Richey's history (1957) substantiates this point:

> During the nineteenth century, in-service programs of teacher-training . . . reflected, above all else, the prevailing and partially valid assumption that the immaturity, meager educational equipment, and inexperience of the teacher rendered him unable to analyze or criticize his own teaching, or, unless given direction, to improve it (p. 36).

Thus, direction had to come from the outside, from a higher authority, usually an administrator or, later, the normal school professor. The intent of inservice training then and, unfortunately to a large extent into the present, was to correct teachers' deficiencies, just as the teachers were expected to correct their students' deficiencies. The teacher institution and the normal school "presented spectator models of learning." Even today, "the lecture remains the most common form of instruction in schools of education" (Edelfelt & Lawrence, 1975, p. 3). The purpose of the lecture was remediation of subject-matter deficiency, and even after 1930, when three-fourths of the nation's teachers had completed two or more years of college, up to today when "99% of the teachers currently in service have a bachelor's degree and a license to teach" (Edelfelt, 1974, p. 250), the continuing thrust of teacher education has remained to cure deficiencies, including the deficiencies of the bachelor's degree preparation.

When teacher training is based on instruction to "cure" deficiency, the teacher remains the patient and the university or college "expert" is the doctor. Richey (1957) shows that:

Teachers, long conditioned to prescription and direction, were
little disposed to be critical of the direction of those in whom
legal authority resided. At least, there would be little question-
ing of such authority until large numbers of teachers came to
realize that it was not always based on competence and understand-
ing superior to their own (pp. 52-53).

Teacher guides, textbooks, school district curricula, and precedence

and tradition generally still put present-day teachers into a posi-

tion of passive receptors of information about the content and process

of their teaching.

Only comparatively recently have certain trends in inservice

education of teachers come to the fore which are shifting the balance

of power from a position external to teachers to a point more within

their own decision-making and control. In the two decades following

World War II, teacher education "became increasingly concerned with

motivating techniques. By 1955 the workshop had become the most

widely used alternative to university courses" (Toll, 1974, p. 22).

The workshop, with its "hands-on" experiential methodology, stresses

active participation by teachers and thus increases their input into

their own training. Almost concurrent with the workshop is the teach-

er center movement in America, adopted largely from the British model.

In Great Britain, the teachers' centers proliferated in the late

1960's, and the number of centers, serving anywhere from 22 to 800

each, doubled every three years since. Thornbury (1972), in his

introduction to a book about the rise of British centers, says:

The international interest in teachers' centers and their
stunning proliferation has arisen because they are a
'British first', an idea so psychologically sound that it
is a puzzle to know why they have not dotted the educational

landscape for decades. They 'put the monkey of educational re-
form on the teachers' back' as an American writer has expressed
it, they meet the felt needs of teachers and show the futility
of attempting educational reform without teachers being directly
and importantly involved (p. 1).

In America teachers' centers arose out of post-World War II lab

schools, state and federal legislation of the 1960's and early

1970's, and because of "cries of outrage at American education in

both professional and popular literature of the '60's and '70's"

(Yarger et al., 1974, p. 11). In the workshop and the teacher center,

problem-solving was the chief technique. Ronald Havelock (Training

for Change Agents, 1973) is quoted by Toll(1974) as saying:

> Problem-solving is usually seen as a patterned sequence of
> activities beginning with a need, sensed and articulated by
> the client (i.e., the teacher) . . . The role of outsiders
> is therefore consultative or collaborative (p. 21).

Besides the workshop and teacher center movement, the whole issue of

individualization of instruction for pupils is spreading to include

the teachers themselves. "Attempts are being made to develop indi-

vidualized inservice programs that recognize alternative paths to

improved teacher competence and that allow participants to develop

at differing rates" (Deighton, 1971, p. 82). When teachers have the

chance to take a hand in deciding how they will direct their own

inservice training, as is seen in the open education movement, their

motivation for learning accelerates sharply.

Thus, inservice training of teachers is moving, slowly and lag-

gingly and piecemeal to be sure, away from training solely at the

discretion and from the expertise of external authority into the

hands of the teachers themselves. The external authority is be-

coming more and more the facilitator of teachers' learning, the arranger, the collaborator, the consultant and advisor (for a clear description of the advisor approach to inservice education see Katz and others, 1974, pp. 154-159).

2. <u>The effect of social and economic forces upon inservice education</u>. The key to understanding what has happened in American education over the past three or four decades is in the concept of change. The changes in society from an essentially rural, agrarian, craft-conscious, and pioneer group of people in young America to an urban, industrial, technology-conscious, and sophisticated society are well documented in historical studies. Social and economic changes have proliferated in the past half century. The lower class has become largely middle class. Much of the upper class has also become middle class. Social and economic factors, like women's enfranchisement and the whole women's liberation movement, the income tax, fair housing and equal opportunities legislation, have caused a vast leveling to occur consistent with America's ideals of democracy. Minority groups like the Blacks, Chicanos, and Native Americans are gaining more and more recognition, power, and identity. Within the nation's schools, desegregation and city-wide busing plans are changing the face of many school systems, far faster than administrative planners can adjust to. The post-World II baby boom almost crushed the schools with an unprecedented population growth. When society and the teacher training institutes eventually responded, the plight of natural resources and the ecology movement moved Americans to slow down and eventually stop their population

growth, thus stranding the enormous surplus of teachers. Today, because of economic restrictions and some fast-acting state legislatures, preservice training of teachers has markedly cut down. The rising costs of inflation, the public's cries for accountability for the burgeoning of the school budgets in the 1960's, the fears of depression, and a general substitution of crisis-oriented educational programs in place of farsighted planning have often brought the teaching profession to its knees.

What do these multiplying social and economic changes mean for inservice education of teachers? Edelfelt and Lawrence (1975) point to the need for some traditional values to change:

> Certainly, the economic situation is dismal, and the political mood hardly seems responsive to dramatic, high-risk experiments in any of the human services, even education. On the other hand, the social consciousness of the American public has been profoundly shocked by the rebellion of youth, the violence over Vietnam and civil rights, and more recently, the crises of energy shortages, international concerns, inflation, and unemployment. The trials of the 1960's and early 1970's are further complicated by the frustration of learning how to use and control technology rather than becoming its victim. The habit of plenty is being broken by the reality of scarcity, and the custom of free unbridled enterprise is being reconsidered by political leaders and scholars in favor of social planning and deliberations about needed social policy. It has become clear that some traditional values and life-styles must change (p. 19).

Villeme (1974) focuses on the area of these changes:

> There is nationwide pressure by the taxpaying public to have teachers be accountable for what they are trying to teach. Within the profession, there is mounting frustration because most teachers have not been trained to operate in this manner. Therefore, massive inservice education programs may become a necessity for school districts to equip teachers to cope with this change (p. 2).

Edelfelt (1971) looks at the ghetto and rural schools where problems that plague teachers are most dramatic. He shows that "there have been very direct efforts through inservice programs to alter curriculum and change teaching approaches" (p. 31). Because of the rapid changes that arise yearly, "it is no longer possible for preservice instruction to keep pace with the changes . . . To keep abreast of current developments, research, and technology, the need for inservice education is evident" (Missouri Association for Supervision and Curriculum Development, 1973, pp. 3; 4). Ditosto (1974) corroborates this argument for the need of further education of teachers beyond the four-year college preparation:

> It is commonly assumed that the certified teacher, at the end of a four year professional preparation program, is a finished product, marketable, and capable of semi-independent growth . . . But most educators would agree that the neophytic teacher is not a finished product but is only at the readiness stage to begin teaching . . . Changes are needed in both preservice and inservice programs (p. 1).

Ditosto refers to Rubin ("A Study of Continuing Education", 1971) who suggests that "inservice training of teachers is probably more important than preservice" (p. 2).

It was reported in the Encyclopedia of Education (Deighton, 1971, p. 80) that in 1970 fifty percent of all teachers left the field within their first five years. The rationale of the Encyclopedia article is that those teachers could not have been served very well by inservice training. Today, with the teacher training schools and the graduate schools turning out three to four times more persons than the job market has positions for (see Pasch, 1974, p. 1), inservice teachers are tenaciously holding onto jobs they

might have left for better ones five years ago. This greater stability

in the teaching force should bring about greater motivation by school

systems, with the fear alleviated of wasted monies, to provide in-

service programs for their staffs. As Edelfelt (1974) says:

> Hopefully then, the effects of inservice education should not
> be dissipated the way they were when large numbers of teachers
> joined and left local faculties each year. There is now a
> chance for continuity, for building a faculty over a longer
> term, and for capitalizing on what is learned in inservice
> education (p. 250).

Thus, social and economic changes are both compelling and encouraging

more numerous and more carefully planned inservice programs for

teachers.

3. The effect of curriculum reforms upon inservice education.

With the mounting complexity of American life, then, in the past half

century--vocational opportunities demanding greater and greater spe-

cialization, technology leaping ahead of its founders, transportation

gains causing high mobility, communication through the media instan-

taneously linking every home and office to every other, increased

violence and crime rate and accident rate and mental health cases,

dissatisfaction with government and American capitalistic free enter-

prise, rising unemployment and welfare needs, international tensions,

and a thousand other such forces, events, and conditions--it is no

wonder that dissatisfaction with the American education process

should be also in the fore. From the comparatively halcyon days of

curriculum content's being a minimal grasp of the three R's and with

a clearcut division of young people's training aiming them toward

either higher education or vocational goals, the curriculum content

of schools in the twentieth century and the possible divisions and

tracking groups have become almost intolerably topheavy. Social and political pressures for reform or re-direction, based on relatively little thought-out or researched data, have brought often temporary but costly movements into the schools--a stress on the Great Books, the core curriculum, the Sputnik-derived thrusts into new science and new mathematics, a feverish press for literacy and the resulting multiple beginning reading approaches, microteaching, team teaching, mini-courses, the flexible curriculum, individualized instruction, and the rest.

Needless to say, the preservice training institutions could not keep up with the swift changes. Educational literature of the past five years is rife with pleas and demands that inservice education be responsible for again "curing the deficiencies." Heath (1974) says, "we must provide a continual process of inservice training if today's teachers are to be prepared to teach today's children" (p. 267). Ritz et al. (1970) point to the new desires, new ideas about learning, new approaches, new methods, constant social change, the "emergence of great forces" demanding that teachers be _au courant_ with all that is going on (pp. 2-10). "Inservice education to help teachers grow and become current in their field is a persistent problem faced by most school districts" (Villeme, 1974, p. 3). Wallace (1974) stresses the need to change the purpose of staff development from the elimination of preservice deficiencies to contemporary problems facing faculties (p. 2). As Heath (1974) wryly comments,

"the demands modern civilization places upon teachers go beyond the heroic to the herculean" (p. 267). It is certainly clear that American society today is expecting its teachers to perform wonders.

4. <u>The effect of the updating of knowledge about the teaching and learning process upon inservice education</u>. In addition to curricular reforms, new or newly accepted theories about the learning process have made it necessary for teachers to change their teaching styles. The works of such theorists as Piaget, Skinner, Erikson, Maslow, Bruner, as well as a reawakening to the potent ideas of the great educational philosopher John Dewey, have made definite impact on teacher education in the 1960's and 1970's. It is not the purpose of this author to review their research here. It is amply documented in the literature. Suffice it to say that research about the unique capacities of the individual learner, which most of these theorists proclaim, has caused teachers to revise teaching styles which have served traditional education since the classical precepts of Plato and Cicero. Students are no longer to be thought of as empty jugs, to be filled with the waters of society's knowledge. Their minds are not identical <u>tabulae rasae</u>, whereon teachers inscribe what teachers think is needful. They are instead individual developing intelligences whose interaction with their environment of things, events, and persons brings about the learning process which makes each student into the unique person he or she is in truth, a person with increasingly complex needs for fulfillment. Moreover, if the knowledge of the learning process is applicable to children, it is equally applicable to us adults, since we are

all individual growing persons. "Too seldom is our understanding of learning applied to adult education" (Wagstaff and McCollough, 1973, p. 3).

5. The effect of teachers' needs upon inservice education. This brings the study to the last section of this explication of inservice training of teachers, and the most pertinent one.

> As it is currently understood, the term "in-service education" has unfortunate connotations. It conveys doing something to or for educators in order to correct deficiencies and enhance adherence to regulations. A necessary first step toward vital- izing in-service training consists of shedding these negative overtones and basing a reconceptualization on positively ex- pressed ideals. The negative notion of improving upon short- comings can be replaced with the ideal of professional growth as a response to both an individual's continual need to strive toward realization of unexploited potentials within himself and to the dynamics of the educational enterprise in a rapidly changing society (Wagstaff & McCollough, 1973, p. 2).

Just as young students may be seen as individuals seeking positive growth patterns which fulfill their needs for esteem and self-actu- alization (see Maslow's hierarchy of needs and Erikson's stages of emotional development), so may adult educators be seen. Education for both youngsters and adults has too long put into the hands of a few professional educators the decisions about content and method of instruction.

To emphasize the importance of looking to the teachers them- selves for the material and methods used to help train them in service, a number of references to current literature may be viewed:

> Inservice training courses must be widely extended to do two things: first, to give teachers an opportunity to reformulate their own philosophies of education . . . (Foster, 1972, p. 134).

Inservice education . . . has to be altered. The programs need
to be more responsive to the needs of the schools and the people
in them (Fantini, 1973, pp. 29-30).

Inservice courses should evolve from the carefully identified
needs of staff members (Deighton, 1971, p. 80).

The most successful . . . programs were those which derived
their bases and objectives from teachers' needs (Childress,
1969, p. 646).

. . . too little teacher participation in deciding what to
study and how to approach it (Edelfelt, 1971, p. 30).

[Whatever the program] it should plan for the assessment of
needs . . . (Missouri Association, 1973, p. 6).

Decisions about expenditure of public funds . . . must be based
on a systematic needs assessment oriented toward the entire
instructional staff (National Education Association, 1974,
p. 2).

. . . instructional programs targeted to a group of teachers
with particular needs (Pasch, 1974, p. 1).

Before any inservice program can be established, the expressed
needs of teachers must be considered (Wilson, n.d., p. 1).

Although most inservice programs are desperately needed, they
are severely inadequate. These inadequacies might be attributed
to the fact that . . . programs fail to relate inservice train-
ing to genuine needs of staff members (Horodezky, 1974, p. 3).

Many teachers would like to participate in continuing education
programs but . . . they would like to pursue their own special
areas of concern or interest (Johnson, 1973, p. 272).

If inservice is to be viable, the assessed needs of all the
educators of the district become the most important element
in preparing the program (Heath, 1974, p. 272).

Teachers are more likely to benefit from inservice programs in
which they can choose goals and activities for themselves, as
contrasted with programs in which the goals and activities are
preplanned (Edelfelt, 1975, p. 18).

Besides these forward-looking views of some professional educa-

tors, the teachers themselves are asking for participation and in-

volvement in their own educational process. Sanders (1973) tells about a recent regional invitational conference of educators and representatives from public and private educational agencies throughout New England, one of whose main goals was to promote collaboration and involvement by all kinds of educators in formulating inservice programs. A British study on inservice education also stresses the need for collaboration among the teachers themselves, since they can benefit immeasurably by sharing their expertise. "Teachers have worked for too long in isolation" (Watkins, 1973, p. 75). Edelfelt (1975, p. 2) says that teachers are making their voices heard through teacher organizations, where they are seeking, among other things, new criteria for judging their teaching, specifically some kind of performance-based or competency-based criterion (see also Fantini, 1973, p. 31). Such a criterion makes inservice training have increased importance over training received in university and college academic courses.

6. <u>Summary</u>. Whereas "inservice education has been the neglected stepchild of teacher training" (Edelfelt, 1974, p. 250), it is certainly fast becoming a valued and respected member of the education family. Wagstaff and McCollough (1973) even argue for the "establishment of permanent and distinct departments of continuing education" (p. 3). Inservice training can no longer be a mere appendage to preservice training nor follow the curricular lead that the latter has traditionally set--a series of academic courses pointing toward degree and certification, resting heavily on theory

and lagging behind the practical problems and individual needs of teachers in the field. Social and economic forces, thrusting continual change upon educators and the necessity for intelligently solving problems due to that change, demand that teachers be in a continual process of learning. "There is . . . a need among teachers for general education that continues career long--and which now is largely ignored" (Edelfelt, 1974, p. 252). New roles for the teacher, new subject-matter derived from the explosion of knowledge and its constant obsolescence, new methods, new curricula, new demands and mandates from legislative bodies, new theories and revised theories about the learning process, all require "herculean" efforts by teachers to keep current and informed and ready to change at a moment's notice their outlooks, teaching styles, and well-established beliefs.

More and more Americans are desperately looking to their schools to be the panacea for all the country's troubles. Government has been shown to be irresponsible; the family is constantly shifting in its ability to influence the young; the Church has lost most of its sway upon young people. How else can present day American teachers shoulder the awful responsibility put upon them than by seeking continual awareness and understanding? And where else can this awareness and understanding come than from enlightened and responsible inservice education? As Wagstaff and McCollough (1973) say, "in-

service training becomes a necessary and perpetual retooling process
upon which the relevance, and ultimately the legitimacy, of the
schooling enterprise depends" (p. 2).

Teachers want to do well. They want to help youngsters grow
into mature, responsive adult citizens. But they need practical
help in achieving their goals. They need advice and information
and practice in solving educational problems that are pertinent to
the teachers' specific needs in their specific locales. These needs
must be addressed if American education is to meet the challenges
facing it.

The following section will therefore be devoted to the problem
of needs assessment, for it is by finding a viable system of assess-
ment that present-day teachers' needs may be specifically ascertained.
Then, from the needs assessment data, inservice programs can be
developed to help teachers grow personally and professionally, in
order to be effective change agents in the crises which face our
schools in the late 1970's.

<u>Part 2 The Importance of Needs Assessment</u>

1. <u>Background of need theory</u>. The whole concept of human need
has been discussed in the field of psychology for most of the twen-
tieth century. The concept of need is tied in with concepts of
motivation, drives, stimuli, instincts, values, and interests.
Berlyne (1971), writing in <u>The Encyclopedia of Education</u>, says that
"drive stimuli bias an organism toward particular forms of behavior,
generally ones that hold out some prospect of relieving the drive"

(p. 410). He comments that need and drive coincide in many instances, further remarking that Freud derived a connection between the drive reduction theory and the "view that the ultimate aim of behavior is to eliminate stimulation and keep it down to a minimum" (p. 410). Super (1971), in the same encyclopedia talking about vocational choice, says, "even more fundamental than values and interests, are needs, drives resulting from the lack of something essential" (p. 472). He alludes to the Maslovian hierarchy of needs by asserting that higher level needs have more opportunity to manifest themselves when basic needs (physiological or survival needs) have been met. The whole field of behavior conditioning and reinforcement conditions, both in psychology and education, stems from the satisfaction of specific needs. Berlyne (1971) refers to Edward Thorndike's "law of effect" (1898), which postulates that "acts followed by satisfying consequences tend to recur, while those followed by annoying or punishing consequences tend to be abandoned" (p. 409). Berlyne claims that "students' motivating conditions must include the forms of drive inclining toward a behavior to be taught" (p. 413). He concludes that educators must reckon with "vast variations in the susceptibility of different individuals to particular kinds of drive and the effectiveness for different kinds of individuals of particular reinforcement conditions" (p. 415).

Thus, it has been realized that human beings have differing kinds of needs, depending on where they are at a given moment of

time. These needs impel them to seek satisfying fulfillment and to avoid conditions which aggravate their needs. Moreover, although many needs are similar among humans, particularly the basic physiological ones, individuals have such a complex pattern of needs which vary from time to time that many kinds of fulfillment are necessary for their satisfaction.

2. <u>Background of educational needs</u>. As far as educational needs are concerned, it was believed for many years (and is still unfortunately widely held) that certain professional educators are the only ones who can determine the needs of learners. From classical times--Plato's educational plan in the <u>Republic</u> and Cicero's extensive curriculum in his essay "On Education"--through the quadrivium and trivium into the Middle Ages and Renaissance, it was held, first, that only a few chosen persons should be educated at all, and second, that their education should concern itself only with the study of certain classical (that is, Greek and Roman) works in literature, mathematics, and the arts. Even when the academies and early public schools were established in this country, relatively few children were invited to attend, and their curriculum again was restricted to a study of the "great" classical works and languages. A few religious groups attempted to broaden the base but their effect was small. For most children, even into the twentieth century, education meant a quick, often painful introduction to the three R's and then practical training in some vocation. For both this great majority and the tiny

minority of children who went on into higher education, their needs were assumed by their teachers and administrators, and appropriate programs were put together and foisted upon them. In an article about a needs assessment model for the Jacksonville, Florida school system, a W. D. Leopold is quoted, writing in 1971, as saying:

> Had God anticipated the eventual structure of the public school system He would surely have shaped man differently. Perhaps with a square little head to match his square little books and his square little classrooms. Surely He would have made man uniform in height to make lining up easier, and in thought to make testing easier, and in sensitivity to make teaching him easier. Whether the Creator thought this work too dull or too unimportant, He nevertheless ducked it, and we kindly picked it up and have been occupying ourselves with it for a number of years (Educational Needs Assessment: A Simulation Model for Humanistic Planning, 1975, p. 22).

Leopold obviously senses that the American public school system is expecting students to be uniform recipients of a uniform educational program.

3. <u>Response to changing conditions</u>. On the other hand, education has become somewhat more responsive to changing conditions in society today. Writing just after World War II, Raths and Metcalf (1945) claim that:

> The public schools are becoming more and more concerned about the importance of meeting the needs of children. Almost any list of educational objectives is likely to include a reference to needs. This is so because theorizing about needs helps to explain the causes of many kinds of behavior. Such concepts as interest, effort, purpose, motivation, and the like are explained in terms of the needs which individuals strive to satisfy. Notwithstanding this emphasis on the needs of young people, there is available almost no objective way of identifying them (p. 169).

Henry Murray (1958) of Harvard University points to the number
of different needs that are frequently involved in a single course
of action:

> In arriving at a decision to accept or reject an opportunity
> to engage in a certain kind of activity, a competition of needs
> and disneeds ensues . . . Very rarely is a decision of this
> sort based upon the operation of a single need (p. 185).

Murray's thesis helps lay the foundation for the inception of needs
assessment that would burgeon in the decade of the 1960's. Educators
are realizing more and more that to make educational programs which
work, which bring about goals and objectives compatible with society's
needs and acceptable to society's growing desire for participation in
and direction of educational enterprises, the complex and varied needs
of the heterogeneous student body now being educated in American pub-
lic schools and colleges must be identified. No longer can a few
professionals expect to isolate a few educational needs and prescribe
a few basic educational programs to meet them.

4. <u>The problem of needs assessment</u>. Why should educators per-
form needs assessments? First, society, the community, is demanding
that it be done. Writing about educational needs assessment in
Maryland, Hershkowitz (1972) states that:

> In this age of growing discontent by the public concerning its
> children's education, educators are responsible for designing
> educational programs which are responsive to the current <u>needs</u>
> of the local community and its constantly changing economic and
> socio-political milieu. Planning and implementing of educational
> programs ought not to be left entirely to guesses, hunches, and
> the usual "it's the <u>right</u> thing to do." Instead, learning can be

improved by a systematic review of educational <u>goals</u>; by the determination of <u>goal gaps</u>; by the determination of <u>critical needs</u>; by the application of objective planning tools; by an optimal allocation of available resources. A comprehensive needs assessment must deal with each of these components (p. 1).

Kaufman and Harsh (1969) have noted that lots of big groups (state, community, public, private) have set up very similar-sounding large, diffuse goals for education. They claim that decisions for the conduct and development of their educational programs have been based upon information which is "generally casual and unsystematic" (p. 1). Part of the confusion lies with the lack of precise definitions of the goals of education. "It is difficult," says Kaufman and Harsh, "if not impossible to develop a program which will satisfy the needs and aspirations of a society if that program is not specifically stated" (p. 1). To achieve both precise definition and relevance of goals, the authors see the process of determining needs as paramount. On the basis of needs, one can develop relevant educational goals and objectives.

Sweigert (1969) reiterates this contention:

It is fast becoming critical for public education to devise more effective systems of inquiry to provide information to help decision-makers at all levels of educational systems, in setting priorities for allocation of resources on a rationally defensible, educationally meaningful basis (p. 1).

Sweigert highlights a part of the problem--allocation of resources. The public is more and more demanding accountability for its schools. We spend millions of dollars on our educational system; we ask, where is the money going? We agree that a good education is the best means

for insuring the most healthful, efficient, and satisfactory citizenry for the future. But look at us, our generation, say the more realistic and humble members of society today. We did not turn out all that well. Drug intake, crimes, mental imbalance, delinquency, vandalism, a dissipative ecology--you name it--are on the increase. The fault lies with us, the people. Where did we go wrong? Perhaps our education could have been better. We will try to make sure that our children at least will get a better chance. So goes an imaginary soul-searching that leads into a close scrutiny of what schools are really doing for children today.

In developing an "evaluation-accountability model" for a regional education center in Texas, Barber and Benson (1972) see the accountability movement as an expression of the public's demand that education agencies provide evidence that they are indeed meeting their obligations. The authors state that "needs assessment, a critical element in this model, consists of objectively identifying the educational needs of clients and establishing a critical list of priorities" (p. 6).

A second answer to the question "Why perform needs assessments?" lies with the federal government. Again, the basis is money. In Hershkowitz's article (1972), it is noted that under the Elementary and Secondary Education Act of 1965 (E.S.E.A.), Title III, the U.S. Office of Education demands that recipients of funds conduct needs assessments. Hershkowitz comments that "most of the State Education Agencies across the Nation are in the process of or already have com-

pleted some form of needs assessment" (p. 2). Indeed, the statement seems to be true: E.S.E.A. did spur a rash of needs assessments, although relatively few have been reported in the literature. A few states and districts conducted needs assessments before 1965, but very few. South Carolina, Pennsylvania, and Orange County, California are three.

Third, there has been a tremendous increase since World War II in the number and complexity of vocations, in the breakdown of training, knowledge, and competencies necessary to perform multifarious jobs in the world of work. Curriculum can no longer be composed of "simple" college preparatory/general business/basic English and mathematics skills. Curriculum needs are about as complex as the jobs that have to be performed. The Oregon State Board of Education, for instance, claims to have undertaken since 1969 "to reverse the trend toward providing a single rigid program for all students, regardless of their abilities, interests, needs, or learning styles" (Oregon Graduation Requirements, 1973, p. 1). Such a change is evident in much of the literature about educational planning since 1969.

Fourth, the current thrust toward individualization of instruction and the general humanistic trend in education coming to the surface now and again since Dewey and the 1930's, require knowledge of what the student perceives as necessary, not just the knowledge assumed by the educational administrator. A definite movement is in progress in American education, variously called open education,

integrated day, or student-centered education, which promotes much more decision-making on the part of students, whether they be elementary, secondary, college, or post-college students (see, for example, James Moffett's Student-Centered Language-Arts Curriculum, K-13, 1973). In 1972, Washington's State Board of Education wanted to meet the needs of all students. The Board states, "instead of shaping the students to fit the mold of the system, the system is being expanded to make allowances for individual differences" (Washington State's Alternative Education, 1972, p. 1). Central Florida's Educational Needs Assessment (1975) sees a comprehensive evaluation program with an accurate needs assessment behind it as being "an effective instrument of change within the college and within the community" (p. 22). In such a program, the student will become more responsible for his own development, deciding more for himself.

Thus, the problem for educational planners in general is not whether to conduct needs assessment but how to conduct it. Needs assessment is seen now as an integral part of educational planning. The concept rests upon the assumption that organizations are designed to satisfy social aims or goals.

5. Definition of needs assessment. In order to learn how to conduct needs assessments, it is necessary to see exactly what they are and how they fit into the scheme of educational planning. Almost all the sources in the literature dealing with assessment in any way make an attempt to define the term. First, it is defined as being

part of an overall planning process. One such definition comes out of Orange County, California (McGuire, 1974. Needs assessment is seen as a process which involves

> Stating potential educational goals or objectives, deciding which of these are of highest priority, and determining how well the existing educational program is meeting these objectives. The latter information is used to identify the major needs of the school (p. 2).

Figure 1 shows a system analysis which is typical of many systems. As can be seen, goals are formulated first by whatever method; then a needs assessment is made, followed by various steps leading to program development, evaluation, and the recycling procedure which goes back to a modification of goals or a remaking of new goals, with the whole process repeating itself.

Second, needs assessment is defined by what it does, a procedure in itself. Sweigert's definition (1969), for instance, is this: "An assessment of needs is a process by which information is made available to decision-makers at the time they need it to make decisions" (p. 2). Sweigert follows the basic definition with five steps in the process itself: deciding what information is to be collected, developing procedures for collecting it, collecting it, processing the data, and presenting it to the decision-makers. Reporting on a formal needs assessment in San Diego, Heinkel (1973) says that formal needs assessment "gives governing boards and educational agencies a valid, objective process for determining priori-

GOALS ← — — — — — — — — — — — — — — — — —|

| NEEDS | | PROBLEM | | PROGRAM | | PROGRAM OPERATION |
| ASSESSMENT | → | DEFINITION | → | DEVELOPMENT | → | AND EVALUATION |

FINAL ANAL. OF
→ EVALUATION → DISSEMINATION OF
DATA   PERTINENT → RE-CYCLE → — — → —
               INFORMATION

_____ Forward progress
          of flow

_ _ _ _ _ Feedback for
          revision as
          required
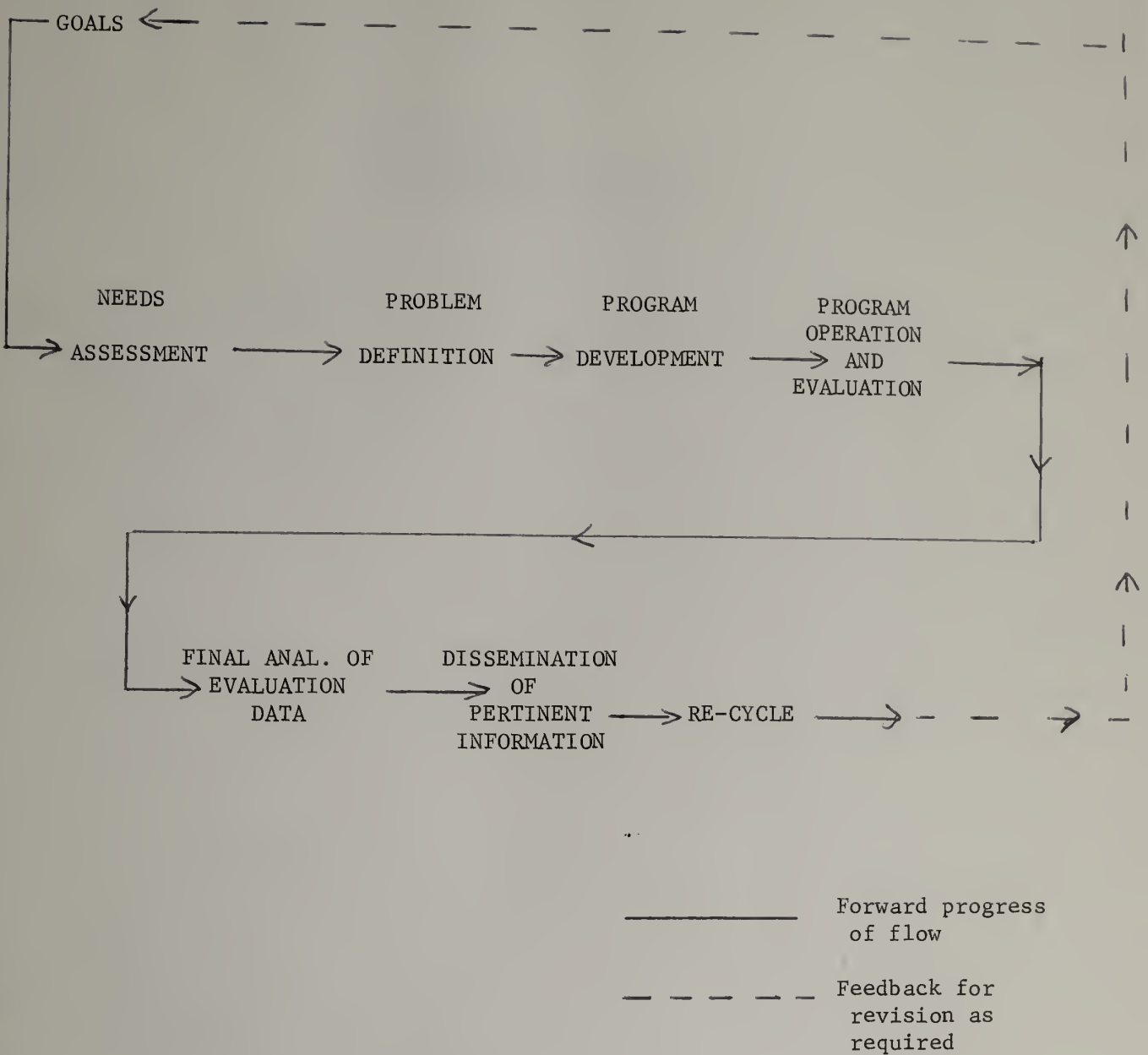
Figure 1.   A Comprehensive Educational Program Planning Model

ties" (p. 2). Many of the definitions in the literature claim the necessity for hard data in educational planning. The formal needs assessment procedure is seen as the key provider of such data.

Third, and most common of the definitions in the literature, is the one which emphasizes the discrepancy between two sets of factors. Heinkel (1973) sees needs as "the gaps between current outcomes and achievements, and desired outcomes and achievements for learners, implementers, and the community" (p. 1). McGuffey (1973), reporting on a Chicago Board of Education's planning for educational facilities, defines needs as "the measurable discrepancies between existing facilities and those required for accomplishing the mission of the overall system" (p. 2). Thus, needs assessment is a process of ascertaining both "what is" and "what should be", to use terms which Kaufman and Harsh devised in 1969 and which many writers of articles later have taken as a solid definition of their own.

All of the definitions are important. Jointly, they signify to this writer a conscious plan with definite steps, as part of a larger process in educational planning to construct educational programs which will focus on what needs to be done to satisfy federal and state requirements, community and school district goals, and teacher and learner objectives.

6. _Summary_. (a) Because of the changing nature of education, its process and product, from simple student needs defined by a few professional educators to complex student needs defined by many different groups (federal, state, county, regional, and district agen-

cies, the community of parents, business persons, social agencies, the administrators, teaching staff of schools, and by all means, the learners themselves; (b) because of recent trends for decision-making reversing the flow from administration to teacher to student in deciding what courses and learning experiences should be given; (c) because of the growing demand for accountability in education, what programs deserve monetary support, in what order; (d) because of the growing complexity of the job market and the requirements that society is putting on the schools to prepare for satisfied and effective citizens, family-makers, and workers; and (e) because of the need, therefore, to provide hard data in planning educational programs, needs assessments must be developed as a fundamental part of an overall process of educational goal-setting, program developing, program implementing, and evaluation. In Chapter II, the writer discusses a number of needs assessment models found in the literature, with particular stress on the Coffing-Hutchinson model in Part 2. The field of needs assessment was researched in order to develop the particular model used in this study, described in Chapter III.

C H A P T E R   I I

A REVIEW OF NEEDS ASSESSMENT MODELS

Part 1   General Types

1.   <u>Preview of general types</u>.   The literature from 1945 to 1975

reveals a number of needs assessment projects.   While the great

majority of these evolve from the need to develop programs for ele-

mentary and secondary public school students, there are several

others which attempt to establish the needs of such diverse groups

as community college faculty, American Indian children on reserva-

tions, mental hospital patients, married college students, regular

hospital department heads, T.V. audiences, library clients, and

day-care pupils.   Most of the models used in these projects are

based on one or both of these types: the live interview and the

questionnaire survey.   Within these two types, there are a multi-

plicity of variations.   In addition to these two major kinds of

needs assessment, a few specialized ones have been developed.

