

ROLE ADAPTATION AND CAREER DEVELOPMENT: A STUDY  
OF ROLE DEFINITION AND ROLE INTERACTION AMONG  
TEACHERS AND TEACHER-AIDES IN ADULT BASIC  
EDUCATION IN THE STATE OF MICHIGAN

By

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## ABSTRACT

### ROLE ADAPTATION AND CAREER DEVELOPMENT: A STUDY OF ROLE DEFINITION AND ROLE INTERACTION AMONG TEACHERS AND TEACHER-AIDES IN ADULT BASIC EDUCATION IN THE STATE OF MICHIGAN

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This study has identified the incumbent defined current roles of teacher-aides and teachers in selected role-sets in Adult Basic Education, compared these roles with similarly defined ideal arrangements, and analyzed the congruences and discrepancies in the roles thus defined. The purpose of the investigation has been to assess the career-ladder aspirations and opportunities of teacher-aides in Adult Basic Education. It was assumed that aides' aspirations would be indicated in differentials between their current roles and roles they defined for an assumed ideal situation; and that opportunity for career development would be indicated by differences between teacher defined current roles of aides and roles defined by teachers for "ideal" teacher-aides, and by differences between roles defined by teachers for themselves in interaction with their current teacher-aides

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and their roles as redefined on the assumption of working with an "ideal" teacher-aide.

The pertinent literature called attention to the importance of career development opportunities for para-professionals in schools and other professional work settings, and to the potential for such opportunities for teacher-aides in the field of Adult Basic Education.

The possibility of institutionalizing the new career concept, training indigenous persons to assume entry positions in the field of adult basic education, matching them with role-adaptive teachers, and then with appropriate training assisting them to move toward professional roles was demonstrated.

The study was based on the assumptions that: (a) the professional personnel in a school have the responsibility of maintaining the established professional controls of the teaching process; (b) the principal responsibility for assigning activities to teacher-aides resides with the teacher operating in her role-set; (c) when a teacher-aide enters into a working relationship with a teacher, the teacher's role is changed from what it was when she worked alone; (d) there must be flexibility of role definition by the teacher to permit entry of the teacher-aide and to permit an expanding role for that teacher-aide; and (e) an aide, to profit by career-ladder opportunity, must aspire to function at progressively higher levels of professional competence.

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The study was confined to the field of Adult Basic Education and to a population of thirty-four teachers, thirty-four teacher-aides, and their directors of Adult Basic Education in the state of Michigan.

Two instruments, a professional competence scale and a demographic census form, developed by the writer, were used to collect the data from each of the thirty-four teachers, teacher-aide pairs in the sample, and to collect demographic data from each of their directors.

The data were analyzed according to fifteen questions posed by the purposes of the study. Four measures of professional competence were used to analyze the teachers' and the teacher-aides' "actual" and assumed "ideal" roles. One-way analyses of variance were used to measure differences. The F ratio at the .05 level was used to locate significant differences. Analyses were conducted between and within the "actual" and the assumed "ideal" role definitions reported by teachers and by teacher-aides to assess the giving and assuming of expanded responsibilities for teacher-aides.

The major findings were: (1) most current activities of teacher-aides were concentrated in the teacher-aide, teacher assistant, and teacher associate levels of professional competence; (2) current activities of teachers were distributed across the teacher assistant, teacher associate, teacher and supervising teacher levels

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of professional competence, and current activities shared between teachers and teacher-aides covered a much wider range than those of either teachers alone or teacher-aides alone.

Most teacher-aides seemed to aspire to continue working at the lower levels of the professional competence scale, but with more activities to perform and with greater sharing of activities with their teachers. Most teachers were willing to share activities with well qualified aides; but few indicated that they would change their roles to include activities significantly higher on the professional competence scale. Teachers report that they would relinquish activities in the lower and middle levels of professional competence to facilitate greater involvement of their teacher-aides. Teachers showed willingness to share activities with their aides at either the same or new levels they would adopt if matched with a competent and upward mobile aide.

The conclusions were that there were teacher-aides who were willing to perform activities intensively in the lower levels and to share activities with their teachers at higher levels of professional competence. There were teachers who were willing to relinquish some of their current activities and to share activities with their teacher-aides so as to facilitate greater involvement of their aides.

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The findings of the study have potential as a basis for action and for future research in the area of teacher and teacher-aide interaction in the classroom and for career-ladder development for teacher-aides.

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## CHAPTER I

### INTRODUCTION

Previous studies have considered the attitudes and effectiveness of paraprofessionals. Some have been concerned with the assessment of the actual and potential contributions of paraprofessionals working in public and non-public schools, or in the fields of medicine, law enforcement, social work, and other public service agencies. Some have dealt with recruiting, selecting and training of paraprofessionals, or with the duties they perform. Some have examined working relationships of paraprofessionals with administrators, principals, teachers, counselors, and others in elementary schools and high schools. Thoughtful students of the problems of educational and vocational inequities have argued for the paraprofessional role of teacher-aide as a first or early step on a "career ladder" by which the adult poor might climb out of situations of unemployment and underemployment.

Few studies have been reported on the paraprofessional in Adult Basic Education as the role is

perceived by principal members of the Adult Basic Education role-set. Specifically, no study has been reported on the changing roles of both aides and teachers as aides work with Adult Basic Education teachers and as the changing roles are perceived by teachers and the aides themselves. How teachers of Adult Basic Education react to the changing of school staffing and modifications in roles made necessary by the presence of this additional staff member is not known. More importantly, no study has been reported on the amenability of professional teachers toward adjusting their own roles to make available expanding opportunities for growth of their paraprofessional aides.

If an aide is to expand her role and move up the career ladder certain minimal conditions are required:

1. There must exist a defined initial role for her to enter.
2. She must aspire to significantly expand her role.
3. The teacher must define her own role in such a way as to accommodate the entry role of her aide.
4. The teacher must be willing to adjust her own role in a way which will accommodate an expanding role for her aide.

As a basis for organization, administration, and training in order to expand opportunities for indigenous

workers among the economically and educationally disadvantaged to become teacher-aides, there is clear need to ascertain in general:

1. How teacher-aides perceive their aide roles and whether they aspire to expand them.
2. How teachers differentiate their own roles and the roles of their paraprofessional helpers, the aides, and whether, in fact, they would adjust their own behaviors to encourage assumption of increasing responsibility on the part of aides.
3. Whether and how teacher-aides vary in their perceptions of their teacher-aide roles and in their aspirations to expand their roles.
4. Whether and how teachers vary in their differentiating of their own roles and those of teacher-aides and in the likelihood of their adjusting their own roles to encourage assumption of increasing responsibility on the part of the teacher-aides.

#### Statement of the Problem

The principal task of this study has been to identify the incumbent-defined current roles of teacher-aides and teachers in selected role-sets in Adult Basic Education, and to compare these roles with similarly

defined ideal arrangements, noting the congruencies and discrepancies in the roles thus defined. The purpose of the investigation has been to assess the career-ladder aspirations and opportunities of teacher-aides in Adult Basic Education as indicated in differentials between current roles of teacher-aides and their preferred "ideal" roles, and between current aide roles and roles defined by teachers for "ideal teacher-aides," plus differences between roles defined by teachers for themselves in interaction with their current teacher-aides and as their roles are redefined on the assumption of working with an "ideal" teacher-aide.

#### Objectives of the Study

The study has sought answers to the following questions:

1. What activities were currently being performed only by the teacher-aides, as reported by (a) teachers and (b) teacher-aides?
2. What activities would ideally be performed only by the teacher-aides, as reported by (a) teachers and (b) teacher aides?
3. What activities were currently being performed by both the teachers and the teacher-aides, as reported by (a) teachers and (b) teacher-aides?
4. What activities would ideally be performed by both the teachers and the teacher-aides, as reported by (a) teachers and (b) teacher-aides?

5. What activities were currently being performed only by the teachers, as reported by (a) teachers and (b) teacher-aides?
6. What activities would ideally be performed only by teachers, as reported by (a) teachers and (b) teacher-aides?
7. What activities were not currently being performed by either the teachers or the teacher-aides as reported by (a) teachers and (b) teacher-aides?
8. What activities would ideally not be performed by either teachers or teacher-aides, as reported by (a) teachers and (b) teacher-aides?
9. Do teachers and teacher-aides agree (a) on the roles they were performing in the "actual" activity structure and (b) on the roles they would perform in the "ideal" activity structure?
10. Do teacher-aides aspire to perform more activities or different activities in an assumed ideal situation than they performed in the actual situation?
11. Would teachers choose for their ideal teacher-aides more activities or different activities than are actually performed by their present teacher-aides?
12. Would teachers, on the assumption of being paired with an ideal teacher-aide, choose to perform fewer activities or different activities than those they perform as they work with their present teacher-aides?
13. Would teacher-aides, if they were free to choose, choose to have their teacher role-set mates perform fewer or different activities than those they presently perform?
14. Are there observable relationships between any one or any combination of the demographic characteristics of teacher-aides and the changes in professional character of roles aspired to by teacher-aides in an assumed ideal situation?
15. Are there observable relationships between any one or any combination of the demographic characteristics of teachers and the changes those teachers report that they would make in the professional character of their own roles, assuming



that they were to be matched with a fully competent and willing aide in an ideal situation?

### Assumptions

The study has been based on the assumptions that:

1. The professional personnel in a school have the responsibility of maintaining the established professional controls of the teaching process.
2. The principal responsibility for assigning activities to teacher-aides resides with the teacher operating in the role-set.
3. When a teacher-aide enters into a working relationship with a teacher, the teacher's role is changed from what it was when she worked alone.
4. There must be flexibility of role definition by the teacher to permit entry of the teacher-aide and to permit an expanding role for that teacher-aide.
5. A teacher-aide with little schooling can learn to perform professional activities starting from a low level and progressing to a high level in the field of Adult Basic Education.
6. If career-ladder opportunities are to be realized, aides must aspire to perform at progressively higher levels of professional competence.

### Definition of Terms

Various terms and various definitions are used in the literature to refer to the several concepts with which this study is centrally concerned. In order to enhance communication those several concepts are defined as they have been used in this work.

Adult Basic Education.--consists of educational opportunities for adults and out-of-school youth related to their need for (1) fundamental skills of communication and computation, (2) understanding rights and responsibilities as citizens, (3) improving home and family life, (4) upgrading of marketable and functional skills, and (5) guidance to enable them to use their increased skills to enrich their lives and the lives of others.<sup>1</sup>

Career Ladder Development.--may be defined as the establishing of a continuum of employment opportunities for individuals, ranging from non-skilled entry positions, extending with advancement in training through sub-professional functions and providing opportunity to the individual to receive full training and attain full professional status.

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<sup>1</sup>Adapted from Michigan State Department of Education Supplement to the Adult Education Act of 1966--Public Law 89750 published by Adult Education Unit, Lansing, Michigan, 1965.

Role-set.--may be defined in the context of teacher and teacher-aide relationship as a complement of role relations in which the two workers are involved by virtue of sharing and performing teacher functions within a classroom situation.

Ideal Aide.--would be an aide who possesses high potential, would be competent and willing to perform any activity listed on the professional competence scale, and would exemplify qualities perceived as being outstanding by the teacher in the role-set.

Teacher-aide.--may be defined as a person who has less than the required or expected level of education for teaching, but who works in close relationship with a certified teacher and under supervision assists and shares duties that in her absence would be performed by the teacher. In the hierarchy employed in this study this is the first level on the career ladder, and its incumbents may enter without any college credit.

Teacher Assistant.--may be defined as a person who has completed at least one year of college or university study specifically related to the job role, and has had teacher-aide or other experience to broaden his range of competence and knowledge. The teacher assistant would be competent to perform all functions on levels one and two of the career ladder hierarchy.

Teacher Associate.--may be defined as a person, often a former assistant, who has had further experience, has completed at least three years of academic training at a university or college, and who can perform all functions on levels one, two, and three of the career ladder hierarchy.

Teacher.--may be defined as a person who has earned a baccalaureate degree and/or has met all requirements for full certification in the state and school where he is employed, and is competent to perform all classroom functions with or without assistance.

Supervising Teacher.--may be defined as a person who has achieved the highest level of professional teacher competence, has received special instruction in evaluation and supervision techniques at a university or college and is thoroughly familiar with all aspects of the duties of the teacher-aide, the assistant, the associate, and the teacher levels of competence.

Categories of Professional Competence.--the sequential arrangement of five major levels of Adult Basic Education professional activities ranging from those requiring minimum amounts of training and skill to those requiring highest levels of experience, training and skill, and official certification to perform.

PCS.--means Professional Competence Scale (the forced-choice checklist of forty-six activities).

LPC.--means Level of Professional Competence (the mean rank of activities identified on the PCS). The formula for LPC is: 
$$LPC = \frac{a_1 + a_2 + a_3 \dots a_k}{N_a}$$
 where  $a_1 \dots a_k$  represents activities performed (weighted according to rank on PCS).  $N_a$  represents the number of activities performed.

RPC.--means Range of Professional Competence and the formula is written as follows:  $RPC = a_1 - a_k + 1$  (a being weighted according to rank on PCS).

SPC.--means Scope of Professional Competence and the formula is written as follows:  $SPC = \sqrt{RPC(N_a)}$

CPC.--means Composite of Professional Competence and is calculated by using the following formula:  

$$CPC = \frac{SPC}{LPC}$$

Poverty Areas.--may be defined as areas in which half or more dwellers receive incomes of under \$3,000 annually.

Redefine Roles.--may be defined as adding and/or deleting functions in specifying new roles.

### Need for the Study

This research is based upon the assumption that the involvement of teachers and teacher-aides, in Adult Basic Education, in defining initial and potential duties for themselves and each other will produce new and needed information. This information should better define career development opportunities for aides. It should suggest direction for the building of career ladders, training and recruiting of aides, and the matching of aides with teachers. If teacher-aides are to move effectively upward on a career ladder, there must be definition and redefinition of roles by both teachers and teacher-aides in the role-set.

There is also an existing need to gain more information regarding activities which are currently performed by teachers and teacher-aides working together. More specifically, there is a need to delineate the activities performed only by the teachers and those performed only by the teacher-aides. It is necessary to know the characteristics of teachers and teacher-aides which are significantly related to variance between the self-defined current roles and the "ideal" roles.

The data derived from this study should be beneficial in providing some insight in the understanding and defining of duties for aides and should also be of direct value to administrators or trainers of teachers and

teacher-aide teams to set up work programs or work situations in which teachers and teacher-aides become co-workers. Administrators, trainers, or others who desire to facilitate career-ladder development of teacher-aides should be able to match upward mobile teacher-aides with teachers willing to adjust their own roles to accommodate such mobility. This would help aspiring teacher-aides to surmount the qualification measure which bars many people from employment opportunities. If qualification requirements are not to be fixed blocks to employment for persons with high potential but low education, job descriptions for career-ladder jobs must be clear enough so that the essential minimum skills required to perform each job can be estimated and then used as a basis for assessing workers.

Thus, this study may help to open up inducements to careers for the poor but capable. If there are to be real career opportunities for the poor and jobless, they must know it. A good career-ladder plan should define jobs explicitly so that it can be understood across work-fields. If they are to move effectively and successfully upward on a career-ladder basis there must be a redefinition and a restructuring of teachers' roles so as to provide and to define teacher-aide roles for a role-set situation.

Therefore, this study should provide information needed to structure jobs for the jobless and to organize curricula in a most promising area, Adult Basic Education.

#### Limitations

The sample consisted of thirty-four teachers, thirty-four teacher-aides, and their ABE directors working together in Adult Basic Education programs in public school districts in the state of Michigan. These thirty-four pairs constituted 94.4 per cent of all teacher/teacher-aide combinations known to exist in the state at the time of the study. There were no limitations regarding age, educational background, marital status, and years of teaching experiences in ABE. The study was confined to the field of Adult Basic Education and to the teachers and the teacher-aides who made up almost the entire population of such paired workers within classroom situations in the selected public schools in the state of Michigan. In this situation, only the teachers and the teacher-aides were the reporters and they served to determine the roles of the teachers and the teacher-aides for role adaptations and career-ladder development. The directors reported demographic data descriptive of the teachers and teacher-aides included in this sample.

The data were limited to those obtained from:  
(1) the forced-choice checklists administered to the teacher-aides, the teachers, and the directors of Adult



Basic Education; and (2) the screening of the instruments for item-quality and suitability for the scale of levels of competence which were used to describe teacher-aides for career-ladder development training and to describe teachers who redefined their own roles.

### Overview

The need for this study, its purpose, its objectives, its assumptions, its guiding questions, and the limitations were stated in Chapter I. Theory and philosophy basic to the study were explained. Terms to be used in the study have been defined.

A review of the pertinent literature and a detailed explanation of the theory are presented in Chapter II.

Chapter III includes the study's design, a description of the sample, instruments used for the study, the organization of basic data, the operational questions, and analytical procedures used in discovering and assessing differences.

The findings are presented and analyzed in Chapter IV. Chapter V contains a summary of the result, conclusions, and recommendations for practice and for future research.

CHAPTER II

REVIEW OF LITERATURE ON

PARAPROFESSIONALS

The development of roles for aides has been recognized as an important factor in schools and in other professional work settings. Within recent years aides have been added in the Adult Basic Education situation and their number is projected to increase.

The Winter, 1967, issue of the American Child, which was devoted to "a symposium on the new non-professional," reported that already in the United States there were about 75,000 new paraprofessionals, most of them in jobs created by anti-poverty legislation. Of these, 25,000 or more were estimated to be in human-service positions created for "indigenous" non-professionals by the Office of Economic Opportunity, and probably another 25,000 or more part-time aides were employed through Head Start. The article further estimated that there are 96,000 psychiatric aides in state and county mental health hospitals.<sup>1</sup>

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<sup>1</sup>American Child (Winter, 1967), 6.

Emergence of Paraprofessionals  
in Education

Teacher-aides have been in existence in the educational system for the last forty years. One of the earliest known uses of the aide was in the early 1930's when students from low-income families, who had become or were likely to become dropouts, were involved in the federally supported National Youth Corps (NYC). Used principally in the larger school system such as New York and Chicago, they were utilized not only as teacher-aides but as liaison persons between the school and the home, particularly in the ghettos.

Prior to the 1950's a number of interesting projects involving assistants for teachers were undertaken in Europe and in the United States. None of them had any notable immediate influence on American Education, however, and not until the labor shortage following the second World War was much attention paid to division of the teacher's complex role as a means of augmenting the teacher force with less highly trained aides.<sup>2</sup>

In the early 1950's the Bay City, Michigan teacher-aide project was initiated under a Ford Foundation grant in collaboration with Central Michigan University. Dr. Charles Park was the co-ordinator. Teacher

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<sup>2</sup>Kern S. Alexander, "What Teacher Aides Can--and Cannot Do," Nation's Schools, LXXXII, No. 2 (August, 1968), 112.

aides were introduced and a study was undertaken to ascertain: (a) the amount of time they might save teachers in performing mundane tasks, and (b) the increased (or decreased) achievement levels of students in certain academic areas. The study covered a three-year period after which the aides were assigned on a basis of class size (the criterion being forty or more students to a classroom). The study indicated that elementary teachers spend between 11.7 per cent and 18.8 per cent of their time on clerical activities and between 21 per cent and 69 per cent on activities that do not require professional competence. Teachers, on the average, spent 23 per cent more time on activities related to instruction, 44 per cent more time on lesson planning, 80 per cent more time on other curriculum planning, and 48 per cent less time on activities not related to instruction when they were supplied with trained teacher-aides. They did a better job in testing and evaluating and in public relations and other special functions. Therefore, it was concluded that teacher-aides constituted a positive force in enabling additional services on the part of teachers.<sup>3</sup>

There followed two similar studies financed by the Ford Foundation: The Yale-Fairfield (Connecticut)

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<sup>3</sup>Charles B. Parks, "Teacher Aide Plan," Nation's Schools, LVI (July, 1956), 55.