2.   <u>Special kinds of needs assessment projects</u>.   One of these

special kinds was developed by Raths and Metcalf (1945), a needs

inventory called "The Wishing Well," in which the authors made up

a great number of "I wish . . ." statements and asked children to

check off the ones that applied to them.   The authors postulate

that "the special wishes of a sampling of children are related to

more general needs of all children" (p. 171). The needs developed from the inventory included a feeling of belonging, a sense of achievement, economic security, a feeling of esteem, a share in decision-making, etc. They sound very much like the hierarchy of needs developed by A. H. Maslow ten years later in his _Motivation and Personality_ (1955). The needs are very general, mostly affective in nature, and were never operationalized (i.e., not developed into educational objectives and learning experiences). Another special needs assessment was developed by Mullen (1974), a professor at the University of Georgia; it is in the form of a money game, called "Bonanza." Nine areas of cognitive, affective, and vocational educational programs are set down. Each participant (selected from administration, faculty, staff, students, and parents) is given twenty $100 play money bills, and asked to put his/her choice of funds allotted on whichever of the programs he/she feels should have it. The idea of the assessment is good, in that it not only asks one to prioritize the programs, but one is forced to trade off some of his/her preferences against others. (The term "prioritize" is used throughout the literature on needs assessment to mean "assign priotity value to.") "A purchaser with limited funds must constantly weigh priorities," says Mullen; "in order to gain here one must sacrifice there" (p. 2). Another special needs assessment was made by the General Subcommittee on Education of the Committee on Education and Labor, 91st Congress, First Session, in Washington, D.C. (1970). This purports to identify "Needs of Elementary and Secondary Education for the '70's." The vehicle for ascertaining

these needs was an invitation to a great many persons with every shade
of opinion on education to write essays predicting the "compelling
issues" of the 1970's. These were compiled and then augmented by
formal statements of witnesses at the hearings. The whole assessment
was politically-oriented, as might be expected, most respondents
grinding their own axes. The idea in a way was good. But, as far
as this writer could discover, no analysis was made of the 996-page
output.

3. <u>The interview</u>. While the majority of needs assessment pro-
jects in the literature that employ interviews also employ question-
naires, a few use only the interview. One of these is reported by
Krebs and Steven (1971) in "An Assessment of Needs Related to the
Education of Indian Children in the State of Washington." Selected
informants came from a variety of groups (parents, students, com-
munity organizations, tribal councils, and the like), and field
interviews were conducted with each group's participants. The inter-
view was of a structured nature, in that prepared questions under
general topics were asked. The discussion, however, was expected
to be informal and spontaneous. Tapes made of each interview were
analyzed by "experts" and the data was turned into problems, then
into needs, and finally into programs for meeting the needs. While
benefiting from the multiple groups of persons involved in the de-
fining of needs and from the here-and-now spontaneity of the group
interview, such an assessment leaves much to be desired, in that
it makes the analyzers too subjectively responsible for translating
the taped words into valid needs.

Another kind of interview method that has been used is that by which a person takes a prepared questionnaire and gives it to selected individuals by hand. The Brick Township, New Jersey, Public School System implemented a needs assessment of various citizenry in 1974, through a door-to-door canvas by P.T.A. members. In this case, the need was already assumed: "overcrowded conditions in the schools require solution" (Extended School Year Study, 1974, p. 1). The interview was done to get answers rather than needs. But the principle of the live interview remains. This system has the advantage of a one-on-one directness, and thus the assurance of getting a high rate of returns on one's investigations, as well as the comparative objectivity of the questionnaire. On the other hand, it presumes a lot on the willingness of volunteers to cover a representative sample of the community.

4. The questionnaire. Although the interview system of needs assessment is rarely found without some kind of questionnaire, the reverse is not true. Questionnaires alone are a common type of approach to assessment. When these are administered, the most common kind is a list of prepared statements to check. Twelker et al. (1972) developed a survey questionnaire at the U.S. International University in Corvallis, Oregon. The survey asks seven groups (teachers, department chairpersons, curriculum coordinators, media specialists, etc.) to sort various items of information about an instructional system into nine categories representing levels of priority or importance. Respondents have one hour to sort 100 3" x 5"

cards relating to what information one would like to have before selecting a set of instructional materials. On the first sorting, the task is to divide the cards into three piles--Important, Neutral, Unimportant. Directions for the second sorting are to take each pile and sort _it_ in the same way. The nine piles are put into nine envelopes and given to the information users or decision-makers. Note the aspect of prioritizing. This factor is very common in needs assessment models. Prioritizing is done in a variety of ways, as will be seen in later descriptions. Twelker's system here has the advantage of a double prioritizing, which the Coffing-Hutchinson model also uses (described in this chapter below). Incidentally, this project awarded free books as a thank you to participants, the only gift-giving assessment found in the hundred or so assessments researched.

Another needs assessment survey was made by educators at Kentucky University. Street et al. (1971) report the procedures. The instrument they devised was designed "to obtain the perceptions of basic school and learners' needs among both professional educators and parents" (p. 7). The professional form of this instrument is in three parts, as is the parent-form, although the latter is far simpler in items covered. Part I is 55 items clustered in six needs categories. Using the scale of choice of More Attention, Present Attention, and Less Attention, respondents are asked to scale the 55 items in terms of needed attention in their respective schools. Part II lists the six categories, and respondents rank order them in priority

of attention. Part III is a list of certain learners' needs, and
respondents are asked to evaluate the school as to how it is meeting
those needs (Strongly, Adequately, Weakly).

The Kentucky questionnaire assessment is typical in these ways:
(a) a committee of professional educators set down certain "needs"
as _they_ see them; (b) certain respondents are then asked for their
opinion as to the importance of the items; (c) various groups of
respondents are assessed; (d) some kind of prioritizing is asked
for, and in the later committee analysis relative weighting is given
to the prioritized items; (e) there are several parts to the question-
naire--demographic information about the respondent, checking items
that apply, rank ordering, and sometimes an opportunity for a "free"
comment or so. The valid points of such a survey are: (a) the fact
that it is done at all in the first place, (b) its comparative objec-
tivity in that all respondents work on the same items, and merely
check off appropriate ones (granted, in a highly subjective manner!),
and (c) the survey is easy to score and analyze quantifiably. The
invalid points are: (a) the fact that a small group identifies the
needs to begin with, so that respondents are forced into simply agree-
ing or disagreeing with what has already been decided, (b) the choice
of respondents is arbitrary--usually "arranged" by the committee, and
(c) the items are usually large and nebulous--being either general
categories of areas of concern ("need for more adequate buildings or
equipment"), whole subject-matter items ("need for basic knowledge
in language arts"), or large behavioral traits ("need for persistence,
disciplined behavior, acceptance of others," etc.). In whatever way

the needs statements are generated, they should be as operationalized as possible to be valuable in making up programs to meet perceived needs. Otherwise, the program developers will probably address themselves to objectives which they themselves have to formulate, which are not necessarily congruent with the needs as the persons who defined the needs see them.

Another kind of questionnaire is that devised by the Summer Institute of the Ed.D. Program for Community College Faculty, from Nova University. Mitchell (1975), in reporting on this survey, gives the full letter sent to participants. It starts as follows:

> Dear Participant:
> We would like to make this first Summer Institute exciting, meaningful, and helpful to you. Therefore, we would greatly appreciate your cooperation in completing the following short form and returning it in the stamped, self-addressed envelope by Monday, July 30, 1973 (p. 20).

The questionnaire asks for four kinds of information, each kind with only a few questions. The questionnaire is devoted mostly to specific expectations and anxieties of prospective participants. It benefits by being short, by being personally addressed to respondents and each respondent's needs as he/she perceives them, by providing a stamped envelope for return of the questionnaire, and by suggesting a date for return.

More aspects of the questionnaire are seen in Christoffersen's study (1972) of audio-visual needs for presenting information to the Madison, Wisconsin, community about career opportunities. Since there were potentially 221,000 district citizens, some kind of sampling had to be done. For reasons decided upon by the needs assessors, a

random stratified sampling was made. Eighth-graders, twelfth-graders, and adults from randomly-selected towns in each county made up the desired stratification. By means of random sampling tables, given lists of names from school records in each county and voting records for adults (it is supposed), 602 eighth-graders, 593 twelfth-graders, and 1,100 adults were surveyed. This is just about 1% of the total population available for questioning. But presumably the percentage would be higher for each of the stratifications. Bulk mailing was made to the adults, and administrators in schools gave the survey to the randomly-selected children. In the mailing a letter of explanation and a yellow stamped postcard were sent first on April 19. After 341 postcards were returned, a second mailing was made on May 6 to the non-respondents, with an orange postcard. The second mailing yielded a further return of 154. The 45% return generated was considered a valid sampling. Sampling is a must for definer populations over a certain number. That number is determined largely by the resources of the assessors, in time, material, and money. To be as objective as possible, it has been found that random sampling is the best vehicle. In this Wisconsin survey, a second aspect of the mailed questionnaire is seen: the probably necessity of follow-up. Respondents who do not have the kind of personal needs such as noted in the Summer Institute above, will often not take the time to fill out even a short postcard. A follow-up "prod" is thus often necessary. Hershkowitz's (1972) questionnaire had a three-stage mailing strategy in four-week intervals, the second of which had stamped on it "URGENT--Previous Copy Not Returned," and the third "YOUR Answers are VITAL."

5. The interview and questionnaire. A typical interview-and-questionnaire was made assessing the educational needs of students in the state of Washington. Boyd (1970) reports the procedures of the two phases. Phase I consisted of a mailed, self-administered questionnaire asking each individual respondent to check off from a large list of possibilities those that applied to him/her. As in many assessments made to develop programs for students, the persons who define student needs are not limited to one group (say, the students themselves, or their teachers). In this case, six stratifications were made: teachers, non-teaching staff, senior high school students, parents, businesspersons, and, interestingly, school dropouts. A random sampling was made for the questionnaire in the six groups. Phase II consisted of 34 focus interviews, with participants randomly sampled from the same six groups. In both phases, the random sampling was further stratified to represent various ethnic, geographical, and school district sizes within the state. School districts, for instance, were divided into urban metropolitan, urban non-metropolitan, rural ethnic, urban disadvantaged, etc. The focus interviews had seven to ten interviewees in each group. A trained interviewer kept in the background as much as possible and taped the session. The same needs as on the questionnaire were discussed in a spontaneous, subjective manner. Thirteen hundred pages of transcribed material, as well as the results of the mailed survey, were given to the Office of the Superintendent of Public Instruction. What that office did with the data is not reported.

This needs assessment benefits from several factors: (a) covering a wide spectrum of the community, (b) random sampling for objectivity and validity, (c) involving various kinds of persons in defining student needs, and (d) interviews to get clarification and potential operationalizing of needs.

Fitzgerald (1972) reports a similar assessment. Still another factor in the process of needs assessment can be seen in this report. The questionnaire that was used gathered two sources of information each from students, teachers, and parents. Each of the items (developed by a district team) was checked twice on a 0-100 scale, once to show where the student was currently operating and a second time to indicate where he/she might reasonably be operating if his/her needs for a particular area were adequately met. A discrepancy score was computed, and those items over a certain percentage were the ones which educators addressed in making up new programs. In addition to the questionnaire, "reverse-flow" interviews were held, as teachers drew out of parents the latter's perceptions on how well the school was meeting the needs of their children. The new aspect described here is that of measuring fulfillment of needs, not just determining the ideal needs per se and possibly prioritizing them. The measurement of fulfillment of needs should be part of a full assessment process.

6. Other facets of questionnaires and interviews. Besides the kinds of factors involved in the typical and atypical needs assessment instruments described above, there have been instruments which reflect other kinds of factors. Brief mention will be made of these

now. It was seen in some of the models described that assessors would ask for an opinion of needs or goals using a three-point scaling, such as Important-Neutral-Unimportant. One of the instruments used a 0-100 scale to rate effectiveness of programs (Fitzgerald's). Within many questionnaires can be found multi-point scales. Wright et al. (1972), surveying secondary school teachers' perceptions of needs in Willowdale, Ontario, asked for a scale rating of perceptions from Strongly Agree, Agree, Disagree, Strongly Disagree, to No Answer/Opinion. Hershkowitz's Maryland study (1972) asked for a ranking of goal importance on a continual interval scale with three of its five points labeled, Not At All Important, Moderately Important, and Very Important (p. 47). Sweigert's (1969) systematic assessment had an eight-point scale, with the option in the directions to place an "X" somewhere along the continuum, only the two extremes being labeled (e.g., "I'd like To Learn To Do It" and "I Wouldn't Like To Learn To Do It" (p. 30). In an article sponsored by the New Jersey State Board of Education, four models of needs assessment are presented in some detail, coming out of other boards of education. The Dallas model shows various district functions, programs, and activities being rated by a number along a 15-point scale, with each group of three points being labeled (Too Much Emphasis, More Than Enough Emphasis, etc.) (Needs Assessment in Education, 1974, p. 27). The scaling methods are simply ways to help respondents rank order items, so that decision-makers may make up programs in some prioritized manner.

The Mapleton Public Schools in Denver, Colorado, in 1972 conducted a needs assessment. Besides using priority ranking of issues and objectives and five-point scale ratings of how well certain instructional objectives were being carried out (measurement), the questionnaire asked respondents to choose from multiple-choice items, such as "The length of the school year should be (1) six months, (2) nine months, (3) twelve months" (Educational X-Ray of Mapleton Public Schools, 1972, p. 120). Length of school week and time of operation were other items. In addition to multiple-choice, the questionnaire also used 75 True-Untrue questions, such as "My teacher always tells me when she is pleased with my work."

Some needs assessments using the interview method have groups come to prescribed locations, like schools; others go out door-to-door; some use random-sampling on telephone interviewing. Some interviewing is done with prepared questions and some with one question which presumably stimulates an informal discussion.

7. Summary of general needs assessment models. Assessment models have been developed and implemented over the past thirty years and chiefly in the past decade as part of an overall program primarily to devise appropriate learning experiences for students. A few have had special purposes, such as preparing goals, assessing validity of procedures, isolating needs of non-school organizations, and so forth. Some models are quite vague in format, such as the 91st Congres survey in 1970. Some use special means to get their data, like the "Bonanza" game and the Wishing Well inventory.

By far the great majority, however, use either or both the interview and the questionnaire. Interviews are made with selected groups or specially sampled groups, from 3 or 4 persons to as many as 30 at a time. The interview data is often taped for further analysis, sometimes partially transcribed by the interviewer, sometimes only briefly noted. Some interviews are merely opportunities for administering a prepared set of questions, or any kind of questionnaire, in a live, person-to-person format. Questionnaires have been seen to be highly varied--in length, types of responses sought, ways of recording responses, ways of transmitting the questionnaires, variety of persons, groups, or stratifications surveyed. Some are personally directed to a relatively few respondents, others go out to hundreds and in some cases thousands. Some ask for mere checking of pertinent items, some ask for prioritizing also, while others want shades of opinion or scaling of items. A few models ask what objectives or needs are pertinent to the respondent and then also ask for a perception of how well the objectives or needs are currently being met. Such information must be obtained <u>sometime</u> if decision-makers are to design effective programs, for it is of no use to meet needs that have already been met. The majority of articles citing some kind of measurement use either the perceptions of administrators about "what is," some quantifiable data like number of chairs available or titles of programs in the curriculum, or standardized test data (see, for example, the <u>Educational Needs Assessment Program for Arizona</u>, 1972,

p. 2). No measurement, as far as could be discovered, operationalized the measurement process by means of persons actually going to observe measurable performance.

A final note: some of the articles cite more than one model and make a comparison of their characteristics (like McGuffey's 1973 Chicago study, which briefly compares four types, and the Kaufman and Harsh 1969 article on determining educational needs). In addition, a few assessment programs explain in great depth all about making needs assessments in general, although primarily addressed to their own particular procedure. The study done by Sweigert (1969) is one such; in it Sweigert not only diagrams steps but also cites assumptions on which he bases his assessment. Hershkowitz's 1972 Maryland study not only compares models (the Kaufman and Harsh models-- inductive, deductive, and "classical") but also defends his choice of the deductive method: setting goals first and then preparing objectives and perceiving needs in relation to those goals. Hershkowitz also gives assumptions for his model and is the only author found who cites limitations of his methods.

Part 2 The Coffing-Hutchinson Assessment Model

A separate section is being devoted to a specific needs assessment model. This model is one which Dr. Thomas Hutchinson, of the University of Massachusetts, Amherst, and Dr. Richard T. Coffing, of The Ohio State University, developed. Dr. Hutchinson presents a description and mini-application of this model in a graduate education course at the University of Massachusetts, Amherst, called

"Needs Analysis Methodology" (hereafter designated NAM). It is by far the most explicit, complex, and, in this writer's opinion, generally useful methodology of all found in the literature. It somewhat resembles others that have been described, in that it can make use of both interview and questionnaire vehicles for determining needs and measuring need fulfillment. It also allows for sampling, prioritizing, multiple groups of definers, and variations of survey procedures. Like many other models, NAM is built upon a systems design, diagrammable in clearly defined steps (see Appendix B for a sample of this systems design in NAM).

Where NAM differs from other models is (a) in its broad applicability to many kinds of needs assessments, (b) thus, in its complexity of process so as to be responsive to a broad band of options, (c) in its being based on well-defined and stipulated assumptions, (d) in its explicit formulation of directions for each step, and (e) in its demand to operationalize definitions of needs as specifically as possible and thus in as potentially usable a form as possible by information users.

The explanation that follows is summarized and excerpted from a 25-page paper, with bibliography and appendices, prepared for the Symposium on "Methodologies Under Development" at the Annual Meeting of the A.E.R.A., Chicago, April 17, 1974.

> Needs assessment is becoming one of education's "hot topics."
> One reason for this is that the clients are restless. Students,
> parents, employers, taxpayers, and others are demanding educa-
> tional services that meet their needs, and they are less willing
> than they were in the past to have educators define their needs
> for them. Accordingly, it is becoming politic for educators to
> learn, and to respond to, their clients' conceptions of what the
> needs are.

A second reason for interest in needs assessment is that educational agencies are adopting more systematic decision-making strategies. Consequently, the formal assessment of needs is coming to be viewed as an essential information input to educational management at all levels from the classroom to national programs.

Clearly, people's needs ought to be among the basic criteria for designing and evaluating educational services (p. 1).

These first few lines of the paper show NAM fitting into the current needs in education (a) for accountability, (b) for "systematic decision-making strategies," and (c) for looking first to the needs of program-users vis-a-vis the needs assumed for them by educators.

Coffing and Hutchinson stress that their methodology's stated purpose is "to provide useful information about needs." Therefore, "(a) the type of need that is of concern to some one has to be identified, (b) the desired status has to be specified (defined) as the basis for determining what is lacking, and (c) the current status has to be measured in terms of the desired status" (pp. 4-5).

A need, then, for these authors is seen as a concept of "what should be." NAM is similar to other assessment models in that it addresses itself to the discrepancy between "what should be" and "what is." But, whereas most other models see a need as the discrepancy itself, NAM sees it as the whole concept. In Figure 2, the relationship among the terms can be seen. It is important to understand how NAM pictures the need, since the methodology seeks definitions of the whole need--fulfilled, semi-fulfilled, or whatever. For instance, a person might have a need for some transportation vehicle. The fact that this person owns a car does not invalidate

the fact of the _need_. The discrepancy in the need, when operation-
alized, may be discovered as the lack of new, safe tires so that
the person can use the car more effectively. A decision-maker,
knowing the facts, can address himself/herself to providing tires,
not a car, bus, airplane, etc.

NEED

FULFILLMENT   DISCREPANCY
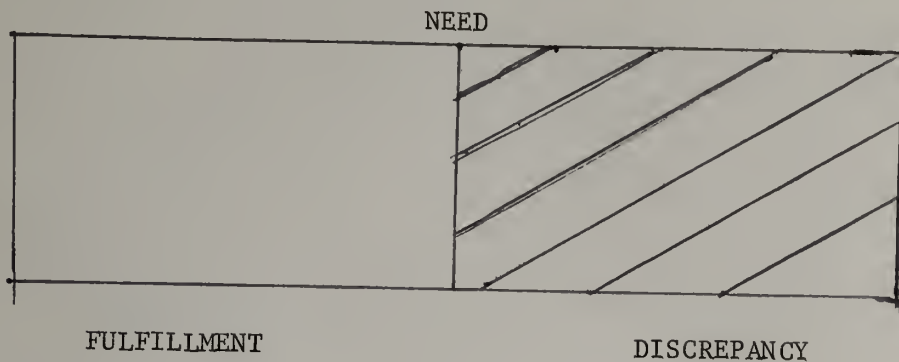
Figure 2. Coffing-Hutchinson Diagram of Needs Components

In NAM, the crucial question to be answered is "who needs what,
as defined by whom? . . . Needs are attributable to people; people
have needs" (p. 7). A need is a status of "what should be." But
several persons can help tell what _my_ need is, not just myself. In
a hospital, for instance, I can tell the doctor, "I need relief from
pain." The doctor can ask a number of definers, various medical staff,
to help him/her define my need. The total definition will likely be
more help to the doctor (the decision-maker or information-user) than
my own limited perception. Therefore, in any field, education at this

point, "the choice of definers becomes crucial to the validity, relia-
bility, and utility of the data" (p. 9). For whom are the data valid,
reliable, and useful? In all models of needs assessment, there must be
a decision-maker/information-user. Without this component, there is
no point in addressing needs at all. The decision-maker must obviously,
then, be an integral part of the assessment process. Among other jobs
that person does, he/she "designates the referents for the basic ques-
tion, 'who needs what, as defined by whom?'" (p. 10).

The Coffing-Hutchinson paper goes on to validate its procedures.
In order to have utility to the decision-maker, the information ob-
tained must have (a) "focus" (i.e., the information must identify
needers, types of needs, and definers, as well as prioritizing which
of these is looked into first, second, and so on); (b) "requisite
specificity" (i.e., definitions should be stated as much as possible
"in measurable terms, observable behaviors or states, rather than in
terms of 'fuzzy' concepts"); (c) "requisite quality" (i.e., "relia-
bility and validity to the maximum feasible extent," as well as re-
cognition of limitations that may exist); (d) "acceptability" (i.e.,
not only must the information be what the decision-maker wants but
the process for obtaining it must meet with his/her willing agree-
ment); (e) "adaptation" (i.e., since information-users and needs
and needs fulfillment and priorities and resources all have a habit
of changing, a suitable needs assessment model must provide for such
changes) (pp. 11-13).

The general design of the methodology can be seen in Figure 3.
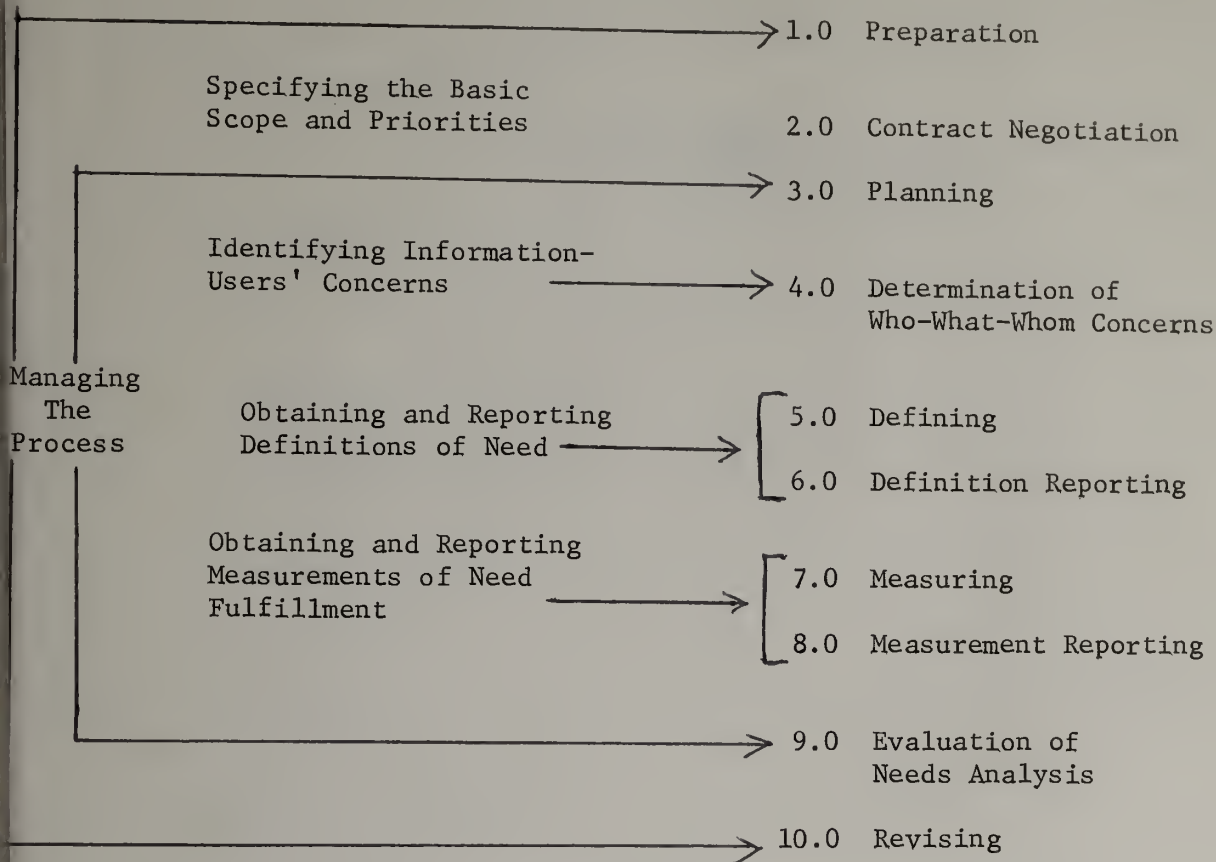
Figure 3.   Coffing-Hutchinson NAM Procedures

Encompassing the ten subsets of procedures, starting with Preparation
and ending with Revising (on the right), are five subpurposes.   The
subpurpose first described involves functions performed by the needs
analyst (NA), "functions that are necessary for (a) getting ready to
implement the methodology, (b) planning and scheduling . . . , (c)
solving problems which arise . . . , (d) evaluating the usefulness
of the information . . . , and (e) revising the applications in

order to improve the utility of the needs analysis . . . ." As can be seen in Figure 3, these functions are implemented in Steps 1.0, 3.0, 9.0, and 10.0.

Next, somebody has to say which information users are to be served by the NA, what resources can be allocated according to some set of priorities. Information users must be the ones who will actually use the data, not the NA himself/herself. This function is performed in the NAM under Step 2.0, Contract Negotiation. (pp. 14-15)

After preparing for the analysis process, setting up a contract with the decision-maker (DM) and planning the priorities, resources, and steps, the NA must ask the DM for a list of the individuals (needers) whose needs are to be met. The NA must also ascertain the types of needs about which the DM wants to know in order to prepare programs to serve them. Then the DM must give the NA the list of persons (definers) who can best define specifically the kinds of needs of the listed needers. The three lists are then combined by the DM according to stated priorities for using the data obtained. The result is a prioritized list of phrases in the form "who needs what, as defined by whom," like "Students' needs for career education, as defined by their parents." This procedure is accomplished in Step 4.0. (pp. 16-18)

A very important part of the NAM process is obtaining and reporting the definitions of needs. "What becomes critical is the specification of the needer's need. What is its operational definition? What behaviors/states comprise the needer's need" (p. 18)? To get at those specific needs, the NA must address the definers of them, by interview and/or survey. "The definitional problem is essen-

tially one of obtaining an explicit description of what the definers would imagine would be present or would be happening if the needer's need were completely fulfilled" (pp. 18-19).

Thus, each defining group would be asked a "stimulus question" designed by the NA. This question would ask each definer to picture to himself/herself an ideal situation in which all the specific needs of the needers for the type of need under discussion were being met completely. Visualizing this situation, the definer would tell or write down everything he/she saw or heard going on--the more specific and operational the better--which would indicate that the specific needs of the needers were being met.

Assume that a Who-What-Whom phrase is "Elementary teachers' needs for paraprofessional aid, as defined by those teachers' supervisors." A sample stimulus question which an NA might address to the supervisors would be as follows:

> Imagine a hypothetical elementary school. There are teachers, administrators, students, some parents, and equipment. Imagine that your elementary teachers are having their needs for para-professional aid fully met. Look at the situation closely and write down those things you perceive which indicate that those teachers' needs for paraprofessional aid are being met.

With such a stimulus question, each supervisor would presumably write down, according to his/her insights, every fulfilling action, event, condition, fact, etc., not merely the ones which his/her particular teachers might be lacking. Later, the measurement process can separate the unmet needs from the fulfilled ones. If the question posed to the definers asks only for the conditions which indicate lack, there is danger of omission of real needs because of the sub-

jective desire by the definers to describe only the high priority and immediately felt lacking conditions and because of the definers' having to discriminate in their responses. In NAM, subjectivity, whereas present of course, is kept to a minimum, and the discriminating is left to the NA to do during measurement.

Also, in NAM it is directly stated that, depending on the numbers of definers and on the needs for specificity, more than one or two rounds of surveys/interviews may be necessary to achieve the desired level of specificity. The whole defining process and its subsequent reporting to the DM is to be found in Steps 5.0 and 6.0.

Another key ingredient in the assessment process, particularly NAM's (see again Figure 3 above) is the steps of measurement and measurement reporting. If one has purposely sought for optimal states of "what should be" in the definition of needs, one may very well find that one or more of these needs are currently being adequately met. Such information is obviously of high interest to a DM in the subsequent planning of educational programs. In NAM, measurement is not done automatically, nor is it done concurrently with needs definition, as for instance it was done in Fitzgerald's model (above), where students' needs and their current state of fulfillment were simultaneously to be assessed by respondents on a 0-100 scale. In NAM, resources for carrying out all steps of the process are meticulously allotted. However, two limitations may obtain: (a) there may not be enough resources for the measurement process, since it is both time-consuming and thus expensive; and (b) the DM may not want or

need measurement done on some or all of the defined needs; moreover, the specific definition of the needer's need may make the status of present fulfillment obvious. If measurement is desired and resources are available, it may be done through a specific set of observation and collecting techniques set up by NAM. The NA may have only to collect existing data (like programs already in effect), may have to arrange for various kinds of testing of students, or may have to carry out quite specific observation of persons' performances. The details for these procedures are to be found in Steps 7.0 and 8.0 of the methodology (pp. 20-22).

The fullest set of rules and procedures so far developed by the authors of NAM is a complex document, with "hundreds of steps, including many alternatives, and it covers 99 typewritten pages" (p. 22). In its simplest form, it covers two pages and 34 steps.

The field of needs assessment has been researched, and a number of models discussed with their strengths and limitations, in order for the writer to design a needs assessment model for this particular study. The selection, design, and implementation of that model form the content of the next chapter.

C H A P T E R   I I I

SELECTION OF A NEEDS ASSESSMENT MODEL

AND ITS IMPLEMENTATION

Part 1   The Original and Revised Designs of the Assessment

This dissertation has introduced the problem impelling research

on needs assessment. Six components of the problem of teacher educa-

tion have been isolated and explained, which led to an examination

of the field of needs assessment models, their rationales and proce-

dures. A host of various models, with their common and uncommon

characteristics, have been discussed, followed by an extensive review

of the methodology developed by Coffing and Hutchinson.

It is now the intent to describe two designs for needs assess-

ment. The first is the original one made by the writer but not ac-

tually implemented. It will be briefly summarized below, with reasons

why it was not put into effect. The second is the one that was put

into effect. Its rationale, purpose, and implementation will be dis-

cussed in much greater detail.

Original design of the needs assessment. The first needs assess-

ment was built on a design very close to the Coffing-Hutchinson model.

The following persons were to be directly involved in the assessment:

a) the Needs Analyst (NA), the writer of this dissertation; b) two

basic Decision-Makers (DM), the administrators of the two communities

of New Bedford and Fall River with whom the NA would contract to make the assessments; c) the participants in group interviews; d) the respondents to a survey-questionnaire in the two communities.

The communities of New Bedford and Fall River have been selected for several reasons. They are geographically close to the place of work for the NA (the Education Department of Southeastern Massachusetts University); the two communities represented a great diversity of teachers, in years of experience, teaching styles, size of schools taught at, ethnic origins, etc. Between them the two communities have over 1,000 elementary teachers from whom to sample; S.M.U.'s Education Department had worked with elementary teachers in the communities both as cooperating teachers for the Department's preservice interns and as students in graduate courses and programs.

In preparation for both parts of the assessment for each community (interviews and questionnaire), the NA planned to make contact with certain key administrators, starting with the superintendents, to determine who would be the individual or group DM. With that DM, the NA planned to draw up a contract. In this contract was to be terms of the assessment: exactly what needs were to be assessed, how they were to be defined, who were to be the persons to define the needs (hereafter called definers), who were the persons in need (hereafter called needers), and how stratifications of definers and needers were to be worked out. In addition, details of instructions for the interviews and questionnaire were to be agreed upon; details of the locales

of the interviews and the method of inviting their participants were
to be arranged; details of the analysis of data from the interviews
and questionnaire were to be explained by the NA to the DM.

The NA had an actual plan which he hoped the DM in each community
would agree to: a) The basic need was that of elementary teachers of
New Bedford and Fall River for valid, appropriate inservice educa-
tional programs (see the first page of Chapter I for the definition
of inservice education); the needers were those elementary teachers;
the definers were to be in four groups: elementary school admini-
strators, the teachers themselves, parents of elementary school
children, and sixth-grade elementary school students.

b) Between 20 and 30 persons of each definer group for a com-
munity were to be invited to participate in the interviews; these per-
sons were to be stratified, that is, divided in numbers in such a way
as to represent important characteristics of their group. For in-
stance, it was thought that certain ethnic populations should be re-
presented in all four definer groups, particularly the Portuguese in
Fall River and the Blacks in New Bedford. For teachers, it would be
important to divide them so as to represent all elementary school
grades as well as different years of experience. For parents, those
having children in various elementary grades should be represented.
And so forth. The details of their stratifications were to be worked
out by the NA in close consultation with the DM in each community
(see Appendix C for suggestions on stratification planned for Fall
River).

c) Randomly sampled elementary teachers from the same two communities, about 300 in number and stratified in certain ways, were to be given the questionnaire. The needs statements on the questionnaire were to be developed out of prioritized data from the definition of needs as obtained in the group interviews. The directions for the questionnaire were to be the same as in the Coffing-Hutchinson NAM (see the last few pages of this chapter for a discussion of these directions and their subsequent revisions).

d) Details of available resources in persons, time, money, and materials were to be worked out as part of the contract, including what persons should be responsible for what operations in the whole process.

e) After all the data from the interviews and questionnaires had been gathered, the NA planned to analyze them in order to make up guidelines for inservice educational programs for elementary teachers in Southeastern Massachusetts.

The NA had hoped that this design would be implemented as planned. Certain key administrators of both communities had heartily endorsed the idea of a needs assessment for potential inservice programs earlier in the year. On March 19, 1975, the Old Colony Superintendents' Association met at S.M.U. to discuss current issues and problems. One of the matters on the agenda concerned inservice education of teachers in the Southeastern Massachusetts region. This writer took advantage of these administrators' interest in inservice education to ask them their definitions of elementary teachers' needs for inservice educa-

tional programs. The letter explaining the assessment and the accompanying stimulus question can be found in Appendix A. The administrators of Fall River and New Bedford at that time had urged the NA to see them in the fall when he was ready to make definite arrangements.

Problems relating to the original design. The original design of the needs assessment, however, never went into effect. Two unforeseen circumstances intervened. First, a week before the start of New Bedford's schools in the fall, almost the entire teacher population of that school system went on strike. This strike was to continue for over five weeks. At the time it seemed useless to the NA to attempt any kind of formal assessment in New Bedford. Three of the four definer groups could probably have been decided upon and interviewed, as far as available time was concerned. But the temper of the groups for harmonious, focused attention on the task at hand seemed to be inappropriate. It would also have been next to impossible to get the fourth group together (the students). So New Bedford was considered out.

Next, the NA turned to Fall River. Sometime between the March superintendents' meeting described above and the early days of September, the Fall River administration had decided to implement a series of inservice educational programs based upon a few top administrators' assessment of needs for such programs. Therefore, when the NA approached that administration for the proposed assessment, the members turned it down. Whereas they applauded its design, they

said that it was "either eight months too early or eight months too late." Thus, there was nothing to do but give up the original design for both Fall River and New Bedford.

The revised design of the needs assessment. Through the invaluable help of Mr. Curtis Hall, Director of the Southeast Regional Education Center of the Massachusetts State Department of Education, the NA was able to initiate the interview component of the needs assessment project in five other Southeastern Massachusetts communities: Attleboro, Barnstable, Duxbury, Swansea, and Wareham, the administrators of which school systems were only too happy to have some one come in with a ready-made assessment design and perform the necessary steps to implement the process. In addition, Mr. Paul Brouillard, an officer in the Bristol County Teachers' Association, promised help of the Association in disseminating a questionnaire to elementary teachers of Bristol County.

The rationale for choosing the five communities above was a pragmatic one, as was the rationale for a number of other steps described below. The communities wanted the project implemented, and they were ready to cooperate in order to get data for possible inservice programs. Mr. Brouillard wanted a reliable instrument for assessing needs for inservice education in Bristol County. In May, 1975, the writer had been a discussion facilitator at a conference at S.M.U. initiated by Mr. Brouillard to brainstorm educational needs of Bristol County, and inservice education had ranked high on the list of priorities developed from the conference. Mr. Brouillard saw the writer's questionnaire,

evolving from the interview project, as the kind of instrument he was looking for, and thus he volunteered his help. Finally, the writer perceived that, in aiding these various groups to get data for their own use, he would be able to test the validity of his assessment model and obtain data for his own purposes as well.

As it happened, the five communities agreeing to participate in the interview component of the assessment comprised a fair representation of Southeastern Massachusetts as a whole. Two are in Bristol County, Attleboro and Swansea; two are in Plymouth County, Duxbury and Wareham; and one, Barnstable, is a large school system in Barnstable County. Those three counties represent probably 95% of the elementary schools in Southeastern Massachusetts. For the questionnaire, Bristol County was a fortuitous choice, since it contains many more elementary teachers than any of the other counties, as was said over 1,000 in two of its principal systems, New Bedford and Fall River. Since one purpose of the NA's was to get as wide a sampling as possible of participants, the personnel involved in the revised design suited that purpose far more than the original design.

Besides representing a large portion of Southeastern Massachusetts, the five communities for the interviews are heterogeneous in other respects: Attleboro is large, semi-urban, semi-rural, heterogeneous socioeconomically; Barnstable is large, semi-urban, semi-rural, heterogeneous; Duxbury is fairly large, homogeneous middle to upper class; Swansea and Wareham are smaller, middle to lower class socioeconomically. For the questionnaire, Bristol County is also quite heterogeneous, being comprised of 24 school systems, 6 very large communi-

ties and 18 medium to smaller ones, with a greater and more diverse population than the other counties.

The revised design of the interviews was essentially similar to the original, except for one important difference and a few less important. For the original design the DA, with help from the DM in each community, was going to stipulate in advance the exact composition of the interview definer groups, specifically their numbers, stratification divisions, times for meeting, and places of meeting. In the revised design, however, it soon became apparent that such advance stipulation was impossible. Except in the case of the student groups, the definer groups were composed of those persons who themselves decided to attend. These numbers varied considerably within communities and from community to community (see Table 1 for the actual numbers attending in each definer group).

The revised design in the interviews, as in the original, involved four groups of definers, who were to help define the needs of elementary teachers for inservice educational programs. In the new design, each community's definer groups were asked to define needs within that community, since each community was engaging in the assessment process as a community program. The members of the community were interested in the data primarily for their own uses. It was no longer simply a dissertation study by itself but a joint effort.

The literature on needs assessment is full of the concept of multiple definer groups. As was demonstrated in Chapter II, more

TABLE 1

Numbers of Persons Attending in Each Interview Group

Community	Administrators	Teachers	Parents	Students
Attleboro	14	5	15	30
Barnstable	12	8	14	28
Duxbury	5	24	20	20
Swansea	8	15	14	25
Wareham	10	18	9	25
TOTALS	49	70	72	128

than the one person who needs something can help give the complete
picture of that need. In the writer's needs assessment design, he
decided to have more than the elementary teachers themselves define
their needs for inservice education. The logical questions to ask
in seeking others to help define those teachers' needs are, "Who knows
most about those needs?" and "Who is most intimately connected to the
teachers in some way as to have ideas pertinent to their needs?" The
writer decided that three other kinds of persons would be particularly
helpful: first, the administrators who employed and supervised the
teachers; second, the parents of elementary school children; and third,
the elementary school students taught by those teachers. In order to
get a group of students who would know more than other students about
elementary schools in a community and would likely be most articulate
in stating needs, the writer decided to use only sixth-grade students
who had been in a given community's schools most of their school life.
These youngsters would be almost all the way through elementary school
and thus be able to sense needs for the whole range of grades. When
the writer as NA began to make arrangements with the community admini-
strators, however, he found that certain communities went only as far
as the fifth grade in their elementary schools. Administrators in
these systems preferred that the fifth-graders be the student definer
groups there. Of course, the NA agreed to that provision, since the
same rationale as for using sixth-graders in a community would apply.
There were further exceptions: in Attleboro, 9 fourth-graders joined
with 20 fifth-graders to make up the student group; in Barnstable,

the administrators wanted to use both fifth and sixth-graders in the assessment, so about half of their student group was composed of members from each grade.

It was seen that a few other persons might have pertinent input as to needs of elementary teachers in a community, such as guidance counselors, special needs personnel, health and physical education specialists, and paraprofessional aides. When it seemed appropriate to include such persons in a community assessment, the administrators asked them to attend either the administrators' interview or the teachers'. No other kinds of definer groups were deemed important by either the NA or the community administrators.

Thus, the composition of the community interviews was arranged. Within the general request from the NA that the interview times be as soon as practicable, the administrators set up the interviews and informed the NA of them. In Appendix C may be found a calendar of arrangements with community administrators and of the dates of the 20 interviews. As can be seen, the first interview, with Attleboro administrators, was on October 31, 1975, and the last, with Attleboro teachers, on November 24, just about three weeks' duration for them all. The administrators of a given community tried to have the four interviews on as few days as possible. Only one community (Barnstable) had them all on one day. Three others had them in two days (Duxbury, Swansea, and Wareham), and Attleboro needed three days.

The interviews were held in whatever meeting place the administrators set up. The students usually met in a classroom (Duxbury,

Swansea, and Wareham), but others met in an auditorium (Attleboro) and a gymnasium (Barnstable). The parents usually came to a central elementary school during the school day (Attleboro, Barnstable, and Duxbury), but others met at night, one in the basement of a school building (Swansea) and the other in one parent's home (Wareham). Teachers met during the school day, at various times, except for Swansea teachers, for whom an emergency set of instructions had to be made up so they could self-administer the assessment. Administrators usually met in some central elementary school conference room, but there were exceptions to this also. In general, it was found that it was not necessary to have a uniform set of physical conditions for the interviews, although one or two places different from those used in the assessment would have been preferred. For example, as will be discussed again below, it would have been better if the Barnstable students had not met in the gymnasium but in a classroom setting. Also, evening meetings for parents would be better, in order to increase the possibility of more fathers attending.

For the conducting of the interviews themselves, the NA made up instructions sheets for him to use in the oral presentations, one set for the three adult groups and a different one for the students. The rationale for the latter will be explained later. A sample of each set of instructions may be found in Appendix E. The general purpose of the interviews was to obtain a large number of responses from the participants so that valid priorities could be made from them. These priority items would in turn be used to make up needs

categories from which a series of the most important 40 needs state-
ments could be established for a survey-questionnaire. The directions
for the interviews, which will be amplified below, were based upon
major principles found in the Coffing-Hutchinson NAM (see the expli-
cation of this in Chapter II, Part 2). The NA deemed it important
to seek the ideal needs of elementary teachers, that is, all their
needs for effective inservice educational programs, whether or not
these needs were currently being fulfilled, partly fulfilled, or un-
fulfilled.

The rationale for ideal, complete needs lies in this fact.
Coffing and Hutchinson discovered that, when the NA asked only for
unfulfilled needs, only a small portion of the needs of a particular
group of needers emerged, since the responders had to be constantly
weighing whether a response represented an unmet need or not. But
when the responders were asked to define all the needs of a group,
they would feel free to consider the total picture and thus respond
with much more spontaneity, at greater length. Then, through two
means, the NA could ascertain which needs should be looked at most
carefully by a DM in making use of the data: first, a responder
would narrow down his/her accumulated list by prioritizing (that is,
telling which were the most important items), and second, the NA
would make some attempt to measure the status of fulfillment, so that
the DM would not address himself/herself to acting upon clearly ful-
filled needs.

This rationale was behind the directions for the interviews
used in this study. The intent of the first four questions used in

each interview was to give each participant a great deal of time and opportunity to think of as many needs of elementary teachers for in-service education as possible. The last question asks participants to indicate the four most important needs. It was these prioritized needs which were used to provide data for the questionnaire.

Part 2 Administration of the Interviews

For any possible future use of this instrument it would be important for a reader to understand the separate components of a typical adult interview and of a typical student interview. The components of such interviews follow, with comments as necessary on what happened in the five communities.

Components of the interviews: initial directions.

NEEDS ANALYST'S DIRECTION SHEET

1. Divide into small groups randomly (preferably 3 or 4 in a group). ("Randomly" in this case means "at random," as explained below.)
2. Each person should have a written instrument (NA should have several extra pencils).
3. NA hands out information-needs sheets (each person should have a suitable surface for writing on).

The intent in Item #1 above was to make sure that when the time came for orally sharing ideas during the interview process, there would be as heterogeneous a small group as feasible, so that a greater variety of responses could be made. In #2, even though most persons had their own pens or pencils, it was often necessary to have extras on hand. In one instance, the NA's supply of 30 pencils was barely enough to go around. Item #3 refers to the Ditto sheets for the

separate interviewees to use in registering their responses. At the top of each set were demographic information blanks in order for the NA to judge the stratifications of persons present. A sample of each sheet may be found in Appendix F. After the first interview, with Attleboro administrators, it was realized that a single sheet (back and front) was not going to be enough for most respondents; thus, for all subsequent interviews, the NA stapled a blank lined sheet to each original. In all but two cases, the four sides were ample.

Components: demographic information.

NA: First, fill in the required statistical information
(a) at the top of your sheets. Encircle the proper
     letter in the top right corner, the first letter of
     the name of your community. Note that your name
     is not wanted.

A discussion of this statistical information will be made later in this chapter. It refers to the stratification component of the original proposal. Although the separate responder sheets were anonymous, the NA asked persons to record their names on a separate pad so that he could acknowledge their participation in his study. Their names may be found in Appendix G, alphabetically by communities.

Components: statement of purpose.

The following directions are for ADMINISTRATORS, TEACHERS, AND PARENTS:

NA: The purpose of this needs assessment is to provide
(b) data so that decision-makers in your community and
     possibly at other levels can make up useful, desirable,
     and valid inservice programs for your elementary teachers.
     Various groups are being asked to define the needs of
     the teachers for inservice education, all of whom I
     believe can add valuable information, since they all

basically want the same thing--effective, quality edu-
cation for the students of the community. This meet-
ing is one of four groups who will help define the needs.
(Mention the others.) To ascertain those needs, I will
ask you to respond to several questions. The intent of
the questions is to have you describe all the needs that
you can possibly think of, including ones that may al-
ready be met in your community. I will ask you finally
to tell which needs are the most important.

First, early in the meeting and arranging process, the writer realized

that the administrators of the communities were willing to help out in

a doctoral study and to be of service to a member of the S.M.U. faculty.

But, more immediately, as was discussed above they also wanted returns

for their involvement. Thus, it became the duty of the NA to convince

them that the interviews alone (not counting the results of the Bristol

County questionnaire) would provide valuable data for the individual

school systems, since the results for the four interviews in each com-

munity could be tabulated separately, with priorities applicable to

the separate communities. This is an important point for any subse-

quent use of this instrument. Second, it is helpful for any specific

interviewed group of persons to know that other responsible groups in

the community are giving the same kind of input. The adults were

interested to know that the students were participating, and the stu-

dents felt proud to be the one class selected to represent the student

body. Third, it is interesting to the groups in a community that a

number of other communities are participating in the project. Finally,

it is important to make the persons aware of the kind of response they

will be making--defining the ideal need situation, not merely the

unmet needs--since it is not common in the literature on needs

assessment to find directions like the kind of stimulus questions
given here. Most of them ask for merely the so-called discrepant
needs, as though in this study the NA had asked for the priority
items and no others. The rationale for listing the total need pic-
ture before prioritizing has been given above.

Components: List "A", positive items.

NA: Now, imagine that _____'s elementary
(c)   teachers' needs for inservice educational programs
      are being completely met. Look at the situation
      closely and write down everything you see which
      indicates that those teachers' needs for inservice
      educational programs are being fully met. After
      the capital letter "A", number the items as you
      write them.

This was the start of the responding process itself. The stimulus
question is in the exact form as in the NAM. The NA began the tim-
ing at this point. The community administration was told in advance
that each interview would take no longer than an hour. As it turned
out, the average time was 50 minutes; some were as long as 58, and
three groups finished in less than 40.

The directions above for list "A" were not clearly understood
by most participants. Nevertheless, the NA decided to retain the
exact wording, both because he believed in the basic principles
behind the NAM and because he wanted to test the system in all inter-
views. As it turned out, the directions always needed clarification.
The NA clarified by such statements as these: "What do you see
actually happening? What are various people doing or saying--teach-
ers, administrators, students? What's going on in the community?

What attitudes are evident, what teaching styles? Everything you see or hear or notice indicates that the teachers' needs are being met."

The question was often asked, "Do you want specific kinds of inservice workshops?" The answer was, "Yes, if that indicates the needs are being met." "Well, do you want the answers general or specific?" "Either. Whatever you feel you want to put down that answers the question." "Do you want programs or results of programs?" "Do you write the answers in terms of behavior or phenomena?" The results of these and subsequent questions in the interviews are analyzed in Chapter IV. The fact of the questions, however, indicates that the simple statement of the stimulus question is not enough for persons to start from; they need examples, clarification, explanation. If this assessment model were to be used again, the NA would build in some kind of further explanation, at least in the first question.

As a kind of general analysis of the interview, this can be said here: of the 6,480 responses, about 1,200 were prioritized; of these about one-third were directly relatable to content of inservice programs (e.g., the need for evaluation of school-wide curriculum), the other two-thirds being descriptive in nature (e.g., good relationships between teachers and administrators). The group which had the most trouble responding, of the three adult groups, was the parents—which was understandable, since most of them had relatively little knowledge of inservice programs at all, and also they were not at-

tuned to the school environment to know how to "talk the language."
It is a kind of criticism of that language, however, to realize that
the parents' groups had consistently a greater percentage of content
responses over descriptive, than any other group.

<u>Components: List "B", negative items</u>.

NA: (after about 10 minutes) Now, even if you are not
(d) quite through, follow these next directions. You'll
     have a chance to add to your first list later if you
     wish. Imagine that_____'s elementary teach-
     ers' needs for inservice educational programs are not
     being met at all (in fact, even being purposely blocked
     perhaps). Look at the situation closely and write down
     everything you see which indicates that those teachers'
     needs for inservice educational programs are not being
     met at all. (Don't merely or only write down the nega-
     tive components of your first list of statements and
     phrases, but see this as a new situation.) Put a
     capital "B" where you stopped writing the first list,
     and number these items again from #1 on.

The ten-minute time limit was rarely necessary to enforce. Most of

the time the group was just about ready to move on. In some instances,

a group was ready before the limit, and they were asked the next ques-

tion. There were almost always one or two persons who had to stop

responding to listen to the next question, but there were no complaints.

This second question (above) also needed some explanation, but only a

little, after the respondents had the idea of how to answer the first

one. What had to be stressed was the parenthetical caution at the end.

Otherwise, most respondents would have done what the remark cautions

against (as happened in the first interview before this caution was

added), without understanding the intent of the question, which was

to draw out from persons more ideas, not just to reiterate the same

ones. In the first interview, again, the respondents were asked to turn their only sheet over and write the "negative" answers on the other side. There was no request for numbering any of the items for this or any list. The answers to the next question after this were to be put on the first side. Even at the time of giving the assessment to the Attleboro administrators it was realized that the instructions were inadequate, logistically speaking. Thus, in the revised edition there were instructions to make four separate, labeled lists and to number each item from #1 on in each list. The relative ease of tabulating results made this change an effective one.

Components: List "C", negative-to-positive items.

NA: (after about 10 minutes) Next, look at the last
(e) group of statements and phrases, and transform any
     that you wish into positive statements or phrases,
     any that would add new positive components to your
     list "A". Put a capital "C" down and write these
     new items starting with #1 again.

This instruction also had to be briefly explained further. What was generally done was to give a hypothetical example, an item that might have been put into List "B": "Take your first item in List "B". Suppose you said, 'The teachers are running around tearing their hair out in frustration.' In your mind, turn that into its opposite: 'The teachers are sitting quietly, optimistically discussing their goals.' See if you said something like that in List "A". If not, write it into List "C". If you said this or something like it, skip it and go on to the second item in List "B" and perform the same operation, etc." This usually clarified the instruction.

Components: List "D", shared items.
_____

NA: (after about 5-6 minutes) Next, within your small
(f)   groups, each person read off his/her lists "A" and
      "C"--that is, the positive needs--so that the other
      members can hear them. Read very slowly, pausing
      a bit after each one so that the other members can
      consider them and write down any of them that appeal
      and that are different from ones they have thought of
      so far. That is, borrow ideas from one another.
      Write these borrowed items under the capital letter
      "D", starting with #1 again.

This component of the assessment was generally well-received. The

groups were not always heterogeneous, since friends tended to sit

with friends. The NA would ask that people split up and move around

but did not insist on it. In many instances, except with administra-

tors perhaps, there was a built-in heterogeneity because of the split

between grades (for teachers), different schools represented (for

parents), and the unusual request (for students). The adults pri-

marily enjoyed sharing their ideas, and these sessions usually went

into friendly discussions about school in general when the "business"

part was over.

Components: prioritizing the items.
_____

NA: (after about 20 minutes) Finally each of you
(g)   should indicate which of the items in sections "A",
      "C", and "D" (that is, all your positive needs--original,
      transformed from the negative, and borrowed) have the
      top four highest priorities. You should consider such
      criteria as these for judging priority:

      _____

      _____

      _____

(Or, if decision-makers have not supplied or sug-
gested the above criteria, use these:

1) most important for your own needs, or your
   students, or children;
2) most important for all elementary teachers
   in your community;
3) most feasible (that is, given what you believe
   to be known resources or limitations of time,
   energy, commitment, etc., which needs could be
   most easily implemented into inservice programs?)
4) most desirable for implementation to suit the
   total community's needs.

NA: Write a Roman numeral #I by the need with the
(h)   highest priority, a #II by the next one, a
        #III, and a #IV.

In all but one instance (the Attleboro administrators), the second

set of criteria was implemented, even though administrators were

asked if they had any special set for their community to use. The

Attleboro administrators had been to a common workshop the previous

summer and had made up a list of priority goals for the schools.

They used this list as criteria for their own prioritizing; their

responses, however, looked about the same as those from other communi-

ties' administrators.

There was no way of telling, however, which criterion was used

by any given person. At first, respondents would show their priori-

tization by re-writing the four items at the end of the sheet of re-

sponses, until the NA reminded them (a) that it was unnecessary to do

this and (b) that it was necessary for analysis purposes to show which

section of the responses their priorities came from. The reasons for

the latter will be given in Chapter IV. There was some confusion as

to which section(s) the priority items should come from even though

the directions above told that they should come from any of the "A",

"C", and "D" lists. The NA usually explained that these items could

all come from List "A" (or "C" or "D"), or they could be distributed

throughout; also, there was no requisite order--priority item #1

could come from List "D", for instance. A few persons disregarded

the instructions by taking priority items from List "B" (the negative

items).

<u>Components</u>: concluding instructions.

NA: (after about 5 minutes) Please hand in your sheets.
(i) On behalf of the information-users who will implement
these data, I thank you for your time and cooperation.
(NA clip or staple a person's sheets together as soon
as possible.)

These directions finished the interview. The sheets were collected;

a very few had to be clipped together if respondents detached the

sheets for easier writing or if they needed a third sheet. Then,

in whatever order they were stacked together, the NA wrote on each

person's top sheet a code notation; for instance, BT #1, BT #2,

BT #3, etc., for the Barnstable teachers' group. On top of the

stack went a copy of the directions sheet used for that group, with

(a) the <u>actual</u> timing for each section written in as particular groups

finished or were directed to go on, (b) additional explanations which

the NA made spontaneously or was asked to make, and (c) personal re-

marks by the NA concerning the group or the circumstances of the

interview, like "Print up and bring extra lined paper," "Question

from a respondent: 'Can you have a descriptive factor as a #I pri-

ority?' My answer: 'Yes' (But what would this tell me?)," "Lots

of personal chitchat in this small group, small room--how can I stop
it, politely?"

Separate directions for students. The directions for the students
were different from those of the adults. (A complete version of this
student form can be found in Appendix H.) The demographic information
section instructions were basically the same. After that came the
following:

Components: statement of purpose.

NA: The purpose of this meeting is to have you students
(b)   help your schools to provide learning experiences for
      teachers in the elementary grades that will make them
      be better teachers than they are even now. You see,
      teachers are students, too; they like to keep learning
      new things that will help them be better and thus that
      will help their students be better and happier learners.
      You students are all the way or almost all the way
      through elementary school. Your teachers, principals,
      and parents want to know what you think can be done to
      help your teachers be more effective and more useful
      to you as students. They want to know what you feel
      makes for effective teaching in the elementary grades.
      You have been selected from lots of students in this
      town's schools to tell us what you think.

As can be seen, these words are addressed to the students as helpers.

It was generally a surprise to students to think of their teachers as

students, too, who spent their time learning how to teach better. They

were flattered to realize that they could be instrumental in making

the teachers better in some way. Also, they felt good about being

the ones selected to do the interview.

Components: List "A", "good teacher" items.

NA: So here's what I want you to do. Imagine some perfect
(c)   elementary grade--your own present one or some other

level. Imagine that the teacher is doing and saying
all the best things that a teacher could to make his/
her class a wonderful, happy, and challenging learning
experience for the students. Look at this classroom
which you have pictured in your mind, and write down
everything you see and hear which shows that the teacher
is providing the best learning experiences for his/her
students. Who is doing and saying what? What is the
teacher doing and saying, for instance? What are the
students doing? What does the room look like? Write
a lot of details. We don't want the names of any real
teachers. And don't talk to each other about what you
write down; you'll have a chance to share with each
other in a while. Number the items 1, 2, 3, etc. If
you use up the first page, go on to the back side.

As with the adults, there was some puzzlement as to what to write

down, even with these much fuller directions than the adults had.

The NA had to reiterate the basic directions and give more examples.

He tried not to influence the students by suggesting concrete items

(except in one case; see below). The slant of these particular direc-

tions was chosen because (a) the children knew nothing at all about

the concept of inservice education, and (b) it was thought that they

could best respond when limited, as it were, to a particular ele-

mentary classroom. In addition, (c) the kinds of things which they

might write down in response could give a different kind of input

from that of the adults to what teachers needed to know from inservice

programs. As it turned out, the children were slow in response to

this first set of directions. In most classrooms, the homeroom teach-

er either sat in the back quietly or absented himself/herself from the

room. In one situation, the teacher not only stayed up front but

talked more than the NA did, encouraging (and perhaps threatening)

her students with such remarks as "Come now, children, surely you

can write <u>something</u> down. We don't want this nice man to go away

empty-handed, do we?" And so forth. She prodded and pushed till

they responded.

<div align="center"><u>Components: List "B", "bad teacher" items.</u></div>

NA: (after about 8-10 minutes) Now, start again. The next
(d) things you write down will be under the capital letter
      "B", number 1, 2, 3, and so forth. This time change the
      picture in your imagination. Think of another elementary
      school classroom, in which just the opposite from the
      first time is happening. This time the teacher is making
      all the worst kinds of learning experiences. The teacher
      is actually trying to make the class dull, unhappy, and
      ineffective. Look at this classroom closely and write
      down everything you see and hear which shows that the
      teacher is providing the worst learning experience for
      his/her students.

For these directions, the students needed very little encouragement.

Their eyes lit up, they smiled and smirked happily, and they nodded

knowingly to each other. Their pencils flew on their response sheets.

As will be seen in the analysis of data in Chapter IV, students' re-

sponses were by far the most numerous in this section (965, as opposed

to 762 for the "A" List). One group, the children from the classroom

of the prodding teacher above, had 211 "B" responses to 126 "A" re-

sponses!

    <u>Components: List "C", bad-to-good items.</u> The instructions for

the "C" list, transforming negatives to positives, were essentially

the same as for the adults, except that the NA printed an actual

example.

    <u>Components: List "D", sharing items.</u> The instructions for the

sharing session were also the same as for the adults. In the case of

the students, however, certain modifications were made in the course

of the interviews, in response to problems which arose. The first
students to be interviewed (Wareham) were fairly responsive and re-
sponsible in their small groups. The next students' group (Barnstable)
were set down to write at a continuous long table in the gymnasium,
because the administrators had chosen about four subgroups of fifth
and sixth-graders to be interviewed, and there was no unused central
homeroom available. When sharing time came, it was impossible to do
it at the long tables. So the NA divided the groups at random and
sent them to various corners of the gym. The students had so much
fun getting to their assigned places that there was little effective
sharing when they got there. Thus, when the third group of students
were convened (Attleboro), and it came time for sharing, the NA made
a decision to have the students share silently, that is, just pass
around their sheets to their small-table colleagues; then, having
looked at three or four other sheets they remembered what they wanted
to and inscribed the additional responses under "D". As it turned
out, their responses were just as numerous in that section, on the
average, as those who had shared out loud.

The next group of students to be interviewed (Swansea) were those
who needed constant encouragement from their teacher. Their responses
seemed so brief as the interview proceeded that the NA decided to try
out a new procedure for the sharing session. He wrote down from
memory about fifteen items that seemed typical from previous students'
responses and said them to the whole class, slowly, one at a time.
The students were to choose any that they liked. It turned out that

they wrote down a great many of them, rather blindly it may be assumed, so as to "fill up" their sheets and thus please "teacher." For the last group of students (Duxbury), the Attleboro "system" was re-employed, silent sharing. This seemed to work best for students. It had the benefits of sharing without the disadvantages of disruptions from children who were not used to small-group give-and-take. For adults, of course, the benefit of general friendly discussion was one of the high points of the interviews.

Components: prioritizing the items. The prioritizing for the students worked on about the same principle as for the adults, except for the suggested criteria:

> NA: (after about 10 minutes) The last thing to do (per-
> (g) haps after returning to the original places before
> grouping) is to look at your own lists "A", "C", and
> "D", all but the bad experience list. Decide what
> you think are the four most important items. You
> could decide by thinking "Which ones would I want
> to have happen for all elementary school students?
> Which ones would I want to have happen if I were
> in that class? or, Which ones do I think could
> happen right away if teachers knew about them?"
> You decide which are the most important items.
> Write a Roman numeral #I alongside the item in
> List "A" or "C" or "D" which is most important for
> you, a #II by the next most important item, a #III,
> and a #IV.

If one compares the criteria suggested for students with those for adults, one can see that the intent of the students' questions above was to match as closely as possible the adults' criteria, at the students' level.

After the prioritizing, the final instructions were the same as for the adults. The NA wrote times down on each student-group's

instruction sheets, as before, and wrote in additional explanations, remarks, and comments.

Interview response sheets: background information. For each kind of group interviewed, Ditto sheets were made up and handed to each responder at the beginning of the sessions. As was said earlier, it was realized after the first interview that more than a single sheet, back and front, would be necessary. Accordingly, the NA made up an extra blank sheet lined like the back and front of the first sheets and stapled the two together.

At the top of each defining group's sheets were requests for demographic information. It will be remembered that a tentative outline for the assessment had been presented to the Fall River admini- strators (see Appendix C). On that outline were guidelines for choos- ing certain responders. The guidelines had been suggested to the writer from both the research on needs assessment models and from various persons in live interviews who had conducted needs assess- ments. (See, for example, the Massachusetts State Department of Education's Northeast Regional Education Center's Assessment of Needs in Appendix D. It can be seen from Items A-N on that document that it was addressed to elementary and secondary educators, that it asked for the exact position held, the years in education, sex, area of expertise, professional preservice education, location of school system, and the like.) The intent of getting such information is to know the exact nature of the persons for whom inservice education programs are to be implemented. If 200 junior high teachers with an

average of 3 years teaching experience respond with high priority

for needing instruction in curriculum planning, the programs developed

for them are going to be different from those developed for 100 ele-

mentary administrators with an average of 20 years' experience need-

ing the same thing.

It had been originally planned for the New Bedford and Fall River

assessments to stratify the respondents by a number of criteria. All

of the four defining groups were to be stratified by inner and outer

city location, depending on the administrators' advice as to relative

numbers. All of the groups were to be stratified by ethnic origin

if the administrators thought that such stratification would make a

important difference (and it probably would have), and all by sex.

In addition, administrators would be stratified by their role divi-

sions--superintendents, principals, etc.; the teachers by grade

level and years of experience; and the parents by grade level of

their children. Finally, more teachers were to be interviewed than

any other group, since it was their needs that were being defined.

When both the originally planned-for communities were no longer

available, it was necessary to modify stratification requirements.

In most cases, the criterion was a simple pragmatic one: take who

is available. Usually, all the administrators having any connection

with the elementary schools in a community, came to the interview.

As for teachers and parents, although the community administrators

made some effort to get a representative spread, the interviews were

composed simply of those who came. The numbers of a parent or teacher

group were decided, in all cases except one, by the willingness of the potential responders to put the interview on a higher priority level than shopping, weather, children, other duties, fatigue, and so forth. The students were the only groups with very little choice whether they participated or not.

Interview response sheets: administrators. Administrators were asked to fill in blanks indicating their sex, number of years in education, years in administration, whether they had been connected with elementary schools chiefly or elsewhere, whether their experience was mostly urban or non-urban, and their ethnic background. No attempt was made to segregate them by role divisions, since nine-tenths of them were principals or assistant principals. In a few cases, curriculum coordinators, school psychologists, and nurses augmented the ranks. The statistics indicating the breakdown of this information will be found in Chapter IV. A sample first sheet of each of the four kinds of defining groups can be found in Appendix F.

Interview response sheets: teachers. The teachers were asked their sex, the grade level(s) currently teaching, grade they mostly had taught, what general years' level of experience they had (1-4, 5-9, 10-15, 16-over), whether it had been mostly urban or non-urban, and their ethnic background. When one considers the fact that there were virtually no stratification demands in advance of the interviews, there was a remarkably good representation on most levels, except urban and non-urban experience. By far, the lion's share was for non-urban--

a natural fact, since all the communities were basically non-urban themselves, or at least considered themselves so. If the original two communities of New Bedford and Fall River had been used, it would undoubtedly have been the other way around, as was learned, since there were few elementary schools in either city that could be called "outer city."

Interview response sheets: parents. Parents were asked their sex, their age in three levels (20-30), 31-40, 40-over), the grade(s) of their child(ren) in elementary school for the current year, and their ethnic background. Ethnic background for all defining groups was not a significant factor, as it turned out. On the parents' sheets, the NA helped qualify this aspect by "Ethnic background, if first or second generation non-U.S. born." Most responders answered the fill-in blank with some word or phrase, varying from Polish American and Irish Catholic to WASP and Damn Yankee.

Interview response sheets: students. The students were asked their sex, age, grade currently in, and the number of years they had been in their respective community's schools. It was originally planned to have only sixth-graders responding for the students. This component had to be modified in some instances because of the administrative school divisions in a community. In some communities, the fifth grade was their highest elementary class. In one community which did have sixth-graders, the administrators misunderstood the arrangements, and they brought in thirty children from all over town to a central location, with mostly sixth and fifth-graders, but with three fourth-graders, and a third-grader who wanted to tag along.

At the top of <u>all</u> groups' sheets was a set of parentheses en-
closing the five first letters of the names of the communities; per-
sons encircled the appropriate one, A, B, D, S, or W. The combination
of this with the printed name of the defining group on each sheet
allowed no chance to mix up the accumulated sheets.

This finished the administering of the interview component of
the needs assessment project. After the final interview for each
community, the NA made a separate community listing of its priority
items; he also made up tabulations of the demographic information
from the four groups' sheets, and made a sample copy, randomly selec-
ted, of one of each group's complete response sheet. Then he returned
the complete set of interview response sheets, with the separate copies
of the priority items, to the chief administrator of the community,
with a personal letter of appreciation, and a promise to send later
more data as they were analyzed. After the last interview for the
last group, the NA mimeographed a letter to a number of persons pri-
marily responsible for initiating and implementing the project, with
personal notes on each appropriate to specific acts of cooperation
and hospitality. A copy of this letter can be found in Appendix M.

<u>Part 3 Administration of the Questionnaire</u>

In the first meeting with Mr. Paul Brouillard, co-director of
professional development in the Bristol County Teachers Association
(described in Part 1 above), the writer found interest expressed in
the needs assessment project and a strong pledge of support from Mr.
Brouillard himself and from several other officers in the Association.

They saw their function largely in connection with the questionnaire component of the assessment. They volunteered to expedite the sending of the questionnaire throughout Bristol County.

As described in Part 1, it became evident early in the fall that the original plan for the interviews was not going to be implemented in New Bedford and Fall River. The choice of communities for the interviews was no longer in the hands of the NA, to all intents and purposes. He had to choose by opportunity rather--taking the communities that were interested and were willing to commit their resources to the project. As it happened, two of the communities were in Bristol County, Attleboro and Swansea. Two others were in Plymouth County, Duxbury and Wareham. The fifth, Barnstable, was in Barnstable County. Thus, by mere chance, there were communities representing the great majority of Southeastern Massachusetts. New Bedford and Fall River would have represented only Bristol County.

When it came time to determine who should respond to the questionnaire, again the decision was resolved by expediency. The Bristol County Teachers' Association was very much interested in initiating more inservice education for its members, virtually all the public school teachers of the county. The county officers saw the questionnaire serving as professional validation for the inservice programs they might implement. In addition, the Association was beginning to work much more closely with S.M.U., particularly its Division of Continuing Studies. The officers had used S.M.U. as a conference center the previous May. Moreover, most of S.M.U.'s Department of

Education teaching interns were doing their student teaching in Bristol County schools. Finally, the County volunteered to distribute all the questionnaires by hand, thus saving the cost of outgoing postage at least, about $75.00.

In the original design for the assessment project, it was proposed to stratify the respondents to both the interviews and the questionnaires, so as to get as valid a sampling as possible. For the interviews, the stratification was seen (above) to have been by chance, since the particular respondents could not be purposely selected in advance. For the questionnaire, a similar situation arose. The Bristol County officers did not have lists of teacher personnel in the whole county at all, let alone lists demographically oriented. They could get the questionnaire distributed to almost any number of teachers, by whole school system, but by no other way.