Study and the Rutgers (New Jersey) Study. The aim of these experiments was to assist administrators in preserving quality education in the face of a severe shortage of professional personnel, the rising cost of education, and the resultant problem of oversized classes.

The Yale-Fairfield Study revealed that elementary school teachers spend about 12 per cent of their time in routine activities and another 7.6 per cent on miscellaneous activities such as helping with clothing, administering minor first-aid, making health checks, and others. The teacher-aides relieved the teachers of these non-instructional responsibilities and thus brought greater educational opportunities to large numbers of individuals.<sup>4</sup>

The next decade saw the teacher-aide being utilized more extensively in the form of mother-volunteers (library aides, noon-hour supervision, after-school activities, and others). In the mid-sixties, the employment of aides in schools and in other human services rose sharply, stimulated primarily by the availability of Federal funds for such purposes from the Office of Economic Opportunity, the Office of Education, and the Labor Department, as a part of the overall War on Poverty.

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<sup>4</sup>Decade of Experiment: 1951-1961 (New York: The Fund for the Advancement of Education, Ford Foundation, 1961), pp. 31-67.

The Elementary and Secondary Education Act (ESEA) of 1965 provides major legislative and financial support. Under Title I of this Act school districts were able to secure the paid services of teacher-aides on a regular basis in "target" schools (those serving high proportions of economically disadvantaged). Along with this, Title III of ESEA also provided monies for teacher-aide services to be used in "exemplary" situations.<sup>5</sup>

In 1967, the Congress enacted the Education Professions Development Act (EPDA). This Act incorporates and expands most of the earlier provisions from ESEA and numerous other Acts for pre-service and in-service training of professional education personnel. Its provisions now largely govern federally supported programs to obtain services of teacher-aides. This Act requires that in order to participate in its benefits with respect to teacher-aides states must designate an agency for state supervision and leadership and develop short- and long-range plans to obtain and train teacher-aides.<sup>6</sup>

Today, there are approximately 200,000 aides working in school districts across the country who are being

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<sup>5</sup>The Elementary and Secondary Education Act,  
Title I, III, 1965.

<sup>6</sup>The Education Professions Development Act,  
Title V of the Higher Education Act, 1967.

subsidized by federal and local monies. It has been estimated that this figure will grow to 2,000,000 by 1975.

### Concept of "New Careers"

The concept of "new careers" involves establishing new entry levels and subsequently new positions in the human services within which economically and educationally disadvantaged persons may make useful contributions to society. The key word is "careers," which indicates an opportunity for upward mobility rather than "dead-end" jobs of a menial nature.<sup>7</sup>

The "new careers" movement has emerged as a response to the following interrelated social developments: (1) the awareness of the special learning needs of disadvantaged children, youth, and adults; (2) the plight of under-educated persons unable to compete in an increasingly automated society; and (3) the communication block that often exists between middle-class professionals and lower-class pupils, youth, and adults. These pointed to the need for a new entry level to human-service professions with opportunity for upward mobility on the job. Some of the new resources initially made available to school systems through the Economic Opportunity Act, the Manpower Development and Training Act, Title I and Title III of the Elementary and Secondary Act, and the

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<sup>7</sup>Arthur Pearl and Frank Riessman, New Careers for the Poor (New York: The Free Press, 1965), pp. 1-12.

Nelson-Scheuer Amendment to the Poverty Act for Impacted areas, and now largely consolidated in the Education Professions Development Act, provide Federal support for the employment of low-income non-professionals in education.

Pearl states that two slogans get to the heart of the New Careers position. One is, "service from rather than service to the poor," and the other is, "job first and education later." New careers constitutes a form of social engineering, defining first what needs to be done and a population which needs something to do and then organizing the functions of work to meet the characteristics of the work-seeking population.<sup>8</sup>

The teacher-teacher-aide role-set concept, with its career-ladder component, not only offers the potential for improving the ways in which adults achieve, but it contains also the promise of new, self-realizing jobs for individuals who presently are unemployed or under-employed.

#### Concept of Role

Social psychologists and sociologists employ the concept of role as an aid in understanding the behavior of people in groups. A role is usually thought of as a pattern of personal behavior of an individual or an actor

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<sup>8</sup>Arthur Pearl, "New Careers and Model Cities," The Center for Community Planning, Department of Health, Education and Welfare (Washington, D.C.: Government Printing Office), p. 7.



as he fulfills a certain position in a social structure or in society.<sup>9</sup> The concept of role encompasses both expectations and behavior. The role expectations represent the "ought to do" part of the concept whereas role behavior is what is actually done or the "is" part of the concept.

It is through role perception that each person in the role-set learns what is expected of him. From these perceived expectations people often generalize about their position in the role-set or the occupation and in society as well, and this generalization constitutes their "vocational" image. From this "vocational" image is derived a sense of self-evaluation, that is, a ranking somewhere between top and bottom, between the highest level and the lowest level on a hierarchy. This self-evaluation provides directions which lead to expectations that may be expressed in the form of career goals.

#### Social Role

One of the earliest studies dealing with roles of the teacher is that of Waller in 1932. Based mostly on the author's observations and understanding of teachers, the materials of this study are mainly descriptions of social interactions of personalities in the classroom

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<sup>9</sup>Ralph Stogdill, Ellis Scott, and William Jaynes, "Leadership and Role Expectations" (Research Monograph No. 85-86, Ohio State University, Bureau of Business Research, Columbus, Ohio, 1956), 1-4.

and in the community. In this undertaking, he offers a thoughtful analysis of role expectations held by students and the community for any teacher in any position. He states:

There is a need for a natural social order in the schools. That does not mean a chaotic social order, but rather a social order which students and teachers work out for themselves in the developing situation, an order which is intrinsic in the personalities of those involved, a social order resulting from the spontaneous, inevitable, and whole-hearted interaction of personalities.<sup>10</sup>

Waller contends that the role inheres in the social situation as the non-social attitude inheres in the more general sort of situation. Both are contingent upon the working out of a definition of the situation. When the diverse elements of a social situation are seen in a configuration, and the various tensions which the situation arouses in the individual are at length synthesized, there is a moment when the proper role appears. When we are confronted with the life of a new group, the first impressions are chaotic and incomplete. But when we make out the sense of that group life, when we become cognizant of the definitions of the situations, we are able to assume the role. The role appears as the organization of the individual's behavior with reference to an entire situation as he perceives it.<sup>11</sup>

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<sup>10</sup>Willard Waller, The Sociology of Teaching (New York: Russell & Russell, 1961), p. 446.

<sup>11</sup>Waller, op. cit., pp. 318-38.

This study was followed by Doyle's study in 1956 on the "Expectancies which elementary teachers, administrators, school board members, and parents have of the elementary teachers' roles." The purposes of this study were to identify the role expectations which elementary teachers, school board members, administrators, and parents had of the elementary teacher's roles, and the role expectations which the teachers believed these groups held and to compare their expectations noting the convergences and divergences of the role expectations held. The study then, was concerned with the following questions:

1. "What are the role expectations held by the elementary school teacher?"
2. "How do the teachers' beliefs and the expectations which they define for the others compare?"

The findings revealed that the teachers were inclined to see themselves as being in harmony with the administrators, to a lesser degree with the school board members and to a limited degree with parents. He identified four combinations of convergent and divergent patterns when comparing teacher beliefs with teacher definitions of others' expectations and with others' actual expectations. The teachers in the study tended to define their professional roles in a much narrower way than the other groups, who were actually willing for teachers to

assume more dynamic roles instead of the traditional role. Recommendations were made largely on the problem of helping teachers to build a clearer self-image as well as to modify the public image of the teachers.<sup>12</sup>

Views of the Role Relationships Between  
Professionals and Paraprofessionals

The professional personnel in schools generally have been assigned by law or certification standards the responsibility of maintaining control of the teaching process. For example:

The rules governing the certification of Michigan teachers require that teachers be certified. Teacher-aides are not certified. Teacher-aides may be assigned to (1) perform non-instructional duties or, (2) assist in instructional related activities. . . . The responsibility for direction and supervision of the activities of the teacher-aide must always remain with a designated certificated teacher. . . . The certified teacher must assign and must supervise activities performed by teacher-aides, and must provide meaningful direction. . . .<sup>13</sup>

These rules are generally designed to guide the operation of schools for children and youth. Similarly, a program of Adult Basic Education should be guided by the recognition that many people are needed and that a

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<sup>12</sup>Louis A. Doyle, "A Study of the Expectancies Which Elementary Teachers, Administrators, School Board Members and Parents Have of the Elementary Teacher's Roles" (unpublished Ed.D. dissertation, College of Education, Michigan State University, 1956), p. 8.

<sup>13</sup>"Teacher Aides and the Instructional Program" (Michigan Department of Education, 1969), pp. 1-2.

person can be useful in many ways even though not eligible for certification. In Adult Basic Education it is appropriate, for at least two reasons, to include as staff workers indigenous members of the communities being served. The first is that they often possess communication and other skills which contribute significantly to the success of Adult Basic Education programs. The second is that employment as teacher-aides may represent, for the indigenous workers, initial steps in their own efforts to climb the "career ladder," an objective posed by many Adult Basic Education programs. It is here assumed that the professional staff should give basic consideration to these factors in the development of role descriptions to meet the levels, the needs, and the values of teacher-aides working in Adult Basic Education. Pearl in his paper, "New Careers and Model Cities," states:

At the present time the organization of the teaching function is absurd. Not only is the universe of potential teachers much too restricted, but also the teacher role incorporates a wide range of different activities ranging from the most menial to the most complicated.<sup>14</sup>

#### Role Definition and Role Flexibility

In their studies as reported on New Careers and Roles in the American Schools, Bowman and Klopff state

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<sup>14</sup>Arthur Pearl, "New Careers and Model Cities" (paper for the Center for Community Planning, Department of Health, Education and Welfare, Washington, D.C.: Government Printing Office, January, 1968), p. 7.

that the principal dilemma in the relationships between teachers and teacher-aides appeared to be associated with conflict between role definition which was recognized as necessary to institutionalization, and role development which was seen as a dynamic of each classroom situation where paraprofessionals were utilized. They concluded that the degree of responsibility which might, without conflict, be assigned to a teacher-aide depends upon the interaction of a particular teacher and a particular teacher-aide operating within a given structure and responding to a given work situation.

In any work situation the individual worker will have his notions about what ought to be done in the position. These notions may arise from his own personal bent, from formal statements about the position, from perceptions of what others expect of him, and from his feeling about who has a right to determine what performance in this position should be. Gibson and Hunt refer to this individual view and call it the self-definition of the role as contrasted with the system-definition of the role. They contend that if self-definition and system-definition are highly congruent, the person can be expected to be satisfied. If self-definition and system-definition are quite different, and the person successfully meets the system definition he may or may not be very well satisfied, but will be

judged by others within the system to be successful. If, conversely, he acts in terms of his own role definition, and it is quite different from that of the system, he might be satisfied with his own role performance, but be judged unsuccessful within the system. If he is not able to bring into performance either the definition which he has or the one the system has, then he will not be satisfied nor will he be judged successful.<sup>15</sup>

If a teacher-aide is able to perform satisfactorily only within a narrowly defined range of activities, his performance can be said to be specific. If, on the other hand, he possesses or develops ability to perform satisfactorily with respect to a wide range of activities, his performance can be said to be extensive.

As a teacher-aide consistently performs in this role-set which satisfies his needs and the system's needs, he begins to move satisfactorily or vertically. Essentially, an "extensive" teacher-aide would be considered competent and trainable on broad areas. The "specific" teacher-aide would be competent only in a narrow range of relatively fixed activities. Either professionals or teacher-aides may be classified as either specific or extensive.

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<sup>15</sup> Oliver Gibson and Herold Hunt, School Personnel Administration (Boston: Houghton Mifflin Co., 1965), pp. 238-40.

The teacher and the teacher-aide are in complementary role relationships in the role-set. The emphasis is on "actual" behavior and "ideal" behavior of the teacher and the teacher-aide. The definition and/or development of role becomes the central issue in determining appropriateness of performance of each role and its reciprocal as enacted by the other, that is, by the teacher and the teacher-aide in the role-set.

The performance of the teacher-aide, to become extensive, will depend on: (1) the flexibility of the teacher to permit and facilitate the teacher-aide to assume certain of the activities otherwise reserved to the teacher and (2) the degree to which the teacher allows the teacher-aide to grow and develop and to have his growth rewarded by increased responsibility and options. That means that each classroom role-set situation must include: (1) some variety in activities the teacher-aide performs and (2) experiences which give the teacher-aide a chance to try out some activities which are on a higher level than those he performs as a routine part of the job.

Teacher-aide growth is encouraged in part, by continuing training and education. But, the idea of giving the teacher-aide a chance to stretch and test his abilities to perform at increasingly higher levels must also be imbedded in the teacher teacher-aide role-set



situation. The teacher and teacher-aide expectations would then serve to define and evaluate the progress of the teacher-aide as to whether her performance is extensive or specific. If both individuals are attaining higher levels as the teacher-aide undertakes extensive performance, then there will be no conflict in role definition and there will be role development. As Bowman and Kloph argue, this should be a dynamic of each situation in which teacher and teacher-aide are involved. This would seem to be consistent with the argument of Gibson and Hunt that if system-definition and self-definition are highly congruent, then both teacher and teacher-aide are satisfied and, they are judged to be successful as a team.

The value of this dynamic role-set situation lies in the ability of the teacher to share and divide activities as they seem appropriate so that the teacher-aide can progress and assume a more extensive role. Such role-sets can be expected to afford career-ladder opportunities and to afford them with minimum conflict in role definition and performance.

### Role Development

Bowman and Kloph conducted an exploratory and developmental study on "Role development, training, and institutionalization of auxiliaries" in school systems. In this study the authors found that the introduction of

teacher-aides led teachers to perceive their own roles in new perspectives, and that administrators, supervisors, teachers, and auxilliary personnel had to rethink roles and relationships when teacher-aides were introduced into a school system.<sup>16</sup>

Recommendations presented were based on the experiences in role development and referred to all types of paraprofessionals. Some were as follows:

1. That the whole range of teaching functions be re-examined so as to identify those which might be performed by nonprofessionals, such as monitoring, escorting, technical, clerical, and the more important functions directly related to instruction and to home relations.
2. That teaching functions be further examined to identify the more complex and highly professional functions which should be performed by a teacher alone, such as diagnosis of the learning needs of pupils, planning programs to meet these needs, and orchestrating other adults in the classroom in the execution of such programs.
3. That role specifications and other prerogatives of auxilliaris be clearly defined in order to prevent either their underutilization by unconvinced professionals or their overutilization by harried administrators faced by manpower shortage.
4. That role definition which gives security, be balanced with role development which gives variety and scope to the program.<sup>17</sup>

The experience in this program seems to indicate that it would have been more productive to analyze the

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<sup>16</sup> Garda Bowman and Gordon Kloph, Auxilliary School Personnel: Their Roles, Training, and Institutionalization (New York: Bank Street College of Education, 1967), p. 10.

<sup>17</sup> Ibid., pp. 12-14.

entire work roles of the professionals or teachers and teacher-aides rather than only specifying roles for the teacher-aides. All things considered, this research failed to find any standard system of differentiating the functions within professional roles that should be performed by the teacher-aides which has been used by nearly all researchers researching "teacher-aides and their roles." Therefore, a more appropriate approach would involve re-evaluation and re-definition of roles performed both by the teacher and the teacher-aide in the role-set which would influence his progress.

Burton Clarke in Educating the Expert Society, gives support to this study as he observes:

It seems likely that a differentiation of teaching positions is on its way in the public schools. As knowledge becomes more specialized and teaching a more complex task, a dividing of the teacher role enters into consideration. Differentiation among teaching roles is taking place in new innovations, such as, the use of the teacher-aides to relieve teachers of paper work and menial chores tends to differentiate types of teacher roles.<sup>18</sup>

Not only are teachers relieved of paper work and menial chores, but jobs can be developed as career ladders or work opportunities for the unemployed or the under-educated.

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<sup>18</sup>Burton R. Clarke, Educating the Expert Society (San Francisco: Chandler Publishing Co., 1962), pp. 181-82.

Assessments of Teachers' and  
Teacher-Aides' Roles

In Florida, an investigation of the actual practices in utilizing of teacher-aides was conducted to discover the direction the use of teacher-aides was taking in that state. A questionnaire was distributed to each county superintendent's office. The replies came largely from general supervisors and other members of the administrative staff at the county level.

This survey disclosed that: (1) utilization of teacher-aides is widespread in Florida, and (2) variations exist not only in the duties that are performed by the teacher-aides but also in the philosophies as to the role of the teacher-aide in the total school curriculum. The basic difference in philosophy centered around the use of the teacher-aide as an instructional assistant. The most nearly consistent uses of teacher-aides throughout the state were their roles as clerk, monitor, material supervisor, instructional assistant, paper checker, and bilingual aide.

The survey results indicated the possible direction in which future studies might prove beneficial. One recommendation of the authors, Cunningham and Webb, was that teacher and teacher-aide relationships should be investigated with possible identification of practices

which would promote efficient working relationships and delineation of teacher and teacher-aide roles.<sup>19</sup>

The New England Educational Assessment Project (NEEAP) completed an assessment of the qualifications and duties of teacher-aides in New England in 1967. The New England Educational Assessment Project is a regional unit organized by the six New England State Departments of Education to provide decision-making resources focused upon current state and local problems.

In this specific evaluation, carefully prepared and field-tested questionnaires were mailed in Maine to teacher-aides and the superintendents of schools or persons responsible for employing teacher-aides. Each teacher-aide was given a list of twenty-seven duties which field testing indicated were typical of teacher-aides and asked to check if she performed the task each time it appeared in the classroom schedule. The teachers who had worked with teacher-aides were asked to check the same list in the same manner in terms of what constituted appropriate assignments. The results of the study indicated that eight of the ten duties most frequently assigned to teacher-aides also appeared in the ten recommended by teachers. It was concluded that these duties should be considered by those planning either pre-service or

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<sup>19</sup>Myron Cunningham and Jeanne Webb, "Teacher Aides," Educational Leadership, II, No. 1 (March, 1966), 14-26.

in-service training for teacher-aides. Field testing indicated that teacher-aides could be divided into three groups: (1) educational material assistants, (2) clerical workers, and (3) instructional assistants.<sup>20</sup> Therefore, this study would indicate that the teacher's task is to diagnose and to prescribe, and the teacher-aide's task is to assist in implementing the prescription.

When the school district of University City, Missouri was preparing to hire composition aides to assist English teachers the plan for the experiment included a provision that the school staff, including the teachers who would work with the aides, should determine the functions of auxilliary personnel. The faculty as a group should determine general guidelines and policies. The individual classroom teacher should designate what specific task the teacher-aide working in the specific classroom should undertake. This was deemed essential if the teacher-aide was to be of assistance in meeting the needs of the students in the individual classroom.<sup>21</sup> Also, it was deemed essential, if the teacher-aide were to progress along a continuum, to enact criteria for personal development and promotion.

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<sup>20</sup>Phillip A. Annas, "Teacher Aides Are an Asset," Maine Teacher (September, 1967), pp. 49-52.

<sup>21</sup>"Determining the Functions of Aides," Administrative Leadership (Washington, D.C.: Administrative Leadership Service, 1966), pp. 1-3.

In this plan the total operation of hiring the teacher-aides and of assigning activities to them was determined by the teachers who worked with the teacher-aides.