With this limitation in mind, the NA consulted with Dr. Thomas Hutchinson, of the University of Massachusetts at Amherst, who acted as an informal consultant for the assessment project. It will be remembered that it was his and Coffing's assessment model that served as the prime basis for this project. Upon Dr. Hutchinson's advice, the NA decided to disseminate the questionnaire to 20% of the elementary teachers of Bristol County. A stratification would be made by counting the number of very large school systems and average-sized systems respectively and choosing a representative number from each set of random sampling.

From the Bristol County officers, a list of the school systems was obtained, 24 in all. There seemed to be 6 systems whose ele-

mentary teachers numbered over 100. The remaining 19 averaged in

the 70's, with a few in the 20's. These numbers indicated that, if

20% was the factor, there would be one large school system and four

smaller ones chosen. Before the random sampling could be made, how-

ever, another limitation had to be applied. The method of dissemina-

tion that the Bristol County officers had chosen was to be by hand,

to the local teacher organization representatives who should come to

an upcoming monthly Association meeting in Fall River (December 3).

Upon consulting the officers, the NA learned that not all the repre-

sentatives regularly came to the meetings. The larger school systems

were regularly represented, but not the smaller ones. From looking

at the list of attenders for the previous 12 months, it was clear

that representatives from seven or eight of the 24 systems were hardly

ever present. A final limitation was applied prior to sampling by

not including the two Bristol County communities that had participated

in the interviews, Attleboro and Swansea. The NA wanted to get as

wide a participation as possible in the whole assessment. The inclu-

sion of the latter communities in the random sampling would tend to

restrict that wide participation.

Thus, the sampling was made among the six larger systems and

ten of the smaller ones. By telephoning the administrative offices

of all 16 systems, the NA ascertained the number of elementary teach-

ers in each. It was then possible to know how many questionnaires

to print up, after the sampling indicated which systems were to be

chosen. In consideration of the possibility that some of the regular

attenders might not be present at the monthly meeting, a few alter-

nates were selected of comparable size. As it happened, all the systems chosen had representatives present. The large system selected randomly was Fall River (475 elementary teachers) and the four smaller ones were Acushnet, Raynham, Easton, and Seekonk (225 in all).

The NA wrote a cover letter for the questionnaire which was mimeographed and signed by Mr. Brouillard and his co-director of professional development, Mrs. Maureen Carreiro. A copy of this cover letter may be found in Appendix J. This letter stated the purpose of the questionnaire, and urged prompt participation by its recipients. In accordance with the research on assessment questionnaires that were self-administered and mailed back, a date was strongly suggested by which to return it. The computer center at S.M.U. printed 700 address labels. These labels were affixed to long envelopes, and stamps were applied. The address for return was the NA's at S.M.U. Seven hundred fifty questionnaires were run off. The cover letter, the questionnaire, and the stamped, addressed envelope were then stapled together in that order. Five packets of these three items, with some extras, for the five school systems selected, were made up and delivered to the Bristol County Office. On December 3, at the monthly meeting, they were distributed to the representatives, who in turn subsequently disseminated them to the elementary teachers in their school systems.

Approximately a week later, about 50 notices were mimeographed on colored paper and given to the Bristol County officers. As will be remembered from Chapter II above, the needs assessment research indicated that it was wise to implement a second send-out of ques-

tionnaires in order to stimulate non-respondents. In the revised project, it was not considered feasible to send out another 700 questionnaires with stamped envelopes. On the other hand, since the Association's officers knew exactly which elementary schools' teachers, in all, received the questionnaires, it was considered feasible to have notices put up in each teacher's room in these schools. It was determined that 50 such notices would cover the field. A copy of this notice can be found in Appendix L. The notices thanked the prompt respondents and urged the others to do the questionnaire soon, stressing again the vital and personal role that the respondents would play in providing data for their own inservice education programs.

The form of the questionnaire itself was just about as had been originally proposed. Forty prioritized needs were generated from the 20 interviews, and randomly ordered for the questionnaire. The directions for the questionnaire were basically as originally planned, with one significant addition. (A copy of the questionnaire may be found in Appendix K. The analysis of the interview data, with the resultant composition of the 40 needs, is discussed in Chapter IV.)

The directions for the questionnaire suggested by Coffing et al. (1973) are partially as follows:

> The NA adds instructions as follows: "Imagine in your mind that (Who's) needs for (What) are fully met." Read each item in the list that follows. If the item is something that Who needs, place a checkmark in the space provided.
>
> "After completing the above, go back over the list and circle the numbers of the five most important needs" (p. A-41).

As can be seen from these directions, there is opportunity for determining respondents' conceptions of the ideal need situation, along with their particular sense of high priority items. In the Coffing-Hutchinson NAM, there are also explicit instructions for measuring fulfillment of the needs generated by the interview-surveys (pp. A-46; A-71), in order to ascertain which needs, of the ones selected by the DM for further implementation, are already met or partially met. It became evident to this NA that such measurement was not going to be feasible, for three reasons. First, there was not going to be time available for the NA to implement this component, nor enough funds for him to use, in covering the large area of Bristol County necessary from the questionnaire sampling. Second, there was no way of telling which questionnaire respondents came from which school systems. Third, since the entire county was being surveyed by random sampling, the DM's job was going to be involved with suggesting guidelines on in-service programs for 24 school systems, not just for the 5 sampled. This writer, acting as DM, planned at least to sample the county systems by making some telephone calls to administrators and to the Bristol County Teachers' Association to find out what kind of in-service programs had recently been implemented and which were soon to be implemented. But such calls would in no wise be completely valid; rather the responses would serve as general indications of needs being met.

Therefore, upon further consultation with Dr. Hutchinson, the NA decided to augment the questionnaire directions, in such a way as

to ascertain in some measure the unmet needs as the ideal ones. The directions of the implemented questionnaire follow:

> DIRECTIONS: The following list of 40 items represent needs for elementary teachers for valid, useful, and satisfying inservice educational programs.
> (1) Read each item. If the item is one which you need, put a checkmark in the first column provided.
> (2) Assuming the item were made into an inservice educational program, put a cross (X) in the second column if you would participate in the program.
> (3) After completing the above, go back over the list of "X" items only and encircle the numbers of the five most important items.

The first and third instructions can be seen to replicate the Coffing-Hutchinson NAM instructions above. The second asks respondents to indicate which items, if translated into actual inservice programs, they would participate in. By means of this instruction, the NA hoped to achieve a kind of measurement process, assuming that if a respondent put an "X" alongside a given need, he/she understood this as an unmet need primarily. It does not mean that the checked items are necessarily met needs, however, just that the burden of the evidence centers on the "X" items as unmet.

The needs assessment project was thus partially completed--the original design and its rationale, the editions of the interviews and questionnaire revised due to unforeseen circumstances and to the problems that arose during implementation, the conducting of the 20 interviews in the 5 Southeastern Massachusetts communities that provided prioritized data for the Bristol County questionnaire, and the dissemination of the 700 questionnaires to 5 random school systems in Bristol County.

The analysis of the interview data and its tabulation in providing material for the questionnaire, as well as the analysis of the returns from the questionnaire, provide the material for the next chapter.

C H A P T E R   I V

ANALYSIS OF THE ASSESSMENT DATA

Part 1 Introduction

To this point, the writer has discussed (a) the response that edu-
cators must make to the American people's plea for better prepared and
continually prepared teachers for their children, a response that takes
the form of valid, reliable, and above all, immediately useful inservice
educational programs; (b) the rationale of needs assessment as a primary
vehicle for ascertaining the educational needs of teachers, so that in-
service programs may be devised and implemented that will address them-
selves directly to areas of teacher education that are applicable to
what teachers are striving to accomplish in their classrooms; (c) the
research that has already been done in formulating and implementing
needs assessment methodologies; (d) the establishment of a needs assess-
ment model which the writer as Needs Analyst (NA) believed could be
expeditiously used in Southeastern Massachusetts to assess the needs of
elementary teachers for inservice education; and (e) a description of
the particulars that occurred in the actual implementation of the re-
vised design of this model through the use of group interviews and a
self-administered questionnaire.

There remain two components of the study, the analysis of the data obtained from the writer's needs assessment model and the use of these data in suggesting guidelines for inservice educational programs in the region. The purpose of Chapter IV is to discuss the first of these components, analysis of the data.

Part 2 Analysis of the Data from the Interviews

It will be remembered that 20 interviews of groups were conducted in five Southeastern Massachusetts communities, four different groups in each. It had been decided by the writer as Decision Maker (DM) that, to define elementary teachers' needs for inservice education, it would be useful and pertinent to ask not only the teachers themselves but other persons as well to help define those needs. The persons thought to be closest to the teachers and to their educational problems were administrators, parents of elementary school children, and the students themselves. For the last-named group, it was decided to ask students in the highest elementary grade in a given community, being those most able from their experience to articulate needs of teachers in the elementary schools.

Accordingly, the NA devised a series of directions and questions to be administered orally to the four groups in each community. The same set of directions were given to the three adult groups, while a slightly different set was made up for the students. As said earlier, a copy of these directions may be found in Appendixes E and H. For each group interview, the NA provided response sheets appropriate to

the group being interviewed. Copies of the four kinds of response
sheets may be found in Appendix F. Specifics of the directions
and response sheets have been discussed in detail in Chapter III,
above.

When the data from all 20 interviews were gathered, it was the
job of the NA to analyze them in such a way as to arrive at a speci-
fic number of prioritized need statements that could be used in making
up a questionnaire. This analysis process was accomplished in five
steps:

1. <u>Stratifying the respondents.</u> As was seen above in this
chapter, the response sheets administered to each group were appro-
priate to the group. That is, the stratification information requested
at the top of each respondent's first sheet was different for each group.
It will be remembered from the discussion in Chapter III that for the
original assessment plans for New Bedford-Fall River certain kinds of
stratification were thought necessary. The purpose of stratifying
respondents is to make sure that, within a given set, all pertinent
subgroups should be represented.

For instance, in asking elementary teachers to define their needs,
it would give an off-balance view to get the responses from primarily
fifth and sixth grade teachers or from teachers who had been teaching
for only a few years. Similarly, it would be important to try to
interview parents whose elementary school children came from a variety
of grades K-6. For administrators, those with many years of admini-

strative experience at the elementary level, might see their teachers'
needs as being quite different from the needs defined by administrators
with comparatively few years' experience.

In the original design, the writer thought that it would be rela-
tively easy to determine what percent of each definer group should be
made up of what stratifications, by information available to the NA
from the administrative offices of the original two large communities.
Then, specific persons could have been invited to respond for each
interview. As it turned out, however, such pre-planned stratification
was not possible for this study. What happened instead was that the
NA basically had to take whoever was available; except for students,
availability meant volunteering. Thus, stratification was done ex
post facto.

The first tabulation, therefore, in the revised plan, was a
summary of each group's stratification factors. Copies of the exact
transcription of these factors may be found in tables in Appendix N.
One example is reproduced here in Table 2, that of the Barnstable
administrators. It can be seen that of the 12 interviewed, there is
a preponderance of men over women (9-3), normal in American education.
Their years of experience in education total 240 (average 20), with
a range from 4 to 40 (a median of 20). Thus, the data show a repre-
sentative span of years in education. Their years in administration
total 156 (average 13, median 14.5), with just about an even balance
on either side of the average. Their experience rates 9-3 in favor
of the elementary school. Their locale of experience is all non-urban.
The last rating was considered normal for the community represented.

Table 2

Summary of Barnstable Administrators' Stratifications

Sex:	Female:	3
	Male:	9
Years in Education & (average)	:	240(20)
Years in Administration & (average)	:	156(13)
Experience mostly elementary	:	9
Experience mostly non-elementary	:	3
Experience mostly urban	:	0
Experience mostly non-urban	:	12

Tables 3, 4, 5, and 6 show the stratification tabulations of the four groups (administrators, teachers, parents, and students) of five subgroups each (the five communities). Although breakdowns by community were done, these are of interest primarily only to the individual communities. For the purpose of this study, analysis was made as though the five communities were one, representing Southeastern Massachusetts as a region.

It can be seen from Table 3, that the total administrator group was only about 2-1 male to female. For a secondary school assessment, the ratio would undoubtedly be much higher on the male side. The average years in education were about double the average number of years in administration, a ratio that held true for each community separately. There was a high proportion of years in elementary education, as would be expected from elementary school administrators. The urban-non-urban ratio was 15-34, surprisingly high for urban, since the five communities were themselves largely non-urban.

Table 4 shows the data on the teachers. As would be expected in American education, the ratio of female to male teachers is very high (63-7). The representation of teachers by grade taught was almost an even balance, except for Grade 6. Two partial explanations for the lesser number of Grade 6 are as follows: (a) two of the communities went only as far as Grade 5 in the elementary school, and a third sent a majority of fifth-graders to the interview, so that of the 128 students, a little less than half were sixth-graders; (b) several of the teachers in the "Special" category taught Grades 4-5-6 or 5-6 or

Table 3

Summary of 49 Administrators' Stratifications

| Sex: | Female: | 15 |
| | Male: | 34 |

Years in Education	:	900 (18 average)
Years in Administration	:	474 (9.5 average)
Elementary Experience	:	40
Non-Elementary	:	9
Urban Experience	:	15
Non-Urban	:	34

Table 4

Summary of 70 Teachers' Stratifications

| Sex: | Female: | 63 |
| | Male: | 7 |

Grade Teaching Now:	K:	5		4:	9
	1:	12		5:	7
	2:	9		6:	2
	3:	9	Special:	14

Grade Mostly Taught:	K:	5		4:	11
	1:	11		5:	9
	2:	8		6:	0
	3:	8	Special:	11

Years Experience:	1- 4:	20
	5- 9:	22
	10-15:	16
	16-over:	8

| Experience Mostly Urban: | 5 |

| Mostly Non-Urban: | 58a |

[a] Where there are discrepancies in numbers of responses not totaling to the number of respondents, as here, they are usually explained by the fact that respondents simply did not fill in the required blanks.

or K-6, so probably the sixth grade was more amply represented than appears. The teachers' years of experience were also well represented, as can be seen from the table. (See note in Appendix N on variance in subtotals by grade vs. total number of teachers.)

Table 5 shows the tabulation for parents. As can be expected from the time of day at which most interviews took place, the women far outnumbered the men. In the original design, it was going to be an evening meeting with parents. As it was, the four male parents in the revised set of interviews all came on an evening interview. To further explain the high ratio of women, it is probably the case in American education, at least in regard to elementary schools, that the mothers are far more actively involved in the schools than the fathers. The parents' age ranges, again as might be expected, were preponderantly 31-40; in another such assessment, this factor would probably not need to be asked, since it seems insignificant here. As with the teachers, the grade level of the parents' children repre- sented practically as much of a balance as could have been asked for had the stratification been determined ahead of time. There is a slight overbalance on Grades 1 and 2, but each grade is well-repre- sented, except Grade 6 again (see the teacher explanation above, as regards numbers of sixth-grade children in the interviews).

Table 6 shows the tabulation on the students. The sex differ- ences are probably a little off-balance; no research was made of the total female-to-male population in the schools or communities inclu- ded in the interviews. The NA, as has been said, simply took whomever the administrators provided, and in most cases it was, for a given

Table 5

Summary of 72 Parents' Stratifications

| Sex: | Female: | 68 |
| | Male: | 4 |

Age:	20-30	:	25
	31-40	:	42
	41-over	:	5

Grade of Children:	K:	12
	1:	21
	2:	25
	3:	15
	4:	18
	5:	10
	6:	7

Table 6

Summary of 128 Students' Stratifications

| Sex: | Female: | 72 |
| | Male: | 56 |

| Age (average) | : | 10.3 |

Grade	3:	1
	4:	9
	5:	56
	6:	62

| Average Years in Town's School(s) | : | 5.0 |

community, a single whole class of students. The grades of the students were split about half between fifth and sixth. Their ages were about what would be expected, perhaps a little under average (notice, however, that 10 students were below Grade 5). If another assessment like this were to be done, it would probably not be important to ask the students their grade or age, since the administrators tell the NA the students' grade(s), and, except for a tiny percentage, all students in Grade 5 are 10 and in Grade 6 are 11. Stipulating the sex balance, however, would be important for the region assessed. Similarly, it was discovered that the students well represented their towns' school systems, since the average time spent in a town's school system was 5.0 years per student. This was an important item to ask for so that the NA could be sure that the students knew their whole elementary school system.

This concludes the stratification component of the analysis of data. As can be seen, the stratifications deemed important came out to be reasonably well-balanced, since no stratification in a given definer group stood out with much larger representation in numbers of participants. Therefore, the NA did not need to assign an extra percentage of priority weighting to, say, K-2 teachers over the rest of the teachers. It will be remembered that ethnicity was one of the stratifications deemed important in the original design. For the interview participants in the revised design, this stratification seemed negligible, and was not taken into account. Throughout most of the research on needs assessment, stratification as a principle

is a must, when there is a variety of role, experience, locale, etc., affecting the responses and thus the data to be used in some subsequent manner. Whether the NA successfully stipulates the stratifications in advance or obtains his/her stratifications ex post facto, those stratifications must be taken into account. In the present study, that account will be demonstrated in Chapter V when the writer as DM describes inservice educational program guidelines.

2. <u>Tabulating the responses</u>. In the 20 interview sessions, a total of 319 persons made a total of 6,480 respones. Of these, 4,530 were "positive" responses in Lists A, C, and D (the 1,950 of "negative" List B were used to generate the 1,224 "positives" in List C). The rationale for the directions has already been given in Chapter III. To summarize briefly, let it be said that the intent of the NA in asking for multiple lists of need definitions from each respondent was to make sure that the respondent had plenty of time and opportunity to plumb thoroughly the depths of his/her own thoughts of what was being asked--the needs of elementary teachers for valid, useful inservice educational programs. (In this context, "valid" refers to the way by which data for establishing the programs are obtained, namely, going to the needers themselves, or those close to them, to define the needs.) It can be seen from Table 7 that although the question for List A generated more responses than for any other list, the combined totals of Lists C and D (2,385) top that of List A.

Table 7

Total Interview Responses by Major Lists

List "A":	2,145
List "B":	1,950
List "C":	1,224
List "D":	1,161
TOTAL:	6,480

Table 8

Total Interview Priority Responses from Major Lists

Priority #	List "A"	List "B"[a]	List "C"	List "D"	Other
I	222		51	34	3[b]
II	177		74	52	5
III	164		76	53	6
IV	147		66	73	6
	TOTAL 710 (56% of all 1,276 responses)		267 (21%)	212 (17%)	20

[a]List "B" data are not given since it was the positive responses from which the priority data were chosen which the NA used in making up the questionnaire needs statements.

[b]This column refers to items which were written in but undecipherable. In addition, there were 67 blanks, where respondents simply did not complete the four priorities.

Thus, it can be assumed that the respondents still had a lot to say after they had completed the first list. This fact, by itself, justifies, it is believed, the necessity of asking more than a single stimulus question, in order to elicit a full set of responses. Whether to ask for _more_ than the types of responses used in this study might be a further question for a prospective NA to consider. To do so would of course extend the time for an interview, but it was thought that the 50-minute average for the interviews was about right. In this study, the respondents were generally ready to stop at the end. At the same time, various comments indicated to the NA that the _variety_ of elicited responses made "the time go pretty fast."

The ultimate intent of the directions that sought for as many positive responses as possible in the allotted time was to have a wide scope from which to select the four priority items. The separate communities to whom the NA sent back all the raw data of responses, after his analysis, were undoubtedly interested in _all_ the responses from the members of that community, not just the priority items.

Actually, the total responses of the individual respondents were interesting to this NA, also. A sample of one community's output can be found in Appendix O, in which the total responses of BA 9, BT 2, BP 13, and BS 14 are transcribed. If a separate tabulation were made of _all_ 6,480 responses, considering them of equal value in priority, it is certain that a great many more good ideas for inservice educational programs could be established. Some important and currently applicable ideas for programs that did _not_ emerge in the priori-

tization process described below, that are to be found in the four samples above, are these: (a) workshops in core evaluation processes, (b) vocational and career education programs, (c) physical education for the classroom, use of standardized tests, (d) problem-solving techniques, (e) pre-school child instruction, (f) morals guidance and instruction, and (g) care of live creatures and their use in classrooms.

But it was the four priority items in which the NA was primarily interested, for it was these specific items that would form the base for the selection of the 40 needs statements for the questionnaire. Accordingly, tabulations sheets were made up for each group. One sample is reproduced here in Table 9. The complete tabulation of all four definer groups can be found in tables in Appendix P.

As can be seen from Table 8, the priority items by no means came out of respondents' perceptions from List A alone, although the majority did. List A was the respondents' first thoughts and probably included their own definite personal perceptions more than any other list. But there was a large number of priority items chosen from List D, too, from items which the individuals "borrowed" from others in the small sharing groups.

The breakdown of Table 8 data by definer groups is shown in Appendix P. Note the percentages of priority items in Lists A, C, and D. The total average from Table 8 shows 56%, 21%, and 17% respectively. The teacher groups come closest to this average, with parents a close second. The administrators showed most reliance on their initial perceptions (65% from List A) and the students least

Table 9

Priority Items of 70 Teachers By Major Positive Lists

	Priority I	Priority II	Priority III	Priority IV	Total	% of all 280
List "A"	49	40	39	28	156	56%
List "C"	13	20	19	19	71	25%
List "D"	7	9	10	18	44	16%
Unanswered					9	
					280	

(47% from List A). Conversely, the administrators showed least desire to borrow ideas from fellow administrators for their priority items (9% from list D) and the students most (20% from List D). In the students' case, this result could be due to the fact that (a) they often had a harder time getting started on their responses than other groups, (b) they were more apt because of their age to rely on ideas of others, and (c) the List D items which they generated were most clearly in their minds when the directions came for prioritizing, and the students were more itchy to get through the interview process than others by that time.

Another aspect of the prioritizing which the NA wanted to analyze was the order in which the respondents chose them. Did they have their priorities so clearly in their minds that the first was at or near the beginning of their responses, the second a little farther away, and so forth? If so, this fact would indicate that respondents had a clearly-ordered progression in their minds ahead of time, as it were, and it might be an argument for asking for only the priority items. As it turned out, as can be seen in Table 10, no group had a majority of priority items in order; in fact, it was generally 2:1 against such an order, with teachers again coming closest to the overall average, and with administrators and students at the extremes in ratio. It could be argued from this that the administrators gave most thought in careful selection in their prioritizing process, and the students the least.

3. <u>Analyzing the priority items: general types</u>. Each group's
four priority items were transcribed word-for-word onto Ditto blanks,
a sample of which can be found in Appendix Q. After these were all
transcribed, the NA and his assistant went through the items to decide
which ones could be called "content" items and which "descriptive" or
"process" items.

The former category was used to pertain to items which, by the
nature of their wording, could be readily or reasonably easily trans-
lated directly into some kind of inservice educational program. An
example of this category is this one, from the Attleboro administra-
tors group, person #5, priority #III (hereafter abbreviated in such
wise: AA5-3): "Teachers effectively use higher order questioning
skills in learning situations." It was considered by the NA and his
assistant (each of whom made independent judgments, with compromises
where necessary) that this item was a "content" item because it was
clear that an inservice workshop could be devised directly dealing
with questioning skills--definition of them, examples, experiential
practice with them, and so forth. Similarly, the "content" category
was assigned to DP6-1: "Teacher has access to latest materials and
knows how to use the worthwhile ones effectively." This item is a
little more general than the first example, but it was still deemed
definitely a "content" item, since, after a search as to the nature
of the "latest materials" which a particular school system might need
to know about, an inservice program could address itself relatively
easily to such a topic. A third example is that of WT2-4: "School-

Table 10

Ordering of Priorities by Definer Groups

	Priorities in Order	Priorities Not in Order	Totals
Administrators:	9	40	49
Teachers :	25	45	70
Parents:	15	57	72
Students :	46	75	121
Undecipherable:	—	—	7[a]
TOTALS :	95	217	319

[a]These 7 all came from the Student's lists. It was often difficult to make out their priority markings. Sometimes they would use Roman numerals, as requested (and demonstrated); sometimes they would use Arabic numerals; sometimes they would use Roman numerals but inappropriately (as "VI" for "IV", two "III"'s and no "II"'s, etc.)

wide policies regarding disciplinary processes." Here the intent of
the person's definition of need seems to be toward the concept of
developing school-wide policies more than learning about effective
disciplinary methods. But it could be for the latter. In any case,
inservice programs for a specific community could be devised on either
aspect of the priority item.

The other category of priority items was the "descriptive" or
"process" one. It will be remembered from Chapter III, Part 3 (Com-
ponents: List "A", positive items) that there was ample leeway in
responses allowed by the NA. Although the stimulus question seemed
to be addressed to defining actual inservice programs, the directions
asked persons simply to write down everything they saw which indicated
that teachers' needs for inserivce educational programs were being met.
This does not say "write down the programs themselves," although it
does not disallow such a response. It does allow persons to describe
situations that occur because teachers already have fine inservice
programs. Or, it allows persons to define a process which is concomi-
tant to valuable inservice programs.

For example, BA4-3's priority reads as follows: "Budgets and
purchases reflect identified needs in a planned way." Such an item
is not readily translated into an inservice educational program for
elementary teachers. On the other hand, it does define a process
which the respondent thinks necessary to happen in order for inservice
programs to be effective, or, seeing it in terms of the directions, a
process which would naturally come about if school systems had insti-

tuted fine inservice programs already. Thus, the NA and his assistant agreed that this item was a descriptive-process item. Similarly, ST1-2 reads: "We are receiving cooperation from directors." This statement from a teacher means that the teachers of Swansea are being supported by administrators, presumably, in their inservice education efforts. This item was labeled descriptive-process also.

An example from the students in this category would be the response AS9-2: "It would be really nice to go to school every day." It will be remembered that the interview directions for students were different from those of the adults, in that the students' directions asked for a much more specific situation, an imagined classroom itself where the teacher was "doing and saying all the best things that a teacher could to make his/her class a wonderful, happy, and challenging learning experience forthe students." Thus, students tended to make more responses that fit into the descriptive-process category than the adult groups, like AS9-2 above. On the other hand, a student response that would be called descriptive-process might be seen as an item that could readily be translated into inservice education for teachers, such as SS7-2: "If one kid does something bad, that one kid is punished." Several other students from different communities made similar responses. They all clearly indicated to the NA a need for inservice education on effective, appropriate, fair disciplinary techniques. Therefore, this response was labeled "content."

As can be seen from the sample Ditto sheet listing priorities in Appendix Q, the NA wrote a small capital "C" or "D" in the corner of

each of the four priority blocks for each respondent. These symbols, referring to the decision to adjudge the items primarily "content" or "descriptive," helped the NA in the subsequent decisions in developing the total prioritization of needs for the questionnaire. When the total breakdown of these items was computed (see Table 11), it was interesting as well as surprising to note that the definer groups which had the most "content" items per respondent was the parents (53% of their total priorities). Of course, both the administrators (46%) and teachers (45%) were fairly close seconds. It was understandable that the students should have had only 23%, again because of the kind of directions which prompted their responses.

4. <u>Analyzing the priority items: designating the needs categories</u>. The next step in the analysis process was to narrow down the priority items by major categories. It was determined to focus primarily (at least at first) on the priority items labeled "C" (Content) on the lists. The rationale for this was two-fold: (a) there were almost 500 "C" items to consider as it was, and since the plan was to synthesize the interview priority items into forty needs statements for the questionnaire, the "C" items alone seemed initially ample; (b) as explained above, the "C" items were those which could be more readily translated into inservice educational programs, and since the final purpose of the study was to use the prioritized data in formulating such programs, it seemed appropriate to concentrate on statements that focused on content of programs rather than merely descriptions of their phenomena.

Table 11

"Content"(C) and "Descriptive-Process"(D) Items by Definer Groups

		(49) Administrators	(70) Teachers	(72) Parents	(128) Students	(319) Totals
Content Items (Percent of total	:	90	126	153	117	486
priority responses)	:	(46%)	(45%)	(53%)	(23%)	(42%)
Descriptive Items	:	100	124	110	334	668
Unanswered Items	:	6	30	25	61	122
TOTALS	:	196	280	288	512	1,276

Accordingly, the NA and his assistant began categorizing the
"C" items. A chart approximately 36" X 24" was made, the first of
whose columns left ample space to record the names or descriptions
of the categories. Following this column were 20 more columns, corres-
ponding to the four definer groups in the five communities. These
were labeled AA, BA, DA, SA, WA / AT, BT, DT, WT / AP, BP, etc.--five
columns each for administrators, teachers, parents, and students. As
the items were read off, a decision was made as to the name of the
category (Better Parent-Teacher Communications, Individualized Instruc-
tion, New Instructional Techniques, Developing Positive Self-Concepts,
Evaluation and Reporting, etc.) and these were listed in order as the
items suggested them. The list of the 56 categories may be found in
Appendix R. Then, as each priority item fell into a certain category
or demanded a new category of itself, the NA wrote in a symbol in one
of the 20 definer-group columns designating the person and item re-
sponsible. In the AA column, for instance, in line with Category #14
(New Concepts of Child Development) could be found at the end of this
process the symbols 2-1, 4-3, 5-2, showing that Attleboro administra-
tor #2 had this item as his first priority, administrator #4 his
third priority, and #5 his second. Some categories had none, or one,
or two symbols from a group; some had as many as eight or nine.

Here is an example of how the NA generated a category. The three
priority statements which were considered to be representative of
Category #14 (New Concepts of Child Development) were these:

AA2-1: The following areas are well-understood by all teachers: apropriate objectives; diagnosis; prescribing; intellectual, emotional, social and physical development; evaluative techniques; learning styles; varied instructional techniques.

AA4-3: Programs are continually evaluated in light of environmental, social, or learning changes, with modifications made in light of assessed needs of pupils.

AA5-2: Teachers know the stages of child development and organize appropriate learning tasks (developmental tasks) for children.

Note that only a portion of each citation above fits the category; for instance, in AA2-1: "intellectual, emotional, social and physical development"; in AA5-2: "Teachers know the stage of child development." Administrators as a group tended to put multiple ideas in one priority item. When this occurred, the NA decided whether to consider the item primarily focused on a single need category or to consider that the response was so divided as to be appropriate to another category, or other categories, as well. In the first citation above, for example, the decision was to consider the data as pertinent to several other categories besides #14, namely #6 (Individual needs), #7 (Classroom grouping), #10 (Motivation), #11 (New instructional techniques), #26 (Affective needs), #30 (Health instruction), and #49 (Evaluation techniques). This item was noted here as an extreme example of multiple placement. The great majority of items found a simple one-to-one correspondence in a category. The third citation above, AA5-2, was considered to fit only a single category; even though the concept of organizing appropriate learning tasks for children seems to be a worthy need category, an inservice program

about new concepts of child development would likely interest itself not just in theory but practical applications, too, and the respondent's "appropriate learning tasks" were seen to be closely connected to such theory and practice.

When all the 486 "C" priority items were assigned to need categories, there arose the question as to how, if at all, to make use of the 668 "D" (Descriptive-Process) items. As was discussed above, the NA had at first decided not to include them at all. Upon further consideration, however, he decided to consult with Dr. Hutchinson again. Upon reading a number of typical "D" items, the latter made a pertinent suggestion: he thought that some of these items, if one considered that an inservice program could be devised around the process of a descriptive item, might be considered valuable grist for the mill.

For instance, one of the need categories generated from the "C" items, #35, was phrased as follows: "Teachers sharing with teachers—team teaching—grade level conferences." Upon reconsideration of the "D" items, the NA discovered that quite a few of these items, formerly thought to be descriptive, could be fitted into this category. AP6-1 said, "Teachers all pulling together to find solutions for classroom problems." DT20-2 said, "More interaction among teachers in specific subject areas." WA6-4 said, "Regularly scheduled grade level meetings . . . ." All these seemed to buttress the concept of teachers-sharing-with-teachers. Thus, many more symbol designations were added to this category. Actually, only two new categories were added to the

whole list because of reconsideration of the "D" items. In all, 172 "D" items were put into the chart, in red to distinguish them from the black-penciled "C" items. In text tables and appendixes which enumerate the symbol designations for a given category, the number of "C" items is listed first, followed by a slash (/), then the number of "D" items.

When the 36" X 24" chart was completed, the NA synthesized the data from it into a table which indicated the prioritization of the 56 categories. This can be found in Appendix S. A portion of this table is reproduced here, in Table 12, the ten top rankings. As can be seen, the totals of priority items are established by adding the totals from each definer group across from left to right. The totals by definer group was a necessary component of the table, as will be discussed. Each separate definer group had its own priority ranking within the 56 categories, and each was tabulated separately up to a certain number, from the data in Appendix S. These separate totals can also be found in Appendix S.

The separate totals were used as follows. Since the intent of the study was to develop inservice educational guidelines for elementary teachers, it was decided arbitrarily that, although it was valuable to ask other persons to help define those teachers' needs, the needs expressed by the teachers themselves should receive greatest consideration for making up the items in the questionnaire. It was similarly decided that the next greatest consideration should be given to the defined needs as expressed by the administrators.

Table 12

Ten Top Category Items By Definer Group Totals

Category #		Admin.	Teachers	Parent	Stud.	Totals
6	Individual needs	15/1[a]	10/5	25/6	2/0	52/12 = 64
35	Teachers share w/tchrs.	6/4	27/11	7/4	0/0	40/19 = 59
11	New instruct. techniques	8/1	19/1	11/2	1/0	39/4 = 43
1	Parent-teacher rapport	4/3	4/2	21/5	0/0	29/10 = 39
55	Planning inservice	0/11	0/24	0/3	0/0	0/38 = 38
8	Discipline	1/0	5/2	8/3	9/6	23/11 = 34
2	Teacher-admin. rapport	3/5	10/9	6/0	0/0	19/14 = 33
12	Curriculum planning	2/9	8/12	1/1	0/0	11/22 = 33
16	Positive self-concept	3/0	2/0	11/0	11/3	27/3 = 30
7	Classroom grouping	5/0	3/0	3/0	13/1	24/1 = 25

[a]The numbers after the slash marks refer to the "Descriptive-Process" items
that were added later.

In the same fashion, parents were considered next in importance, and students last. Therefore, a percentage breakdown was established: 50% for the teachers, 25% for the administrators, 15% for the parents, and 10% for the students. Applied to the 40 needs statements that were to be developed for the questionnare, this meant that the following divisions would be made: teachers--20, administrators--10, parents--6, and students--4.

The NA took the teachers' prioritized items and extracted the top 20 and temporarily assigned these to the teachers. Then he took the administrators' prioritized items. At this point, it was clear that, if one simply took the top 10 of the latter, there were several repeats from the teachers' list. It was thus necessary to go down the administrators' list farther in order to find 10 new items that were not already represented by the teachers' list. A similar adjustment had to be made for the parents' 6 and the students' 4. In Appendix S may be found which categories were consigned to each of the four definer groups. Of course, the overall totals of even the smaller representatives were higher because of their being chosen by members from other groups. Again, these overall totals can be seen in the lists in Appendix S.

5. <u>Making up the questionnaire items</u>. By now, the 40 prioritized needs categories had been designated. The problem at this point was how to turn these into needs statements for the questionnaire. The process decided upon by the NA was for him and his assistant to take them one at a time in order--the teachers' 20 items first, administra-

tors' items next, and so forth. All the prioritized statements repre-
senting a given category were read aloud, verbatim from the Ditto lists
referred to above (beginning of Step 3), in order to sense the exact
wording by the respondents. This review of the statements by respon-
dents sometimes took a long time, as in the case of the top overall
ranking items. Ten of them, for instance, were represented by 25 or
more statements. Nineteen, however, were represented by 10 or fewer
statements. For each item, the NA and his assistant agreed upon a
certain phrase, long or short, which synthesized the priority state-
ments.

An example of this process can illustrate the procedure involved.
Category #37 was labeled "Innovative Programs." The category had
been designated from the priority responses AA2-4, BA3-2, WA4-1,
SP11-1, and DT7-2. These read as follows, respectively:

Teachers' growth is continual and positive. They are more
likely to become open-minded toward innovative programs
and philosophies.

Curriculum . . . strong, basic program with innovative,
creative, student-centered supplements.

Students reacting favorably to innovative and imaginative
classroom programs because teachers are excited and enthu-
siastic about them.

Innovative and imaginative classroom programs.

More innovative programs, enriched standard programs, better
coordination of programs--thus more success by students.

Innovative materials or techniques should be explored.

The second item above was only partially transcribed because, like
another administrator's item quoted earlier, this one was full of

many priority items that fit other categories. In working these priority statements into a single phrase--and in general the same procedure and criteria were used for each of the other 39 needs statements--these criteria were considered: (a) make a noun phrase with the key expression being a common noun or a gerund; (b) keep it relatively short (in the 40 needs statements the longest was 14 words, the shortest 2, the average 6 to 7); (c) reflect the majority of pertinent respondents' items; (d) use as many key words verbatim as possible that were used in the majority of respondents' items; and (e) make the phrase simple and direct, with vocabulary common to the language of elementary school educators. Thus, in the sample above, the fourth one, as given, seemed to fit these five criteria, and it was so inscribed as #35 in the questionnaire (Innovative and imaginative classroom programs).

Thus, all 40 needs statements for the questionnaire were generated in a similar manner. Then the NA, using a random numbers table, randomly ordered the statements, printed the questionnaire, and disseminated it to the 700 elementary teachers of Bristol County, as discussed in Chapter III.

Part 3 Analysis of the Data From the Questionnaire

The questionnaire was disseminated by the Bristol County Teachers' Association. Shortly after the schools' 1975 Christmas break started, a substantial portion of the questionnaire had been returned and the NA was able to start his analysis.

A total of 277 questionnaires were returned at this time. This was 40% of the number sent out. In order to get some sense of how the non-respondents might have voted, to see if there was any major divergence in the data, the NA requested Mr. Paul Brouillard of the B.C.T.A., on January 5, 1976, the day school classes began, to ask his local representatives to make one more plea to the elementary teachers in the randomly selected towns to respond to the questionnaire if they had not done so the first time. The results were disappointing. Two questionnaires came back in response. As of January 14, there were no more, and none of the towns is more than a day's first-class mail away from S.M.U. The NA considered one major factor as an explanation: the long Christmas vacation break. It is altogether likely that the teachers, tired and anxious to get away from school after the long fall term, simply disposed of the questionnaires if they did not answer them right away, and all of the teachers were in possession of the disseminated questionnaires a week to ten days before the Christmas break. It will be remembered that the B.C.T.A. had posters up in the teachers' rooms as an added "prod" about Monday of the last week of school. But the last day--it is clear to this writer as a teacher himself what happened to all the odd papers on teachers' desks. They were simply thrown away.

In other words, the timing was inappropriate for follow-up purposes, a factor that was not foreseen by this NA. The research on needs assessment questionnaires, whereas very helpful in other ways, had not posed any problems on follow-up of this nature. Another ex-

planation beyond inappropriate timing is that the representatives did not get the word out to the teachers as requested. But since the B.C.T.A. officers had acted so responsibly in the first dissemination and had desired the data to be as full and valid as possible for their own purposes, the NA tended to discount the latter explanation. Thus, it was the 40% of the total possible that was analyzed. The analysis of data from the questionnaire was accomplished in five steps:

1. <u>Making the tabulations: demographic information</u>. After the 277 envelopes were opened, the questionnaires were piled in random order and numbered consecutively 1-277. There had been no attempt made, either directly or indirectly, to ascertain which respondents came from which sampled community. The NA had devised a Ditto tabulation sheet to record the responses. A sample of this sheet (Questionnaire Tabulation Sheet #1) may be found in Appendix T. It is a copy of one of the 20 such tabulations that were initially filled out in the analysis. Its contents illustrate many of the points to be discussed below.

Tabulation Sheet #1 had spaces for the recording of data from 14 respondents. In multiples of 14, the sheets were numbered 1-277 to correspond to the numbers on the questionnaires. Piles of 14 questionnaires with their appropriate tabulation sheets were paper-clipped together. Then the NA and his assistant took each pile and recorded responses as follows. First, the demographic information was taken from the top of each questionnaire, and three notations were made at the left, surrounding the printed number of the respondent:

his/her grade level (K-2, 3-4, 5-6, Special) in the top right-hand corner of the block; the years of experience (1-4, 5-9, 10-15, 15-over) to the left of the printed number; and a capital letter (U--urban, N--non-urban) in the lower right-hand corner, to indicate majority locale of experience.

Although the great majority of respondents filled out all the information requested, it was surprising to the NA to see how many still did not. As can be seen from the sample in Appendix T, there are a number of question-marks (?'s) in place of the requested designations. These marks indicate where respondents simply left out the information. Of the possible 831 notations for this information (3 X 277), 11 persons omitted grade level, 43 omitted years of experience, and 37 urban or non-urban locale. Of these, 9 persons failed to record any information at all, and 19 omitted two of the three designations.

Two reasons might explain the 9 who failed to record any information at all: the persons failed to see the request for the information or were in a hurry to "do their duty" and complete the questionnaire. The majority of these 9 had the minimal number of items checked off, for instance. One reason seems to explain the latter 19: these respondents, having checked off their grade level, assumed that that was all they had to do and looked no farther. Every one of these 19

checked grade level only, the first designation, omitting the second two categories. What explains why those who filled out two of the categories but not the third is not clear. For the remaining 9 who did not fill in the U-N category (37 less the 9 and 19 above) a partial explanation might be that the respondents (a) did not understand the request or (b) felt that their experience was about half-and-half and thus did not feel warranted in checking off a majority figure. As it happened, two other respondents did note that they had had half-and-half urban and non-urban experience.

Table 13 shows the breakdown by categories that were recorded on Tabulation Sheets #1. As can be seen, there is no real over-balance anywhere, except of course in the disappointing numbers of persons who failed to register certain of these items. The useful-ness of this demographic information will be demonstrated in Chapter V when the writer as DM discusses inservice education guidelines, according to specific stratifications of the proposed clients. Ways to improve upon the questionnaire's effectiveness will also be found in the evaluation part of Chapter V.

2. Making the tabulations: the special cases. As can be seen from the directions for the questionnaire (see sample questionnaire in Appendix K), persons were asked to do three things: (a) put a check by items which they saw as a need for themselves as elementary school teachers, (b) put a cross by items in which, if inservice edu-cational programs were offered, they would participate, and (c) put a circle around the five most important of the latter. As in the

Table 13

Questionnaire Demographic Information:
Numbers of Respondents Within the Stratifications

	K-2	3-4	5-6	Special	(?)	Total
GRADE	80	67	74	53	11	285[a]
	1-4	5-9	10-15	15-Over	(?)	
YEARS EXPERIENCE	72	81	42	40	42	277
	Urban	Non-Urban			(?)	
LOCALE	121	119			37	277

[a]Four were counted twice each, since they specifically registered themselves as K-2 and 3-4.

directions for the group interviews, the intent of the questionnaire directions was not only to give respondents enough scope and opportunity to plumb their thoughts on the 40 needs statements but also to force them, in the limited time which they expected to spend on the process, to so examine their thoughts that they would not simply jot down the few pressing items that might appeal to them but would select and focus and choose carefully. It was expected that there would be more checks than crosses, therefore, and more crosses than circles. This was generally so. As might be expected, moreover, when a respondent put a cross by an item, he/she also put a check by the same item.

On the 20 Tabulation Sheets #1, then, the NA and his assistant recorded the various kinds of responses. Although, again, the great majority of respondents followed the directions in regard to both the specific requests of the directions and to their intent, there were a number of exceptions. These were noted as such in the far right column of each tabulation sheet.

The exceptions generally fit two categories: Not following the directions, and making a noticeably greater number or smaller number of marks throughout the questionnaire than the majority of respondents. The two ways of not following the directions were (a) transcribing a number of circles different from the requested five, and (b) returning the questionnaire completely blank. The six items in the second category were: (a) making a mark by every one of the items; (b) making marks by all but a very few items; (c) putting no crosses at all; (d) putting five or fewer checks and crosses; (e) putting circles

but no checks and crosses; (f) having a blank on the back side of the questionnaire (a logistical error, the fault of the questionnaire printer and the NA). Table 14 shows the numbers of respondents fitting each of these categories. The most disappointing category was considered the large number of persons who failed to prioritize their responses by not encircling any items. Whether they simply disregarded the directions (specifically printed twice on the questionnaire, at beginning and end) or were in too much of a hurry is uncertain. Actually, over half of this number responded fairly well to the items in other ways (checks and crosses).

Besides these exceptions to the general trend of responses, there were 14 special notes, messages, comments, etc. These are recorded in Appendix U for the interested reader. They can be summarized here under these headings: (a) stressing the importance to the respondent of certain items; (b) adding clarification to the meaning of an item for a respondent; (c) explaining the manner of response; (d) a personal message complimenting the use of the questionnaire; and (e) miscellaneous.

3. <u>Making the tabulations: summarizing the responses</u>. The great majority of the questionnaire respondents, however, did just what was requested. The next procedure was to summarize the respondents. Another Ditto blank was employed, a sample of which may be found in Appendix T, Questionnaire Tabulation Sheet #2. One such sheet was used for each group of 14 respondents, as for Sheet #1. On Sheet #2, for each questionnaire item the NA recorded separately

Table 14

Extra-ordinary Responses to the Questionnaire
By Respondents

	None	1	2	3	4	6	7
NUMBER OF CIRCLES	17	2	2	7	6	8	1

All Spaces Filled	Almost all Filled	Five or Fewer Items Noted	No Crosses at all	Circles, but no Checks/Crosses
2	2	12	2	2

Blank on Back	Completely Blank
4	2

the number of checks, the number of crosses, and the number of circles. Then, assigning point values to each category of response, the NA recorded total points for each questionnaire item from the given group of 14 respondents.

This point value had been arrived at after consultation with Dr. Hutchinson. In the Coffing-Hutchinson NAM, it will be remembered, the questionnaire had been devised on a check-circle basis only, with checks counting one point each and circles ten points each. In the present questionnaire, however, a new category of response had been devised, as a means of adding more information for the NA-DM, that is, in regard to measurement of need fulfillment (see the discussion in Chapter III, Part 3). It was decided, since the majority of respondents would put a circle on a crossed item and would put a cross on a checked item, that a simple 1-2-4 point value system would serve to differentiate the various emphases sufficiently. This would mean that a checked item would get 1 point, a checked-crossed item 3 points (1 plus 2), and a circled item 7 points (1 plus 2 plus 4). This value system was used in all cases but for the exceptions, which were tabulated as written. That is, if a respondent circled an item but had no cross inside the circle, the point score awarded was 4, not 6 as it would be in most cases, since by the directions a respondent should circle only X-ed items. Similarly, some respondents circled checked items; the NA gave these items a score of 5. The eventual decisions on how to use the data would be based primarily on ranking of items, so the point spread scored a fair division. To make sure, the NA com-

pared the total score ranking based upon the 1-2-4 value rating and that based upon a 1-2-8 rating (to make it more like the spread in NAM); in this comparison the first 20 ranks were almost the same, with only three merely exchanging positions and one moving two ranks away.

When the 20 copies of Tabulations Sheet #2 were completed, a total from the 20 sheets was made up, based on the 1-2-4 ratio.

4. <u>Analyzing the responses by stratification</u>. The next part of the process, probably the most important for the writer as DM in creating inservice program guidelines, was tabulating the priority items by stratifications components. First, the priority items for the whole group were added up, that is, for each of the 40 questionnaire items the number that were circled. Second, the given numbers (from 1-277) of the respondents who had registered themselves as teaching K-2 were recorded; a similar recording was made of the numbers of respondents registering Grades 3-4, 5-6, and Special; experience in years 1-4, 5-9, 10-15, 15-over; and major locale Urban and Non-urban. Third, the number of circles for each of the 40 questionnaire items was tabulated for each of these ten stratifications. Fourth, the entire 12 categories were ranked 1-40, Rank #1 being the questionnaire item receiving the largest number of circles (or point scores) in each case. In Appendix V may be found a table with these rankings for comparison. A final ranking was added, the checked items alone.

It was fascinating for the NA-DM to analyze the completed table of rankings. The following examples are among the most interesting:

(a) Two questionnaire items clearly stand out as overall favor-
ites (#3 and #17) with three others close on their heels (#27, #37,
and #40). Number seventeen was probably the most expected high
scorer of the five: "Training in diagnosing and prescribing for
reading difficulties." Number twenty-seven and #37 were also likely
high scorers: "Instruction in proven and new methods of discipline"
and "Recognition and diagnosis of learning disabilities." Number
forty was at first a surprise to the NA, in that it should score as
high as it did ("More back-to-basics in teaching methods"); although
the current trend in education seems to be moving in that direction,
it was not thought that elementary teachers would rank it near the
top of the list. The real surprise was #3, however: "Alternative
supplementary projects and games for students who have finished
regular assignments." This stated need did not seem to be in the
same category as back-to-basics, learning disabilities, and diagnos-
tic reading, and yet as Rank #1 was well above Item #17 in total
score (714-669).

(b) Items #28, #8, #14, #25, and #21 were the next set of favor-
ites, "Promoting a positive self-concept in children," "Motivational
techniques," "Updated instruction on new educational techniques and
materials," "Teaching games . . . ," and "Teachers on same grade level
sharing ideas . . . ," respectively--all but one focused directly on
helping children learn more effectively.

(c) The next two in rank both deal with understanding the needs
of individual students: #9 (Individual needs) and #30 (Special needs

children). It was thought that #30 would rank higher than Rank #12 on total priorities (it was only Rank #17 in total checks-crosses-circles), since it was addressed to the requirements of Massachusetts Law 766. Certain stratifications ranked it higher, to be sure, the most logical being the "Special" teachers and the ones with 10-15 years of experience, who put it Rank #5.

(d) "Instruction in metrics" (Item #23) ranked fairly high (under Column 3 of Appendix V, Total circles) on total priorities (Rank #13), although K-2 teachers were low in their opinion of its importance (Rank #35) (discussed in Part 1 of Chapter V).

(e) The next four in rank from the priorities list were #1 (more student-directed learning), #32 (real-life learning experiences), #38 (affective needs of children), and #4 (different kinds of grouping), all fairly consistently focusing on open education principles.

(f) The last three rankings in the top 50% were #18 (the gifted child), #11 (first-aid instruction), and #36 (observation, listening, and questioning skills), more or less in no relationship to each other or to the other groups.

(g) At the bottom of the rankings was #13 ("Effective planning for varied, ongoing inservice programs"). It might have been rated low because teachers found it hard to conceive of this item as an inservice program by itself. The only group which mitigated its low position, by ranking it #10, was the teachers with over 15 years experience. Number twenty-six was next lowest, another surprise for the writer ("Increased communication between teachers and parents"),

since the priority rankings from the interviews had made it Rank #4. It may be that the socio-economic character of the sampled school systems for the questionnaire militated against parents "interfering" with the business of educators. This certainly was not the case in the majority of communities interviewed, where there was generally a supportive and involved parent organization.

5. <u>Making the final analyses</u>. Two more points about the questionnaire data should be made here. First, there was considerable disparity between the rankings of questionnaire items and those same items as needed categories among the interviewees who generated them. In Appendix V may be found a comparison between the single rankings of total priority items from the questionnaire and the priority rankings from interviews. As can be seen, 21 of the items were more than 10 rankings apart (the priority rankings of the interviews were scaled to a 1-40 level, to make the comparisons logical). Only 6 of the top 50% were within 4 ranks of each other (Items #1, 3, 14, 27, 28, and 38) and 2 in the bottom 50% (Items #35 and 39). Three explanations for this general discrepancy may be these: first, and probably most important, not every one interviewed reacted to every item. Second, as was suggested above concerning Item #26, the overall background and character of the respondents could have been considerably different from those of the questionnaire respondents. Third, the items in the interviews were generated (a) by a great many different <u>kinds</u> of persons besides elementary school teachers (administrators, parents, and students), who together were responsible for half the needs categories.

The final point about the questionnaire data centers about the interesting comparisons that may be made among the various stratification groups. In some cases there was considerable disparity. For instance, to take an item that has not been discussed so far, note the rankings in the table in Appendix V of Item #22 ("Learning by-doing, active participation by teachers in inservice programs"). As one reads across from left to right, one sees these rankings: total check-cross-circle: Rank #16; total priorities, #23, total checks: #12; K-2: #18; 3-4: #10; 5-6: #30; Specials: #29; years experience 1-4: #25; 5-9: #17; 10-15: #30; Over-15: #8; Urban: #22; Non-urban: #25. They go through a range from #8 to #30. For teachers in Grades 3-4 with 15 years of experience or more, it is a relatively high priority; for teachers in Grades 5-6 with 10-15 years experience, it is a relatively low priority item.

Another kind of comparison may be made. In Tables 15, 16, and 17 are found each of the top ten and bottom ten priority items registered by each of the stratifications of teachers. Abbreviated names of the items are used here. Thus, for example, teachers in K-2, 3-4, and 5-6 voted "Reading difficulties" and "Supplementary projects" as their #1 and #2 priorities. But teachers in the Special group voted "Positive self-concept" and "Motivation" as theirs. Indeed, the Specials did not include "Supplementary projects" anywhere in their top ten, and put "Reading difficulties" down at #8 ranking. This difference between the regular classroom teachers and the specialists may be explained by the fact that the specialists would have no need for supplementary pro-

Table 15

Top and Bottom Ten Priority Items by Grade Stratifications

Ranking #	K-2	3-4
1	Reading difficulties	Supplementary projects
2	Supplementary projects	Reading difficulties
3	Back-to-basics	Learning disabilities
4	Learning disabilities	Back-to-basics
5	Teaching games	Discipline
6	Discipline	Paraprofessional aid
7	Positive self-concept	Student-directed learning
8	Teachers sharing w/ teachers	Metrics
9	Art-drama-music-crafts	Motivation
10	Individual needs	Learn-by-doing inservice
31	Evaluation techniques	Curriculum guides
32	Children help children	Evaluation techniques
33	Curriculum guides	Art-drama-music-crafts
34	A-V materials	Child development
35	Values clarification	Assessing teachers' needs
36	Metrics	Rapport w/ administrators
37	Teacher-parent rapport	Integration of subjects
38	Integration of subjects	Field trips
39	Observation, etc., skills	Teacher-parent rapport
40	Rapport w/ administrators	Planning inservice

	5-6	Special
1	Supplementary projects	Positive self-concept
2	Reading difficulties	Motivation
3	New educational techniques	Learning disabilities
4	The gifted child	Affective needs
5	Metrics	Individual needs
6	Practical application	New educational techniques
7	Back-to-basics	Special needs children
8	Discipline	Reading difficulties
9	Positive self-concept	Child development
10	Observation, etc., skills	Rapport w/ administrators
31	Child development	Learn-by-doing inservice
32	Learn-by-doing inservice	Teacher-parent rapport
33	Field trips	The gifted child
34	Curriculum guides	Curriculum guides
35	Assessing teachers' needs	Science materials
36	Rapport w/ administrators	Innovative programs
37	Bilingual children	A-V materials
38	Paraprofessional aid	Planning inservice
39	Teacher-parent rapport	Open classroom
40	Open classroom	Integration of subjects

Table 16

Top and Bottom Ten Priority Items by Experience Stratifications

Ranking #	1-4	5-9
1	Reading difficulties	Supplementary projects
2	Motivation	Reading difficulties
3	Supplementary projects	Teaching games
4	Teaching games	Discipline
5	Positive self-concept	Learning disabilities
6	Learning disabilities	Affective needs
7	Discipline	Back-to-basics
8	Individual needs	Positive self-concept
9	Special needs children	Motivation
10	Health instruction	Student-directed learning
31	A-V materials	Paraprofessional aid
32	Rapport w/ administrators	Bilingual children
33	Open classroom	Curriculum guides
34	Paraprofessional aid	Assessing teachers' needs
35	Teacher-parent rapport	Science materials
36	Evaluation techniques	Classroom grouping
37	Integration of subjects	Field trips
38	Assessing teachers' needs	Teacher-parent rapport
39	Planning inservice	Special needs children
40	Curriculum guides	Planning inservice

	10-15	Over 15
1	Supplementary projects	Classroom grouping
2	Back-to-basics	Student-directed learning
3	New educational techniques	Back-to-basics
4	Reading difficulties	Supplementary projects
5	Motivation	New educational techniques
6	Special needs children	Metrics
7	Positive self-concept	Discipline
8	Curriculum guides	Reading difficulties
9	Individual needs	Learn-by-doing inservice
10	Teachers sharing w/ teachers	Health instruction
31	Art-drama-music-crafts	Values clarification
32	Learn-by-doing inservice	Rapport w/ administrators
33	Paraprofessional aid	Teaching games
34	Innovative programs	Teacher-parent rapport
35	Assessing teachers' needs	Curriculum guides
36	Planning inservice	Science materials
37	Teacher-parent rapport	Integration of subjects
38	A-V materials	Bilingual children
39	Science materials	Field trips
40	Integration of subjects	Affective needs

Table 17

Top and Bottom Ten Priority Items by Locale Stratifications

Ranking #	Urban	Non-urban
1	Reading difficulties	Reading difficulties
2	Supplementary projects	Discipline
3	Learning disabilities	Supplementary projects
4	Back-to-basics	New educational techniques
5	Discipline	Positive self-concept
6	Positive self-concept	Back-to-basics
7	Motivation	Motivation
8	Children help children	Teaching games
9	Classroom grouping	Individual needs
10	Practical application	Student-directed learning

	Urban	Non-urban
31	Child development	Curriculum guides
32	Open classroom	A-V materials
33	Assessing teachers' needs	Field trips
34	Integration of subjects	Science materials
35	Rapport w/ administrators	Rapport w/ administrators
36	Curriculum guides	Open classroom
37	Field trips	Planning inservice
38	Paraprofessional aid	Assessing teachers' need
39	Teacher-parent rapport	Teacher-parent rapport
40	Planning inservice	Integration of subjects

jects, since they do not have regular students; also, although they rate "Reading difficulties" fairly high, it is probable that many of them are not involved in teaching reading or remedial reading at all, or already have sufficient skills if they do, whereas all regular classroom teachers teach reading considerably.

A further comparison is this: teachers with little experience seem to need most those programs that will help them work with individual children (seen in the first nine rankings of Experience Level 1-4 and all but #7 in Level 5-9). The older teachers have some of those needs, too, but rate other items often, those that broaden their experience (Back-to-basics, New educational techniques, Curriculum guides, Classroom grouping, Teachers sharing with teachers, Metrics, Learn-by-doing inservice, and Health instruction). "Affective needs" is ranked #6 by Level 5-9, #40 by Over-15. "Teaching games" is ranked #4 by Level 1-4 and #3 by Level 5-9, but #33 by Over-15. "Classroom grouping" ranks #1 by Over-15, but #36 by 5-9. On the other hand, all levels of experience rank somewhere within their top ten "Reading difficulties" and "Supplementary projects," and three of the four levels have four other items in common.

Within the locale stratifications, both Urban and Non-urban have six of their respective top 10 items in common, and 8 of their bottom 10 in common. This fact seems to point up that this particular stratification is relatively unimportant, as far as current needs of elementary teachers of Bristol County are concerned. And it will be remembered

that there was a very even balance in numbers responding for these locales (of those indicating locale, 121 marked "Urban," 119 "Non-urban").

A final point may be made by comparing all the major stratifications, top and bottom 10, in the questionnaire. Only 13 of the remaining 30 items are <u>not</u> represented by any stratification group in the top 10, and only 14 in the bottom 10. In other words, there are a wide range of choices in both categories. Only one item (#12 "Aiding children at home") is not represented in either category.

This completes the analysis of data from the 20 group interviews in five Southeastern Massachusetts communities and from the questionnaire responded to by 277 Bristol County elementary School teachers. There seemed to be ample material for a DM to use in making up guidelines for inservice educational programs for the county's elementary teachers. Those guidelines will form the content of the first part of the next and final chapter of the dissertation.

C H A P T E R V

USE AND EVALUATION OF THE NEEDS ASSESSMENT DATA

This final chapter of the dissertation (a) outlines proposals for potential inservice educational programs arising out of the analysis of data from the Bristol County questionnaire; (b) provides an evaluation of the total project, its strengths, limitations, and suggestions for certain changes; and (c) gives recommendations for further work evolving from this study.

Part 1 Inservice Educational Program Guidelines

<u>Summary of the need for reform in inservice education</u>. Early in the first part of Chapter I the term "inservice education" was defined as follows:

> "Inservice education" is used in this dissertation to refer to formal and informal education programs, courses, workshops, conferences, etc., whose purpose is to inform, train, or give experiential opportunities to professional educators in order for them to grow in knowledge and expertise and thus to become better educators.

The need for valid, useful inservice education of teachers was derived from numerous sources. These sources generally stressed that, for appropriate reforms to take place in American public education, reforms that would make for better education of the diverse and complex

student body, the educators themselves have to be re-formed in some way. As Wagstaff and McCullough (1973) say:

> . . . schools will not change unless educators change, not once but continually. Thus, the continuing education of educators themselves is at the heart of . . . school reform . . . (p. 1).

Preservice education of teachers can no longer be the beginning and the end of teacher education.

The sources also stress the need for increased involvement of the teachers themselves in the whole process of inservice education. Instead of a few administrative executives making up the specific programs and the rules for attendance, the teachers should help plan the programs. Much of the complaint in regard to inservice programs has come from teachers who regard them as irrelevant to their needs and thus an imposition on their time. With teachers' needs directly addressed and with teacher input as to kinds and locales of inservice programs, much of the friction associated with these programs can be diminished. If individualizing and student-directed learning is a viable reform in classroom instruction, it is certainly logical to extend the same benefit to teachers-as-students.

Thus, needs assessment as a means of determining actual, priority needs of teachers for specific inservice education has been defended as the best method of involving teachers in the first stage of their continuing education. The assessment project described in Chapters III and IV above is one such method. With its data decision-makers can devise inservice educational programs which should help elementary teachers of Bristol County, Massachusetts, to "grow in knowledge and

expertise and thus to become better educators." As has been explained, Bristol is the largest county in the region of Southeastern Massachusetts (50% of its population); it has a wide scope of different kinds of school systems (large cities to small villages); it has an extensive representation of the various ethnic groups common to the region (Portuguese, Blacks, Spanish, French, Italian, Greek). Since the data from the Bristol County questionnaire, moreover, grew out of definitions of need from persons throughout Southeastern Massachusetts, it is hoped that the inservice programs suggested in this chapter will be helpful to elementary teachers in the other counties as well.

Guidelines: prior considerations. In order to use the data from this study's needs assessment to best advantage, the writer as decision-maker (DM) proposes certain considerations. First, let it be said, the DM does not plan to suggest more than the barest kind of content of particular inservice programs. The burden for devising and implementing the programs themselves should be borne by the various specific decision-makers who might use these data, like the B.C.T.A., the Southeast Regional office of Education at Lakeville, the Division of Continuing Studies personnel at S.M.U., the superintendents of school systems, and the building principals and involved teaching staff of individual elementary schools. Certain persons like these have the requisite program preparation expertise and the knowledge of specific groups of teachers to implement useful programs.

The DM, however, can give several kinds of guidelines for implementing programs based on the needs assessment data. There were two

major categories of results from the data: (a) prioritized items suggestive of the nature of certain inservice programs, and (b) the ranking of these data by the 12 stratifications of overall priority listings, teacher grade level, teacher experience level, and locale. Guidelines for inservice programs, then, should be addressed to kinds of programs suited to these categories.

Guidelines: the top 50% prioritized needs, taken as a whole. To facilitate the first set of guidelines to be discussed, the DM decided to use only the first 20 rankings of questionnaire items, the top 50%, marked in the "X" column and also circled, with a rank score of 116 or above. That is, not only did respondents consider each item worth attending if it were made into an inservice program and considered it one of their top five such items in importance, but also enough respondents marked it thus to give it a score of 116 or better (the scores ranged from 296 for Item #17 down to 32 for Item #13). Table 18 lists these 20 items in rank order with abbreviated titles.

A helpful way to start using these data was found to be by categorizing the needs items as follows: those dealing with (a) general kinds of instruction for students, (b) general ways of helping students with their work, (c) specific techniques of handling students, and (d) special needs of particular students. Table 19 lists the abbreviated names of the items considered to fit each category. The rationale for selecting these categories came from examining the whole list in terms of student needs, as well as numbers and grade

Table 18

The Top 20 Questionnaire Items in Rank Order

Rank #	Item #	Abbreviated Name of Item
1	17	Reading difficulties
2	3	Supplementary projects
3	40	Back-to-basics
4	37	Learning disabilities
5	27	Discipline
6	28	Positive self-concept
7	25	Teaching games
7	8	Motivation
7	14	New educational techniques
10	21	Teachers sharing with teachers
11	9	Individual needs
12	30	Special needs children
13	23	Metrics
14	1	Student-directed learning
15	32	Practical application
16	38	Affective needs
17	4	Classroom grouping
18	18	The gifted child
19	11	Health instruction
20	36	Observation, etc., skills

Table 19

Categories of the Top 20 Questionnaire Items

Item #   Rank #

Category (a)
General kinds of instruction for students:

40	3	Back-to-basics
14	7	New educational techniques
23	13	Metrics

Category (b)
General ways of helping students with their work:

3	2	Supplementary projects
25	7	Teaching games
1	14	Student-directed learning
32	15	Practical application
38	16	Affective needs
4	17	Classroom grouping
18	18	The gifted child

Category (c)
Specific techniques for handling students:

27	5	Discipline
28	6	Positive self-concept
8	7	Motivation
11	19	Health instruction
36	20	Observation, etc., skills

Category (d)
Special needs of particular students:

17	1	Reading difficulties
37	4	Learning disabilities
21	10	Teachers sharing with teachers
9	11	Individual needs
30	12	Special needs children

levels of students who might benefit from their teachers' learning experiences in the appropriate inservice programs. Rationale for assigning specific items to each category will be made in Sections (a) through (d) below. As will be discussed later, moreover, a different DM could very well elect to categorize the same list of items in a different fashion. It is the principle of categorizing which is being illustrated here.

To begin to suggest kinds of inservice programs to match these categories appropriately, the following criteria were made, based on research in literature on inservice education and on observation of known programs in Southeastern Massachusetts: diversity of teachers participating in the programs, different kinds of persons preparing the programs, and various locations and times of their offering. There seem to be four major classifications here. Each fits one of the categories above:

(a) A wide diversity and large number of teachers, regardless of special stratifications; the programs designed and offered by such organizations as the B.C.T.A, the Fall River Education Association, the Southeast Regional Office of Education, and the education departments of state colleges; the programs offered in some large, centrally located building with facilities for mass presentations, at a time convenient to most teachers (evening, weekend, summer). To the DM, the kinds of inservice program needs listed under Category (a) in Table 19 seem to fit here. All three are large, region-wide needs, information about which could be presented to a large, diverse teacher population. For instance, every teacher at whatever

grade level or in whatever specialization is going to have to know the process of metrification. When this system of measurement is fully implemented in the United States, it will infuse every aspect of one's life. A State Department of Education might want to insist that all its teachers be instructed in metrics principles.

(b) A wide diversity of teachers but with certain restrictions as to grade level taught, experience, etc.,; the programs designed and offered by such organizations as under (a) as well as administrations of very large school systems such as Taunton or New Bedford; the programs again offered in a large central location, at a time convenient to the specific teachers interested. The programs listed under Category (b) in Table 19 seem to fit this kind of inservice program. The needs statements in this category are applicable to a large number of teachers in a region, but do not have the wide scope that items in Category (a) have. Certain ones are appropriate to certain segments of a region's teachers. "Supplementary projects," "Teaching games," and "Classroom grouping," for instance, would vary as programs, depending on their participants' grade level. Programs to meet these needs would probably best be given in sections—K-2, 3-4, 5-6, or at least Primary and Intermediate. Similarly, "Student-directed learning" has quite different techniques appropriate to the first-grader and the fifth-grader.

(c) A select number of teachers from a large area with a particular need to fulfill; the programs designed and offered by the same persons as in (a) and (b), with a carefully chosen moderator or in-

structor presumably expert in addressing the particular need; the program offered in some central locale or designated by the expert, at a time convenient to the expert and to the average teacher expected. As in Category (b), the needs under Category (c) apply to teachers from a large region, but these needs are becoming more specific to the needers. Many teachers are satisfied with their methods of discipline and motivation, for instance, even though all could probably benefit from further advice. For some teachers, improving the positive self-concept in children provides an overall philosophy of teaching itself, and they would want to attend programs on this subject. The concept runs across all stratifications. Attendance would be on the basis of felt needs, therefore.

(d) A select number of teachers from a small area, such as the teachers of a town's school system or from a particular school within a town, sometimes restricted to a grade level's particular need, to an experience level, etc., sometimes not; the program designed by the town superintendent, a building principal, an individual teacher or involved group of them, or various combinations of these; the program offered either at a centrally located school or in a particular school, usually on a release day for inservice education, or, if brief, right after school on a regular day. Whereas many of the items in Category (d) are needs of a great many elementary teachers, their implementation is particularly suited to a given school system or a single school itself, and often within a school to a restricted group of teachers. Although many aspects of "Reading difficulties"

could be presented in a program such as (a) above, what would be of
most help to teachers within a particular school would be ways to
work with specific reading difficulties, in a specific classroom or
reading group. There might be need to deal with a school-wide read-
ing system, newly introduced to take the place of a less useful one.
Or, as is constantly the case in Fall River, there might be an un-
foreseen influx of Portuguese immigrant children in the middle of
the school year; their reading problems would be quite specific
and not applicable to students even in an elementary school in the
next ward. The other needs items under this category have similar
application. They are all best addressed in a small, restricted
environment. Even the one that does not seem to affect students
immediately, "Teachers on same grade level sharing ideas on curri-
culum, current programs, and common problems," is most pertinently
addressed within a single school, or whole school system at most.

Such categorization, then, is one way of starting to deal with
the total list of needs statements from the respondents to the ques-
tionnaire. For any further use of the material in this dissertation,
it should be stressed that what is being illustrated and recommended
here is a system of effecting inservice programs, by grouping many
needs statements so as to match general types of programs feasible.
Presumably with a different set of needs statements, or with a DM
different from this writer with the same set of statements as found
in this study, the details of the classification process might be
entirely different.

A second guideline to consider is based on the aspect of available resources. The question may be asked by decision-makers (or, to use another term in the Coffing-Hutchinson NAM, information-users), "Which one(s) of these many pertinent needs should we address first?" In the case of the Bristol County questionnaire items, the top two needs are clearly "Training in diagnosing and prescribing for reading difficulties" and "Alternative supplementary projects and games for students who have finished regular assignments." Responding to these two top needs, it is quite possible that an information-user would have far less trouble providing workshops for as many as 1,200 teachers in "Supplementary projects" than providing helpful instruction for as few as 12 primary teachers in one school in solving "Reading difficulties."

Available resources are the key to a decision here. Questions to be answered are these: How much money do we have to pay resource persons as expert instructors, to rent space for workshops, to provide transportation for participants, to mail notices, to buy necessary materials? Who is available to help run inservice programs, to plan the many details, to do the necessary secretarial work? What kind of time can we allocate to a project like this—a full release day, half a day, an after-school period? What materials do we have available, and which ones do we have to locate, to borrow, rent, or purchase? Information-users at whatever level—the Southeast Regional Office of Education or the building principal—must consider resources before

deciding on the nature, scope, or indeed the very fact of an in-service program. As was said, resources might be perfectly adequate for 1,200 teachers on one program and not at all adequate for 12 teachers on another.