The National Commission of Teacher Education and Professional Standards (NCTEPS) holds that the proficiency standard for paraprofessionals should be determined by the nature of the job they perform and that such standards should be determined and applied at the local level. It suggests that state education agencies might well develop guidelines for the use of aides and the professional associations might serve a quality control function by helping to assess the effectiveness of the aides.<sup>22</sup>

During a study by Glovinsky and Johns the following questions were posed: "What is the job of the school paraprofessional?" "At what point does the work of the paraprofessional conflict with the legal and ethical responsibilities of the professional?" "What is the rationale for developing programs which will produce in the trainees the needed knowledge and skills?" "What kinds of paraprofessional positions are currently held?" "What additional positions should there be?" Answers given to these questions were based upon the following criteria: (1) their task must be defined clearly so

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<sup>22</sup>The National Commission of Teacher Education and Professional Standards, "Auxilliary School Personnel," TEPS Newsletter, 1966.

that they can be trained to provide maximum service,  
 (2) training should be based on clearly delineated performance goals, and (3) tasks performed by the paraprofessional should be under the direct supervision of the professional.<sup>23</sup>

### Expanding of the Role of Paraprofessionals

Pearl and Riessman argue that the task of selecting persons to enter new career sequences presents a formidable problem. If traditional measures are used to screen prospective workers for currently available positions, those who most need employment will in all probability be excluded. If applicants are to be denied opportunity for employment in new career sequences on the basis of measured intelligence, or aptitude, or lack of school attainment, then, the current jobless will, in disproportionately large numbers remain jobless. They therefore contend that persons filling entry positions must have latitude for limited advancement without being required to undergo extensive additional training; there must be opportunities for vertical mobility which would require a flexibility in the training and educational establishment to allow the person to go as far as his

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<sup>23</sup>Arnold Glovinsky and Joseph Johns, Studying the Contributions of the Paraprofessional and Planning for Their Recruitment, Selection, Training and Use in the Wayne County Public Schools and Nonpublic Schools (Detroit, Michigan, 1968), pp. 8-12.



talents and his motivation can carry him; and there must be transfer and cross-over opportunities which allow the person the flexibility to move to related occupations or to other geographic regions.<sup>24</sup>

In New Careers for the Poor, Pearl and Riessman have advanced the view that it is possible to stratify professional jobs into a hierarchy of functions. It is possible to train non-professionals to perform many of these functions and they can be prepared through on-the-job training to perform increasingly higher levels of functions. They propose that five different functions can be abstracted from the one omnifarious duty now performed by teachers. These roles are:

(1) a teacher aide; (2) a teacher assistant; (3) a teacher associate; (4) a teacher; and (5) a supervising teacher. These five teaching roles would exist along a continuum in which advancement from entry position to full-fledged professional could be negotiable on the basis of talent and motivation, rather than economic means.

The baseline or entry position, teacher aide, would be open to all regardless of schooling attained (or delinquency record) and would require only that a short training experience be successfully completed. If capable and motivated, the aide would be encouraged to continue his education. With an A.A. Degree (two years of college or equivalent) he would become eligible for an intermediate role--the teacher assistant. With further education and a B.A. Degree, eligibility for teacher associate would be obtained. Thus, by systematic steps and intervals a series of positions are created which narrow the present gulf between the disadvantaged and professional standing. Each level attained can constitute a career. . . .<sup>25</sup>

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<sup>24</sup> Arthur Pearl and Frank Riessman, New Careers for the Poor (New York: The Free Press, 1965), p. 17.

<sup>25</sup> Ibid., pp. 57-58.

From these propositions, it would appear that there is opportunity for the indigenous aide in Adult Basic Education to realize his potential if the facilitating situation is created. This situation would be a system of learning or on-the-job activity which would allow for advancement of the teacher-aide and service satisfactory to the system.

Before any program for training can be intelligently launched, there must be a preliminary attempt at job descriptions. These job descriptions must include the tasks that teacher-aides would be expected to perform from the time they enter and the knowledge that they would have to command to perform those tasks. When these tasks are identified, then it requires the development of training programs to produce the requisite proficiency to perform tasks at different levels ranging from the most menial to the most complicated.

As Pearl states:

Certainly, much that a teacher does, does not require a college education. Some of the things the teacher does require little more than bare literacy. Such things as operating audio-visual equipment and other non-teaching functions are a waste of a professional's time. Even many of the so-called "teaching" activities are minimally challenging. Helping students with homework or reading to a class, or even explaining a scientific principle can be effectively managed by relatively untrained personnel, if they are supervised by more highly trained staff. . . . It has been demonstrated that even very young, apparently intellectually impaired ten-year-olds, can be enormously helpful in aiding younger children in their school work. . . . Education in particular could benefit

from a hierarchy of roles . . . a series of landings to allow for a wider range of persons to function in the field.<sup>26</sup>

Surely, what is true in children's classrooms is no less true in those which serve Adult Basic Education.

The "new-career concept," has as a point of beginning the creation of jobs by differentiation of functions normally allotted to highly trained professionals or technicians, but which could be performed by the unskilled, inexperienced, and relatively untrained worker; or, the development of activities not currently performed by anyone, but for which there is readily acknowledged need and which can be satisfactorily accomplished by the unskilled worker.

With respect to this second alternative Pearl and Riessman say:

Another approach is to see the work to be performed as essentially different than that done by the traditional professionals, new and innovative, adding new dimensions to the work of the professional, even including alternate career lines--in effect, new people engaged in new careers. This would involve a change in the work of the professional and "new careerists" alike.<sup>27</sup>

They contend that in both instances there is a common need for careful scrutiny of the job function for the purpose of defining roles which are structured for the jobless.

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<sup>26</sup>Ibid., p. 8.

<sup>27</sup>Ibid.

Research has shown an approach to role definition of aides based largely upon a cataloging and detailing of lists of appropriate duties and functions of the teacher-aide. Such a listing of duties and functions would define those roles of teacher-aides to which directors, teachers, counselors, and others all subscribe.<sup>28</sup> This approach assumes that role definitions are imposed upon an actor by other members of his role-set. Under such conditions a role incumbent has a ready-made set of role definitions or perceptions to which he can orient his behavior.

Brookover's work suggests that such a model does not represent the realities of the situation. If it did, there would be no role conflicts; role expectations being known, they would be learned by the actor.<sup>29</sup> Also, it does not necessarily follow that the purposes and

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<sup>28</sup>See for example Wayne Newlin, "It Can Be Done: Teacher Aides Can Make a Difference in Illinois," Illinois Education, XXX, No. 5 (1968); Michigan Commission for TEPS, "The Paraprofessional: Job Descriptions, Requirements and Recommendations," TEPS Study Year Papers, I, No. 11 (1968); Lawrence Read and Clarence Lacny, Utilizing Teacher Aides in the Jackson, Michigan Public Schools (Jackson, Michigan, 1966); Oakland Inter-agency Project, Oakland Public Schools, California, "Preschool Teachers," Eri Document Resume (United States Department of HEW, Office of Education, Washington, D.C.).

<sup>29</sup>Wilbur Brookover, "Research on Teacher and Administrator Roles," Journal of Educational Sociology (1955), 3.

needs of the actor are fulfilled in a manner prescribed by the system, rather than by his own needs.

This approach could be corrected by allowing all members of the role-set to differentiate and define roles which would satisfy both the needs of the system and the needs of the teacher-aides. Consequently, in this study, teachers and teacher-aides working in Adult Basic Education have been viewed as the most likely ones to assess roles for themselves and each other.

In addition to clarifying roles, exploration is likely to yield perceptions of new and more complex professional roles for teachers and new career opportunities for teacher-aides. Bowman and Kloph project this point of view in referring to the need for professional workers to evaluate their experiences and plan for more effective utilization of teacher-aides in the future.<sup>30</sup>

### Summary

This review of background information and pertinent research consists of eleven major sections of direct support to the study. They are: (1) a review of literature on paraprofessionals; (2) emergence of paraprofessionals in education; (3) concept of "new careers"; (4) concept of role; (5) social role; (6) views of the

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<sup>30</sup>Garda Bowman and Gordon Kloph, New Careers and Roles in the American Schools (New York: Bank Street College of Education, 1967), p. 21.

role relationships between professionals and paraprofessionals; (7) role definition and role flexibility; (8) role development; (9) assessments of teachers' and teacher-aides' roles; (10) expanding of the role of paraprofessionals, and (11) a summary of the major ideas for the review of literature and the rationale upon which the research is based.

In a review of literature on paraprofessionals there were projected an overall estimated 200,000 aides working in schools and human-service positions created for "indigenous" nonprofessionals by the Office of Economic Opportunity and Head Start and in Mental Health hospitals.

Analysis of the emergence of paraprofessionals in education reveals the existence of the use of teacher-aides in the educational system in the United States during the last forty years. It makes mention of one of the earliest known studies in the 1930's when drop-outs and students from low-income families were used in the National Youth Corps. Studies and research by Alexander, Parks, and others lend support to the teacher-aide and especially to those from low-income areas as the best persons to work with teachers or professionals in a classroom situation. The use of such persons grows out of a concern for providing improved service for the indigenous nonprofessional residing in

economically disadvantaged communities. Encouragement and support for the training and advancement of indigenous workers has been financially supported by the Ford Foundation and the Office of Education through the Elementary and Secondary Act of 1965 and the Education Professions Development Act of 1967 and others.

The concept of "new careers" advanced by Pearl and Riessman in 1965 involves new entry levels and positions in the human services within which economically and educationally disadvantaged persons may make useful contributions to society. New careers proposals include among other things an opportunity for the motivated and talented poor to advance vertically from low-skill entry jobs to any station available to the more favored members of society, to furnish equal chances for upward mobility to become socially useful in society.

Views of the role relationships between professionals and paraprofessionals attempt to describe the rules governing the certification of teachers and teacher-aides in the instructional program in public schools. Similarly, a program of Adult Basic Education should be guided by the recognition that many people are needed and that a person can be useful in many ways even though not eligible for certification. Employment of these persons as teacher-aides in Adult Basic Education may represent for the indigenous workers initial steps

in their efforts to climb the "career ladder" an objective posed by many Adult Basic Education programs.

There are considerations of the various issues involved in utilizing this new type of personnel--the teacher-aide with the professional--the teacher. For example, there is the concept of the sharing of the teacher's activities with the teacher-aide in a manner so as to allow the teacher-aide to progress vertically or along a continuum as far as his aspirations and ability will allow him to do.

For full implementation of the defining and redefining of activities for teachers and teacher-aides working in Adult Basic Education and for actualizing the "new-career" concept there must be large-scale study of the activities performed by professionals or teachers in Adult Basic Education (and others) to delineate specific duties and functions for non-professionals to perform.

In summary, the review of literature on paraprofessionals calls attention to the importance of the development of roles for teacher-aides as a needed factor in schools, and in other professional work settings, and the recognition of the addition of teacher-aides in the field of Adult Basic Education.

### Rationale

These propositions carry with them a call for rigorous definition and redefinitions of activities for



teachers and teacher-aides and the adding of indigenous non-professionals to the education system. The implementation of this rationale forms the basis for this study. Therefore, the salient characteristics of this study are explorations of a hierarchy of levels of teacher professional activities being performed and to be performed by Adult Basic Education teachers and teacher-aides working together in role-sets. This, plus the fact that the Adult Basic Education teachers and teacher-aides are assessing and ranking these activities for each other are unique in respect to research reported to date.

The presentation in the next chapter will include the methodology, the detailing of the problem, the method employed, selection and description of the sample, procedures for analysis, summary, and limitations.

### CHAPTER III

#### METHODOLOGY

As stated in Chapter I, this investigation has attempted to assess the career-ladder opportunities of teacher-aides in Adult Basic Education, in view of the roles which the teachers define for them currently and ideally, of the roles currently filled and those aspired to by the teacher-aides, and of the modifications in their own roles which teachers would make if paired with ideal teacher-aides.

The study is based on Pearl's and Riessman's theory of career-ladder development and upon the following assumptions:

1. The professional personnel in a school have the responsibility of maintaining the established professional controls of the teaching process.
2. The principal responsibility of assigning activities to teacher-aides resides with the teacher operating in that role-set.

3. When a teacher-aide enters into a working relationship with a teacher, the teacher's role is changed from what it was when she worked alone.
4. There must be flexibility of role definition by the teacher to permit entry of the teacher-aide and to permit an expanding role for that teacher-aide.
5. A teacher-aide with little schooling can learn to perform professional activities starting from a low level and progressing to a high level in the field of Adult Basic Education.
6. If career-ladder opportunities are to be realized, aides must aspire to perform at progressively higher levels of professional competence.

#### Detailing of the Problem

The operational problems in this exploratory and analytical study have been:

1. To identify the incumbent defined current roles of teacher-aides and teachers in the selected role-sets in Adult Basic Education.
2. To compare these roles with similarly defined ideal arrangements.
3. To note the congruences and discrepancies in the roles thus defined and

4. To ascertain whether teacher-aide aspirations to expand roles and teacher-defined role modifications to accommodate ideal teacher-aides are systematically associated with selected characteristics of teacher-aides and teachers respectively.

It was necessary to gather data which would tell us:

1. The activities currently performed only by teachers.
2. The activities currently performed only by teacher-aides.
3. The activities currently performed by both teachers and teacher-aides.
4. The activities neither teachers nor teacher-aides currently perform.
5. The "ideal" division of activities between teachers and teacher-aides as judged by teachers, i.e., the activities which would be performed by teachers and those which would be performed by teacher-aides, assuming a "fully competent ideal teacher-aide."
6. The "ideal" division of activities between teachers and teacher-aides as judged by teacher-aides, i.e., the activities which would be performed by teachers and those which would be performed by teacher-aides if teacher-aides were free to choose.

7. The teacher-aides who aspire to perform more or different activities if they were given adequate training and if they were really free to choose.
8. Whether those aides who aspire to more or different activities differ in any significant way from those who do not.
9. The teachers who, assuming "ideal" teacher-aides report that they would redefine their own roles in such ways as to permit expanded roles for their teacher-aides.
10. Whether those teachers who report that they would redefine their own roles in such ways as to permit expanded roles for assumed "ideal" teacher-aides differ significantly in terms of the selected characteristics, from those who do not report that they would so redefine their roles.

#### Method Employed

The forced-choice checklist or rating-scale method is chosen for gathering the data for this study. As Parten has stated, "the forced-choice checklist type of questionnaire is popular for mailed questionnaire surveys where the respondent is asked to indicate his choice in any of the several ways." This type of device apparently elicits a more or less natural response, and it offers little chance of misunderstanding. The advantage of this

rating scale is that it serves as a reminder for respondents who might otherwise fail to give a certain reply only because they might not happen to think of it at the moment.

It is felt that the forced-choice checklist method is appropriate for this task. By checking several activities that are now performed by teachers and teacher-aides and activities that are perceived by teachers and teacher-aides as appropriate for the roles of "ideal" teacher-aides, respondents have the chance to differentiate between the actual and the ideal roles of teacher-aides and of teachers without being asked to state them.

The checklist included statements of activities presently performed or to be performed in an ideal situation by both teachers and teacher-aides in Adult Basic Education. The activities or duties on the initial checklist were adapted from lists of existing activities or duties that are stated for teachers and for teacher-aides working in public schools, from a comprehensive study of the literature on Adult Basic Education curricula and from the research offerings on teacher-aides working with teachers in several different positions.

This initial checklist was constructed by giving to each of eight experienced teachers and directors of

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<sup>1</sup>Mildred Parten, Surveys, Polls and Samples: Practical Procedures (New York: Harper & Brothers, 1950), pp. 186-89.

Adult Basic Education a deck of cards, each bearing one of the listed duties. The teachers and directors were asked to rank the activities into the following categories:

1. Tasks that should only be performed by the teacher.
2. Tasks that should usually be performed by the teacher.
3. Tasks that may be performed by either teacher or teacher-aide.
4. Tasks that should usually be performed by the teacher-aide.
5. Tasks that should be performed only by the teacher-aide.
6. Tasks that should be performed by neither the teacher nor the teacher-aide.

Then, the eight were asked to check to be certain that each task was in the most appropriate category, according to their best judgement. Next, they were to number the tasks in sequence, one representing the highest order of professional performance in each category. Also, they were asked to give the benefit of their judgement as follows:

1. Are these the tasks that teachers and teacher-aides in Adult Basic Education should perform?

2. Which, if any of these items should be deleted?  
(Please remove any such card)
3. What task, if any, should be added? (Please  
write name of one task on each blank card as you  
deem necessary)
4. Please insert new cards, if any, at appropriate  
places in sequence.

Of the seventy-two tasks presented to them twelve were judged to be inappropriate and were deleted. A scale consisting of the remaining sixty tasks was constructed and ranked from the highest to the lowest levels of professional competence as determined by these experienced teachers and directors of Adult Basic Education programs (Appendix A).

This first draft of the forced-choice checklist was then given to each of a second panel of eight experienced directors of Adult Basic Education programs to determine if the activities represented their thinking in regard to teacher competence levels in Adult Basic Education programs. These directors were asked to delete activities they judged not performed or not valid. They were then asked to rank the remaining activities into the following levels of teacher competence: (1) supervising teacher, (2) teacher, (3) teacher associate, (4) teacher assistant, and (5) teacher-aide. These levels are adapted



from Pearl and Riessman's proposal on "New Careers in Education."<sup>1</sup>

Of the sixty activities presented to them, fourteen were deleted and the remaining forty-six arranged in the above stated levels of teacher competence. This second draft was then viewed by members of the project ENABEL staff, a team of experienced ABE workers, to determine if it was consistent with ABE activities in terms of suitability of activities selected and placed in each competency level. After these validation processes the forced-choice checklist was finalized and printed (Appendix A). The final forced-choice checklist includes forty-six statements of activities actually performed or to be performed in an ideal situation by both teachers and teacher-aides working together in Adult Basic Education. It was then identified and is hereafter referred to as the Professional Competence Scale (PCS).

#### Description of Population and Sample

##### The Population

The final forms of the instruments were administered to a population of thirty-six teachers, thirty-six teacher-aides, and their ABE directors working together in Adult Basic Education in the public schools in the state

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<sup>1</sup>Arthur Pearl and Frank Riessman, New Careers for the Poor (New York: The Free Press, 1965), pp. 56-62.

of Michigan. The teacher-aides were indigenous workers and adult or young adult volunteers. The public schools were selected from the 1969-1970 directory of Adult Basic Education programs obtained from the Michigan Department of Education, Bureau of Educational Services, Lansing, Michigan. This directory supplied the names and addresses of all school districts and the names and addresses of all Adult Basic Education directors (Appendix B). From this list we identified, with assistance of consultants from the State Department of Education, the school districts that had teachers and teacher-aides working together in classroom situations throughout the state of Michigan.

#### The Sample

Of the population of thirty-six teachers, thirty-six teacher-aides, and their ABE directors working together in Adult Basic Education, only thirty-four combinations returned the instruments. Thus, the sample of this study consists of twelve Adult Basic Education directors, thirty-four teachers, and thirty-four teacher-aides working together in Adult Basic Education. There was no limitation regarding age, marital status, or teaching experience of either the teachers or the teacher-aides in Adult Basic Education.

Table 1 shows the age of teachers and of teacher-aides in the sample. This sample includes teachers of

TABLE 1.--Age of respondents--teachers and teacher-aides.

Age	Number Teacher- aides	Number Teachers	Percentage of Totals	
			Teacher- aides	Teachers
Below 20 years	19	2	55.9	5.8
20-29 years	9	14	26.6	41.2
30-39 years	5	10	14.6	29.6
40-49 years	0	4	00.0	11.7
50-above	1	4	2.9	11.7
Total	34	34	100.0	100.0

Adult Basic Education in age span from below 20 years of age to 50 years or above. It also shows teacher-aides in an age span from below 20 years to 50 years or above.

The largest group of 56 per cent, or nineteen teacher-aides is in the below-20 age range. Nine teacher-aides or 27 per cent are in the 20-29 age range. In the 30-39 age range are five teacher-aides, or 15 per cent. One teacher-aide is 50 years of age or above.

Only 6 per cent or two teachers are below 20 years of age. The largest group of 41 per cent or fourteen teachers is in the 20-29 age range. Ten teachers or 30 per cent are in the 30-39 age range. Four teachers or 12 per cent are in the 40-49 age range, and another 12 per cent, or four teachers are in the age range of 50 years of age or above.

Marital Status.--Table 2 shows that twenty-two or 65 per cent of the teacher-aides are single and five

TABLE 2.--Marital status of teacher and teacher-aide respondents.