Closely allied to available resources is the prioritization process. This will be discussed in much more detail in the section below dealing with stratification of needers. Suffice it to say here that an information-user would want to initiate inservice programs for elementary teachers of Bristol County in "Supplementary projects" (Rank #2) before programs on "The gifted child" (Rank # 18). Even though both are in the top 50% of needs, both are in Category (b) (General ways of helping students with their work), and both might use approximately the same resources in their implementation, one clearly stands out as a need of twice as many teachers as the other. On the other hand, within the same category, in what order to address oneself to "Student-directed learning," "Practial application," or "Affective needs" would be a difficult question to answer if based solely on prioritization. They are all within 8 score points of each other, virtually tied although strictly ranked #14, #15, and #16 respectively.

Thus, considering the questionnaire data as a single body of prioritized needs statements, these guidelines have been suggested: (a) classify the statements in terms of the general nature and scope of their participants, the appropriate implementing bodies, and locations and times of implementation; (b) at whatever level one is as

an information-user, consider a range of available resources--money, persons, time, and materials; for no matter how needful a program might be, if there are few resources for implementing it, it cannot be put into useful effect; (c) within the classifications of needs as suggested in the first guideline and with a general knowledge of resources, consider the expressed prioritized needs of potential participants. As has been said several times before, there is no point in answering questions that have not been asked, or, in this case, addressing needs felt by only a few persons. Finally, do not consider that these three guidelines follow one another in any particular chronological order. They are interwoven, part of a single process.

Guidelines: the total list taken by stratifications. As was discussed in Chapter IV, Part 3, Analyzing the responses by stratifications, there were seen to be important differences in prioritized items depending on the grade level, experience level, and locale of teachers responding to the needs statements. Tables 15, 16, and 17 (top and bottom 10 priorities for each group) were supplied to facilitate comparisons among the various stratifications. From these tables and from the overall comparison of total list prioritization by stratification found in Appendix V, data may be used to help establish further guidelines for inservice programs.

Two classifications of inservice programs are immediately suggested by these data. First, it is obvious that certain kinds of teachers (by grade level, experience, and locale) will benefit from

certain educational programs more than others. After examining the top 10 prioritized needs in Table 15 of the four grade level stratifications, one can definitely state that all regular grade level teachers (K-6) favored programs in "Reading difficulties" and "Supplementary projects," these programs being ranked #1 and #2 by all of them. But the Specials considered only one of these in their top 10, ranking "Reading difficulties" #8. Similarly diversified, a program on "Learning disabilities" would be well-received by teachers in K-4 and by Specials, but not so by teachers in 5-6. This item was ranked #3 by 3-4 and Specials, and virtually tied for #3 by K-2. But 5-6 ranked it #21, not even in the top 50%. A third example is this. The Specials group wanted primarily programs on "Positive self-concept" and "Motivation." But for 5-6 "Positive self-concept" was #9 and for K-2 #7, and for 3-4 "Motivation" was #9. There was thus no clear-cut priority for all groups on these items, either.

Experience levels had their diverse priorities, too. None of the four had the same two top needs, as K-6 did. "Learning disabilities" was rated about #5 by levels 1-4 and 5-9 but nowhere in the top 10 by the two sets of more experienced teachers. Conversely, "New educational techniques" averaged #4 by 10-15 and Over-15 but nowhere in the top 10 by the two sets of less experienced teachers.

The stratification of locale, Urban and Non-Urban, were seen in the Chapter IV analysis to be remarkably similar, from the data in Table 17. Six items are common to the top 10 in both locales, and 8 in the bottom 10. As it happens, 6 items are also common to

both locales in the second and third groups of 10 rankings. In other words, these two stratifications, compared to each other, do not show the diversification that is true across either grade levels or experience levels.

To make up inservice programs on the basis of stratification data from the Bristol County questionnaire, then, an information user must take into account primarily the first two categories of stratifications and secondarily the urban, non-urban locales. Various combinations are suggested by the data in Tables 15, 16, and 17 and in Appendix V. In Table 20 may be found, first, the top 10 priority items from the questionnaire, matched with the stratification groups that would most likely attend inservice programs on them and those that would probably attend—therefore the groups that would presumably benefit most from such programs. The criterion for adjudging these groups was established as follows: if an item was ranked #1-#5 by a group, that group was considered as most likely to attend; if the item was ranked #6-#20, that is, anywhere else in the group's top 50%, it was considered that the group would probably attend.

As can be noted, the top 10 priority items, if made into inservice programs, would be heavily attended. All but three of the top 10 items included all stratifications in either "Most likely to attend" or "Probably would attend." Each of those three had only one stratification not ranking them in the top 50%.

Table 20

Tabulations of 20 Questionnaire Items: Persons by Stratifications
Likely to Attend Inservice Education Programs

Rank	Item	Abbreviated Name of Item	Most Likely to Attend			Probably Would Attend		
			Grade	Exper.	Locale	Grade	Exper.	Locale
1	17	Reading difficulties	K-6	1-15	both	Spec.	Over-15	
2	3	Supplementary projects	K-6	all	both	Spec.		
3	40	Back-to-basics	K-4	Over-10	U	5-6 Spec.	1-9	NU
4	37	Learning disabilities	K-4 Spec.	5-9	U		1-4 Over-10	NU
5	27	Discipline	3-4	5-9	both	K-2, 5-6 Spec.	1-4 Over-10	NU
6	28	Positive self-concept	Spec.	1-15	NU	K-2 5-6	Over-15	
7	8	Motivation	Spec.	1-4 10-15		K-6	5-9 Over-15	both
7	14	New educat. techniques	5-6	Over-10	NU	K-4 Spec.	1-9	U
7	25	Teaching games	K-2	1-9		3-6 Spec.	10-15	both
10	21	Teachers sharing				all	all	both
16	38	Affective needs	Spec.				1-15	both
17	4	Classroom grouping		Over-15		K-2 5-6	1-4 10-15	both
18	18	The gifted child	5-6			K-4	all	NU
19	11	Health instruction				K-2 5-6	1-4 1-15	U
20	36	Observation...skills		.		3-6 Spec.	Over-5	both
26	16	Child development				Spec.	1-4 10-15	
27	39	Values clarification				Spec.	5-15	NU
28	6	Bilingual children				3-4 Spec.	1-4	
29	33	Science materials					1-4	
30	31	A-V materials					5-9 Over-15	

As the rankings descend, however, there are marked discrepancies in probable attendance. In Table 20 may also be found the attendance likelihood for the last five items in the top 50% and for the items ranked #26-#30. As can be seen, the stratifications in the category "Most likely to attend" diminish rapidly. Only three items in Ranks #16-#20 have stratification groups ranking them in their top five. On the other hand, two of them, "Classroom grouping" and "The gifted child", are fairly heavily subscribed, if one considers the totals of both attendance categories. As one goes down the list, naturally fewer and fewer stratification groups give an item high priority. This does not mean that no inservice programs should be offered for one of these lower items, however. For instance, the Special teachers ranked as #9 "Knowledge of child development stages in order to design appropriate learning tasks" (Item #16). Teachers with 1-4 years experience ranked this item virtually tied with their #10 item. Thus, it would be appropriate for a DM to provide an inservice program on child development stages for Special teachers with few years experience, though hardly for anyone else.

The method used in establishing Table 20, then, if made up for the entire list of items, either from the questionnaire under discussion or from whatever assessment data another DM might obtain, is one way to set guidelines for inservice educational programs based on stratification. The second method suggested by this writer is as follows. It was noted in Table 20, for example, that for the #1 priority, "Reading difficulties," almost all stratification

groups were ranked "Most likely to attend." It will also be remembered that this item was considered to fit Category (d) (see Table 19), "Special needs of particular students," in the earlier section dealing with guidelines on diversification of program participants. That is, the item was considered one that, if made into an inservice program, would be of optimal benefit to participants within a relatively small school system or school.

The reason for putting this item into Category (d) was that the problems associated with diagnosing and prescribing for reading difficulties are so endemic to the particular students of a school that solving their reading problems is practically an individualized process. For purposes of setting up inservice programs to aid teachers in solving their students' reading problems, it would be far better to have teachers of beginning readers in one group, of more advanced readers in another, and so forth. Similarly, in diagnosing reading difficulties, the problems of less experienced teachers in K-2 would likely be quite different from problems of K-2 teachers with a dozen or more years of experience. Thus, a superintendent or building principal or reading resource consultant would arrange small, pertinent inservice programs on "Reading difficulties" for as varied a number of specialized groups as would be feasible, considering available resources of money, persons, time, and materials, and considering which groups expressed more needs in the area than others--the more diverse the groups the more ultimately beneficial to both teachers and students.

Again, to take a fairly high priority item not included in the stratification analysis of Table 20, consider "Metrics," total priority Rank #13. A glance at Table 19 shows that it was considered to fit Category (a), "General kinds of instructions for students." It was explained that items in this category were of such a nature that teachers in all stratifications, regardless of grade level, experience, etc., are going to have to become more knowledgeable in metrics. Thus, a fairly comprehensive, mass presentation of basic metrics facts could be implemented. This judgment is based on the first set of guidelines established above. But now add the second set of guidelines.

If one performs an analysis of the item on metrics similar to those done in Table 20, one finds these data: "Most likely to attend": Grade level 5-6; "Would probably attend": Grade level 3-4, Experience levels 5-9, 10-15, and Over-15, Locales Urban and Non-Urban. An information user, in preparing an inservice program on a large scale presentation for many teachers throughout a region, would be wise to take into account that it is the teachers in upper elementary classrooms with above-average years of experience that would most likely attend.

It is interesting to scan the priority rankings of "Metrics" (Item #23) in the table in Appendix V. The total priority ranking averages it out as Rank #13. But K-2 puts it Rank #35, and Experience level 1-4 puts it Rank #30. As one follows the rankings up the grades and up the experience levels, the rankings become lower,

that is, higher in priority. Grade 3-4 ranks it #7, 5-6 #3. Experience level 5-9 ranks it #20, 10-15 #9, Over-15 #4. This progression can perhaps be explained by the facts that (a) teachers in the lower grades as yet see no need for introducing metrification since they are occupied in basic mathematics concepts and teach relatively little science; (b) teachers in the upper elementary grades, conversely, do find more need to include metrics in their science programs, and their students have already had enough basic measurement concepts; and (c) teachers with less experience in teaching are closer to recent preservice instruction, which in these days may very well have included metrics. Such considerations as these, regardless of the accuracy of the judgments above, must be taken into account by an information user preparing inservice programs, even on a large-scale plan. The content of a program on metrics, addressed to all Bristol County elementary teachers, should focus on the needs of teachers in the intermediate grades, with the realization that it will be the more experienced teachers, thus probably the older ones, who will attend.

The same reasoning as applied to analysis of the items on "Reading difficulties" and "Metrics" could be applied to every one of the prioritized items in the questionnaire. The content of an inservice program, whoever prepares it, should be keyed to the nature, present abilities, and probable teaching situation of the participants most likely to attend it. This is where the writer sees his needs assessment as being of high utility--not only in establishing a total

prioritized list of current needs of a given population of needers but also in suggesting, from a breakdown of stratification priorities, which segments of those needers would primarily benefit from certain kinds of programs to fulfill the needs. A suggested schematic is represented in Table 21 for incorporating almost all the guidelines for planning inservice programs. It could be reproduced in quantity, with blanks left for appropriate fill-ins by an NA. The details for questionnaire item #1 are given as an example of its utility.

At this point, all but one aspect of guidelines for inservice educational programs have been discussed and illustrated. That last aspect is measurement. It will be remembered from the explication of the Coffing-Hutchinson NAM, in the last two pages of Chapter II, that

> . . . if one has purposely sought for optimal states of "what should be" in the definition of needs, one may very well find that one or more of these needs are currently being adequately met. Such information is obviously of high interest to a DM in the subsequent planning of educational programs.

The writer went on to say that two limitations may obtain, one of which is that "there may not be enough resources for the measurement process, since it is both time-consuming and expensive." That limitation did indeed apply to this needs assessment project.

Two attempts, however, were made to measure need fulfillment of the prioritized items on the questionnaire. The major one was to establish, in the directions of the questionnaire itself, means of estimating probable fulfillment of the needs listed. It will be re-

Table 21

Schematic For Planning Inservice Program Guidelines From Assessment Data

Questionnaire Item #	Abbreviated Title	Category #	Most Suitable to Inservice Program #
1	Student-directed learning	2^a	2^b

Stratification Priorities by Rank

Total	K-2	3-4	5-6	Spec.	1-4	5-9	10-15	Over-15	Urban	Non-Urban
14	11	7	14	24	25	10	17	2	15	10

Groups Most Likely to Attend				Groups Probably Attending		
Grade	Experience	Locale		Grade	Experience	Locale
	Over-15			K-6	5-15	U, NU

Groups Probably Not Attending

Grade	Experience	Locale
Spec.	1-4	

Content Ideas For Those Likely and Probably Attending

-2: Individualized conferences; individualized reading
-4: Mathlab pacing system; science projects
-6: Student-teacher planning; self-evaluation techniques
lder
teachers: Presentation of new principles on child intellect
development; informal education

ee Table 19.

ee Chapter V, Part 1.

te. The above notes need not be repeated in a total schematic, since they would be recorded elsewhere and clearly in the mind of the NA.

membered from these directions (see Appendix K for a copy of the
questionnaire) that respondents were to check items which were gen-
erally needed (that is, the ideal needs) and to put a cross by items
which, if made into inservice programs, they would attend. Finally,
the five most important crossed items were to be circled. It was
the judgment of the writer, in consultation with Dr. Hutchinson,
that those crossed and circled items represented unmet needs, whereas
the checked items could be either met or unmet. Thus, there was
built into the questionnaire a certain measurement of fulfillment.

A second way to measure fulfillment of needs, as mentioned on
the last page of Chapter II, is for the NA simply to "collect exist-
ing data (like programs already in effect." The writer made a number
of telephone calls to various Southeastern Massachusetts school sys-
tem administrative offices, as well as to the Southeast Office of
Education at Lakeville and the B.C.T.A. From these calls it was
learned that certain inservice education programs had been imple-
mented in the past year or two or were soon to be implemented. Duxbury,
for instance, had just finished a full day inservice program for all
its elementary teachers on metrics. They were planning to have programs
soon on Learning Centers, Implementing the Mathlab, and School Law.
Barnstable had just finished a town-wide program in diagnostic read-
ing using the so-called Wisconsin Design. They were about to have a
similar program on the use of S.A.P.A. science materials. Attleboro
had a comprehensive program of mini-workshops running throughout the
school year on such topics as observation skills, values clarification,

record-keeping, use of the resource center, learning disabilities, individualized reading, language-arts games, Piaget in the classroom, and use of video tapes. The Southeast Office of Education was planning a full day, week-end series of a dozen workshops for elementary teachers in such areas as metrics, learning disabilities, teaching games, and explications of certain state education laws.

From this survey it is possible to see that some topics reflect certain of the high priority items from the writer's needs assessment questionnaire. On the other hand, as far as the writer could ascertain, none of the programs designed were an outcome of formal needs assessment data. Attleboro's programs were a possible exception, the items of which were based on a needs assessment performed there about three years ago. But even theirs had no breakdown by stratifications. As a final guideline for inservice programs, then, it would be important for a DM, at whatever level, to make whatever attempt his/her resources would allow to ascertain the amount of fulfillment of needs before planning his/her own program and perhaps needlessly duplicating efforts for some or all of the participants. A school system superintendent in Southeastern Massachusetts would be wise to find out the scope and nature of the inservice program already planned by the Southeast Office of Education in metrics before instigating a program in his/her own community. The cost of sending certain community teachers to the Southeast conference might be considerably less than the cost of implementing a program in that community. On the other hand, it might be that the program

planned at the Southeast conference would not fit the specific needs of that community's teachers, and the superintendent would have to prepare a program more suitable. In any case, the concept of measurement of need fulfillment is valid, and that measurement should be done.

As a summary of the whole project to this point, the following list of steps are given, incorporating the above guidelines for preparing inservice programs. The steps reflect the specific work done in this project, but they also could be used as a format by any prospective NA attempting to assess needs in order to develop appropriate programs to meet them. This plan concludes Part 1 of Chapter V.

OUTLINE OF A PLAN TO ASSESS NEEDS IN ORDER TO IMPLEMENT APPROPRIATE PROGRAMS TO MEET THEM

1. DM establishes basic area of need, scope of needers, and definers of the needs.

2. DM sets up with NA means of ascertaining definition of needs (like interviews and questionnaire), and plans to implement them to obtain total (average) priority data and stratified priority data.

3. NA conducts needs assessment and analyzes the data:

    (a) A certain number of the total priority items are classified by general types and matched with general types of implementing programs;

    (b) The priorities by stratification are computed to obtain lists of persons most likely to attend and thus to benefit from programs designed to meet their needs;

    (c) The priorities by stratification are analyzed to estimate the probable nature of the content of the proposed programs.

4. NA makes whatever measurement of fulfillment of needs resources allow, in order to implement programs most usefully and economically.

5. DM decides which programs to implement, in order of his/her priorities.

Part 2 Evaluation of the Study

The purpose of this study has been to provide data for establishing guidelines for valid, useful inservice educational programs for elementary teachers in Southeastern Massachusetts. Five subpurposes have unfolded in the course of the project: (a) to justify inservice education as an imperative in present-day American education of teachers; (b) to justify needs assessment as the most viable means to help teachers define their requirements for inservice education; (c) to examine models of needs assessments in order to design a defining instrument for use with certain elementary teachers in the proposed region; (d) to design a model of needs assessment and use it to define those teachers' needs for inservice education programs; and (e) to analyze the results of data gained from the assessment in order to establish guidelines for inservice programs.

The ultimate proof of the validity and utility of the project would be, first, in seeing how many inservice programs might be implemented as a result of the data and of the subsequent recommendations for using it that have been established here; second, in seeing how well and how appropriately attended these programs might be; third, in seeing what evaluations of those programs would arise from the standpoint of those who implemented them and those who participated in them; and fourth, in evaluating the results of the implementation of the programs in the increased feeling of competence of their participants and finally in the increased skill gains, knowledge, and valuable learning experiences of the students of those participants.

To quote an ancient aphorism, the proof is in the pudding. It is hard to see, however, how an evaluation of the study could incorporate such ultimate proofs at this point of time. Good intents, sincerely researched motives, logical steps, and much reliance on the cooperation and ethical compliance of a great many persons have marked the progress of this project. But how much these characteristics can be scientifically, objectively evaluated is unknown.

One method of evaluation, however, may be helpful in analyzing the strengths and limitations of the study, an examination of its main points as they developed. In Chapter I the writer pointed to the ever-increasing need for inservice education of teachers, as a way to keep them aware of the rapid expansion of new knowledge, new educational techniques, new theories of child development and child psychology, etc., which mark the American education scene of the 1970's. No longer is a brief series of course work in preservice education of teachers the be-all and end-all of their education. If they do not keep up, they will fall hopelessly behind. But inservice educational programs that are devised and implemented according to the arbitrary decisions of a few top administrative executives in education will do very little more good than no programs at all. Teachers as professional educators, from the exigencies developing in their own teaching situation, can help define their own needs for inservice education. If they do so, the probability of their benefiting from programs specifically designed to meet those needs increases markedly. Thus, the writer claimed that needs assessment is

the most viable manner of discovering the needs of teachers. Current educational trends and corroboration of older ones help bolster this claim—particularly the whole trend in individualizing young students' education and responding to special needs of the learner.

Limitations to the claim for inservice education as a necessary ingredient in the educational growth of modern American teachers lie mainly in the lack of really conclusive proof such education does any good. A great many teachers whom this writer conversed with in the course of implementing the interviews deprecated the effect of inservice educational programs they had already participated in. Their chief complaints, to be sure, centered around the irrelevancy of the programs to their individual needs. Also, the times of the programs often came when they were fatigued. The combination gave inservice programs a bad name for them. From the writer's experience, it is indeed true that most inservice programs in effect today have been designed and implemented with little or no regard to valid assessment of needs of their participants. Teachers often take them grudgingly, either being virtually compelled to attend or told that such programs are the only means toward salary increments—hardly the kind of motivation that inspires true learning.

As far as needs assessment is concerned, there is again little proof in the literature as to its validity or utility. Although the writer examined over 100 models of needs assessment to write the survey in Chapter II, only a handful mentioned other assessments. Two of them analyzed at some length other assessments, but only as to their probable scope of usefulness, not on the basis of any evi-

dence of their actual use. Despite the fact that needs assessment as a process has been in effect for 30 years, it is only in the last decade that they have multiplied in numbers and breadth of use. In addition, although several assessments researched made use of teachers as definers of needs, none that this writer could find duplicated the kind of assessment made here--defining elementary teachers' needs for inservice education.

The limitation that applies to needs assessment, then, is similar to one for inservice education: it simply has not been performed enough, analyzed enough, or evaluated enough to date. This is not to say, however, that neither inservice education nor needs assessment have any validity. They are both still relatively in the infancy of their development. Moreover, they represent the earnest hopes of many professional educators, including this writer, that they can eventually live up to the high expectations proposed for them.

Chapter III of this study was concerned with the administration of the interview and questionnaire components of the needs assessment project. The original and revised designs of the assessment were explained. In the original design, interviews of four definer groups each, in New Bedford and Fall River, were planned in order to provide prioritized data for a questionnaire in the same two communities, to be given to several hundred elementary teachers. The original design closely followed many of the precepts in the Coffing-Hutchinson NAM, particularly its sections on planning, identifying information users' concerns, and defining. Because of a desire to

emulate the principles of the NAM, the writer determined to set up numbers of interviewees, stratifications of definers, locales, and times of meeting all in advance, with help and advice from the communities' administrators. The questionnaire to follow was to be given to a large number of teachers within each community, again stratified and randomly sampled by name ahead of time.

Because of unforeseen circumstances the original design had to be abandoned. But a revised design was able to be implemented soon after. Most of the principles of the original design were adhered to, with one major significant difference which affected many of the smaller details of implementation. That difference was based on the fact that most decisions about the details of numbers of participants, stratifications, locales, and times could not be arranged in advance, particularly by the NA. He was able to stipulate the four definer groups for the interviews, more or less; he was able to suggest numbers of participants; he was able to conduct the interviews using the sets of directions he had made up. That was about all. Numbers of participants varied considerably, except for the students. Since no group of adults was specifically ordered to attend, attendance was on a voluntary basis. No stratifications used in the data analysis later were after-the-fact; that is, they were noted and taken into account in certain decisions by the writer as NA or DM, after the data were in. Locales and times for meeting were completely at the discretion of the community administrators. The NA followed along on their decisions.

Then, as the individual process got under way, numerous further differences cropped up. Fourth-graders and fifth-graders joined sixth-graders as student definers. Parents generally met during the day, thus much reducing the possibility of fathers' attending. Teachers in one instance were notified too late to attend a meeting, and the community administrator in charge asked that they be allowed to respond to a written set of interview instructions. These produced results quite different from those obtained from teachers in group oral interviews, though still usable. Another community's teachers were expected to attend the interview in large numbers, but an unexpected snowstorm reduced their number to five. Administrators sometimes invited certain non-administrative staff to their interviews.

Despite these differences most interviews came off successfully and produced useful data for analysis. As was mentioned near the end of Part 1 in Chapter III, "in general, it was found that it was not necessary to have a uniform set" of conditions for the interviews. In the writer's opinion, however, certain aspects of the interviews should and could be made more uniform another time, even using the principles in the revised design. The following are suggested:

(a) Although attendance by teachers may be voluntary, plan the time of the interviews for them such that a maximum number can be present, so as to represent as many as possible of the stratifications deemed important. As it happened, there _was_ a fairly balanced spread of teachers represented in all five communities, luckily, but for a given community sometimes that representation was scanty.

(b) Plan the parents' interviews for the evening and encourage fathers to attend. Only 4 of the 72 parents interviewed in this assessment were fathers, all 4 from an evening meeting.

(c) Plan to have as even a balance of sex among the students as is representative of the given community's school population. This stratification can be arranged in advance, for often particular students were selected by the administrations to attend the interviews. The total student body participating in the interviews was probably over-balanced by sex (72 girls, 56 boys). In only one community did the boys outnumber the girls, and only by two. In another, the girls outnumbered the boys 15-5.

(d) Plan the students' interviews to take place in a classroom. The ones that took place there ran fairly smoothly. The Barnstable group met in a gymnasium, where the facilities for sharing ideas were so limited that the students merely played during that component of the interview.

(e) Rewrite certain parts of the directions for the interviews. Although the NA believed in the principles of the Coffing-Hutchinson NAM and wanted to test them as exactly as possible, it was found that the simple statement of the initial stiumulus question was not enough for most participants. They needed further clarification. Such clarification (discussed at length in Part 2 of Chapter III) should be written into the directions. Other clarifying points beyond the first question are needed also.

(f) Rewrite the directions for the students so that they do the sharing part silently, passing around a few response sheets to imme-

diate neighbors. When this was tried in Attleboro and Duxbury, the results seemed just as worthwhile as when sheets were read off aloud in a group. The students seemed to remember better their fellow students' ideas from reading them than from listening to them.

With these modifications in the interview component of the assessment, the writer believes that it would be as workable and valid a model as possible under the circumstances of the revised design. He would still like to try the original design and compare its effectiveness to the other.

The original design for the questionnaire, like the interviews, was going to be involved with planning well in advance, and then the questionnaire was given to a similar population of teachers as had been interviewed, though much larger. In the revised design, the one actually implemented, the questionnaire was not given to the same teachers, or even a randomly sampled number of the same teachers, as from the interviews. In fact, under the purposes of the revised design--to seek out as wide as possible a representation of participants in Southeastern Massachusetts--the two communities of Bristol County that had participated in the interviews were exempted from the potential number of samplees.

Then, in an attempt to replicate the provisions of the original design for the questionnaire, the NA sought ways to get names and demographic information about teachers in Bristol County so as to randomly sample them individually by stratifications, trying thereby to get as representative a balance as possible of grade levels taught,

experience levels, etc. As was explained in the latter part of Chapter III, this was not possible; there were no lists available with this kind of information. Moreover, the exigencies of questionnaire dissemination by the B.C.T.A. made it necessary to sample randomly by whole school system and within that number to exempt from the sampling certain communities whose representatives rarely came to B.C.T.A. monthly meetings. Thus, although the sampling for the questionnaire was random, it was probably not nearly so valid as if it could be done by the terms of the original design.

In addition, several aspects of the questionnaire making and dissemination should and could be changed another time, even using the revised design. The writer makes these recommendations:

(a) In the directions for filling out demographic (stratification) information at the top, make it more apparent that there are three different sets of information to be responded to. As was noted in Chapter IV, a disappointingly large minority of respondents neglected to fill out all the requested information, a fact which decreased the validity of the stratifications obtained.

(b) In some way, revise the directions for marking the items. Again, a sizable minority did not follow these directions exactly. As was seen in Table 14 (Chapter IV, Part 3), for instance, 43 of the 277 respondents performed the prioritization process inappropriately (circling the X-ed items). Other extra-ordinary responses are noted there also. The directions were more complicated than was originally intended. But they provided valuable data and should be stated in a way so as to get them. On the other hand, it may very well be that

there will always be respondents who cannot follow directions. There would be no way to make sure of this potential variant, unless the same directions were used again with a similar sampling of elementary teachers.

(c) Arrange to have the questionnaire disseminated at a time so that appropriate follow-up notices could be effectual. The questionnaire in this study gave respondents about two weeks to reply, the first time. The follow-up notice urging non-respondents to reply came to them just about as they were ready to leave on a two-weeks Christmas vacation. For another assessment, the writer suggests mid-October as an optimal time for disseminating a questionnaire. Thanksgiving is still a month and a half away, and teachers are both well into their new classes and still not overly fatigued. Special school vacations, of course, would have to be taken into consideration.

(d) Arrange for a pilot sample for the questionnaire, to make sure that the directions were clear. As it was, the NA did give the questionnaire to five persons ahead of time, and they all followed the directions exactly. Not all were elementary teachers, however, and the sampling should be larger.

As for the material in Chapter IV, the writer found that most of the procedures used in implementing interviews and questionnaire had been validated. In the interviews it was felt that, except perhaps for the teachers, the numbers in each defining group were about right, considering persons available and the characteristic of voluntary attendance. The NA would like to have had half again as many teachers, since it was their needs that were being defined. Their

input, however, was recognized in the distribution of items for the questionnaire. The stratifications fortuitously came out to be extremely well-balanced, again considering the voluntary nature of a attendance.

Procedures for obtaining and analyzing the interview data were thought to be satisfactory, on the whole. The 6,480 responses from the interviews were narrowed down to 1,276 priority items. These in turn were divided into two groups, those mostly "content" and those mostly "descriptive." Although it was at first determined to make use of only the former, 177 "descriptive" items were later incorporated into the tabulations of priority data. These priority data were categorized by the NA and his assistant independently and a single list was then agreed upon. From the list of 56 needs categories, a 40-item questionnaire was devised, primarily the top 40 of the 56, turned into needs statements.

The percentage distribution of items for the questionnaire was determined by giving the teachers 50%, administrators 25%, parents 15%, and students 10%. These divisions might be questioned, since it was purely an arbitrary decision by the NA to divide them thus. There was nothing in the literature on needs assessment to suggest such a division. The rationale for it was that it was proper to give the teachers most representation, since it was their needs that were being ultimately defined. The persons closest to their needs were considered the administrators. And so forth. If the need statements had been allocated by numbers interviewed in each defining

group, as might seem fair at first glance, the division would have been as follows: administrators 16%, teachers 22%, parents 23%, and students 39%. This division seemed entirely inappropriate.

Two other ways of analyzing the interview data were considered, one only very briefly. The latter was, in some way, to use all of the responses in the interviews—6,480 as compared to the 645 that were eventually used. It was noted from a brief sampling—one person's total responses from each Barnstable definer group (see Appendix O)—that there were many appropriate items on each sheet that could be made into valid inservice programs, items that were not in the person's priority list. It is to be hoped that these multiple raw data will be of use to the decision-makers in each community, to whom the NA returned them. But two reasons invalidated using the total number of responses: resources in time and energy prohibited it, and, more importantly, the whole concept of prioritization would have been denied.

The second different way of using the interview data has more justification, that is, using all the prioritized items without weeding out the so-called purely "descriptive" data. As it was, many of the descriptive items were incorporated. For the rest, the greatest share of them were generated by the students' priorities. In many cases, the statement of the item made it obvious that it could not have been used: "Room has lots of windows," "She will let us chew gum," "A place to put things," "We can go out for recess," etc. Some items like these could conceivably be worked around into state-

ments of need by elementary teachers. But most of them required too much subjective decision on the part of the NA to use them.

It was considered that the questionnaire data was analyzed in an appropriate manner. It would have been good to have a greater percentage of return on the questionnaires, of course, as well as enough of a return by initial nonrespondents to check on validity in that way. But, as was explained, only two respondents replied after the Christmas vacation break, and it is believed that they were persons basically in the first group who had done the questionnaires on time and simply forget to mail them. Thus, the NA had to be satisfied with a 40% return for analysis. (In the literature on needs assessment, a 40% return from the first send-out of questionnaires was considered average-to-good.) These returns yielded a fairly even balance in stratification divisions, again by chance, which enabled the NA to make certain assumptions about the sampled data. Some of the more significant points of these data were analyzed in the last part of Chapter IV, a great many more in the first part of Chapter V.

Finally, the writer believes that, if the sampling can be considered reasonably valid, the inservice education guidelines outlined in Part 1 above can be of service to information users planning to implement programs for elementary teachers in Southeastern Massachusetts. The validity of the sampling, it is believed, is the crux of the matter here. The process of sampling has been amply justified in the literature as the only feasible way to reach a large given population

and to analyze the data that come in. But, in the needs assessment under discussion here, the sampling could undoubtedly have been made more truly representative. Besides the suggestions for change to improve the sampling process already made earlier in this part of the chapter, the writer could make others. These will be given in the final part of the chapter, Recommendations for Further Research and Assessment.

Part 3 Recommendations for Further Research and Assessment

The writer hopes that the following point has already been made clear: both inservice education of teachers and needs assessment as a technique of defining needs are essentially new concepts in the field of American education. This is true for inservice education because, although good teachers have always continued to grow and better themselves in their profession through self-evaluation, professional reading, and trial-and-error implementation of new techniques, and although a few forward-looking administrators have always sought ways to help their staff grow through planned learning experiences, staff conferences, and encouragement of initiative, still, system-wide and state-wide programs for helping all teachers improve their teaching methods are a relatively recent institution in American education. Similarly for needs assessment. It was not until social and political reforms concerned with such areas as racial and sex desegregation, the rights of individuals to pursue their own best educational interests, newly accepted theories of intellectual development of persons, and accountability to the paying public started to

have impact upon American education that the administrative need for and moral imperative of needs assessment came to light. As has been stressed, needs assessment mounted on even a small-scale basis is in its infancy.

Further research and experimentation, then, in both inservice education and needs assessment, are demanded at this time. The former field is much too broad and complex for this writer to analyze in the present study. Since his dissertation has concerned itself primarily with developing an assessment technique to ascertain needs of certain teachers for inservice education, he will confine his recommendations for further research and experimentation to matters arising out of the concepts developed in this study in regard to the particular methodology that was implemented.

The writer makes the following recommendations, in four sections, generally corresponding to the four major steps described in the project:

Research in the literature on needs assessment. (a) Although the writer reviewed over 100 models of needs assessment, largely through the invaluable aid of a computer search of ERIC documents, there is still much literature to be scanned and analyzed, citations for which do not readily come to light under the obvious headings in ERIC, educational indexes, university catalog systems, and dissertation abstracts. Many of these can be found in the bibliographic sections of known works, in chapters of books primarily devoted to the explication of matters not directly concerned with needs assessment but germane to it (literature on evaluation systems in general, open

education, inservice education programs, and the like), and in un-
published accounts of needs assessment projects implemented by vari-
ous state and local agencies in a given area.

(b) Simply as a research project in itself, it would be extreme-
ly useful to professional educators today to have at hand a cross-
referenced index of needs assessment projects and techniques, clearly
categorizing such aspects as the following: purposes of assessments;
scope of the projects; numbers and types of needs, needers, and de-
finers; kinds of assessment used (interview, questionnaire, etc.);
resources of persons, monies, time, and materials necessary and used
for implementation; general results of the assessments; formal evalua-
tions if done; and summaries of strengths and limitations. As men-
tioned, if this overall picture of needs assessments, performed or
planned for instance in the past decade, were to be cross-referenced
in such a way that prospective NA's could look up material on definers,
costs, purposes, and so forth, the research would prove most helpful
for future assessments. As a published work, it could be added to,
moreover, by yearly installments.

Implementing needs assessment. As was discussed in Chapter III
and further analyzed in Part 2 of this chapter, there were certain
points about the selection of a model and its administration that the
writer would like to see tried differently some other time. (a) The
original design of the present assessment, it is believed, has merit.
The writer recommends its implementation as follows: select a medium
large but cohesive school system, such as found in many smaller cities

today; explain to appropriate administrators the advantages to be gained by a carefully planned and implemented needs assessment of certain persons in the system; determine with these administrators what needs they want information about; determine which needs are most important, next most important, and so forth; determine the nature, number, and stratification characteristics of the needers and definers (needers could be administrators, parents, students, community businesspersons, special needs children, preschool children, as well as all teachers, certain teachers, etc.; definers could have a similar range, since the methodology is suitable for a wide scope of needs, needers, and definers); ascertain what resources are available and mutually agreeable to both NA and DM(s); in general, plan as much as possible in advance of actual implementation of interviews and/or questionnaires, trying to maximize the careful selection and standardization of persons and procedures; then, conduct the interviews and/or questionnaires as outlined in Chapter III; conduct appropriate measurement procedures of fulfillment of needs, as far as resources allow (see the section on measurement in the Coffing-Hutchinson NAM); finally, analyze the data as before and present them to the DM(s) for whatever uses they may make of them.

(b) Using the revised design of the assessment, specifically addressing it again to needs of elementary teachers in Southeastern Massachusetts for inservice educational programs, test the validity of original data obtained by adding to or changing certain parts of the procedure as follows: attempt to represent all the elementary teacher population in the five counties by more exact percentages--

Bristol County has approximately 50% of them, Plymouth County 38%,

Barnstable County 11%, and Nantucket and Dukes Counties together 1%;

try to randomly sample the school systems in each county so that such

a sampling would give the NA a representation as close to the percen-

tage distribution as possible; point out to the DM(s), in each com-

munity that agrees to implement the assessment, how necessary it is

to have as well-stratified and numerous as possible a body of teachers

participating in the interviews; set times and places of interviews

for parents so as to encourage the largest participation possible for

fathers (in the present study administrator and student groups were

expectedly and appropriately full enough); make the sex representation

for students as balanced in ratio as the school system's total student

population; rewrite the interview directions so as to make them clear

and standard for all pertinent groups; randomly sample the teachers for

the questionnaire as was done for the interviews, obtaining as wide a

representation as possible; and arrange the time of the questionnaire

dissemination so as to allow for follow-up.

(c) Using either the original design or the revised one, whether

as first outlined or with the recommendations for change, implement a

similar assessment project for the needs of secondary teachers in

Southeastern Massachusetts for inservice educational programs. If re-

sources allow, compare research, procedures, implementation, and data

analysis between that one and the present study.

Analyzing assessment data. (a) For an NA with expertise in

statistical analysis, either the questionnaire data obtained in the

present study or those obtained from a new assessment could be com-

puterized in such a way as to yield a variety of complex statistical variants, depending particularly on the demographic and stratified nature of the participants and also on the characteristics of needs defined by them. Such an analysis is possible today with the help of computers, so as to allow for a much larger sampling population than that whose data must be analyzed by individual pen-and-pencil computation.

(b) Even without expertise in statistical analysis, a prospective NA could make use of the computer in setting up an analysis of the multiple data obtained from the interviews in the present study. As was noted, only about 10% of the total responses from the interviews were used in tabulating items for the questionnaire. By means of computer-weighing procedures, a great many more responses, and thus a much greater variety of valuable information, could be added to the total picture of defined needs than was obtained for this project. Again, further research could profitably be done using the same or different raw data as in this study. The writer plans to retrieve all these raw data from the administrators of the five communities after they have used them to their advantage.

Using the data for inservice education guidelines. Using the needs assessment data to suggest guidelines for inservice education programs has been discussed in Part 1 above. Depending on the expertise of a researcher and his/her direct experience in preparing inservice programs or on his/her compelling need to produce such programs, the use of data like those of the present needs assessment

varies considerably. The writer therefore makes three kinds of re-commendations for further research and experimentation in this area.

(a) For a person who is already a decision-maker faced with a compelling need to implement valid, useful inservice educational programs for elementary teachers in Southeastern Massachusetts, it is to be hoped that the writer's assessment data would be most use-ful. It is recommended that such a person, besides evaluating and using the suggestions in Part 1 above, first complete Table 21, the schematic for planning inservice programs from assessment data, for all 40 items. Then that DM should evaluate his/her own locale and the potential participants in the program(s) to see in what way their characteristics match those of the Bristol County stratifications. Finally, the DM should expand considerably according to his/her own expertise the section labeled Content Ideas For Those Probably Attending. Valuable research data could be added to the present study simply by following these steps. It would be further enhanced by consideration of the criteria mentioned in the second page of Part 2 above--attendance in the DM's programs, evaluation of their results, etc.

(b) For a person who wishes to do a doctoral study in this area, but who is not a full-time administrator faced with making immediate decisions to implement inservice programs, there is another course of action possible. That person could start at the other end of this study and work to evaluate inservice educational programs in Southeastern Massachusetts that may be implemented in the next

year or so, both those that are a direct result of using the needs assessment data produced here through the interviews and/or questionnaire and those devised by DM's with no regard to those data. Fruitful research could be done drawing up appropriate methodologies for evaluation. In addition, comparisons between the two kinds, if logically comparable in some way, would yield valuable data on the validity of this writer's assessment.

(c) For a person not interested in doing the full-scale research appropriate to a doctoral dissertation, but who nevertheless wishes to add body to the growing literature on needs assessment and inservice education, many avenues for valuable smaller contributions are open. Such a person could research the literature to find how many inservice programs in a given area during a given time period were implemented as a result of any needs assessment data. Or, he/she could use the data generated from this study to devise a completely different set of guidelines for implementing inservice programs, with a comparative evaluation of the two sets. Or, if the person could obtain the raw data from the interviews in one of the five communities which participated in this assessment, he/she could apply the guidelines suggested here to all or part of those raw data, to see if the guidelines are as suitable for interview data as for questionnaire data.

To aid the reader, Table 22 summarizes all the recommendations made here in Part 3 for further research and experimentation.

With imagination and initiative, then, persons could do multiple kinds of research and experimentation as a result of the research,

procedural, and analysis data in this study, to whatever breadth and depth might be desired. Unlike many fields in education, inservice education and, particularly, needs assessment are still relatively wide open. They need careful attention, much experimentation, and valid data so as to increase in their utility and thus contribute to the betterment of American education. It is hoped that the present study can stand among those that contribute to that betterment.

Table 22

Summary of Recommended Further Research and Experimentation

1. Research in the literature on needs assessment:

   a) Research more completely the whole field of needs assessment.

   b) Make a cross-referenced index by multiple categories of the various characteristics of needs assessment.

2. Implementing needs assessment:

   a) Implement the original design.

   b) Implement the revised design, with suggested additions and changes.

   c) Implement either design, for secondary teachers.

3. Analyzing assessment data:

   a) Perform a variety of statistical analyses on present or new assessment data.

   b) Use computer to make further analysis of interview data.

4. Using the data for inservice educational guidelines:

   a) Complete Table 21, expand Content Ideas, and evaluate.

   b) Evaluate inservice programs and compare those that follow up on the present data with others.

   c) Compare inservice programs resulting from needs assessment and those not so resulting; devise a new set of inservice guidelines and evaluate, comparing the two; apply present guidelines to raw interview data.

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APPENDIX A

Explanatory Letter to the Old Colony Superintendents
For the Needs Question

Dear

On Wednesday, March 19, 1975, the Old Colony Superintendents Association met at S.M.U. One of the matters on the agenda concerned inservice education for teachers in the Southeastern Massachusetts region.

I am working on a project over the next year of making up an inservice training program for teachers in the region. I would see this as "facilitated," because I believe that a number of resources might go into such a program - not only SMU Education Department staff but also staff from other departments in the University, state regional education centers, community college personnel, specialized public and private organizations, teacher organizations, volunteer parents, and school district resource personnel. Also, I believe that the state regional institution of higher learning should be in the vanguard of seeing to educational needs of the region.

Now, instead of assuming that a single person, committee, or even the Education Department of the University can plan an inservice program suitable for the complex needs of teachers in the area, I believe that an inservice program should address itself to felt needs of the educators involved.

Accordingly, I want to mount a needs assessment which will be addressed to as many kinds of educating persons as feasible. The inservice program I would see as primarily applicable to the teachers. But I think that in making up a program for them the perceived needs of such groups as superintendents and principals, parents, students, as well as the teachers themselves can be assessed.

At this point I want to start at the top, with the superintendents of schools, to see what needs they see for their teachers. It is vital that we know what administrators believe are these needs because administrators are responsive to a broader sense of community desires than most teachers.

Accordingly, I ask you to fill in the enclosed sheet with the needs you think should be addressed by an inservice program for teachers in your district, the area you know best. Notice the stimulus question at the top: it asks you to imagine a situation in which the needs of your teachers are being met and to describe what you see going on that indicates that

APPENDIX A

-2-

fact. If the form of this question does not fit the way you want to express the needs, write them any way you choose. In any case, please respond. Otherwise, the Education Department at SMU will be working from too much of a subjective basis. As you know, in the education process there is nothing more useless than providing answers to questions students have not asked. I believe that an inservice program that is not responding to the needs of the persons engaging in the program can be just as useless.

Please use the enclosed stamped, addressed envelope to return your reply. I would be pleased to know of other thoughts you may have concerning my proposed project. Some of you already have envelopes and needs sheets from the meeting.

Hoping to hear from you.

Sincerely,

Hamilton M. Brush
Department of Education
SMU, North Dartmouth, Ma.

APPENDIX A

<u>Stimulus Question Sheet for Old Colony Superintendents</u>

IMAGINE THAT S.M.U. IS FACILITATING AN INSERVICE
EDUCATION PROGRAM IN SOUTHEASTERN MASSACHUSETTS.
IMAGINE THE PROGRAM ACTIVELY IN OPERATION AND
MEETING THE NEEDS OF THE TEACHERS IN YOUR DISTRICT.
LOOK AT THE SITUATION CLOSELY, AND WRITE DOWN
THOSE THINGS YOU SEE WHICH INDICATE THAT THE NEEDS
OF THE TEACHERS ARE BEING MET.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Return to: Hamilton Brush
            S.M.U.
            No. Dartmouth, Mass.
            02747

APPENDIX B

Flow Chart for Definition Reporting (6.0)

```
        START
          │
          ▼
  PLAN HOW TO CARRY
  OUT THE DEFINITION                              TYPE THE
  REPORTING PROCESS                               REPORT
          │                                          │
          │                                          │
          ▼                                          ▼
  COMPILE RESULTS OF                          DELIVER THE REPORT
  DEFINING PROCESS                            TO THE DECISION-
          │                                   MAKER
          │                                          │
          ▼                                          ▼
   WRITE BODY                                 ANSWER QUESTIONS OF
   OF REPORT                                  THE DECISION-MAKER
          │                                          │
          ▼                                          ▼
   WRITE THE                                  RETURN TO MAIN
   COVER PAGE ──────────►                     FLOW CHART
```
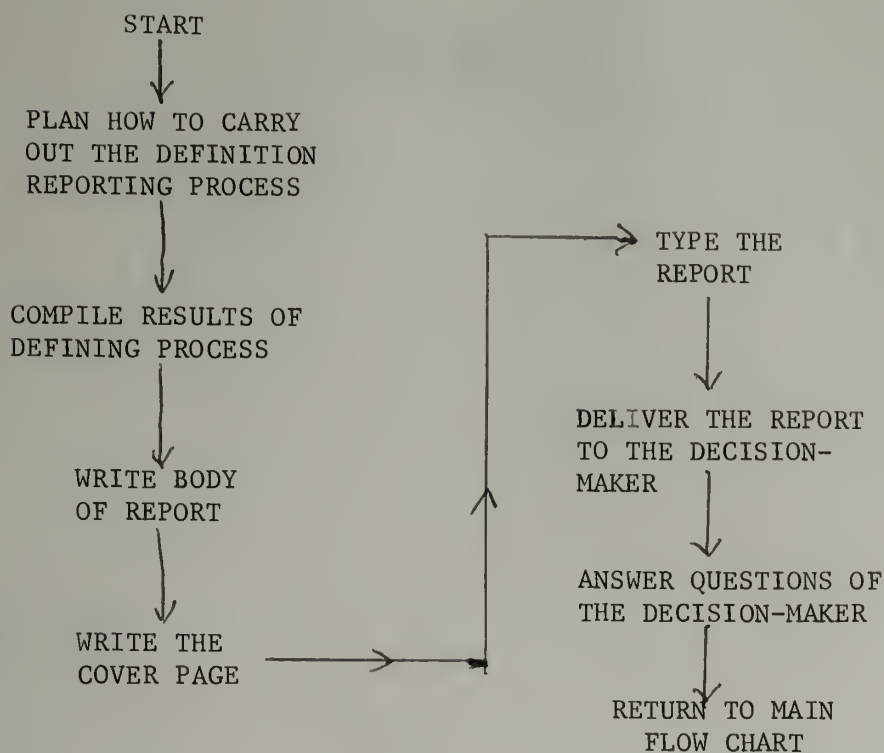
Note. From "Needs Analysis Methodology: A Prescriptive

Set of Rules and Procedures for Identifying,

Defining, and Measuring Needs" by R. T. Coffing

and T. E. Hutchinson. Reprinted by permission.

APPENDIX C

<u>Initial Explanatory Procedures for the Fall River Needs</u>
<u>Assessment</u>

FALL, 1975
A NEEDS ASSESSMENT FOR FALL RIVER
(to provide guidelines for inservice training programs, devised,
facilitated, directed by whatever agencies can use the data)

Part I   A series of four live interviews with four sets of definer popu-
lations, stratified by various criteria, in order to generate
prioritized needs for inclusion in a mailed questionnaire survey
to a much larger total population.

Part II   A mailed questionnaire survey to a large population, asking
for prioritization of approximately 40 generated needs.
Self-addressed stamped envelope for return. Two send-outs.

Part I   Interview A Administrators (Superintendents, Principals,
Asst. Principals, Supervisors)--
Stratified to represent
(a) inner city
(b) outer city
(c) ethnic origin
(d) sex
(e) the above role divisions

Interview B Elementary school teachers--
Stratified to represent
(a) inner city
(b) outer city
(c) ethnic origin
(d) grade level primarily teaching, K-6 (seven)
possibly K-1, 2-3, and 4-6 (three)
(e) years of experience, 0-4, 5-10, 11-20, 21...
(f) sex

Interview C Parents of children in the elementary schools--
Stratified to represent
(a) inner city
(b) outer city
(c) ethnic origin
(d) grade level of child(ren) (seven), or
possibly just primary-intermediate (two)
(e) sex

Interview D Sixth-grade elementary students--
          Stratified to represent
                    (a) inner city
                    (b) outer city
                    (c) ethnic origin
                    (d) sex

Part I (cont.) The live interviews would be about 15-20 in number for
     each of the groups administrators, parents, and students, and
     about 25-30 for the teachers. Each group would come to some
     central location (like a school).
     The membership of each group would be selected for their ability
     to articulate, within the proposed stratifications. The group
     in each case would meet for about one hour with the needs analyst
     and would be directed how to proceed.

Part II   With data generated, collated, organized, weeded, and
     generally chosen for their operationalizability, about 40 needs
     items would be made into a list randomly ordered and sent out
     by mail in a questionnaire check-off instrument to between 200
     and 500 persons, again stratified as in Part I but randomly
     sampled in choice.

               From data generated from these questionnaires, the
     decision-maker makes up tentative guidelines for inservice
     programs.

                                        Hamilton M. Brush
                                        Education Department
                                        S.M.U.

APPENDIX C

CALENDAR OF ARRANGEMENTS, MEETINGS, & NEEDS ASSESSMENT INTERVIEWS

Oct. 14   Curtis Hall, S. E. Regional Department of Education
             Edward Silva, Curriculum Coordinator, Swansea
Oct. 16   Lynn Clark, Wareham
Oct. 17   William Gieck, Barnstable
Oct. 20   Lawrence Anderson, Duxbury
             Edward Silva, Swansea
Oct. 21   Attleboro administrators, Bartholomew O'Connor
Oct. 22   Lynn Clark, Wareham
Oct. 23   Duxbury administrators, Lawrence Anderson
Oct. 24   William Gieck, Barnstable
             Lynn Clark, Wareham
Oct. 27   William Gieck, Barnstable
Oct. 29   Bart O'Connor, Attleboro
             Lynn Clark, Wareham
Oct. 31   Needs Assessment, Attleboro administrators (#1)
Nov. 3   N. A. Wareham students (#2)
             N. A.   "   parents (#3)
             Bart O'Connor, Attleboro
             Lawrence Anderson, Duxbury
             Edward Silva, Swansea
Nov. 4   Paul Brouillard, B.C.T.A.
Nov. 5   N. A. Wareham teachers (#4)
             N. A. Wareham administrators (#5)
             N. A. Duxbury administrators (#6)
Nov. 6   N. A. Barnstable administrators (#7)
              "   "   students (#8)
              "   "   parents (#9)
              "   "   teachers (#10)
Nov. 12   N. A. Attleboro students (#11)
              "   "   parents (#12)
             N. A. Swansea parents (#13)
Nov. 13   Edward Silva, Swansea
Nov. 17   N. A. Swansea students (#14)
              "   "   administrators (#15)
              "   "   teachers (#16)
Nov. 20   N. A. Duxbury teachers (#17)
              "   "   parents (#18)
              "   "   students (#19)
Nov. 21   Pick up Swansea teachers self-administered forms
Nov. 24   N. A. Attleboro teachers (#20)

APPENDIX D

Department of Education Northeast Regional Education Center
Assessment of Needs

Stratification Component

A. I am:
    1. A school committee member
    2. A superintendent or assistant
    3. A central office supervisor
    4. A secondary principal or assistant
    5. A secondary teacher (gr. 10-12)
    6. A junior high principal or assistant
    7. A junior high teacher (gr. 7-9)
    8. An elementary principal or assistant
    9. An elementary teachers (gr. K-6)

B. I have been in education:
    1. 0-2 years
    2. 3-5 years
    3. 6-8 years
    4. 9-12 years
    5. 13-20 years
    6. More

C. Sex:
    1. Female
    2. Male

D. I have been in my present position:
    1. 0-2 years
    2. 3-5 years
    3. 6-9 years
    4. 10 or more years

E. Secondary teachers check your field or the closest item to it:
    English, Social Studies, Mathematics, etc.

F. Undergraduate school attended:
    1. Salem State
    2. Gordon College
    3. Other

G. Graduate school attended: 1. Salem State. 2. Other

J.K.L. Which town do you serve? (3 digits for each of 24 towns)

M.N.   In which school do you work? (2 digits per school)

Note. Reprinted by permission.

APPENDIX E

NEEDS ANALYST'S DIRECTIONS SHEET

1. Divide into small groups randomly (preferably 3 or 4 in a group).
2. Each person should have a writing instrument (NA should have several extra pencils).
3. NA hands out information-needs sheets (each person should have a suitable surface for writing on).

The following directions are for ADMINISTRATORS, TEACHERS, AND PARENTS:

NA: First fill in the required statistical information at the top of your sheets. Encircle the proper letter in the top right corner, the first letter of the name of your community. Note that your name is not wanted.

NA: The purpose of this needs assessment is to provide data so that decision-makers in your community and possibly at other levels can make up useful, desirable, and valid inservice programs for your elementary teachers. Various groups are being asked to define the needs of the teachers for inservice education, all of whom I believe can add valuable information, since they all basically want the same thing--effective, qualtiy education for the students of the community. This meeting is one of four groups who will help define the needs. (Mention others.) To ascertain these needs I will ask you to respond to several questions. The intent of the questions is to have you describe all the needs that you can possibly think of, including ones that may already be met in your community. I will ask you finally to tell which needs are the most important.

NA: Now, imagine that_____'s elementary teachers' needs for inservice educational programs are being completely met. Look at the situation closely and write down everything you see which indicates that those teachers' needs for inservice educational programs are being fully met. After the capital letter "A", number the items as you write them.

NA: (after about 10 minutes) Now, even if you are not quite through, follow these next directions. You'll have a chance to add to your first list later if you wish. Imagine that_____'s elementary teachers' needs for inservice educational programs are not being met at all (in fact, perhaps even being purposely blocked). Look at the situation closely and write down everything you see which indicates that those teachers' needs for inservice educational programs are not being met at all. (Don't merely or only write down the negative components of your first list of statements and phrases, but see this as a new situation.) Put a capital "B" where you stopped writing the first list, and number these items again from #1 on.

APPENDIX E

(NA's Directions)

NA: (after about 10 minutes) Next, look at the last group of statements and phrases, and transform any that you wish into positive statements or phrases, any that would add new positive components to your list "A". Put a capital "C" down and write these new items starting with #1 again.

NA: (after about 5-6 minutes) Next, within your small groups, each person read off his/her lists "A" and "C"--that is, the positive needs--so that the other members can hear them. Read <u>very slowly</u>, pausing a bit after each one so that the other members can consider them and write down any of them that appeal and that are different from ones they have thought of so far. That is, borrow ideas from each other. Write these borrowed items under the capital "D", starting with #1 again.

NA: (after about 20 minutes--groups that have worked a lot together probably need less) Finally each of you should indicate which of the items in sections "A", "C", and "D" (that is, all your <u>positive</u> needs--original, transformed from the negative, and borrowed) have the <u>top four</u> highest priorities. You should consider such criteria as these for judging priority:

_____

_____

_____

_____

(or, if decision-makers have not supplied or suggested the above criteria, use these:
1) most important for your own needs, or your children's;
2) most important for all elementary teachers in your community;
3) most feasible (that is, given what you believe to be known resources or limitations of time, energy, commitment, etc., which needs could be most easly implemented into inservice programs?)
4) most desirable for implementation to suit the total community's needs.

NA: Write a Roman numberal #1 by the need with the highest priority, a #II by the next one, a #III, and a #IV.

NA: (after about 5 minutes) Please hand in your sheets. In behalf of the information-users who will implement these data, I thank you for your time and cooperation.
(NA clip or staple a person's sheets together as soon as possible.)

APPENDIX F   (A   B   D   S   W)

DEFINING ELEMENTARY TEACHERS' NEEDS FOR INSERVICE EDUCATION

ADMINISTRATORS: Please fill in or check off appropriate items:

Sex: M_____ F_____ Number years in education_____ in administration_____

Mostly elementary_____ Mostly non-elementary_____

Administrative experience mostly urban_____ Mostly non-urban_____

Ethnic background_____

LIST "A"
#1

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

APPENDIX F (A B D S W)

DEFINING ELEMENTARY TEACHERS' NEEDS FOR INSERVICE EDUCATION

<u>TEACHERS</u>: Please fill in or check off appropriate items:

Sex: M_____ F_____ Grade level(s) currently teaching_____

Grade mostly taught_____ Years of fulltime teaching:

1-4_____ 5-9_____ 10-15_____ 16-over_____

Experience mostly urban_____ Mostly non-urban_____

Ethnic background_____

List "A"
#1

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

APPENDIX F   (A   B   D   S   W)

DEFINING ELEMENTARY TEACHERS' NEEDS FOR INSERVICE EDUCATION

PARENTS: Please fill in or check off appropriate items:

Sex: M_____ F_____   Age: 20-30_____ 31-40_____ 41-over_____

Grade(s) of child(ren) in elementary school this year:

_____   _____   _____   _____   _____

Ethnic background (if first or second generation non-U.S. born)_____

LIST "A"
#1

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

APPENDIX F   (A B D S W)

DEFINING ELEMENTARY TEACHERS' NEEDS FOR INSERVICE EDUCATION

STUDENTS: Please fill in or check of these items:

BOY_____   GIRL_____   Age_____   Grade now in_____

How many years have you been in this town's school(s)?

Kindergarten___/ 1st___/ 2nd___/ 3rd___/ 4th___/ 5th___/ 6th___/ 7th___/

LIST "A"
#1

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

APPENDIX G

ATTLEBORO TOWNSHIP PARTICIPANTS

Administrators

Ted Thibodeau
Bartholomew O'Connor
Robert Coelho
Ron Koback
Evelyn Silva
John Rickir
Patricia Hosley

William Skitt
Jane MacDonald
Desiree Piquet
William O'Neil
Joseph Carr
James Calista

Teachers

Betty Steele
Barbara Henson
Nadjia Varney
Mary Ricker
Betty Helmick

Parents

Joyce Marshall
Carole McCann
Estelle Quaglia
Cheryl Galarneau
Sandra Martin
Marie Klucznik
Stacia Crowley

Carol Gagnon
Sandra Varrieur
Patricia Gagnon
Simonne Lacasse
Jeanne Charpentier
Barbara Shrewsbury
Patricia Lambi

Students

Francisco Lopes
Thomas Kenyon
Wendy Cummings
Margaret O'Reilley
Kurt Vieira
Kristine Silvia
Diane Jerauld
Christine Peirier
Darlene Jewett
Michael Crowley
Diana Donlan
Don Marquis
John Menard
Jeanne Klucznik
Sean Clement

Danny Andrews
Edward Thibert
Angel Ventura
David Clark
Anthony Ariosto
Ellen Sweeney
Kim Neal
Wayne Pendleton
Michael Thornhill
Annette Charran
Elizabeth Cote
Michelle Cartier
Cindy Welch
Judith Gingras

APPENDIX G

BARNSTABLE TOWNSHIP PARTICIPANTS

Administrators

Margaret O'Neil	Principal	Osterville Sch.
John Berry	Principal	Hyannis West Sch.
J. Kenneth Downey	Principal	Hyannis Sch.
David Crosby	Principal	Centerville Sch.
John Ferreira	Principal	Marston Mills-Cotuit Sch.
Jerry Guy	Principal	Barnstable-West Barnstable Sch.
Richard Norman	Director	Athletics
Elinor Martin	Director	Learning Disabilities
Clay Beless	Director	Pupil Personnel Services
Roger Warren	Director	Physical Education
Edward Bolton	Director	Art
Verna Jenkins	Director	Title I

Students

Greg Hinstead	Susan Stacy	Susan Morse
Jack Carroll	Nick Onnembo	Erica Jansson
Michael Sullivan	William Antes	Amanda Sears
John Cahoon	Michael Simmons	Danny Murzio
Richard Capen	Marie Devine	Jennifer Duprey
Dana Paterson	Tom Cobbett	David Bolton
Chris Dawley	Steven Mikulak	Arthur Cahoon
Imelda Monaghan	Elaine McGann	Sophie Kimball
Katie O'Riordan	Stephanie Cahoon	

Parents

Priscilla Rutherford	Jean O'Neill
Stephanie LaRoche	Nou Medonis (?)
Ann Rogers	Elaine Chevalier
Adelaido Queeney	Jo Ann Kelley
Mary Smedley	Constane Tracy
Judith Desrochers	Marilyn Field
Ellen Matthewson	Judith Harnion

Teachers

Belle Dienes
Roger Eldridge, Jr.
Fern Freeman
Barbara Harrington
Ruth Mulcahy
Patricia Duffy
Judith Alberica (?)
Regina Hourihan

APPENDIX G

DUXBURY TOWNSHIP PARTICIPANTS

Administrators

Ralph Freedly
Richard Moniz
Charles Elliott
Janet Broadbent
Barbara Cooper

Teachers

Joanne Sikorsky	Helen Balsbaugh
Joy Jenkins	Elyse Gustin
Dianne Smith	Jan Gershberg
Lucille Slack	Debora Greenglass
Kay Dolan	Edward Pentanshe
Barbara Davock	Eleanor McDevitt
Ann Kallander	Lucy Ellis
Margaret Stiles	Jean Pagnano
Emily Loring	Steve Radcliffe
Angela Russo	Helene DeWolf
Stuart Kaplan	Robert Krivi
Sandy Holbrook	Helena Quilty

Parents

Carol Satkus	Marjorie McLean
Gerda Edmunds	Shirley Dumphy
Lane La Racque	Kathy Dixon
Anita O'Brien	Debbie Jacques
Annette Klein	Joan Leitzes
Janice Bruno	Diane Leighton
Marie Schortmann	Julie Hatfield
Karen Donoghue	Elaine Wienoger
Myra McIntosh	Devie Johnson
Mary Moe	Nancy Young

Students

Stephanie Conrick	Derin Eddy
Lisa Doyle	Kristine Flynn
Sara Fargo	Michelle Grealy
Jennie Neubauer	Kristin Johnson
Vicki Nickerson	Chris Kilduff
Susan Pink	Ethel McIntyre
Dan Pitenger	Mike Oates
Jim Quine	Mark Pagnano
David Robinson	Kim Publicover
Pam Switzer	Regina Rollo
Dickie Tibbetts	Sue Shea

APPENDIX G

SWANSEA TOWNSHIP PARTICIPANTS

Administrators

H. Simpson
Maria Danielson
Elgin Boyce, Jr.
Robert Couture
Lawrence Weiner

Bruce Spooner
Harold Devine
Edward Kelly
Edward Silva
Charles Lonerin

Teachers

(not available; interview self-administered)

Parents

Kathleen Di Napoli
Liam Scott
Brenda Mendes
Diane Lafferty
Maurice Fallon
Mary Rebello
Gerald Durette

Mildred Scott
Nick Hrycaj
Edna Cartin
Rosemarie Wilde
Linda Normand
Marie Durette
Diane Grady

Students

Mark Almeida
John Baker
Lynn Blockburn
Rick Camara
Elise Cauvel
Ron Carr
Elise Charron
Kevin Cote
Susan Croteau
Tim Davis
Rosemarie DeCosta
Brian Dansereau
Tim Douglass
Gerald Geary

Cheryl Graham
Stephen Lial
AnnMarie Lopez
David Mello
Allison Michaud
William Miranda
Tracy Moniz
Chris Neronha
Kerri Orter
Nancy Rose
Daryll Rousseau
Bruce Sherman
Susan Toolin
Dawn Viveiros

APPENDIX G

WAREHAM TOWNSHIP PARTICIPANTS

Administrators

Lynn Clark
Joyce Hartman
Anthony Tullio
Barbara Delancey
Peter Coville
Elmira Phinney

Walter Smith
Frederico Medina, Jr.
Leo Peduzzi
Marjorie Burns
Ada Lukey

Teachers

Susan Ball
Dorothy Cavender
John Clark
Susan Dale
Bonnie England
Lucy Fearing
Theresa Furfey
Barbara Giard
Beverly Gracia

Mary Harrington
Donna Lonnergan
Dorothy Long
Martha Montrond
Sheila Parker
Mrs. Pina
Marie Strawn
Betty Wright

Parents

Betty Averill
Marsha Boutiette
Mary Boutin
Susan Carroll
Susan Cronk

Jerry Graham
Brenda Haridman
Marsha Montrond
Jerry Poarle
Patricia Souza

Students

Andrea Finnell
Don Brown
Robert Graffi
Neal Levy
Don Raymond
Raymond Glass
Mark Johnson
Dean Hauleen
Gary Montejro
Patricia Grady
Russell Cormjer
Sean Haskell
Warren Morse
Donna Barboza

Suzanne Taber
Ealine Donlan
Nicole DeBlois
Catherine Carney
Penny Strawn
Theresa Strawn
Christine Perry
Betty Desrosiers
Bonnie Lou Parker
Diane Higgins
Priscilla Taylor
Mary Sullivan
Regina Samarowski

APPENDIX H

(NA's Directions)

The following directions are for STUDENTS:

NA: First fill in the information at the top of your sheets. Encircle the
     proper letter in the top corner--the first letter of the name of your
     community. Note that your name is not to be put on the sheets. (But
     NA should get a list of the names of the participating children to
     include in the total report, as acknowledgments.)

NA: The purpose of this meeting is to have you students help your schools
     to provide learning experiences for teachers in the elementary grades
     that will make them be better teachers than they are even now. You
     see, teachers are students, too; they like to keep learning new things
     that will help them be better and thus that will help their students
     be better and happier learners. You students are all the way or
     almost all the way through elementary school. Your teachers, princi-
     pals, and parents want to know what you think can be done to help your
     teachers be more effective and more useful to you as students. They
     want to know what you feel makes for effective teaching in the ele-
     mentary grades. You have been selected from lots of students in
     this town's schools to tell us what you think.

NA: So, here's what I want you to do. Imagine some perfect elementary grade--
     your own present one or some other level. Imagine that the teacher is
     doing and saying all the best things that a teacher could to make his/
     her class a wonderful, happy, and challenging learning experience for
     the students. Look at this classroom which you have pictured in your
     mind, and write down everything you see and hear which shows that the
     teacher is providing the best learning experiences for his/her students.
     Who is doing and saying what? What is the teacher doing and saying, for
     instance? What are the students doing? What does the room look like?
     Write a lot of details. We don't want the names of any real teachers.
     And don't talk to each other about what you write down; you'll have a
     chance to share with each other in a while. Number the items 1, 2, 3,
     etc. If you use up the first page go on to the back side.

NA: (after about 8-10 minutes) Now, start again. The next things you write
     down will be under the capital letter "B", number 1, 2, 3, and so forth.
     This time change the picture in your imagination. Think of another
     elementary school classroom, in which just the opposite from the first
     time is happening. This time the teacher is making all the worst kinds
     of learning experiences. The teacher is actually trying to make the
     class dull, unhappy, and ineffective. Look at this classroom closely
     and write down everything you see and hear which shows that the teacher
     is providing the worst learning experience for his/her students.

APPENDIX H

(NA's Directions)

NA: (after about 8-10 minutes) All right. Look at what you've just written down. If anything that you see suggests some good kinds of learning experiences or teacher actions and words which you do have in your List "A", add these good things under the capital letter "C", beginning with #1 again. For example, if in List "B" you wrote down something like "The teacher is always hollering at the students," the opposite of this might be "The teacher is always saying nice things to the students." If you didn't write this last statement in List "A", you'd write it now in List "C". Any questions?

NA: (after about 6-7 minutes) Now, get into your small groups (NA arranges the students into small groups of about 4 each). Each person in the group should read off the items in his/her lists "A" and "C" to the other members of the group. Read the items very slowly, waiting a bit between each one. If the other members of the group hear an item which they would like to have on their list, let them write it down. Make a new list "D", starting with #1 again, and write these "borrowed" items there. When the first person in a group has finished reading off his/her lists "A" and "C", let the next person to the same, until all the members have read their lists. If a group finishes before the others, just stay quiet until every one finishes.

NA: (after about 10 minutes) The last thing to do (perhaps after returning to the original places before grouping) is to look at your own lists "A", "C", and "D", all but the bad list. Decide what you think are the four most important items. You could decide by thinking "Which ones would I want to have happen if I were in that class?" or "Which ones would I want to have happen for all elementary school students?" or "Which ones do I think could happen right away if teachers know about them?" You decide which are the most important items. Write a Roman numeral #I alongside the item in List "A" or "C" or "D" which is most important for you, a #II by the next most important item, a #III, and a #IV.

NA: (after about 3-4 minutes) That's all. Please hand in your sheets. And thanks for the effort you've put into them. I'm sure the teachers and principals will be grateful to you for your ideas.

APPENDIX J

3 December 1975

Dear Colleague,

The Bristol County Teachers' Association and the Education Department of Southeastern Massachusetts are collaborating to assess elementary teachers' needs for valid inservice educational programs.

The 40 needs in the attached survey were generated by a needs analyst, Prof. Hamilton Brush of SMU, in twenty group interviews with a number of elementary teachers, administrators, parents of elementary school children, and fifth and sixth grade students, in school systems in Bristol County and other Southeastern Massachusetts communities. Top priority needs were gathered, collated, and then arranged randomly in the survey. From administering the survey to a pilot group, it is estimated that it takes teachers about 15 minutes to complete.

The B.C.T.A. would greatly appreciate your input for this assessment; since only a comparatively small group of County teachers have been selected to respond to it, your participation is really necessary. From the survey data we hope to provide valid inservice programs, originating from a variety of program-makers (including small local teacher groups), responding directly to specific needs of the teachers themselves.

Please return the completed survey in the attached self-addressed, stamped envelope, no later than December 12. Thank you for your help.

Sincerely,

Paul Brouillard,
Co-chairperson
Professional Development

Maureen Carreiro,
Co-chairperson
Professional Development

DEFINING BRISTOL COUNTY'S ELEMENTARY TEACHERS' NEEDS
FOR INSERVICE EDUCATIONAL PROGRAMS

Grade level now teaching: K-2___ 3-4___ 5-6___ Special___
Years of fulltime teaching: 1-4___ 5-9___ 10-15___ Over 15___
Mostly urban experience___ Mostly non-urban___

DIRECTIONS: The following list of 40 items represent needs for elementary teachers for valid, useful, and satisfying inservice educational programs.
(1) Read each item. If the item is one which you need, putaa check-mark in the first column provided.
(2) Assuming the item were made into an inservice educational program, put a cross (X) in the second column if you would participate in the program.
(3) After completing the above, go back over the list of "X" items only and encircle the numbers of the five most important items.