Marital Status	Number Teacher-aides	Number Teachers	Percentage of Totals	
			Teacher-aides	Teachers
Single	22	5	64.7	14.7
Married	12	26	35.3	76.6
Separated	0	1	0.0	2.9
Widow(er)	0	2	0.0	5.8
Divorced	0	0	0.0	0.0
Total	34	34	100.0	100.0

or 14 per cent of the teachers are single; twelve or 35 per cent of the teacher-aides are married and twenty-six or 77 per cent of the teachers are married. One teacher or 3 per cent is separated and two teachers or 6 per cent are widowed.

Experience of Respondents.--As shown in Table 3, only 3 per cent or one teacher-aide has three years of experience in Adult Basic Education; 21 per cent or seven teacher-aides have two years, and 77 per cent or twenty-six teacher-aides have one year of experience.

The largest group of 30 per cent or ten teachers have three years of teaching experience in Adult Basic Education; nine teachers or 27 per cent have four years; five teachers or 15 per cent have five years; 18 per cent or six teachers have one year, and 12 per cent or four teachers have two years of teaching experience in Adult Basic Education.

The years of experience for thirty-four teacher-aides range from one to three years, and the years of experience for thirty-four teachers range from one year to over five years (Table 3).

TABLE 3.--Teaching experience of teachers and teacher-aide respondents.

Teaching Experience	Number Teacher-aides	Number Teachers	Percentage of Totals	
			Teacher-aides	Teachers
1 Year	26	6	76.8	17.6
2 Years	7	4	20.7	11.7
3 Years	1	10	2.9	29.5
4 Years	0	9	0.0	26.5
5 Years	0	5	0.0	14.7
Total	34	34	100.4	100.0

Teachers and Teacher-aides Working Together.--Of the sixty-eight teachers and teacher-aides working together in pairs, 56 per cent or nineteen teacher and teacher-aide pairs had worked together for one year; eleven pairs or 32 per cent had worked together for two years; three pairs or 9 per cent had worked together for three years, and one pair or 3 per cent had worked with each other for one year (Table 4).

Schooling of Respondents, Teacher-aides.--Of the thirty-four teacher-aides, two or 6 per cent attended vocational school; five or 15 per cent had completed first to sixth grade schooling; another 5 or 15 per cent had

TABLE 4.--Years teacher-aides and teachers had worked together.

Working Together	Number	Percentage of Total
1 Year	19	55.9
2 Years	11	32.3
3 Years	3	8.8
4 Years	1	2.9
5 Years	0	0.0
Total	34	99.9 <sup>a</sup>

<sup>a</sup>Error in percentage total is due to rounding on percentages.

seventh to eighth grade schooling; twelve or 35 per cent, had completed tenth or eleventh grades; ten or 29 per cent were high school graduates; and none had attended college. Therefore, the teacher-aides' schooling ranged from first grade through vocational school (Table 5).

TABLE 5.--Schooling of teacher-aides.

Schooling	Number	Percentage of Total
1st to 6th Grade	5	14.8
7th to 8th Grade	5	14.8
9th to 10th Grade	0	0.0
Above 10th Grade	12	35.2
High School Graduate	10	29.4
Attended College	0	0.0
Graduated College	0	0.0
Attended Vocational School	3	5.8
Total	34	100.0

Schooling of Teachers.--Table 6 showed that thirty-one of the teachers have bachelor's degrees and only three or 8 per cent do not have. Thirteen or 38 per cent had no graduate work beyond their bachelor's degrees; six teachers or 18 per cent had done post master's study, six or 18 per cent had master's degrees, and another six or 18 per cent had completed graduate work above the bachelor's degree but had not completed their masters. The schooling of teachers ranged from less than the bachelor's degree to post master's study.

TABLE 6.--Schooling of teachers.

Schooling	Number	Percentage of Total
Less than Bachelor's Degree	3	8.0
College Degree (Bachelor)	13	38.4
Graduate Work (no degree)	6	17.6
Graduate Degree (Master)	6	17.6
Post Master's Study	6	17.6
Total	34	99.9 <sup>a</sup>

<sup>a</sup>Error in percentage total is due to rounding on percentages.

#### Collection of Data

Data for this study were obtained by use of the Professional Competence Scale (PCS). Research packets were mailed to each of fourteen directors of Adult Basic Education in school districts reported to have teacher-aides employed in ABE. Each packet contained (Appendix C):

- (a) A cover letter
- (b) The Professional Competence Scales
- (c) Machine scoring answer sheets
- (d) A self-addressed stamped envelope
- (e) Census sheets for demographic data

The director for each school district was asked to be responsible for distributing, collecting, and returning the completed instruments administered to the teachers, the teacher-aides, and himself. Each director was also asked to supply the demographic data on each teacher and on each teacher-aide.

Each teacher was asked to classify by number code each of the forty-six listed activities. In the column marked "Actual," on a separated, prepared machine-scored answer sheet, each teacher was asked to darken one space beside each of the statements given:

"1" for each thing your teacher-aide usually does alone,

"2" for each thing you and your teacher-aide usually do alternately or together,

"3" for each thing you as teacher usually do alone,

"4" for each thing not done by either you or your teacher-aide.



In the column marked "Ideal" of the same answer sheet each teacher was instructed to assume that he had a fully qualified and willing "ideal" teacher-aide and to darken one space beside each of the statements given:

"1" for each thing your ideal aide would usually do alone,

"2" for each thing you and your ideal teacher-aide would usually do together or take turns,

"3" for each thing you would usually do alone,

"4" for each thing which would not be done by either you or your ideal teacher-aide.

Each teacher-aide was asked to classify each of the same forty-six stated activities given to the teachers in each of two columns marked "Actual" and "Ideal." In the column marked "Actual" each teacher-aide was instructed to darken one space beside each of the statements given:

"1" for each thing you usually do alone,

"2" for each thing you and your teacher usually do together or take turns to do,

"3" for each thing your teacher usually does alone,

"4" for each thing not done either by you or your teacher.

In the column marked "Ideal" of the same answer sheet each teacher-aide was instructed to imagine that he was entirely free to choose what she would do and what her teacher would do and to darken one space beside each of the same statements:

"1" for each thing you would do alone if you were really free to choose,

"2" for each thing you and your teacher would usually do together if you were free to choose,

"3" for each thing your teacher would usually do alone if you were free to choose,

"4" for each thing which would not be done by either you or your teacher if you were free to choose.

Completed checklists and demographic data inventories were returned by twelve of the fourteen directors. These covered thirty-four of the known thirty-six teacher and teacher-aide combinations in the state. The data obtained from the checklists and inventories were transferred on to computer coding sheets. Some of the data were analyzed by inspection and statistical analysis while other data were programmed into the 3600 CDC computer at Michigan State University for computation and presentation in reliable tables. These tables were analyzed to determine the information and knowledge sought for this study.

In this chapter, the basic assumptions and detailing of the problem are outlined and the methods and procedures used in completing these tasks are described. The Professional Competence Scale is presented as the indicator of teacher competency roles presently performed and to be performed in the classroom by ABE teachers and teacher-aides working together in pairs.

Tables of demographic data are used to describe the sixty-eight respondents with respect to age, marital status, years of experience in ABE, and schooling.

The presentation and analysis of the data collected are presented in Chapter IV.

## CHAPTER IV

### PRESENTATION AND ANALYSIS OF THE DATA

The central purpose of this study has been to examine the opportunities for "career ladder" ascension for indigenous paraprofessional workers in communities characterized by high concentrations of poverty. We have reasoned, as had Griffin and others, that if indigenous paraprofessionals (in this case Adult Basic Education teacher-aides) are to ascend from performing of low entry level functions to progressively higher levels of professional performance two requisites, in addition to appropriate and continuing education, must be assured. First, there must be aspiration on the part of the paraprofessional in a role-set to perform functions which require higher levels of professional competence; and second, the professional worker in the role-set must be willing to adapt his own role to permit both satisfactory entry and the opportunity for the paraprofessional, when ready, to perform those higher level functions.

We have not assumed that all paraprofessionals aspire to progressively higher levels of professional

performance; we have assumed that some do. We have also assumed that some professionals would be more open to adapting their own roles and to encouraging their paraprofessional colleagues to perform progressively higher level functions than would others. Our task, thus, has been to assess differences in aspirations of paraprofessionals and differences in willingness of professionals to make the professional role adaptations which would facilitate professional advancement of their paraprofessional partners and then to draw certain conclusions as to the feasibility of the career-ladder concept.

A population of teacher and teacher-aide pairs working in Adult Basic Education in the state of Michigan was selected as subjects for the study. From a total identified population of thirty-six teacher and teacher-aide pairs in the state, data were obtained for thirty-four pairs. Thus the study represents a preliminary analysis of virtually the entire population of professional-paraprofessional teams employed at this early stage in Adult Basic Education for one state, Michigan.

Several tasks were undertaken: (1) to ascertain the present state of function sharing, (2) to ascertain the perceived ideal state of function sharing, (3) to analyze each of these states and the variances between and among them in order to reveal significant differences within the population, and (4) to draw such conclusions as seem justified by the analysis.

This chapter presents the data and discussion of findings from the first three of these tasks. Conclusions are presented in the chapter which follows.

A Professional Competence Scale (PCS) in the form of a forced-choice checklist was constructed. It consists of a hierarchy of forty-six ranked activities in five categories of professional competence. The Professional Competence Scale was administered to the thirty-four ABE teachers and the thirty-four teacher-aides to ascertain:

1. What activities were currently being performed only by the teacher-aides, as reported by (a) teachers and (b) teacher-aides?
2. What activities would ideally be performed only by the teacher-aides, as reported by (a) teachers and (b) teacher-aides?
3. What activities were currently being performed by both the teachers and the teacher-aides, as reported by (a) teachers and (b) teacher-aides?
4. What activities would ideally be performed by both the teachers and the teacher-aides, as reported by (a) teachers and (b) teacher-aides?
5. What activities were currently being performed only by the teachers, as reported by (a) teachers and (b) teacher-aides?
6. What activities would ideally be performed only by teachers, as reported by (a) teachers and (b) teacher-aides?
7. What activities were not currently being performed by either the teachers or the teacher-aides, as reported by (a) teachers and (b) teacher-aides?
8. What activities would ideally not be performed by either teachers or teacher-aides, as reported by (a) teachers and (b) teacher-aides?

In addition to the answers to these questions, which were obtained directly from teachers and teacher-aides, demographic data on the teachers and teacher-aides were obtained by questionnaire from their directors. These data, together with those from each teacher and each teacher-aide, were organized and analyzed in order to derive answers to the remaining questions:

9. Do teachers and teacher-aides agree (a) on the roles they are performing in the "actual" activity structure and (b) on the roles they would perform in the "ideal" activity structure?
10. Do teacher-aides aspire to perform more activities or different activities in an assumed ideal situation than they performed in the actual situation?
11. Would teachers choose for their ideal teacher-aides more activities or different activities than are actually performed by their present teacher-aides?
12. Would teachers, on the assumption of being paired with an ideal teacher-aide, choose to perform fewer activities or different activities than those they perform as they work with their present teacher-aides?
13. Would teacher-aides, if they were free to choose, choose to have their teacher role-set mates perform fewer or different activities than those they presently perform?
14. Are there observable relationships between any one or any combination of the demographic characteristics of teacher-aides and the changes in professional characteristics of roles aspired to by teacher-aides in an assumed ideal situation?
15. Are there observable relationships between any one or any combination of the demographic characteristics of teachers and the change those teachers report that they would make in the professional character of their own roles, assuming that they were to be matched with a fully competent and willing aide in an ideal situation?

It should be noted that all analyses and findings are based on the Professional Competence Scale and upon a demographic data inventory submitted by directors describing each of the thirty-four teachers and the thirty-four teacher-aides in terms of age, marital status, teaching experience, place of residence, and level of education.

The Professional Competence Scale (PCS) administered to each of the thirty-four teachers and each of the thirty-four teacher-aides includes forty-six statements of activities performed in the actual situation and to be performed in assumed ideal situations in the classroom. These teachers and teacher-aides were working together in teacher/teacher-aide pairs in ABE classrooms. The forty-six activities were ranked into five levels of teacher competence as shown below.

Activities Arranged by Levels of  
Professional Competence

I. Supervising Teacher

1. Evaluate the ABE program
2. Inform school officials of community problems and special needs relating to ABE
3. Arrange and conduct advisory committee meetings
4. Collect data on need for ABE in the community
5. Contact industries, welfare agencies, clubs, churches, and others to talk about ABE



6. Provide information about state guidelines for ABE
7. Officially represent ABE on civic groups
8. Describe ABE programs to community groups
9. Design the ABE course of study

## II. Teacher

10. Make decisions about content of ABE curriculum
11. Regularly teach one or more classes
12. Determine appropriate teaching methods
13. Make daily teacher's plans
14. Select instructional materials
15. Decide on the grading system to be used
16. Recommend students for promotion and graduation
17. Administer and interpret tests
18. Recommend instructional equipment for purchase
19. Serve on faculty committees of the school
20. Attend faculty meetings.

## III. Teacher Associate

21. Keep up-to-date on the latest developments in content and teaching materials for ABE
22. Help adults choose courses
23. Read professional journals
24. Attend professional meetings
25. Identify special talents of ABE students
26. Inform adults of community services available to them

#### IV. Teacher Assistant

- 27. Occasionally assist in teaching a class
- 28. Arrange enrichment programs such as trips, speakers, films, and others
- 29. Assist adult students outside of classes
- 30. Help individual students with their lessons
- 31. Orient new adult students
- 32. Make personal contacts with ABE prospects
- 33. Grade test papers
- 34. Help students select books at the library

#### V. Teacher-aide

- 35. Help to make ABE students feel comfortable in class
- 36. Convince under-educated adults that ABE is valuable
- 37. Call on adult students who have been absent from class
- 38. Keep attendance record up to date
- 39. Telephone adult students at home when necessary
- 40. Arrange special observances of birthdays, promotions, anniversaries, or other events important to ABE students
- 41. Make up calendar of class activities and keep them up to date

42. Duplicate things like tests, forms, letters, and teaching materials
43. Operate audio-visual equipment
44. Maintain inventory of recordings, tapes, and other teaching equipment
45. See that instructional materials are neatly arranged
46. Search out library materials

The Teacher-aide is the lowest or basic entry level, and the Supervising Teacher is the highest or senior professional level. As stated in Chapter III, this instrument was screened by ABE experts for quality of activities and for validity.

A set of symbols and units of measure were employed to present and interpret the raw scores and to transform them into more meaningful forms. The relationships of the teachers' roles to the teacher-aides' roles were determined and comparisons were made of actual and ideal roles of both teachers and teacher-aides. Finally, the several patterns of variance in role definition were analyzed in relation to demographic and other factors which characterized the teachers and the teacher-aides. Differences were tested for significance at the .05 level.

The following symbols and units of measure were used to present and interpret role definitions as

represented by the raw scores from teacher and teacher-aide responses on the PCS.

PCS means Professional Competence Scale (the forced-choice checklist of forty-six activities)

LPC means Level of Professional Competence (the mean rank of activities identified on the PCS).

The formula for LPC is

$$LPC = \frac{a_1 + a_2 + a_3 \dots a_k}{N_a}$$

where  $a_1 \dots a_k$  represents activities performed (weighted according to rank on PCS).

$N_a$  represents the number of activities performed.

RPC means Range of Professional Competence and the formula is written as follows:

$$RPC = a_1 - a_k + 1 \text{ (a being weighted according to rank on PCS)}$$

SPC means Scope of Professional Competence and the formula is written as follows:

$$SPC = \sqrt{RPC(N_a)}$$

CPC means Composite of Professional Competence and is calculated by using the following formula:

$$CPC = \frac{SPC}{LPC}$$

Each of these values (LPC, RPC, SPC, and CPC) was calculated for each teacher and each teacher-aide as roles of each were defined by each for both the actual and the assumed ideal situation. The data were then organized and analyzed in order to answer the questions as framed above. The raw data are recorded in Appendix E and the calculated values are presented at appropriate points in this chapter.

#### Part I. Roles as Defined in the Actual or Current Situation

Part I dealt with the present patterns of function sharing between Adult Basic Education teacher and teacher-aide pairs working in Michigan classrooms as defined by each.

##### Question 1:

What activities are currently performed only by the teacher-aides as reported by (a) teachers and (b) teacher-aides?

The raw scores obtained on current activities of teacher-aides as defined by teachers and by teacher-aides were transferred to data coding forms. The information was organized into tables showing the distribution of all activities currently performed by each of the thirty-four ABE teacher-aides as reported by (a) teachers and (b) teacher-aides (Appendix E).

The first two of those distribution tables (Tables E-1, E-2) reveal that each of the forty-six activities was

performed by one or more of the teacher-aides. The activities were performed in varying numbers and levels. Eight teachers and nine teacher-aides reported that no activities were performed by the teacher-aides working alone. While only three of the teacher/teacher-aide pairs, numbers 15, 26, and 28, were in full agreement as to the activities performed by the teacher-aides in their role-sets, clearly there is much general agreement as to the teacher-aides' activities. Most activities of teacher-aides were concentrated in the lower three levels of professional competence, namely, the teacher-aide, teacher assistant, and teacher associate categories (Appendix E-3, E-4).

Table 7 presents the level, range, scope, and composite of professional competence of the roles of teacher-aides as reported by the thirty-four teacher-aides themselves. The level of activities performed by any one teacher-aide ranged on the LPC scale from 1 to 43 with a mean level of 33.61 as reported by teachers; it ranged from 4.00 to 41.00 with a mean level of 32.33 as reported by teacher-aides.

The range of activities performed by any one teacher-aide ranged on the RPC scale from 1 to 44 with a mean range of 12.27 as reported by teachers; it ranged from 1 to 43 with a mean range of 12.44 as reported by teacher-aides.

TABLE 7.--Activities currently performed only by teacher-aides as reported by teachers and teacher-aides and as expressed in level, range, scope, and composite ratings of professional competence involved.

Number Teachers & Teacher- aides	Reported by Teachers				Reported by Teacher-aides			
	LPC	RPC	SPC	CPC	LPC	RPC	SPC	CPC
1	36	18	12	.003	31.4	43	24.5	.78
2	30.46	41	23.08	.75	17.0	25	7.07	.41
3	30.00	36	18.97	.63	32.14	38	16.30	.05
4	36.5	17	8.24	.22	19.2	28	11.83	.61
5	33.5	24	13.85	.41	29.0	1	1.0	.035
6	37.0	11	8.77	.23	33.0	7	3.74	1.16
7	37.0	9	6.0	.002	38.5	6	3.46	.09
8	31.83	22	12.40	.32	36.2	16	8.94	.24
9	38.0	1	1.0	.001	0.0	0	0.0	0.0
10	31.0	11	4.69	.006	41.0	1	1.0	.025
11	0.0	0	0.0	.0	35.0	7	3.74	.10
12	25.5	18	6.0	.003	28.2	7	31.11	1.10
13	20.0	1	1.0	.001	24.22	44	19.44	.80
14	26.5	14	5.29	.20	4.0	42	1.0	.25
15	0.0	0	0.0	0.0	0.0	1	0.0	0.0
16	30.22	41	19.20	.63	32.5	0	7.21	.22
17	28.00	17	5.83	.20	4.55	13	1.0	.22
18	39.00	1	1.0	.001	0.0	1	0.0	0.0
19	30.66	25	12.24	.40	39.0	0	8.94	.23
20	34.00	16	9.79	2.88	27.77	15	6.63	.23
21	8.5	16	5.65	.66	34.5	11	4.47	.13
22	36.00	1	1.0	.001	0.0	10	0.0	0.0
23	1.00	1	1.0	.01	32	0	1.0	.032
24	0.0	0	0.0	0	20.2	1	20.71	1.02
25	43.0	3	2.44	.057	32.5	33	14.31	.44
26	0.0	0	0.0	0	0.0	41	0.0	0.0
27	28.75	43	13.11	.45	0.0	0	0.0	0.0
28	0.0	0	0.0	0	0.0	0	0.0	0.0
29	39.0	11	4.69	.12	0.0	0	0.0	0.0
30	0.0	0	0.0	0	37	1	1.0	.02
31	36.3	18	7.34	.20	0.0	0	0.0	0.0
32	1.0	1	1.0	.011	29.0	1	1.0	.035
33	0.0	0	0.0	0	12.33	29	9.32	.75
34	0.0	0	0.0	0	6.00	1	1.0	.16
Totals	1142.74	417.0	205.58	8.40	1099.21	423.0	209.75	9.12
X =	12.27	6.05	.25		32.33	12.44	6.17	.27

The scope of activities performed by any one teacher-aide ranged on the SPC scale from 1 to 23.08 with a mean of 6.05 as reported by teachers; it ranged from 1 to 24.5 with a mean of 6.17 as reported by teacher-aides.