✓ X

1. More student-directed learning and self-pacing.

2. Assessment of teachers' needs used to plan inservice programs.

3. Alternative supplementary projects and games for students who have finished regular assignments.

4. Ability to use different kinds of classroom grouping.

5. Better communication with administrators.

6. Greater cognizance of children with a bilingual home environment.

7. Greater educational use of field trips.

8. Motivational techniques.

9. Understanding of individual children's emotional, developmental, and educational needs.

10. Knowledge and use of effective evaluation techniques.

11. First-aid and health instruction programs for teachers.

12. Programs to inform parents how to aid children at home.

13. Effective planning for varied, ongoing inservice programs.

14. Updated instruction on new educational techniques and materials.

15. Integrating art, drama, music and crafts into the classroom.

16. Knowledge of child developmental stages in order to design appropriate learning tasks.

(OVER)

✓	X	
		17. Training in diagnosing and prescribing for reading difficulties.
		18. Concerned programs for the gifted child.
		19. Ability to use the open classroom organization.
		20. Techniques showing children how to help other children.
		21. Teachers on same grade level sharing ideas on curriculum, current programs, and common problems.
		22. Learn-by-doing, active participation by teachers in inservice programs.
		23. Instruction in metrics.
		24. Helping parents and other paraprofessionals aid classroom teachers.
		25. Teaching games and hands-on, active learning experiences in the classroom.
		26. Increased communication and rapport between teachers and parents.
		27. Instruction in proven and new methods of effective discipline.
		28. Promoting a positive self-concept in children.
		29. System-wide updating of articulated curriculum guides.
		30. Integrating special needs children into the classroom.
		31. Stimulating children by means of varied A-V materials.
		32. Practical application to real-life learning experiences.
		33. Interesting science materials, labs, experiments, and projects.
		34. Integration of subject areas in the curriculum.
		35. Innovative and imaginative classroom programs.
		36. Observation, listening, and questioning skills.
		37. Recognition and diagnosis of learning disabilities.
		38. Humanistic approach to the affective needs of children.
		39. Training in human values clarification and its use in class.
		40. More back-to-basics in teaching methods.

Please remember to circle the numbers of the five most important "X" items.
When finished, put the questionnaire into the attached stamped envelope and mail, if possible by Dec. 12, no later than Dec. 19. THANK YOU for your participation.

APPENDIX L

H A V E   Y O U   D O N E

t h e   N E E D S   Q - A I R E

for inservice programs

Many have.   Thank you!

W E   N E E D   <u>Y O U R</u>

P A R T I C I P A T I O N.

It is V I T A L to

Making Inservice Programs

for <u>YOUR</u> Benefit.

<u>P L E A S E</u>   T A K E   T H E   F E W

M I N U T E S   T O   F I L L   O U T   T H E

QUESTIONNAIRE.

THANKS--

PAUL BROUILLARD
MAUREEN CARREIRO

Bristol County Teachers Assoc.

APPENDIX M

11 December 1975

I want to take this opportunity to thank you for your part in allowing and arranging group interviews in your community for needs assessments concerning your elementary teachers' needs for inservice educational programs. I wish you would express my appreciation to the members of the participating groups. I plan to acknowledge their participation by name in my doctoral dissertation.

I hope by this time you and other decision-makers in your community are being able to make sue of the data provided by the group assessments. It should be remembered that the nature of the needs assessment methodology suggested that respondents list the _perfect_ situation, not merely the discrepant needs. Therefore, there may be many instances where certain needs are already being met or partially met in your community. I would like to call you sometime to find out what inservice programs you have instigated in the past two years and what if any you are planning to do soon, whether as a result of the needs assessment project or not.

If in the future you would like a similar assessment made of the same or of different kinds of needs, or if you would like a similar assessment made at the secondary level, using similar or different defining populations, I would be happy to discuss arrangements for implementing them.

Again, my thanks for your welcome cooperation in this project.

Sincerely yours,

Hamilton M. Brush
Education Department
Southeastern Mass. Univ.

Summary of Administrators' Stratifications

		AA	BA	DA	SA	WA	Total
Sex	Female:	4	3	2	1	5	15
	Male:	10	9	3	7	5	34
Years in Educ. & (aver.)		231 (16)	240 (20)	103 (21)	145 (18)	182 (18)	900 (18)
Years in Adm. & (aver.)		118 (8)	156 (13)	53 (11)	77 (10)	72 (7)	474 (9.5)
Mostly Elementary		11	9	5	7	8	40
Mostly Non-elem.		3	3	0	1	2	9
Mostly Urban		7	0	0	7	1	15
Mostly Non-urban		7	12	5	1	9	34

Summary of Teachers' Stratifications

		AT	BT	DT	ST	WT	Total
Sex	Female:	5	7	20	14	17	63
	Male:	0	1	4	1	1	7
Current Grade: (*)	K:	1	1	1	1	1	5
	1:	1	1	4	2	4	12
	2:	3	0	3	0	3	9
	3:	2	1	4	1	1	9
	4:	0	0	4	4	1	9
	5:	0	0	3	3	1	7
	6:	0	2	0	0	0	2
	Special:	1	1	5	0	7	14[a]
Grade taught most: (*)	K:	2	1	1	0	1	5
	1:	1	1	4	2	3	11
	2:	1	1	4	0	2	8
	3:	0	0	6	1	1	8
	4:	0	3	2	4	2	11[a]
	5:	0	1	4	3	1	9
	6:	0	0	0	0	0	0
	Special:	1	0	2	0	8	11
Experience:	1-4:	1	3	8	2	6	20
	5-9:	3	1	6	4	8	22
	10-15:	1	3	6	2	4	16
	16-over:	0	2	4	2	0	8
Mostly Urban :		0	2	1	1	1	5
Mostly Non-urban :		5	6	23	7	17	58

[a]It may be noted that some of the communities' totals on grades teaching or taught do not agree with the number of teachers in the communities. This is explained by the fact that some teachers put down two grade levels, and others forgot to register this information sometimes.

APPENDIX N

Summary of Parents' Stratifications

	AP	BP	DP	SP	WP[a]	Total
Sex: Female:	15	14	20	10	9	68
Male:	0	0	0	4	0	4
Age: 20-30:	3	3	3	10	6	25
31-40:	11	8	16	3	3	41
40-over:	1	3	1	0	0	5
Grade(s) of child(ren):						
K:	5	1	5	1		12 (of four communitie
1:	5	2	8	6		21
2:	5	9	4	7		25
3:	4	0	11	0		15
4:	5	9	0	4		18
5:	2	2	5	1		10
6:	2	3	0	2		7

[a]Wareham parents forgot to fill in this information.

Summary of Students' Stratifications

	AS	BS	DS	SS	WS	Total
Sex: Female:	17	13	15	13	14	72
Male:	13	15	5	12	11	56
Age (aver.):	9.7	10.5	10.0	11.5	11.0	10.3
Grade:[a] 4:	9					9
5:	20	16	20			56
6:	(*)	12		25	25	62
Years in town's schls.(aver.):	4.4	5.0	5.0	5.4	5.3	5.0

[a]In Attleboro, one third-grader came for the interview, also.

APPENDIX O

Sample Full Response Sheets from the Interviews

Barnstable Administrator   BA 9

A:

III. 1. Hands on workshops for regular classroom teachers (in each building) on how to work with special needs children.
   2. Workshops for special needs staff in core evaluation process, role, and service delivery.
II. 3. Program to sensitize children and staff to children with special needs.
I. 4. Human relations workshop to help staff become aware of dynamics involved in working together to develop specific educational plans for children.
   5. Workshop or program for principals regarding understanding and leadership of special needs evaluations and program development in their respective buildings.
IV. 6. Workshop on identification and remediation of children with special needs in the regular classroom.

B:

   1. Teachers reluctant to accept children coming into classroom from special needs programs.
   2. Personnel referring children for evaluations unclear regarding what problems are operating.
   3. Evaluating staff struggling to work together in developing educational plans for children.
   4. Principals finding it difficult to chair evaluation conferences in buildings.
   5. Staff threatened by new parent involvement.

C:

   1. Teachers aware that children with special needs should be with "normal" children and accept them with realistic expectations.
   2. Referring personnel are generally clear about what child's problem, what has been done to deal with situation in classroom and give indications of areas to be evaluated.
   3. Staff accept parent involvement and reasonably clear about their role with parents (child focused).

D:

   1. Human values clarification for personnel.
   2. Teacher planning of inservice workshops with credit.
   3. Training on evaluation of materials.
   4. Training for working with gifted children in and out of classroom.
   5. Vocational awareness career education beginning in kindergarten.
   6. Focus on teacher involvement with physical education.
   7. Teachers awareness of use of standardized testing data.

APPENDIX O

Barnstable Teacher BT 2

A:

I. 1. Education is a humanizing process--care for the rights, beliefs,
        attitudes, values, and self-concepts of children are being
        considered in all phases of an elementary program.
    2. Self-awareness through problem-solving techniques and the decision-
        making process is an integral part of the instructional climate.
    3. Cooperative planning is in evidence by needs assessments of goals
        and the procedure by which they are attained.
II. 4. Continuous appraisal and evaluation is in evidence by students,
        staff, community, and administration.

B:

    1. Teachers are complacent in their authoritarian roles seeking only
        to complete day to day tasks in a routine manner.
    2. Administrators are not seeking to bring out talents and expertise
        of personalities but rather issuing regulatory procedures which
        deal with things and not people.
    3. Community forces do not wholeheartedly support school personnel due
        to several factors: lack of accountability, tax burdents, disci-
        plinary weaknesses evidenced in schools, lack of public relations
        agent, aparthy or non-involvement with educational scene.
    4. Little opportunity for incentive type performance has been evidenced
        by administration--merit pay is frowned upon by teacher association
        leaders and till only recently been endorsed by the school committee
        (not been endorsed?)

A: (cont.)

    5. Accessibility to resourcs and authoritative data is in evidence as
        organizational structure is designed:
    6. There is a sensitivity toward or between school goals and community
        needs.
    7. Time to do the job for which we give our all is allocated as well as
        encouraged so that tasks can be addressed in a logical manner.
    8. Provisions for in-service training is either provided through local
        universities or teacher training institutions. Moneys are obtained
        for exemplary programs. Teachers have opportunity to plan and
        execute programs fitting the needs of their own buildings.
    9. Opportunity for interaction is provided through differentiated staffing
        patterns as well as supportive administrative leadership.

C:

III. 1. Teachers are cognizant of the needs of the total school and community
        and their actions reflect this in their desires to address needs,
        testing data, evaluatory procedures in an open trusting climate
        of mutual respect and shared responsibility.

APPENDIX O

Barnstable Teacher BT 2 (cont.)

IV. 3. Community is supportive of the school and has a trust in its credibility.
It desires to become a part of the school program and offers support
in a variety of ways.

C:

4. Professional growth and development programs are in evidence.

D:

1. Reading consultant to work with teachers <u>and</u> parents on presecriptive
needs.
2. Special needs students integrated into regular classroom.
3. Preschool centers (for 3 and 4 year olds) with physical handicaps.
4. Parnet inservice programs.

APPENDIX O

Barnstable Parent BP 13

A:

II. 1. Positive teaching methods, i.e., reaching the child in positive rather than negative ways--using praise.

      2. Better communication with and acceptance of parents as teachers-- more cooperation between parents and teachers.

III. 3. Individualized teaching, being more concerned with what the child is actually learning and going forward from that point, rather than evaluating progress and passing by the subject whether the child has grasped it or not. The point is teach them something and have them learn, not just to evaluate and forget it.

  I. 4. Each teacher would be primarily concerned with developing good self-images in each child.

      5. Each teacher would contribute to the developing values and morals of each child.

      6. Reading would be given heavy emphasis throughout elementary grades in a positive approach.

B:

1. There is no continuity from grade to grade in subject areas.
2. The teachers do not see the children as developing human beings who must live in the world.
3. The teachers teach to a group, hoping to reach as many as possible, but losing most.
4. The teachers don't have a specific set of objectives or goals for the year.
5. The teachers aren't flexible and willing to try new approaches.
6. The teachers are concerned only with subject matter, giving little attention to the other needs of the child and how methods of teaching can influence a child's learning capacity.
7. The teachers blame the children for not learning, rather than evaluating their methods or techniques of reaching the children.

C:

1. There is continuity from grade level with no gaps or unnecessary overlapping of subjects.
2. There would be a curriculum guide with objectives for the year.
3. New approaches to teaching would be discussed and considered.

II. 4. There would be a teacher self-evaluation program incorporated, possibly using video tape or at least a tape recorder.

D:

1. Use of enrichment materials to best advantage, including people in the community.
2. There is a controlled class size.
3. Remedial help is available to all children.

APPENDIX O

Barnstable Student   BS 14

A:

      1. A section of the room which has chairs and rugs to read on more comfortly.

I.   2. A desk for every student and a shelf.

      3. Thye would be able to select which subject in reading which they would like.

      4. Has animals and fish.

II. 5. During math you could pick a partner or a group of 4-5 at the same level.

      6. Don't have many windows.

      7. Has lots of books.

B:

      1. Has no books to read.

      2. Have to do whatever she says.

      3. No free time.

      4. Room is cold.

      5. Won't let you have recess if one person is bad.

      6. Lots of homework.

      7. Room is dark and if you can't see the blackboard she screams at you.

      8. Old mean grouchy.

      9. She has no party.

   10. Makes you stay back even if you are a straight A student.

   11. Room has lots of windows.

   12. Always screams at the pupils.

C:

      1. Has lots o books to read.

      2. Can do what you want most of the time.

III. 3. Has free time.

      4. Room is warm.

      5. If one person is bad lets him/her have another chance.

IV. 6. Not that much homework.

      7. Room is nicely lighted.

      8. Nice.

      9. Celebrates by partys.

   10. Passes almost everybody.

   11. Room has 2-3 windows.

   12. Doesn't scream.

D:
(none)

APPENDIX P

Priority Items by Major Positive Lists

	PRIORITY #I	PRIORITY #II	PRIORITY #III	PRIORITY #IV	TOTAL	PERCENT OF TOTAL PRIORITIES/GROUP
Administrators						
List "A"	35	32	37	30	134	65%
List "C"	11	13	7	7	38	18%
List "D"	2	3	4	9	18	9%
Unanswered					14	
					204	
Teachers						
List "A"	49	40	39	28	156	56%
List "C"	13	20	19	19	71	25%
List "D"	7	9	10	18	44	16%
Unanswered					9	
					280	
Parents						
List "A"	57	41	36	33	167	58%
List "C"	9	12	13	12	46	16%
List "D"	6	17	15	9	47	16%
Unanswered					28	
					288	
Students						
List "A"	80	64	52	46	242	47%
List "C"	18	29	37	28	112	22%
List "D"	19	23	24	37	103	20%
Unanswered					55	
					512	

Sample Priority Items--Attleboro Teachers

Community Group Person	PRIORITY #I	PRIORITY #II	PRIORITY #III	PRIORITY #IV
AT - 1	Specific organizational pattern set in terms of actual teaching, students, centers, materials, resources. (C)	Students with special needs are met. (C)	Materials supplied when teaching instruction in resources available. (D)	Screening program. (C)
AT - 2	Observation of different classrooms by teachers involved during school 9-3. (C)	Informal sharing sessions among teachers by grade level. (C)	Teachers and administrators involved in sharing sessions. (C)	Use of people in system as resource persons. (D)
AT - 3	Morale of personnel. (D)	Evaluation check-list for self-evaluation. (D)	Time schedule: more than one specific day. (D)	Carry-over to classroom--teacher's use of materials--games, centers, bulletin boards. (C)
AT - 4	Understanding by teachers of different children's emotional, developmental, and educational needs. (C)	A concerned, interested, well-informed staff and principal. (D)	An enthusiastic and positive staff. (D)	Good testing system used in both fall and spring to aid teachers in diagnosing children's needs. (C)
AT - 5	Inservice based on solid & pertinent information, i.e., teachers' inputs, community inputs & student inputs. (D)	There is no such thing as a learning disabled child. (C)	A multi-level multi-text approach is used. (C)	Provisions for teacher planning and testing: adquate materials, variety of methods, freedom with good planning. (D)

APPENDIX R

General Priority Categories in Order of Development

1. Better communication between parents and teachers.

2. Better communication between teachers and administrators.

3. Better communication between teachers and other teachers.

4. Better communication between schools and the community.

5. "Open-classroom" techniques and methods.

6. Individual needs, individualization, individualized instruction.

7. Grouping by skills, abilities, interests.

8. Techniques of effective discipline; behavioral problems.

9. Values clarification, values-oriented curriculum.

10. Motivational techniques.

11. New instructional techniques, teaching methods, trends, materials.

12. Curriculum planning, revising, guides.

13. Audio-visual materials; media center and its use.

14. New concepts of child development and learning.

15. Learning projects (small group & individual), particularly field trips.

16. Developing positive self-concept in children, good self-image.

17. Parent and other paraprofessional training for work in school and classes.

18. Special needs children and their integration into class (Chap. 766).

19. Reading disabilities, techniques, groups; diagnosis and prescription.

20. Teaching games (educational toys).

21. Science materials, computers, experiments; use of plants and animals.

22. Supplementary projects for after regular school work.

23. Mechanical learning-devices.

24. Self-pacing techniques; student self-directed learning.

25. Art-drama-music-crafts integrated into classroom.

26. Affective life of students-teachers-staff.

27. Recognition and diagnosis of learning disabilities.

28. Practical problem-solving.

29. Parent cooperation in helping students at home.

30. First-aid and health programs.

31. Creativity experience.

32. The gifted child.

33. Integration of several learning areas.

34. Back-to-basics.

35. Teachers sharing with teachers, team-teaching, grade-level conferences.

36. Study habits.

37. Innovative programs.

38. Child psychology.

39. Metrics.

40. Research techniques.

41. Evaluation and reporting.

42. Teacher centers.

43. Consumer education.

44. Hands-on, active teacher-learning experiences.

45. Transcental meditation; body movement experiences.

46. Special needs teachers.

47. Helping students to help other students.

48. Scheduling.

49. Evaluation techniques (testing) of programs by various groups.

50. Teaching how to learn.

51. Behavior modification.

52. Use of the library (school and public).

APPENDIX R

53. Observation, listening, and questioning skills.

54. Bilingual educational programs.

55. Planning good, valid, usable inservice programs.

56. Needs assessments.

Breakdown of Priority Items by the Twenty Interview Definer Groups

Category	AA	BA	DA.	SA	WA	Total
1.	1/0	0/2	0/0	2/1	1/0	4/3
2.	0/2	1/1	1/0	1/1	0/1	3/5
3.	1/0	0/0	0/0	1/0	0/0	2/0
4.	0/1	0/0	0/0	2/3	0/1	2/5
5.	2/1	0/0	0/0	0/0	0/0	2/1
6.	8/0	2/1	4/0	1/0	0/0	15/1
7.	2/0	1/0	2/0	0/0	0/0	5/0
8.	0/0	0/0	0/0	1/0	0/0	1/0
9.	1/0	2/0	0/0	0/0	0/1	3/1
10.	1/0	0/0	0/0	0/0	0/0	1/0
11.	4/0	2/0	1/0	1/1	0/0	8/1
12.	0/0	2/1	0/2	0/0	0/6	2/9
13.	2/0	0/0	0/0	0/0	1/0	3/0
14.	3/0					3/0
15.						3/0
16.	2/0				1/0	3/0
17.	0/1		1/0	1/0	1/0	3/1
18.		5/0		1/0		6/0
19.	3/0			1/0		4/0
20.						
21.						
22.			1/0		1/0	2/0
23.						
24.	1/0		2/0			3/0
25.			0/0			0/1
26.	1/0	1/0			1/0	3/0
27.		1/0				1/0
28.	1/0					1/0
29.						
30.	1/0	1/0				2/0
31.						
32.						
33.		1/0				1/0
34.						
35.	2/1	1/0	0/1	0/1	3/1	6/4
36.						
37.	1/0	1/0			2/0	4/0
38.						
39.			1/0			1/0
40.					1/0	1/0
41.					1/0	1/0
42.					1/0	1/0
43.						
44.	1/0	1/0				2/0
45.						
46.						
47.						
48.						
49.	2/1	3/0				5/1
50.						
51.	1/0					1/0
52.						
53.	2/0					2/0
54.						
55.	0/4		0/3	0/1	0/3	0/11
56.	0/3					0/3

(Numbers after the slash refer to "Descriptive" (D) items added later.

(Hereafter, if a piece of data is 0/0, it will not be entered.)

Category	AT	BT	DT	ST	WT	Total
1.		1/1	1/1		2/0	4/2
2.	1/0	0/1	4/3	5/1	0/4	10/9
3.			3/0	4/0		7/0
4.		0/1	2/0			2/1
5.					2/0	2/0
6.	3/0		3/5	1/0	3/0	10/5
7.			2/0		1/0	3/0
8.			0/1	4/0	1/1	5/2
9.			1/0	4/0		5/0
10.			1/0			1/0
11.	1/0	3/0	8/1	4/0	3/0	19/1
12.	1/0	1/2	2/5	2/4	2/1	8/12
13.				1/0	1/0	2/0
14.					1/0	1/0
15.			0/1	1/0		1/1
16.		1/0			1/0	2/0
17.		1/0	2/1	1/0	1/1	5/2
18.	1/0	1/0	3/0		4/0	9/0
19.		2/0	0/1	2/0		4/1
20.	1/0				1/0	2/0
21.			1/0			1/0
22.						
23.						
24.						
25.			5/0		4/0	9/0
26.	1/0		3/0		1/0	5/0
27.	1/0		1/0			2/0
28.			2/1			2/1
29.			1/0		1/0	2/0
30.		1/0	1/0			2/0
31.			1/0	1/0		2/0
32.					2/0	2/0
33.	1/0				1/0	2/0
34.		0/1				0/1
35.	2/0	5/1	3/3	11/5	6/2	27/11
36.						
37.			1/0			1/0
38.						
39.			1/0		1/0	2/0
40.						
41.			1/0			1/0
42.						
43.			1/0			1/0
44.			1/0			1/0
45.			1/0			1/0
46.			1/0			1/0
47.						
48.						
49.	0/1	1/0	0/1			1/2
50.					1/0	1/0
51.					1/0	1/0
52.					1/0	1/0
53.						
54.						
55.	0/1	0/2	0/10	0/2	0/9	0/24
56.			0/1		0/1	0/2

Category	AP	BP	DP	SP	WP	Total
1.	5/0	3/2	4/1	7/0	2/2	21/5
2.			4/0		2/0	6/0
3.						
4.			2/1	1/1		3/2
5.	1/0				1/0	2/0
6.	4/3	9/2	9/1	2/0	1/0	25/6
7.	3/0					3/0
8.		1/2	5/1		2/0	8/3
9.						
10.	1/0					1/0
11.	1/0	4/0	5/1	0/1	1/0	11/2
12.		1/0			0/1	1/1
13.	1/0	1/0	1/0		1/0	4/0
14.						
15.						
16.	2/0	5/0	1/0		3/0	11/0
17.	2/0	1/0	0/4	1/1	0/1	4/6
18.	2/0	1/0		1/0	1/0	5/0
19.	1/0	2/0				3/0
20.						
21.		1/0				1/0
22.	1/0		0/1	3/0	0/1	4/2
23.						
24.	1/0		1/0	2/0	1/0	5/0
25.	1/0		1/0		2/0	4/0
26.	2/0	4/0				6/0
27.			1/0			1/0
28.	1/0		1/0			2/0
29.	1/0	1/0				2/0
30.	1/0					1/0
31.			1/0			1/0
32.		1/0	1/0		2/0	4/0
33.	1/0		1/0			2/0
34.			2/0		1/0	3/0
35.	0/1	2/1	2/1	2/1	1/0	7/4
36.			1/0			1/0
37.				1/0		1/0
38.				1/0		1/0
39.						
40.						
41.						
42.						
43.						
44.						
45.						
46.						
47.		1/0				1/0
48.						
49.		1/1			1/0	2/1
50.						
51.						
52.					1/0	1/0
53.						
54.					3/0	3/0
55.		0/1	0/1	0/1		0/3
56.						

Category	AS	BS	DS	SS	WS	Total
1.						
2.						
3.						
4.						
5.						
6.			1/0	1/0		2/0
7.	3/0	3/1		5/0	2/0	13/1
8.	4/1	0/3		5/0	0/2	9/6
9.						
10.		1/0			2/0	3/0
11.			1/0			1/0
12.						
13.	2/0	3/0	0/1	1/0	3/0	9/1
14.						
15.		1/0	1/0	2/0	4/0	8/0
16.	1/0	2/1	1/0	2/1	5/1	11/3
17.						
18.						
19.	2/0	2/0	1/0			5/0
20.	1/0	1/2	3/0		2/0	7/2
21.	5/0	2/0	6/0	1/0	2/0	16/0
22.	5/0	2/0	3/0	1/0	4/0	15/0
23.		1/0	1/0			2/0
24.		4/0		1/0	1/1	6/1
25.	1/0		1/0			2/0
26.						
27.						
28.					1/0	1/0
29.						
30.						
31.						
32.						
33.						
34.						
35.						
36.						
37.						
38.						
39.						
40.						
41.						
42.						
43.						
44.						
45.						
46.						
47.	0/4	1/0			2/0	3/4
48.		1/0				1/0
49.						
50.						
51.						
52.						
53.						
54.						
55.						
56.						

Totals of All Groups

Total	Category
29/10	1.
19/14	2.
9/0	3.
7/8	4.
6/1	5.
52/12	6.
24/1	7.
23/11	8.
8/1	9.
6/0	10.
39/4	11.
11/22	12.
18/1	13.
4/0	14.
9/1	15.
27/3	16.
12/9	17.
20/0	18.
16/1	19.
9/2	20.
18/0	21.
21/2	22.
2/0	23.
14/1	24.
15/1	25.
14/0	26.
4/0	27.
6/0	28.
4/0	29.
5/0	30.
3/0	31.
6/0	32.
5/0	33.
3/1	34.
40/19	35.
1/0	36.
6/0	37.
1/0	38
3/0	39.
1/0	40.
2/0	41.
1/0	42.
1/0	43.
3/0	44.
1/0	45.
1/0	46.
4/4	47.
1/0	48.
8/4	49.
1/0	50.
2/0	51.
2/0	52.
2/0	53.
3/0	54.
0/38	55.
0/5	56.

Rank Order of the 56 Categories

RANK	CATEGORY #	NO. OF RESPONSES	RANK	CATEGORY #	NO. OF RESPONSES
1	6	64	27	28	7
2	35	59	27	5	7
3	11	43	29	10	6
4	1	39	29	32	6
5	55	38	29	37	6
6	8	34	32	56	5
7	2	33	32	30	5
7	12	33	32	33	5
9	16	30	35	14	4
10	7	25	35	27	4
11	22	23	35	29	4
12	17	21	35	34	4
13	18	20	39	31	3
14	13	19	39	39	3
15	21	18	39	44	3
			39	54	3
16	19	17	44	23	2
17	25	16	44	41	2
18	4	15	44	51	2
18	24	15	44	52	2
20	26	14	44	53	2
21	49	12	49	36, 38, 40, 42, 43, 45, 46, 48, 50	1
22	20	11			
23	15	10			
24	9	9			
24	3	9			
26	47	8			

APPENDIX S

Category Numbers Awarded to the Four Groups

TEACHERS (50%) ##1, 2, 6, 8, 9, 11, 12, 17, 18, 19, 20, 25, 26, 27, 28, 35, 39, 49, 55, 56 (twenty items)

ADMINISTRATORS (25%) ##5, 13, 14, 16, 22, 24, 30, 37, 44, 53 (ten items)

PARENTS (15%) ##7, 29, 32, 33, 34, 54 (six items)

STUDENTS (10%) ##10, 15, 21, 47 (four items)

NOT ASSIGNED ##3, 4, 23, 31, 36, 38, 40, 41, 42, 43, 45, 46, 48, 50, 51, 52

Sample Questionnaire Tabulation Sheet #1

(15) K-2 — row 1–25, row 26–40

(16) Sp — row 1–25, row 26–40

(17) 5-6 — row 1–25, row 26–40

(18) K-2 — row 1–25, row 26–40 — All spaces filled!

(19) 3-4 — row 1–25, row 26–40 — 6 (S)

(20) 3-4 — row 1–25, row 26–40 — 3 (S)

(21) 3-4 — row 1–25, row 26–40 — No (S)

(22) 3-4 — row 1–25, row 26–40

(23) K-2 — row 1–25, row 26–40

(24) K-2 — row 1–25, row 26–40

(25) K-2 — row 1–25, row 26–40

(26) ? / ? — row 1–25, row 26–40 — message

(27) K-2 — row 1–25, row 26–40

(28) K-2 / U — row 1–25, row 26–40 — Blank on back

Each pair of rows is numbered 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 (top) and 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 (bottom), with hand-marked ✓ and ✗ tallies in the cells.

APPENDIX T

Sample Questionnaire Tabulation Sheet #2

155 - 168

1. 661/2. 620/3. 974/4. 962/5. 320/6. 631/7. 751/8. 862/
9. 741/10. 421/11. 643/12. 542/13. 310/14. 1195/15. 530/16. 631/
17. 854/18. 641/19. 562/20. 662/21. 631/22. 751/23. 754/24. 430/
25. 842/26. 331/27. 652/28. 731/29. 531/30. 521/31. 320/32. 750/
33. 641/34. 521/35. 641/36. 432/37. 764/38. 732/39. 421/40. 995/

1. 6 + 12 + 4 = 22

2. 6 = 4 = 0 = 10

3. 9 + 14 + 16 = 39

4. 9 + 12 + 8 = 29

5. 3 + 4 + 0 = 7

6. 6 + 6 + 4 = 16

7. 7 + 10 + 4 = 21

8. 8 + 12 + 8 = 28

9. 7 + 8 + 4 = 19

10. 4 + 4 + 4 = 12

11. 6 + 8 + 12 = 26

12. 5 + 8 + 8 = 21

13. 3 + 2 + 0 = 5

14. 11 + 18 + 20 = 49

15. 5 + 6 + 0 = 11

16. 6 + 6 + 4 = 16

17. 8 + 10 + 16 = 34

18. 6 + 8 + 4 = 18

19. 5 + 12 + 8 = 25

20. 6 + 12 + 8 = 26

21. 6 + 6 + 4 = 16

22. 7 + 10 + 4 = 21

23. 7 + 10 + 16 = 33

24. 4 + 6 + 0 = 10

25. 8 + 8 + 8 = 24

26. 3 + 6 + 4 = 13

27. 6 + 10 + 8 = 24

28. 7 + 6 + 4 = 17

29. 5 + 6 + 4 = 15

30. 5 + 4 + 4 = 13

31. 3 + 4 + 0 = 7

32. 7 + 10 + 0 = 17

33. 6 + 8 + 4 = 18

34. 5 + 4 + 4 = 13

35. 6 + 8 + 4 = 18

36. 4 + 6 + 8 = 18

37. 7 + 12 + 16 = 35

38. 7 + 6 + 8 = 21

39. 4 + 4 + 4 = 12

40. 9 + 18 + 20 = 47

APPENDIX U

Special Notes, Messages, & Comments on the Questionnaires

Respondent	Notes

Respondent — **Notes**

 # 26 — "I was out ill. Sorry I didn't get this back sooner."

 # 33 — (re Item #9) "all in one session??"

 # 55 — wrote "I feel we are using too many teaching days for these inservice workshops" across the top and returned the questionnaire blank.

 # 56 — (re Item #39) wrote in Sid Simon's name

 # 60 — (re Item #38) added "plus Language Disability"

 # 81 — (re Item #23) added "very much so"

 # 89 — (re Item #26) added "including teachers making home visits"

#116 — (re Item #38) put an extra cross down for emphasis

#139 — wrote "Raynham Junior High" across top

#163 — (re Item #10) asked "For students or teachers?"

#226 — wrote "This is a good idea. Hope you have success." (another respondent included a separate note which got lost from the questionnaire, which said, "Thank you. I enjoyed doing the survey.")

#235 — (who checked, crossed, and circled only 5 items) said, "I realized I could have checked more."

#250 — scrawled a huge "NOT APPLICABLE" across the face of the questionnaire and returned it blank.

#252 — (re Item #13) stressed it by underlining it

#273 — prioritized the order of the five circles by numbering them 1, 2, 3, 4, 5.

APPENDIX V

Ranking the Questionnaire Data By Stratifications

1	11	14	3	11	7	14	24	25	10	17	2	15	10
2	35	36	28	22	35	35	29	38	34	35	19	33	38
3	1	2	1	2	1	1	10	3	1	1	4	2	3
4	13	17	9	11	23	11	24	25	36	14	1	9	19
5	38	36	35	39	35	35	10	32	28	17	32	35	35
6	33	28	30	22	15	35	18	18	32	27	38	26	27
7	27	32	17	11	38	33	29	22	36	27	38	37	33
8	5	7	2	18	9	14	2	2	9	5	19	7	7
9	12	11	15	9	20	11	5	8	24	9	19	18	9
10	29	31	22	30	32	26	18	36	20	17	19	29	27
11	25	19	32	18	23	11	24	10	20	30	10	18	23
12	20	22	19	18	23	14	10	22	17	17	12	18	19
13	40	40	35	39	40	26	38	38	40	35	10	40	37
14	8	7	3	16	11	3	5	10	16	3	4	11	4
15	21	23	20	9	32	30	18	22	28	30	12	29	26
16	26	26	25	22	32	30	9	10	23	17	28	29	23
17	2	1	5	1	1	2	8	1	2	3	8	1	1
18	19	18	21	11	20	3	33	18	10	17	12	23	10
19	28	33	25	16	15	40	38	32	24	27	28	29	35
20	18	21	16	30	15	19	18	16	12	17	28	8	27
21	10	10	6	8	13	14	14	10	12	9	12	11	15
22	16	23	12	18	10	30	29	25	17	30	8	22	25
23	14	13	18	35	7	3	24	30	20	9	4	11	15
24	36	35	40	28	6	35	24	32	28	30	19	37	27
25	6	7	6	4	11	19	14	3	3	9	32	11	8
26	39	39	39	35	39	35	29	32	36	35	32	39	39
27	3	5	10	6	4	8	10	7	3	14	7	5	1
28	7	6	8	7	23	8	1	3	8	7	12	5	4
29	34	34	30	30	28	33	33	38	32	7	32	35	27
30	17	12	29	11	20	21	5	9	36	5	19	16	10
31	32	30	32	30	28	26	37	30	20	35	19	23	27
32	15	15	12	22	15	6	18	18	12	17	12	9	15
33	31	29	35	28	23	26	33	16	34	35	32	26	33
34	37	38	38	37	35	24	38	36	24	40	32	33	39
35	23	25	23	22	15	14	33	18	24	30	19	26	19
36	22	20	27	37	13	8	14	25	12	17	12	18	19
37	9	4	11	4	3	21	3	3	3	14	19	2	13
38	24	16	24	22	28	24	3	10	6	17	38	16	14
39	30	26	32	30	28	21	18	25	17	9	28	23	18
40	4	3	12	3	4	6	14	10	6	1	2	4	4

APPENDIX V

Comparison Ranking of Questionnaire Needs Statements
By Interview Respondents and Questionnaire Respondents

Questionnaire Item	Questionnaire Total Priorities Ranking	Interview Priorities Ranking
1	14	18
2	36	30
3	2	6
4	17	10
5	36	7
6	28	37
7	32	22
8	7	27
9	11	1
10	31	20
11	19	30
12	22	33
13	40	5
14	7	3
15	23	17
16	26	33
17	1	16
18	18	27
19	33	25
20	21	24
21	10	2
22	23	37
23	13	37
24	35	12
25	7	21
26	39	4
27	5	6
28	6	9
29	34	7
30	12	13
31	30	14
32	15	25
33	29	15
34	38	32
35	25	27
36	20	40
37	4	33
38	16	19
39	26	23
40	3	33