The composite (combination of level and scope) of activities performed by any one teacher-aide ranged on the CPC scale from .001 to 2.88 with a mean score of .25 as reported by teachers; it ranged from .02 to 1.16 with a mean score of .27 as reported by teacher-aides.

Both teachers and teacher-aides reported that teacher-aides' activities were concentrated in the three lower levels of the PCS. The CPC mean scores .25 and .27 as reported by teachers and teacher-aides respectively suggested a very slight difference in the level and scope of activities reported for the teacher-aides by teachers and by teacher-aides themselves.

Question 3:

What activities are currently performed jointly or alternately by both the teachers and the teacher-aides as reported by (a) teachers and (b) teacher-aides?

The raw scores obtained on current activities of both teachers and teacher-aides as defined by teachers and teacher-aides were transferred to data coding forms. The information was organized into tables showing the distribution of all activities currently performed by each of the thirty-four teacher/teacher-aide pairs as reported by (a) teachers and (b) teacher-aides (Appendix E).



The first two of those distribution tables (Tables E-1, E-2) reveal that each of the forty-six activities was performed by one or more of the teacher/teacher-aide pairs. The activities were performed in varying numbers and levels.

Table 8 presents the level, range, scope, and composite of professional competence of the roles of both teachers and teacher-aides as reported by the thirty-four teachers and thirty-four teacher-aides. The level of activities performed by any one teacher/teacher-aide pair ranged on the LPC scale from 10.83 to 31.00 with a mean score of 25.23 as reported by teachers; and it ranged from 2.00 to 31.45 with a mean of 23.50 as reported by teacher-aides.

The range of activities performed by any one teacher/teacher-aide pair ranged on the RPC scale from 18 to 46 with a mean range of 41.44 as reported by teachers; and it ranged from 29 to 46 with a mean range of 40.32 as reported by teacher-aides.

The scope of activities performed by any one teacher/teacher-aide pair ranged on the SPC scale from 9.48 to 45.50 with a mean of 21.12 as reported by teachers; and it ranged from 5.65 to 29.64 with a mean of 21.33 as reported by teacher aides.

The composite (combination of level and scope) of activities performed by any one teacher/teacher-aide pair

TABLE 8.--Activities currently performed alternately or jointly by both teachers and teacher-aides as reported by teachers and teacher-aides and as expressed in level, range, scope, and composite of professional competence scores.

Number Teachers & Teacher- aides	Reported by Teachers				Reported by Teacher-aides			
	LPC	RPC	SPC	CPC	LPC	RPC	SPC	CPC
1	21.33	44	19.89	-.933	19.19	37	24.93	.78
2	23.13	41	24.79	1.07	27.33	36	18.0	.41
3	22.54	46	31.81	1.41	26.37	42	23.36	.05
4	25.71	34	15.42	.60	26.17	46	17.94	.61
5	27.25	44	18.76	.689	24.22	46	28.77	.035
6	31.0	18	9.48	3.06	9.21	29	13.19	1.16
7	28.95	46	31.08	1.07	26.42	46	29.64	.09
8	30.07	36	22.44	.74	26.84	45	29.24	.24
9	23.17	46	45.50	1.96	2.0	39	12.49	0.0
10	27.0	46	21.44	.79	21.8	44	20.97	.025
11	25.16	44	39.93	1.58	25.66	44	22.97	.10
12	21.89	45	39.50	1.80	17.00	29	13.19	1.10
13	25.0	43	19.67	.78	24.5	16	5.65	.80
14	26.72	44	31.11	1.65	29.3	39	26.49	.25
15	30.12	41	18.11	.60	29.2	43	19.67	0.0
16	22.93	44	25.69	1.12	26.2	44	25.69	.22
17	26.94	46	28.77	1.06	28.88	34	17.49	.22
18	25.2	46	33.23	1.31	26.2	46	27.96	0.0
19	27.71	43	24.53	.88	9.66	33	16.24	.23
20	24.28	46	33.91	1.39	7.9	46	27.12	.23
21	26.66	41	27.16	1.01	26.38	45	18.97	.13
22	28.75	43	26.22	.91	25.00	44	18.76	0.0
23	10.83	21	11.22	1.03	25.12	43	19.67	.032
24	22.21	44	31.81	1.43	27.25	31	11.14	1.02
25	23.04	44	24.81	1.07	22.2	45	28.46	.44
26	26.22	44	19.89	.75	31.45	38	20.44	0.0
27	28.6	37	19.23	.67	29.7	42	20.49	0.0
28	26.92	45	24.18	1.01	29.08	46	23.49	0.0
29	23.17	45	32.17	1.38	28.30	36	19.39	0.0
30	22.0	45	23.23	1.05	23.03	46	24.45	.02
31	21.9	35	19.62	.89	27.16	45	26.83	0.0
32	27.7	43	19.67	.71	19.75	42	18.33	.035
33	26.6	45	22.24	.83	25.59	39	25.74	.75
34	27.0	34	17.49	.27	24.83	45	28.46	.16
Totals	857.73	1409	854.00	37.50	798.89	13.71	725.17	9.12
X =	25.23	41.44	21.12	1.10	23.50	40.32	21.33	.27

ranged on the CPC scale from .27 to 3.06 with a mean score of 1.10 as reported by teachers; and it ranged from .02 to 1.16 with a mean score of .27 as reported by teacher-aides.

Both teachers and teacher-aides reporting activities currently performed by teachers and teacher-aides working together defined joint roles which ranged from level one to level five on the PCS. The mean LPC score derived from teacher ratings was 25.23; and from teacher-aide ratings, the mean LPC score was 23.5 (Appendix E-1, E-2).

The teachers reported a slightly wider range of shared activities than did the teacher-aides (means of 41.4 and 40.32 respectively). SPC mean scores were almost identical (21.12 and 21.33). The CPC mean scores 1.10 and .27 for activities as reported by teachers and teacher-aides respectively reflected the minor differences in their perceptions of the level of activities performed and hence, in their definitions of shared roles.

Question 5:

What activities are currently performed only by the teachers as reported by (a) teachers and (b) teacher-aides?

The raw scores obtained on current activities of teachers as defined by teachers and by teacher-aides were transferred to data coding forms. The information was

organized into tables showing the distribution of all activities currently performed by each of the thirty-four ABE teachers as reported by (a) teachers and (b) teacher-aides (Appendix E).

The first two of those distribution tables (E-1, E-2) reveal that each of the forty-six activities was performed by one or more of the teachers. The activities were performed in varying numbers and levels.

Table 9 presents the level, range, scope, and composite of professional competence of the roles of teachers as reported by the thirty-four teachers themselves and the thirty-four teacher-aides. The level of activities performed by any one teacher ranged on the LPC scale from 16.25 to 33.05 with a mean level of 21.13 as reported by the teachers themselves; it ranged from 11.9 to 24.1 with a mean level of 19.07 as reported by teacher-aides.

The range of activities performed by any one teacher ranged on the RPC scale from 33 to 46 with a mean range of 42.03 as reported by teachers themselves; it ranged from 9 to 46 with a mean range of 40.56 as reported by teacher-aides.

The scope of activities performed by any one teacher ranged on the SPC scale from 19.74 to 41.26 with a mean of 31.13 as reported by teachers; it ranged from 6.00 to 44.43 with a mean of 28.76 as reported by teacher-aides.

TABLE 9.--Activities currently performed only by teachers as reported by teachers and teacher-aides and as expressed in level, range, scope, and composite ratings of professional competence.

Number Teachers & Teacher- aides	Reported by Teachers				Reported by Teacher-aides			
	LPC	RPC	SPC	CPC	LPC	RPC	SPC	CPC
1	20.96	45	35.50	1.69	17.5	45	21.21	1.21
2	19.66	44	22.97	1.16	70.5	46	35.24	1.72
3	17.2	39	19.74	1.14	17.10	41	27.91	1.63
4	21.33	46	35.24	1.15	21.33	41	23.95	1.12
5	21.4	45	34.86	1.62	19.31	41	25.61	1.32
6	17.88	46	34.58	1.93	17.9	42	31.08	1.73
7	16.25	38	27.56	1.69	19.4	42	31.08	1.60
8	16.59	39	29.29	1.76	12.8	42	24.24	1.89
9	0.0	0	0.0	0.0	23.9	46	43.43	1.81
10	21.97	44	38.68	1.76	22.9	45	38.54	1.68
11	21.23	46	24.45	1.15	19.8	45	32.86	1.66
12	27.63	44	20.0	.79	12.6	28	12.96	1.02
13	23.44	45	39.11	1.66	20.1	46	36.152	1.81
14	18.72	42	27.49	1.46	14.6	41	11.09	.76
15	21.28	41	36.22	1.70	21.6	44	20.83	.96
16	17.78	44	24.8	1.39	13.9	41	23.95	1.72
17	20.66	42	29.69	1.00	14.6	34	21.42	1.44
18	20.33	38	26.24	1.29	18.9	38	26.87	1.38
19	16.52	45	30.74	1.86	17.25	9	6.0	.04
20	16.41	33	19.89	1.21	19.8	39	20.71	1.04
21	33.05	44	33.17	1.00	22.6	45	36.12	1.59
22	17.18	44	31.11	1.92	21.4	45	34.86	1.62
23	25.61	45	41.89	1.63	14.5	40	26.83	1.37
24	24.75	43	29.32	1.18	24.1	44	33.17	1.37
25	19.85	45	30.00	1.51	18.2	17	9.21	.50
26	21.88	45	39.69	1.81	16.5	34	21.81	1.32
27	21.1	44	36.33	1.72	21.7	46	37.76	1.74
28	21.45	45	37.35	1.74	20.3	43	37.69	1.85
29	19.64	42	26.72	1.36	15.0	44	32.50	2.16
30	24.23	45	36.74	1.51	23.1	44	33.82	1.46
31	22.8	46	38.37	1.68	21.60	46	38.37	1.77
32	23.5	44	39.80	1.69	24.16	44	39.80	1.64
33	22.5	45	39.69	1.76	23.42	45	39.69	1.69
34	22.6	46	41.26	1.82	11.9	46	41.26	1.82
Totals	697.38	1429	1058.50	45.52	648.34	1379	977.97	49.32
X =	21.13	42.03	31.13	1.45	19.07	40.51	28.76	1.45

The composite (combination of level and scope) of activities performed by any one teacher ranged on the CPC scale from 1.79 to 1.93 with a mean of 1.45 as reported by teachers themselves; it ranged from .004 to 1.89 with a mean of 1.45 as reported by teacher-aides.

Only one teacher/teacher-aide pair reporting current activities for teachers demonstrated full agreement on the activities being performed. Teachers generally reported lower level, wider range and fuller scope of activities for themselves than were reported for them by their aides.

The CPC mean scores 1.45 and 1.45 as reported by teachers and teacher-aides suggested that in spite of differences in perceived level and scope of activities performed by teachers, there was general agreement as to overall role. There was also a general agreement that the CPC for teachers (1.45 in each case) was higher than the CPC for aides (1.10 and .27 respectively).

Both teachers and teacher-aides reported teachers' activities concentrated in the levels of teacher, teacher associate, and teacher assistant.

Question 7:

What activities are not currently being performed by either the teachers or the teacher-aides as reported by (a) teachers and (b) teacher-aides?

The raw scores obtained on activities performed by teachers alone or jointly with their aides, and by teacher-aides alone or jointly with their teachers, as reported by teachers and by teacher-aides showed every activity being performed by one or more of either the teachers, the teacher-aides or both teachers and teacher-aides. The activities were performed in varying numbers and levels (Appendix E).

From these scores Table 10 was formulated and it showed the mean percentage of activities being performed by teachers and teacher-aides whose roles, as actually performed, included activities in each professional role category as reported by (a) teachers and (b) teacher-aides.

Teachers reported that a mean of 92.76 per cent of the activities in the supervising teacher role category were being performed by teacher-aides alone or in shared relationships, and 32.64 per cent of them were being performed by teacher-aides alone or in shared relationships.

Teacher-aides reported that a mean of 81.97 per cent of the activities in the supervising teacher role category were being performed by teachers alone or in shared relationships, and 26.43 per cent of them were being performed by teacher-aides alone or in shared relationships.

TABLE 10.--Mean percentage of activities in each role category which were reported as being performed by teachers alone or jointly with aides and by aides alone or jointly with teachers.

Professional Role Category	Percentage			
	Teachers as Reported by		Teacher-aides as Reported by	
	Teachers	Aides	Teachers	Aides
Supervising Teacher (Activities 1-9 from PCS)	92.76	81.97	32.64	26.43
Teacher (Activities 10 to 20 from PCS)	88.99	73.20	33.91	22.95
Teacher Associate (Activities 21 to 26 from PCS)	85.23	80.33	37.70	35.26
Teacher Assistant (Activities 27 to 34 from PCS)	87.82	59.50	47.30	35.96
Teacher-aide (Activities 35 to 46 from PCS)	77.40	67.85	52.40	42.85

Teachers reported that a mean of 88.99 per cent of activities in the teacher role category were performed by teachers alone or with their aides, and 33.91 per cent of them were performed by teacher aides alone or with their teachers.

Teacher-aides reported that a mean of 73.20 per cent of activities in the teacher role category were being performed by teachers alone or with their aides,



and 22.95 per cent of them were being performed by teacher-aides alone or with their teachers.

Teachers reported that a mean of 85.23 per cent of the activities in the teacher associate role category were being performed by teachers alone or with their aides, and 37.70 per cent of them were being performed by teacher-aides alone or with their teachers.

Teacher-aides reported that a mean of 80.33 per cent of activities in the teacher associate role category were being performed by teachers alone or with their aides, and 35.26 per cent of them were being performed by the teacher-aides alone or with their teachers.

Teachers reported that a mean of 87.82 per cent of activities in the teacher assistant role category were being performed by teachers alone or with their aides, and 47.30 per cent of them were being performed by teacher-aides alone or with their teachers.

Teacher-aides reported that a mean of 59.50 per cent of the activities in the teacher assistant role category were being performed by teachers alone or with their aides, and a mean of 39.96 per cent of them were being performed by teacher-aides alone or with their teachers.

Teachers reported that a mean of 77.40 per cent of the activities in the teacher-aide category were being performed by teachers alone or with aides, and a mean of 52.40 per cent of them were being performed by teacher-aides alone or with their teachers.

Teacher-aides reported that a mean of 67.85 per cent of the activities in the teacher-aide category were being performed by teachers alone or with their aides, and a mean of 42.85 per cent of them were being performed by teacher-aides alone or with their teachers.

No activities were found which were not being performed by some one of the teachers, teacher-aides, or combinations. As would be expected, activities at the higher levels of professional competence were more frequently performed by teachers and the involvement of aides was greater in the lower level role categories. It was somewhat surprising to discover that even though accompanied by aides, teachers continue to perform very many of the activities at lowest levels.

Part I has described the present sharing of functions between teachers and teacher-aides as reported by each of them. It has described roles of each in terms of (a) current activities performed only by teacher-aides, (b) current activities performed jointly or alternately by both teachers and teacher-aides, and (c) current activities performed only by teachers. These activities have been expressed and measured in terms of Level of Professional Competence, Scope of Professional Competence, Range of Professional Competence, and Composite of Professional Competence.

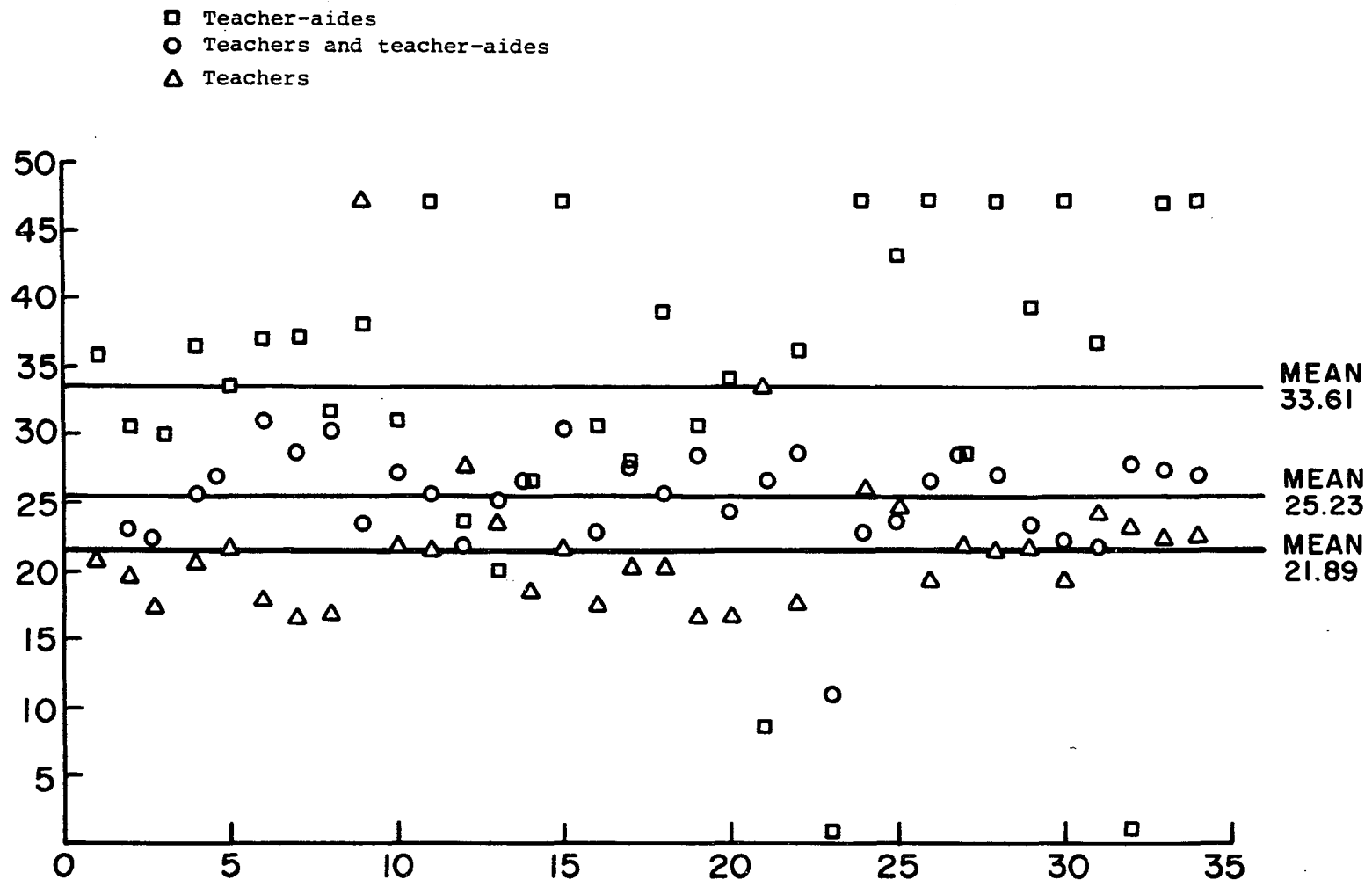


Figure 1.--Distribution of LPC defined current roles as performed by teacher-aides working alone, by teachers and teacher-aides working jointly, and by teachers working alone as reported by teachers.

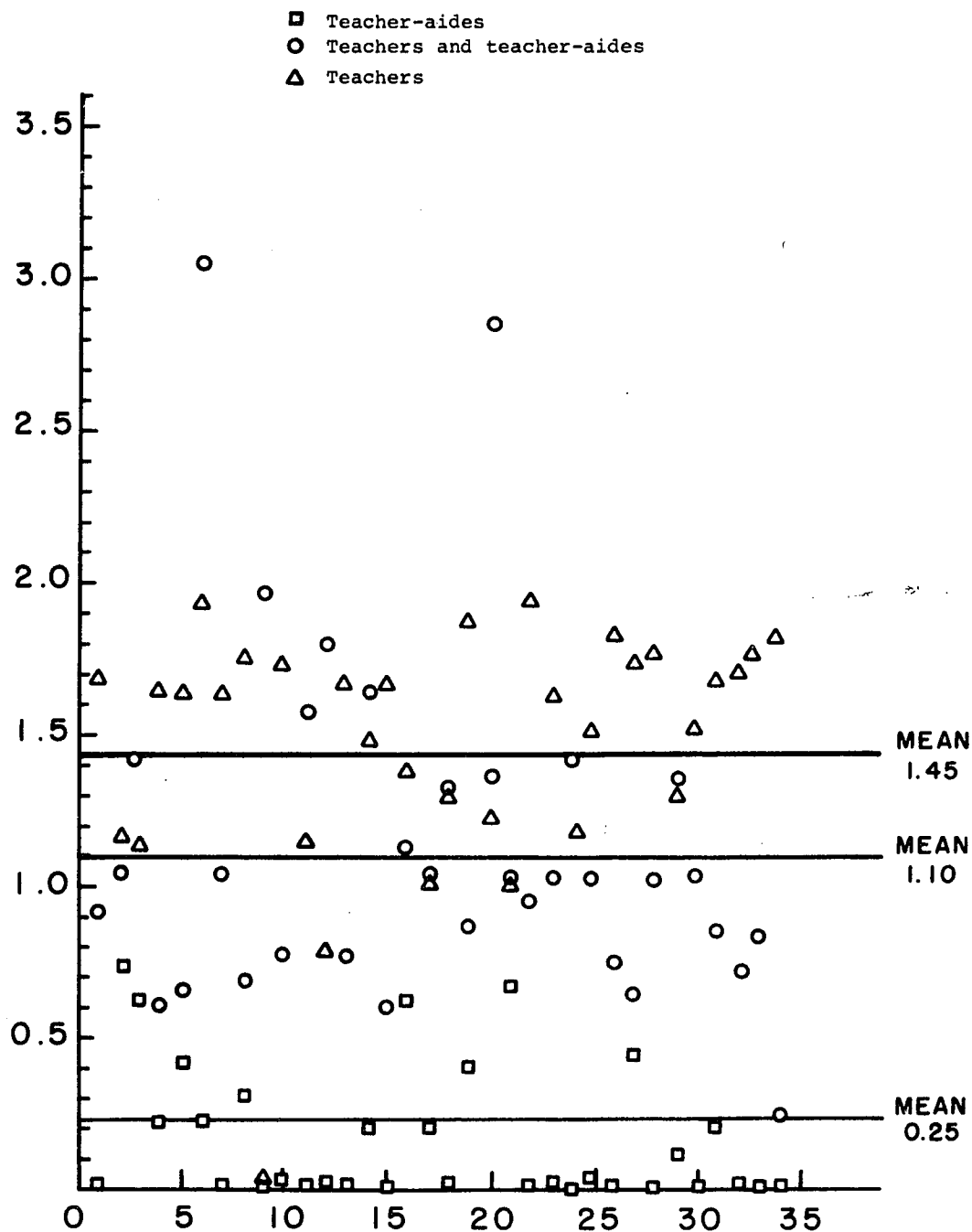


Figure 2.--Distribution of CPC defined current roles as performed by teacher-aides alone, jointly by teachers and aides, and by teachers alone as reported by teachers.

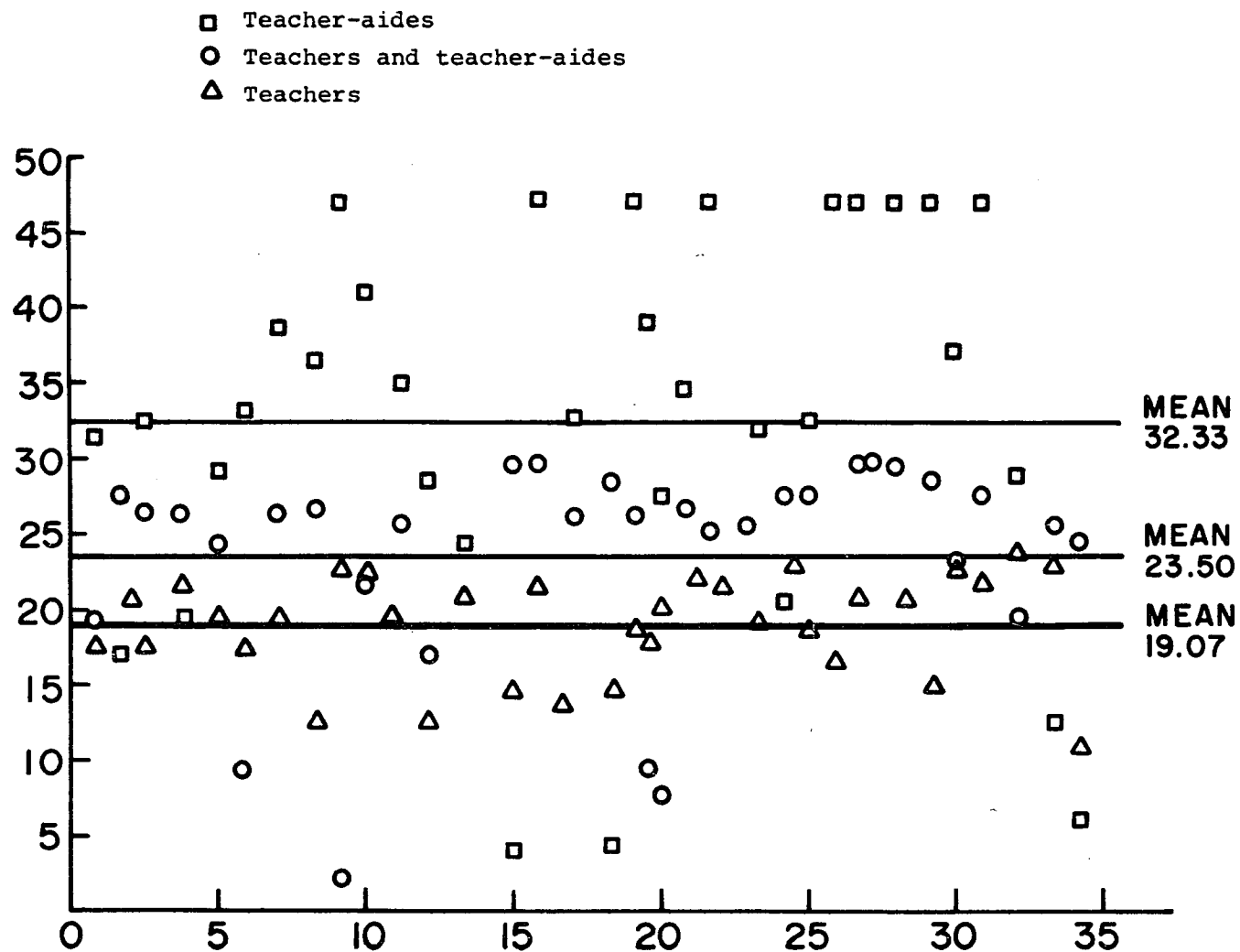


Figure 3.--Distribution of LPC defined current roles as performed by teacher-aides alone, jointly by teachers and aides, and by teachers alone as reported by teacher-aides.

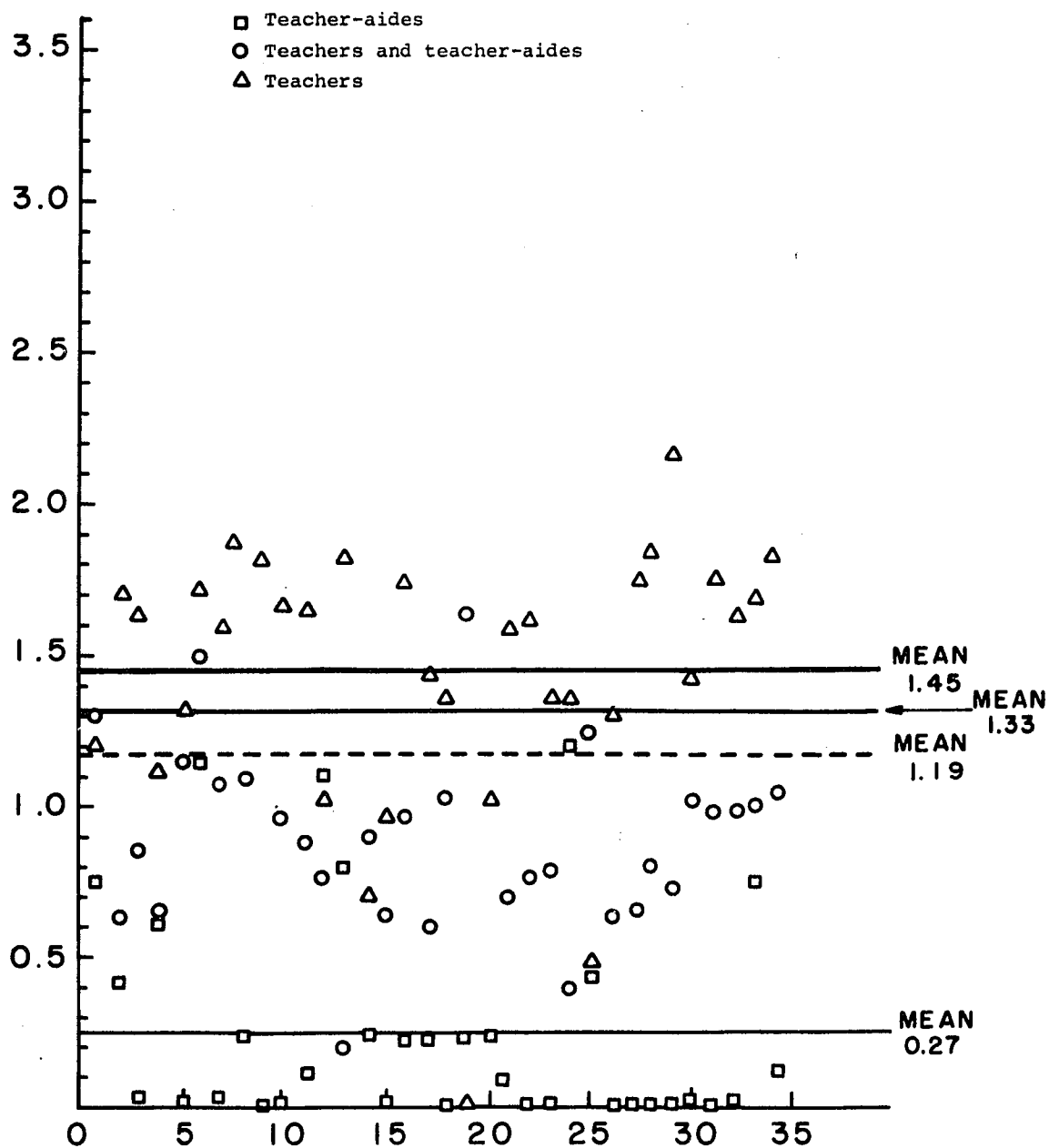


Figure 4.--Distribution of CPC defined current roles as performed by teacher-aides alone, jointly by teachers and aides, and by teachers alone as reported by teacher-aides.

Part II will describe the patterns of function sharing as described for an ideal state by (a) teachers and (b) teacher-aides.

Part II. Roles as They Would be Defined  
in an Assumed Ideal Situation

Four questions were formulated and answered in order to understand the actual patterns of function sharing between teachers and their aides. Four parallel questions were formulated and answered in order to understand perceived ideal patterns of function sharing as assumed and defined by both teachers and teacher-aides. The principal purpose of these questions was to provide a base for estimating (a) the aspirations of teacher-aides, and (b) the willingness of teachers to develop a flexible "career ladder" situation in which teacher-aides might qualify themselves and move progressively into more highly professional levels of activities and teachers would adapt their own roles in order to accommodate and encourage this movement of aides toward full professional status. Findings from this second set of questions are presented in Part II.

Question 2:

What activities in an assumed ideal situation would be performed only by the teacher-aides as reported by (a) teachers and (b) teacher-aides?

The raw scores from the PCS, identifying activities of teacher-aides in an assumed ideal situation, as

reported by teachers and by teacher-aides, were transferred to data coding forms. The information was organized into tables showing the distribution of activities as they would be performed in the assumed ideal situation by teacher-aides as reported by (a) teachers and (b) teacher-aides (Appendix E).

The third and fourth of the distribution tables (E-3, E-4) reveal that each of the forty-six activities would be performed by teacher-aides in the assumed ideal situation as described by one or more of the teachers and teacher-aides. These to-be-performed activities were identified in varying numbers and levels.

Table 11 presents the level, range, scope, and composite of professional competence of the roles of teacher-aides in the assumed ideal situation as reported by the thirty-four teachers and the thirty-four teacher-aides. The level of activities to be performed by teacher-aides ranged on the LPC scale from 13.66 to 39.67 with a mean of 27.36 as reported by teachers; it ranged from 4.5 to 44.00 with a mean of 29.34 as reported by teacher-aides.

The range of activities to be performed by teacher-aides ranged on the RPC scale from the minimum possible range of 1 to the maximum possible range of 46, with a mean of 29.59 as reported by teachers; it ranged over the entire scale from 1 to 46 with a mean of 31.74 as reported by teacher-aides.



TABLE 11.--Activities which would be performed by teacher-aides in an assumed ideal situation as reported by teachers and teacher-aides and as expressed in level, range, scope, and composite ratings of professional competence.

Number Teachers & Teacher- aides	Reported by Teachers				Reported by Teacher-aides			
	LPC	RPC	SPC	CPC	LPC	RPC	SPC	CPC
1	26.92	42	23.36	0.87	29.44	43	27.82	.94
2	25.53	39	25.74	1.01	27.57	35	15.65	.56
3	22.20	41	24.79	1.12	31.89	38	18.79	.59
4	30.00	41	12.80	0.43	4.5	4	2.83	.62
5	16.00	39	8.83	.55	43.0	1	1.0	.02
6	34.88	38	17.43	.5	44.0	1	1.0	.003
7	39.00	11	5.74	.15	25.5	37	17.20	.67
8	16.00	1	1.0	.06	27.0	1	1.0	.004
9	0.0	0	0.0	0.0	33.75	36	16.97	.50
10	13.66	38	10.67	.78	33.0	31	9.61	.29
11	28.00	31	7.87	.27	0.0	0	0.0	0.0
12	14.63	21	12.96	1.23	27.76	44	30.40	1.09
13	29.00	1	1.0	.03	26.9	41	20.25	.75
14	39.67	11	5.74	.14	28.0	29	7.61	.27
15	14.66	13	6.24	.43	0.0	0	0.0	0.0
16	21.67	41	19.20	.89	21.86	39	16.52	.079
17	0.0	0	0.0	0.0	27.17	28	12.96	.47
18	21.5	21	6.48	.3	0.0	0	0.0	0.0
19	33.66	19	10.67	.32	20.0	38	15.10	.75
20	26.33	33	9.94	.38	22.75	42	12.96	.57
21	26.64	41	21.23	.8	24.38	46	24.45	1.00
22	23.33	34	10.09	.43	29.71	40	16.73	.56
23	17.5	32	13.85	.79	27.52	46	32.53	1.18
24	26.44	43	19.67	.74	26.44	44	33.17	1.25
25	39.5	10	4.47	.11	36.89	26	15.30	.41
26	29.67	30	16.43	.55	27.75	46	19.18	.69
27	26.89	41	27.91	1.04	30.3	43	20.74	.66
28	26.23	41	23.08	.88	28.27	46	26.27	.93
29	32.2	38	13.78	.43	18.63	39	17.66	.94
30	23.2	46	26.26	1.13	26.00	38	23.87	.91
31	28.06	41	25.61	.91	26.00	46	30.33	0.6
32	26.44	46	27.12	1.02	27.30	46	24.45	.84
33	27.64	40	20.97	.75	25.80	39	24.19	1.96
34	29.3	42	20.49	.76	27.69	46	22.80	3.80
Totals	930.35	1006	481.44	19.80	997.77	1079	559.37	23.30
X =	27.36	29.59	14.16	.58	29.34	31.74	16.45	.69

The scope of activities to be performed by teacher-aides ranged on the SPC scale from 1 to 27.91 with a mean of 14.16 as reported by teachers; it ranged from 1 to 33.17 with a mean of 16.45 as reported by teacher-aides.

The composite (combination of level and scope) of activities to be performed by teacher-aides ranged on the CPC scale from .3 to 1.23 with a mean of .58 as reported by teachers; it ranged from .02 to 3.80 with a mean of .69 as reported by teacher-aides.

Teachers and teacher-aides reporting activities to be performed by teacher-aides in an assumed ideal situation demonstrated an apparent difference in definitions of teacher-aide roles as represented by the lower LPC, wider RPC, and fuller SPC scores of teacher-aides and the variance of .11 in the mean CPC scores. These CPC score differences are analyzed in the discussion of question 10 on page 115. Both teachers and teacher-aides included activities in all five categories on the PCS (Appendix E-1, E-4) as they defined the new roles for teacher-aides. This observation, too, is analyzed in relation to question 11 on page 118.

Question 4:

What activities would ideally be performed by both the teachers and the teacher-aides in the assumed ideal situation as reported by (a) teachers and (b) teacher-aides?

The raw scores from the PCS, identifying activities to be performed by teachers and teacher-aides, working together in an assumed ideal situation, as reported by both teachers and teacher-aides, were transferred to data coding forms. The information was organized into tables showing the distribution of all activities to be performed by teacher/teacher-aide pairs; as reported by (a) teachers and (b) teacher-aides (Appendix E).

Those distribution tables (E-3, E-4) reveal that each of the forty-six activities was identified by one or more of the teacher/teacher-aide pairs as appropriately performed by the teacher and teacher-aide working together. The activities were included in the ideal role descriptions in varying numbers and at varying levels.

Table 12 presents the level, range, scope, and composite of professional competence of the activities to be performed by both teachers and teacher-aides as reported for the assumed ideal situation by the thirty-four teachers and thirty-four teacher-aides. The level of activities to be performed by teacher/teacher-aide pairs ranged on the LPC scale from 3.80 to 34.19 with a mean level of 22.76; it ranged from 16.00 to 28.65 with a mean level of 22.59 as reported by teacher-aides.

The range of activities to be performed by teacher/teacher-aide pairs ranged on the RPC scale from 33.00 to 46 with a mean range of 42.91 as reported by teachers;

TABLE 12.--Activities to be performed by both teachers and teacher-aides working together in an assumed ideal situation, as reported by teachers and by teacher-aides, and as expressed in level, range, scope, and composite ratings of professional competence.

Number Teachers & Teacher- aides	Reported by Teachers				Reported by Teacher-aides			
	LPC	RPC	SPC	CPC	LPC	RPC	SPC	CPC
1	22.89	46	29.56	1.29	21.78	43	27.82	1.27
2	17.17	43	22.71	1.32	22.84	46	29.56	1.29
3	25.5	42	27.49	1.08	25.09	42	21.49	1.05
4	22.39	46	37.76	1.69	25.33	46	38.96	2.75
5	25.2	44	25.69	1.02	20.65	46	34.58	1.39
6	15.67	33	14.07	.9	22.57	46	35.89	1.74
7	26.15	46	30.33	1.16	28.65	46	27.96	1.56
8	24.03	46	40.69	1.69	24.89	46	40.12	2.86
9	22.93	46	15.50	1.98	19.79	46	25.38	1.18
10	3.80	46	30.33	7.98	24.10	38	27.57	1.19
11	21.97	41	37.88	1.72	22.35	46	30.33	1.47
12	5.32	45	3.46	5.91	16.0	41	21.24	.95
13	25.7	46	38.96	1.52	26.57	45	17.75	1.00
14	24.91	46	42.36	1.70	29.83	43	27.82	1.58
15	25.27	46	38.37	1.52	24.0	46	25.48	1.23
16	24.08	44	22.97	.95	18.75	46	30.33	1.04
17	26.38	36	24.00	.95	25.9	45	21.21	1.67
18	24.61	45	28.46	1.08	20.0	1	1.0	.07
19	26.78	34	17.49	.65	23.8	19	9.75	.75
20	26.42	46	34.58	1.31	26.04	43	33.44	1.44
21	24.86	42	30.39	1.22	19.33	36	23.24	1.23
22	34.19	38	24.65	.72	25.94	46	27.96	.90
23	28.05	43	29.32	1.05	19.5	37	24.33	1.09
24	26.27	38	20.44	.78	20.73	42	24.80	1.43
25	21.5	45	31.46	1.46	19.71	43	30.05	1.36
26	23.61	46	32.53	1.38	19.56	44	28.14	1.24
27	22.06	41	26.40	1.2	21.63	45	32.86	1.80
28	23.3	41	28.63	1.23	16.33	44	30.40	1.27
29	22.69	46	36.52	1.61	22.32	46	31.81	1.66
30	25.16	40	27.56	1.1	22.26	45	29.24	1.74
31	19.88	38	25.41	1.27	24.7	43	15.97	.59
32	21.33	42	27.49	1.25	21.70	43	30.0	1.51
33	18.13	46	34.58	1.51	21.58	46	27.66	1.08
34	18.56	46	30.33	1.23	23.92	39	25.10	1.01
Totals	773.86	1459	1026.37	54.43	768.04	1419	909.14	45.39
X =	22.76	42.91	30.19	1.60	22.59	41.74	26.74	1.33

it ranged from 1 to 46 with a mean range of 41.74 as reported by the teacher-aides.

The scope of activities to be performed by teacher/teacher-aide pairs ranged on the SPC scale from 14.07 to 42.36 with a mean of 30.19 as reported by teachers and it ranged from 1.0 to 40.12 with a mean of 26.74 as reported by teacher-aides.

The composite (combination of level and scope) of activities to be performed by teacher/teacher-aide pairs ranged on the CPC scale from .9 to 7.98 with a mean of 1.60 as reported by teachers; it ranged from .07 to 2.86 with a mean of 1.33 as reported by teacher-aides.

Both teachers and teacher-aides, reporting assumed ideal activities for teacher/teacher-aide pairs working together, defined roles for them in each of the five categories on the PCS (Appendix E-3, E-4). The variances in mean role-defining scores of only .17 on LPC, 1.17 on RPC, 3.45 on SPC, and .27 on CPC as calculated for teachers and teacher-aides respectively revealed very little difference between teachers and teacher-aides in the level and scope of roles seen as appropriate for shared work in an assumed ideal situation (Appendix E). These apparent minor differences were analyzed and are discussed on page 121 in connection with question 12.

Question 6:

What activities, in an assumed ideal situation, would be performed only by teachers, as reported by (a) teachers and (b) teacher-aides?

The raw scores from the PCS, identifying activities of teachers in an assumed ideal situation, as reported by teachers and by teacher-aides, were transferred to data coding forms. The information was organized into tables showing the distribution of activities as they would be performed by teachers in the assumed ideal situation as reported by (a) teachers and (b) teacher-aides (Appendix E).

The third and fourth of the distribution tables (E-3, E-4) reveal that each of the forty-six activities would be performed by one or more of the teachers. The activities were identified in varying numbers and levels.

Table 13 presents the level, range, scope, and composite of professional competence of the solo roles of teachers as described for an assumed ideal situation by the thirty-four teachers and the thirty-four teacher-aides. The level of activities to be performed by teachers ranged on the LPC scale from 14.31 to 39.00 with a mean of 19.88 as reported by teachers; it ranged from 13.00 to 29.00 with a mean of 21.47 as reported by teacher-aides.

The range of activities to be performed in the assumed ideal situation by teachers ranged on the RPC scale from the minimum possible range of 1 to the maximum

TABLE 13.--Activities to be performed by teachers in an assumed ideal situation as reported by teachers and teacher-aides and as expressed in level, range, scope, and composite ratings of professional competence.

Number Teachers & Teacher- aides	Reported by Teachers				Reported by Teacher-aides			
	LPC	RPC	SPC	CPC	LPC	RPC	SPC	CPC
1	15.1	37	19.74	1.31	16	37	12.16	.76
2	21.85	44	17.54	.557	12.67	38	18.49	1.46
3	20.57	46	17.94	.875	20.36	39	31.22	1.53
4	18.5	32	8.0	.43	14.17	33	14.07	.99
5	22.68	41	30.03	1.32	24.82	38	20.44	.82
6	18.63	46	31.81	1.71	20.56	39	18.73	.91
7	16.23	38	28.24	1.74	17.90	38	27.56	1.54
8	18.8	29	14.24	.76	14	5	2.23	.16
9	39	1	1.0	.03	21.46	37	29.79	1.38
10	19.70	35	24.39	1.24	23.00	46	27.12	1.18
11	31.5	37	12.16	.39	20.63	49	28.00	1.35
12	20.5	42	18.33	.89	22.25	40	12.64	.56
13	15.81	42	20.49	1.30	17.64	35	18.62	1.11
14	14	31	13.63	.97	17.54	41	21.23	1.21
15	19.5	38	17.43	.89	20.50	43	30.75	1.50
16	26.15	39	22.51	.86	29	26	14.42	.49
17	19.44	41	27.16	1.40	12.64	40	20.97	1.66
18	18.53	44	25.69	1.39	14	1	1.0	.07
19	14.31	42	23.36	1.63	13	1	1.0	.07
20	18.53	36	24.73	1.33	23.14	43	17.34	.75
21	16.83	35	20.49	1.22	18.87	38	23.87	1.26
22	19.85	41	28.63	1.44	31.5	38	23.06	.73
23	14.36	38	23.06	1.61	22.25	38	12.32	.55
24	16.09	41	30.70	1.91	17.33	41	15.68	.90
25	21.54	38	22.22	1.03	22.07	32	21.16	.95
26	17.0	35	20.49	1.21	22.7	26	16.12	.71
27	17.0	34	16.49	.97	18.22	34	17.49	.95
28	20.71	35	18.70	.90	23.89	34	17.49	.73
29	21.36	32	18.86	.88	19.11	37	18.24	.95
30	12.75	22	13.26	1.04	16.75	42	18.33	1.09
31	21.18	38	19.49	.89	18.6	45	20.12	.93
32	21.33	36	19.41	.91	22.4	45	24.18	1.00
33	18.13	30	19.18	1.05	23.5	45	24.18	1.03
34	18.56	36	27.12	1.46	20.6	45	28.46	1.26
Totals	676.01	1232	696.45	37.53	730.70	1209	649.48	32.54
X =	19.88	36.24	20.48	1.10	21.47	35.56	19.10	.95

possible range of 46, with a mean of 36.24 as reported by teachers; it ranged over almost the entire scale from 1 to 45 with a mean of 35.56 as reported by teacher-aides.

The scope of activities to be performed on an assumed ideal situation by teachers ranged on the SPC scale from 1.00 to 31.81 with a mean of 20.48 as reported by teachers; it ranged from 1.00 to 31.22 with a mean of 19.10 as reported by teacher-aides.

The composite (combination of level and scope) of activities to be performed by teachers ranged on the CPC scale from .39 to 1.91 with a mean of 1.1 as reported by teachers; it ranged from .07 to 1.66 with a mean of .95 as reported by teacher-aides.

Teachers and teacher-aides reporting activities to be performed by teachers in an assumed ideal situation demonstrated very little apparent difference in definitions of teacher roles as represented by the variances of 2.59 in mean LPC, .68 in mean RPC, 1.38 in mean SPC, and .15 in mean CPC scores. These differences are analyzed in the discussion of questions 12 and 13 on pages 121 and 125. Both teachers and teacher-aides included activities from all five categories on the PCS (Appendix E-1, E-4) as they defined the new roles for teachers.

Question 8:

What activities would ideally not be performed in the assumed ideal situation by either teachers or teacher-aides, as reported by (a) teachers and (b) teacher-aides?



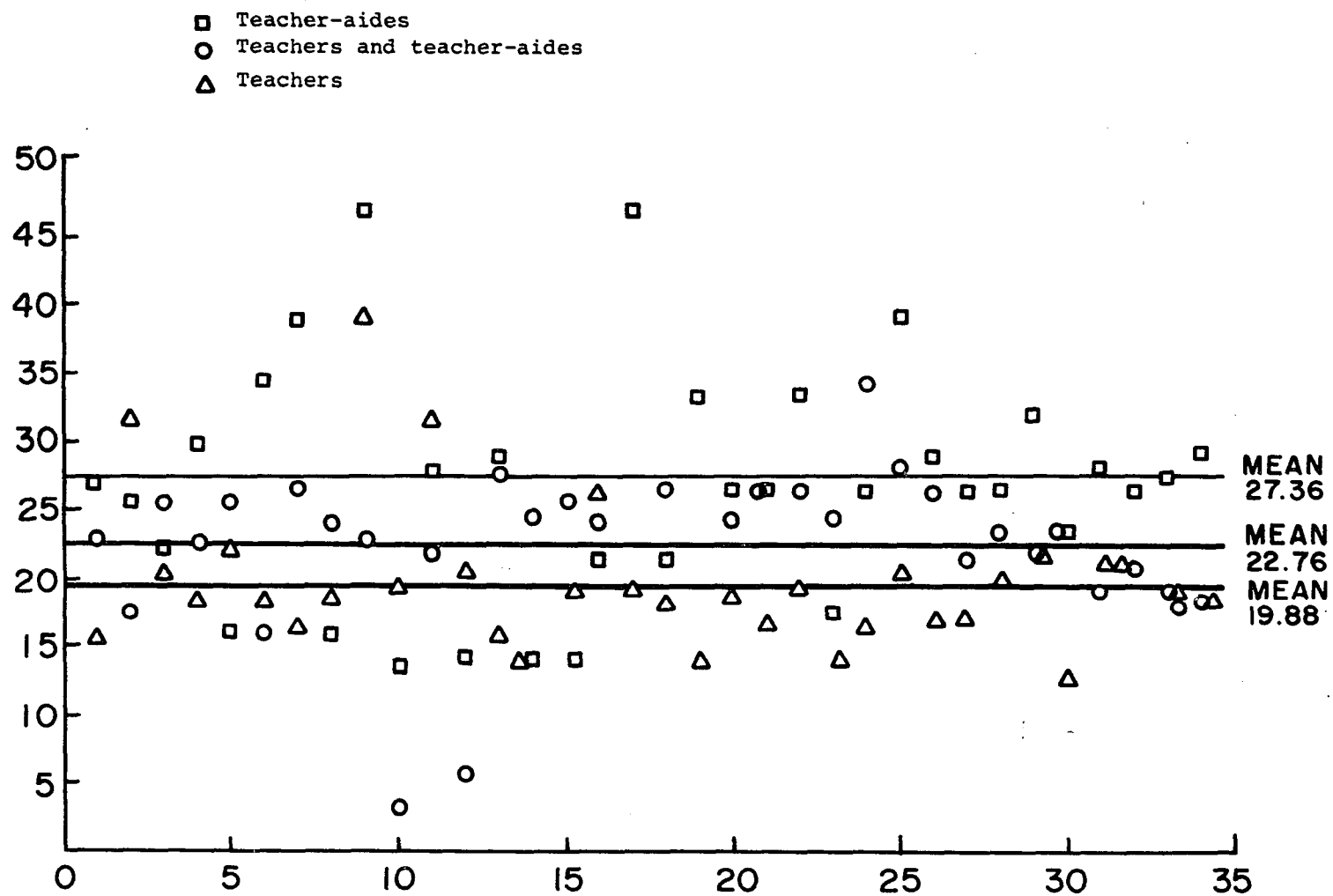


Figure 5.--Distribution of LPC defined roles in an assumed ideal situation to be performed by teacher-aides alone, jointly by teachers and aides, and by teachers alone as reported by teachers.

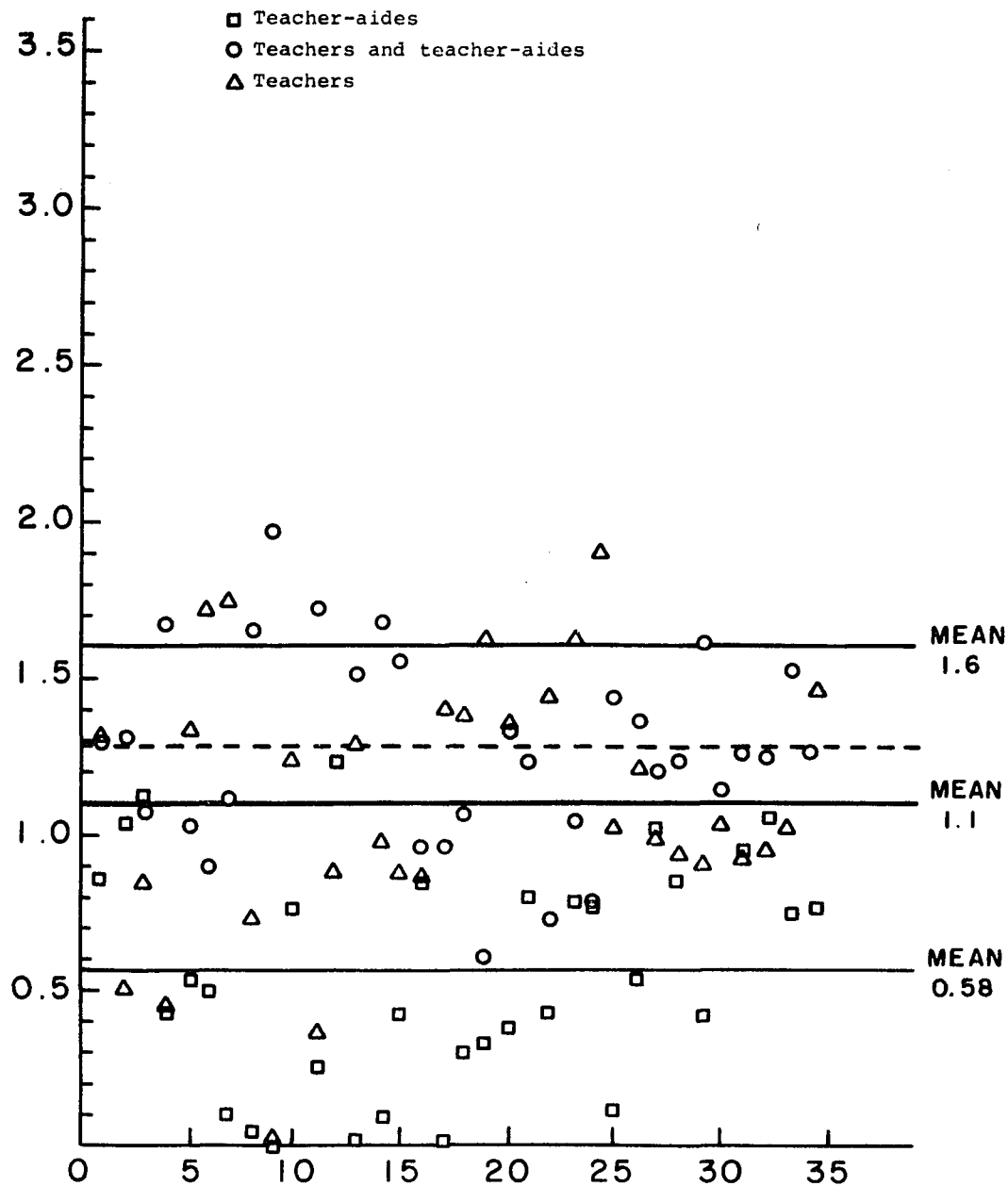


Figure 6.--Distribution of CPC defined roles in an assumed ideal situation to be performed by teacher-aides alone, jointly by teachers and aides, and by teachers alone as reported by teachers.

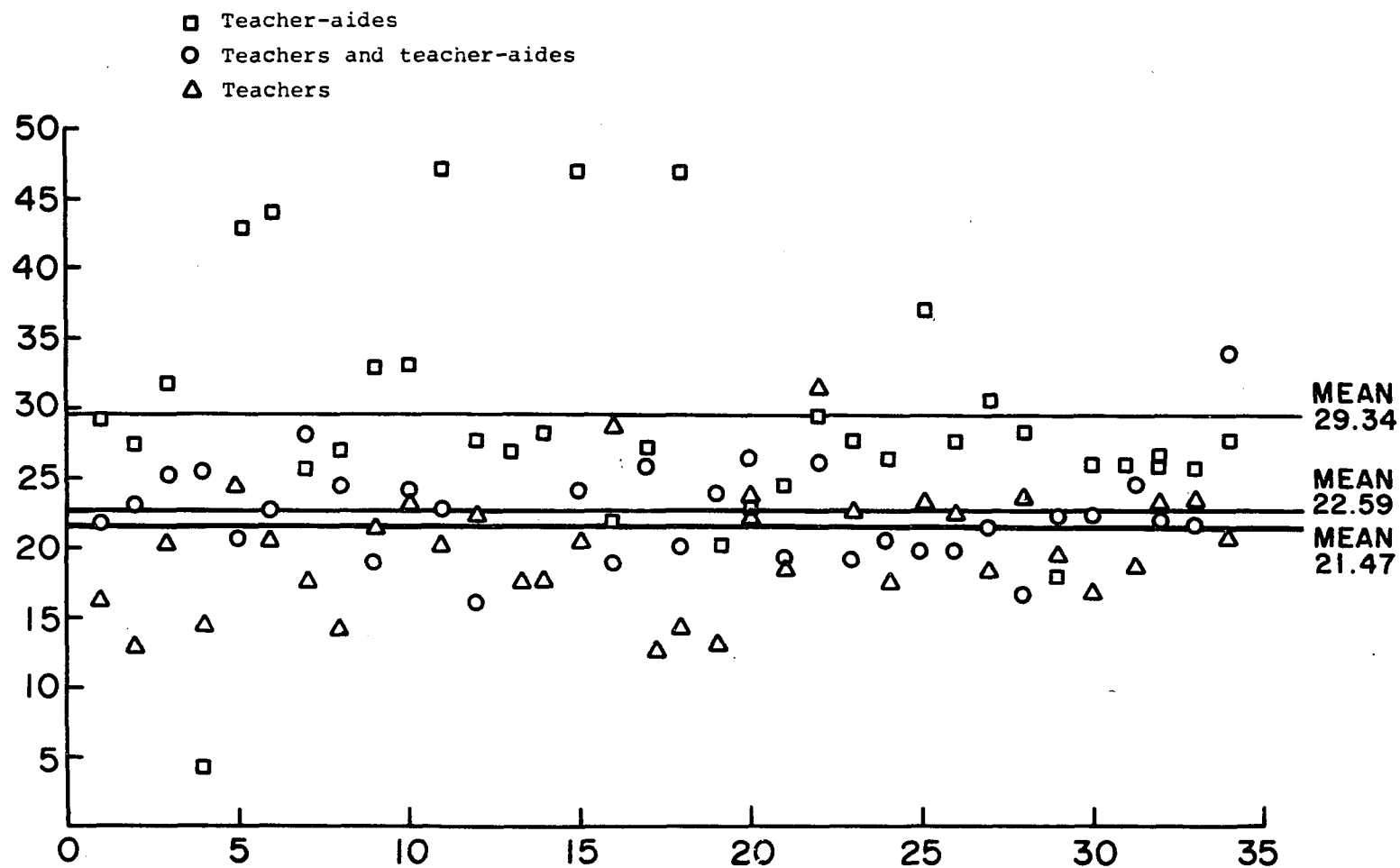


Figure 7.--Distribution of LPC defined roles in an assumed ideal situation to be performed by teacher-aides alone, jointly by teachers and aides, and by teachers alone as reported by teacher-aides.

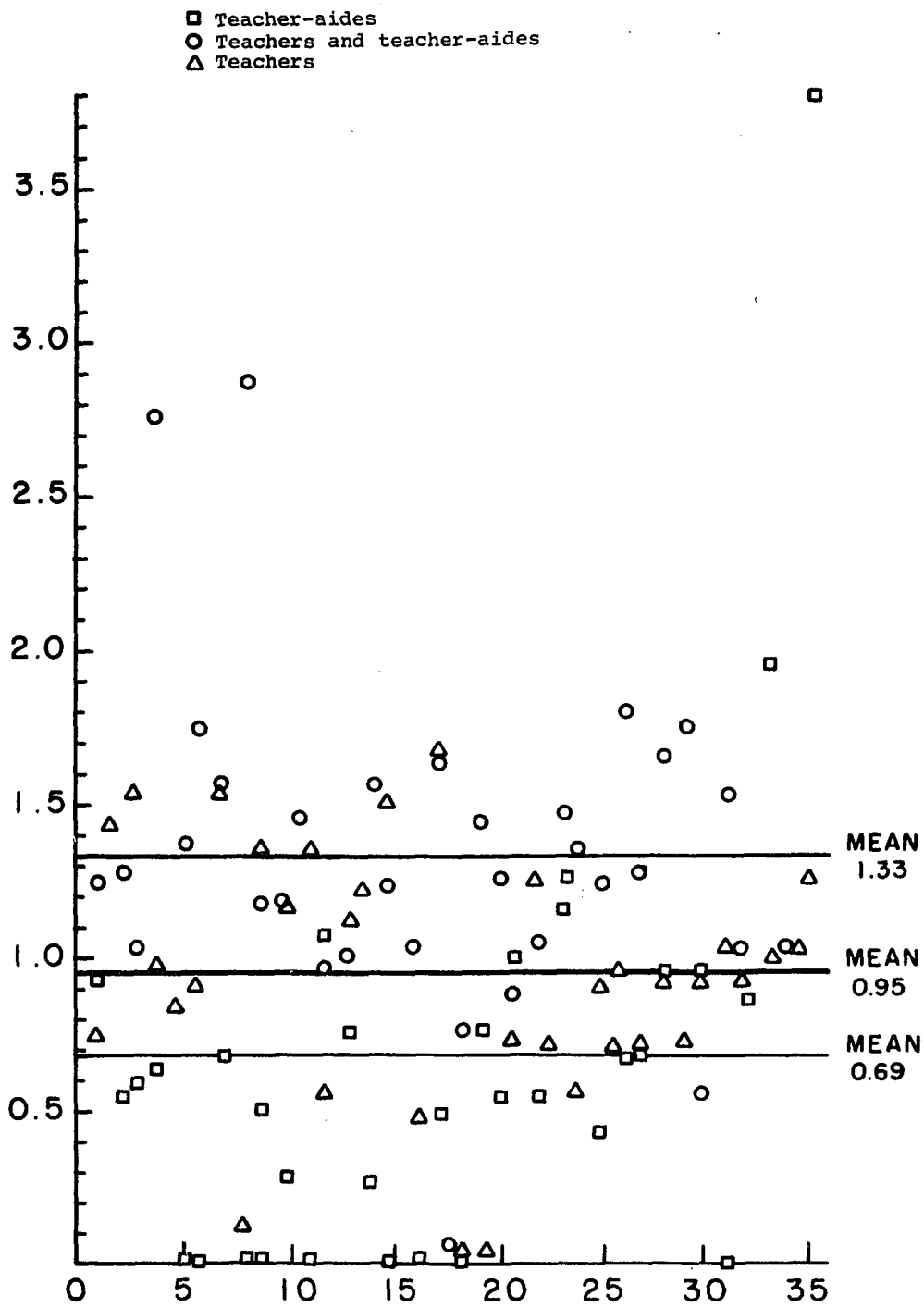


Figure 8.--Distribution of CPC defined roles as they would be performed in an assumed ideal situation by teacher-aides alone, jointly by teachers and aides, and by teachers alone as reported by teacher-aides.

This question was answered indirectly while ascertaining the mean percentage of activities in each professional role category which is included in role descriptions for the assumed ideal situations. The raw scores obtained on activities of teachers and teacher-aides in the assumed ideal situation, as reported by teachers and teacher-aides, showed every activity being performed by one or more of either the teachers, the teacher-aides, or both teachers and teacher-aides. The activities were identified in varying numbers and levels (Appendix E).

From these scores Table 14 was formulated and it shows the mean percentage of activities from each professional role category which would be performed in an assumed ideal situation by teachers alone or jointly with their aides or by teacher-aides alone or jointly with their teachers, as reported by (a) teachers and (b) teacher-aides.

Teachers reported that within the Supervising teacher role category a mean of 75.37 per cent of the activities would be performed by teachers alone or jointly with their aides and 56.16 per cent of the activities would be performed by teacher-aides alone or jointly with their teachers in the assumed ideal situation.

Teacher-aides reported that in the Supervising teacher role category a mean of 72.17 per cent of the activities would be performed by teachers alone or jointly

with their aides and a mean of 56.16 per cent of the activities would be performed by teacher-aides alone or jointly with their teachers in the assumed ideal situation.

TABLE 14.--Mean percentage of activities in each professional role category which would be performed by teachers either alone or jointly with their aides or by aides either alone or jointly with their teachers in an assumed ideal situation.

Professional Role Category	Percentage			
	Teachers as Reported by		Teacher-aides or Both Reported by	
	Teachers	Aides	Teachers	Aides
Supervising Teacher (Activities 1-9 from PCS)	75.37	72.17	56.16	56.16
Teacher (Activities 10 to 20 from PCS)	73.29	63.52	64.66	55.03
Teacher Associate (Activities 21 to 26 from PCS)	78.36	60.25	64.18	59.75
Teacher Assistant (Activities 27 to 34 from PCS)	64.30	54.37	63.93	57.68
Teacher-aide (Activities 34 to 46 from PCS)	67.35	53.63	70.50	63.90

Teachers reported that in the Teacher role category a mean of 73.29 per cent of the activities would be performed by teachers alone or jointly with their aides and 64.66 per cent of the activities would be performed

by teacher-aides alone or jointly with their teachers in the assumed ideal situation.

Teacher-aides reported that in the Teacher role category a mean of 63.52 per cent of the activities would be performed by teachers alone or jointly with their aides and 55.03 per cent of the activities would be performed by teacher-aides alone or jointly with their teachers in the assumed ideal situation.

Teachers reported that in the Teacher associate role category a mean of 78.36 per cent of the activities would be performed by teachers alone or jointly with their aides and 64.18 per cent of the activities would be performed by teacher-aides alone or jointly with their teachers in the assumed ideal situation.

Teacher-aides reported that in the Teacher associate role category a mean of 60.25 per cent of the activities would be performed by teachers alone or jointly with their aides and 59.75 per cent of the activities would be performed by teacher-aides alone or jointly with their teachers in the assumed ideal situation.

Teachers reported that in the Teacher assistant role category a mean of 64.30 per cent of the activities would be performed by teachers alone or jointly with their aides and 63.93 per cent of the activities would be performed by teacher-aides alone or jointly with their teachers in the assumed ideal situation.

Teacher-aides reported that in the Teacher assistant role category a mean of 54.37 per cent of the activities would be performed by teachers alone or jointly with their aides and a mean of 57.68 per cent of the activities would be performed by teacher-aides alone or jointly with their teachers in the assumed ideal situation.

Teachers reported that on the Teacher-aide role category a mean of 67.35 per cent of the activities would be performed by teachers alone or jointly with their aides and 70.50 per cent of the activities would be performed by teacher-aides alone or jointly with their teachers in the assumed ideal situation.

Teacher-aides reported that on the Teacher-aide role category a mean of 53.63 per cent of the activities would be performed by teachers alone or jointly with their aides and a mean of 63.90 per cent of the activities would be performed by teacher-aides alone or jointly with their teachers in the assumed ideal situation.

As indicated in Table 14 all activities would be performed by varying numbers of teachers and teacher-aides. There are no activities which would not be performed in some cases by either teachers or teacher-aides in the assumed ideal situation.

Part II has described the sharing of functions between teachers and teacher-aides in an assumed ideal situation as reported by each of the thirty-four teachers and



thirty-four teacher-aides. It has described roles of each in terms of (a) activities to be performed only by teachers, (b) activities to be performed by teachers and aides together, (c) activities to be performed only by teachers, and (d) activities which would not be performed by either teachers or aides. These roles have been expressed and measured in terms of Level of Professional Competence, Range of Professional Competence, Scope of Professional Competence, and Composite of Professional Competence.

In Part III each of these role patterns is analyzed and reported in order to reveal significant differences within the population.

Part III. Analysis of Each of the Above  
Described Patterns of Role Definitions

Part III is concerned with the analyses of each of the previously described patterns of role definition. It describes apparent relationships between selected demographic factors and selected initial role definitions on the one hand and the expressed role aspirations of aides and expressed willingness of teachers to adapt their own roles on the other. Variances, i.e., changes in definition from actual to assumed ideal situations were taken as indices of aspirations of aides and of willingness of teachers to adapt.

For this purpose another series of questions were analyzed and discussed, using CPC as the unit of professional competence.

Question 9:

Do teachers and teacher-aides agree (a) on the roles they were performing in the actual activity structure and (b) on the roles they would perform in the ideal activity structure?

The role descriptive data were organized into tables showing the distribution of activities currently performed and to be performed in an assumed ideal situation by each of the thirty-four ABE teachers and the thirty-four teacher-aides as reported by (a) teachers and (b) teacher-aides.

Tables 8 to 13 have presented the level, range, scope, and composite of professional competence of the actual and assumed ideal activities of teachers and of teacher-aides as reported by (a) teachers and (b) teacher-aides.

One-way analyses of variance were performed and F ratios were computed using the composite of professional competence (CPC) scores. The teachers' own definitions of current roles of teachers were compared to the teacher-aides' definitions of teachers' roles. Similarly, teacher definitions of current roles of aides were compared to aides' definitions of their own roles; teachers and aides were compared in like manner in terms of their definitions of aides' roles in the actual situation, and in the assumed ideal situation.

The level of significance decided upon was .05. Using this information the formula

$$SS \text{ total} = \sum_j \sum_i (Y_{ij} - M)^2$$

$$SS \text{ within} = \sum_j \sum_i (Y_{ij} - M_j)^2$$

$$SS \text{ between} = \sum_j n_j (M_j - M)^2$$

with  $j-1$  degrees of freedom was used.  $j$  stands for the number of groups.

Table 15 shows the analysis of variance between teachers' own role-defining CPC scores and teacher-aides' CPC scores defining teacher roles.

TABLE 15.--Analysis of variance for teacher-defined and aide-defined current roles.

Source of Variation	df	Sum of Squares	Mean Square	F Ratio
Between Groups	$j-1$	12.92	.02	$\frac{.02}{.20} = .10$ NS
Within Groups	66	12.90	.20	
Total	67	25.82		

The tabled F ratio at the .05 level of confidence for two groups and 67 degrees of freedom was found to be 4.00. The mean square for the between groups comparison of the teachers' versus the teacher-aides' CPC scores on current teacher roles was .02; it was .20 for the comparisons within groups. The computed F ratio was .10 indicating that no statistically significant difference exists with respect to definitions of teacher roles by the two

groups. While there were differences in definition for individual role sets, teachers as a group and aides as a group were in very close agreement in their definitions of the current roles of teachers.

Table 16 shows the analysis of variance between the two groups in terms of their CPC expressed descriptions of roles of teachers in an assumed ideal situation.

TABLE 16.--Analysis of variance for teacher-defined and aide-defined assumed ideal roles of teachers.

Source of Variation	df	Sum of Squares	Mean Square	F Ratio
Between Groups	j-1	26.96	.26	$\frac{.26}{.40} = .65$ NS
Within Groups	66	26.70	.40	
Total	67	53.66		

The mean square for the between groups comparisons was .26; it was .40 for the within groups comparison. The computed F ratio was .65 indicating that no statistically significant difference exists with respect to definitions of teacher roles by the two groups. Teachers and teacher-aides are in general agreement as they define roles of teachers in (a) the actual situation and (b) the assumed ideal situation.

Table 17 shows the analysis of variance between teacher-aides' own role-defining CPC scores and teachers scores on teacher-aides' roles. As in the previous test,

the tabled F ratio at the .05 level of confidence for two groups and 67 degrees of freedom was found to be 4.00. The mean square for the between groups comparison of the teacher-aides' versus the teachers' CPC scores on current teacher-aides' roles was 3.26; it was .40 for the comparison within groups. The computed F ratio was 8.15 indicating that significant differences do exist with respect to definitions of teacher-aides' role by the two groups.

TABLE 17.--Analysis of variance for teacher-aide-defined and teacher-defined current roles of teacher-aides.

Source of Variation	df	Sum of Squares	Mean Square	F Ratio
Between Groups	j-1	29.89	3.26	$\frac{3.26}{.40} = 8.15$ S
Within Groups	66	26.63	.40	
Total	67	56.52		

Table 18 shows the analysis of variance between the two groups in terms of their CPC expressed descriptions of roles of teacher-aides in an assumed ideal situation. The mean square for the between groups comparison was 1.91; for the within groups it was .20. The computed F ratio was 9.55 indicating that significant differences exist with respect to definition of teacher-aides' roles by the two groups. Teachers and teacher-aides are apparently not in full agreement about teacher-aide roles in either the actual situation or the assumed ideal situation.

TABLE 18.--Analysis of variance between teacher-aide-defined and teacher-defined roles for teacher-aides in an assumed ideal situation.

Source of Variation	df	Sum of Squares	Mean Square	F Ratio
Between Groups	j-1	14.90	1.91	$\frac{1.91}{.20} = 9.55$ S
Within Groups	66	12.99	.20	
Total	67	27.89		

Question 10:

Do teacher-aides aspire to perform more activities or different activities in an assumed ideal situation than they perform in the actual situation?

Tables 8 and 9 presented the level, range, scope, and composite of professional competence scores descriptive of current roles and assumed ideal roles of teacher-aides as reported by (a) teachers and (b) teacher-aides. From these two tables, Table 19 has been compiled, indicating the actual and the assumed ideal roles of teacher-aides and the variances between these roles as reported by teacher-aides in terms of composite of professional competence scores.

The current roles as reported by teacher-aides and expressed in CPC scores ranged from .02 to 1.16 with a mean score of .27; their aspired-to roles as identified by them for an assumed ideal situation ranged from .003 to 3.80 with a mean score of .69.

TABLE 19.--Actual and ideal roles of teacher-aides and variance between these roles as reported by teacher-aides and expressed in terms of composite of professional competence scores.

Teacher-aide Number	Actual	Ideal	Variance
1	.78	.94	.16
2	.41	.56	.15
3	.05	.59	.54
4	.61	.62	.01
5	.035	.02	-.015
6	1.16	.003	-1.157
7	.09	.67	.58
8	.24	.004	-.236
9	0.0	.50	.50
10	.025	.29	.265
11	.10	0.0	-.10
12	1.10	1.09	-.01
13	.80	.75	-.05
14	.25	.27	.2
15	0.0	0.0	.0
16	.22	.079	-.143
17	.22	.49	.27
18	0.0	0.0	0
19	.23	.75	.52
20	.23	.57	.34
21	.13	1.00	.87
22	0.0	.56	.56
23	.032	1.18	1.148
24	1.02	1.25	.23
25	.44	.41	-.03
26	0.0	.69	.69
27	0.0	.66	.66
28	0.0	.93	.93
29	0.0	.94	.94
30	.02	.91	.91
31	0.0	0.0	0.0
32	.035	.84	.805
33	.75	1.96	1.21
34	.16	3.80	3.64
Total	9.12	23.30	
$\bar{X} =$	.27	.69	

An inspection of the differences or variances between the actual and the assumed ideal roles as expressed in CPC scores in Table 19 indicated that twenty-two of the thirty-four teacher-aides do aspire to perform more or different activities while three aspire to perform fewer or lesser activities in an assumed ideal situation than they perform in the actual situation. Nine appear to aspire to no change in role.

A one-way analysis of variance was performed and the F ratio was computed to test the statistical significance of the aspired-to role changes. The level of significance decided upon was .05. Using this information the formula

$$SS \text{ total} = \sum_j \sum_i (Y_{ij} - M)^2$$

$$SS \text{ within} = \sum_j \sum_i (Y_{ij} - M)^2$$

$$SS \text{ between} = \sum_j n_j (M_j - M)^2$$

with  $j-1$  degrees of freedom was used.  $j$  stands for the number of groups. The tabled F ratio at the .05 level for two groups and 67 degrees of freedom was found to be 4.00. The mean square for the between groups was found to be 3.26; for the within groups it was .40. The computed F ratio was 8.15. Table 20 presents these results.



TABLE 20.--Analysis of variance between current roles and roles aspired to in an assumed ideal situation by teacher-aides as those roles are expressed in CPC scores.

Source of Variance	df	Sum of Squares	Mean Square	F Ratio
Between Groups	j-1	29.89	3.26	$\frac{3.26}{.40} = 8.15$ S
Within Groups	66	26.63	.40	
Total	67	56.52		

It is apparent both from inspection of the data and from this analysis of variance that there were significant differences between the roles currently performed by teacher-aides and the roles they aspire to perform in the assumed ideal situation, and that the general aspiration is toward roles of higher level and/or greater scope.

#### Question 11.

Would teachers choose for their ideal teacher-aides more activities or different activities than are actually performed by their present teacher-aides?

Tables 7 and 11 presented the level, range, scope, and composite of professional competence of current roles and assumed ideal roles of teacher-aides as reported by (a) teachers and (b) teacher-aides. From these two tables, Table 21 has been compiled, indicating the teacher-defined actual and assumed ideal roles of teacher-aides and variance between these roles in terms of composite of professional competence scores.

TABLE 21.--Actual and ideal roles of teacher-aides and variance between these roles as reported by teachers in terms of composite of professional competence.

Number Teachers	Actual	Ideal	Variance
1	.004	.87	.866
2	.75	1.01	.26
3	.63	1.12	.49
4	.22	.43	.21
5	.41	.55	.14
6	.23	.5	.27
7	.002	.15	.142
8	.32	.06	-.26
9	.001	0.0	-.001
10	.006	.78	.774
11	0.0	.27	.27
12	.003	1.23	1.227
13	.001	.03	.029
14	.20	.14	-.06
15	.0	.43	.43
16	.63	.89	.26
17	.20	0.0	-.20
18	.001	.3	.029
19	.40	.32	-.08
20	2.88	.38	-2.50
21	.66	.8	.14
22	.001	.43	.429
23	.011	.79	.779
24	.0	.74	.74
25	.057	.11	.053
26	.0	.55	.55
27	.45	1.04	.59
28	0	.88	.88
29	.12	.43	.31
30	0	1.13	1.13
31	.20	.91	.71
32	.011	1.02	1.009
33	0	.75	.75
34	0	.76	.76
Total	8.46	19.80	
$\bar{X}$ =	.25	.58	

The current teacher-defined roles of teacher-aides, as expressed in CPC scores, ranged from .001 to 2.88 with a mean score of .25; their roles then would define for their aides in an assumed ideal situation ranged from .03 to 1.23 with a mean score of .58.

An inspection of the differences or variances between the actual and the assumed ideal roles as expressed in CPC scores in Table 21 indicates that at least twenty-five of the thirty-four teachers would allow teacher-aides to perform more or different activities in an assumed ideal situation. Three of them would apparently expect fewer or lower level activities and six would suggest no change in role for their aides.

A one-way analysis of variance was performed and the F ratio was computed to test the statistical significance of these teacher-defined role changes for teacher-aides. The level of significance decided upon was .05. Using this information the formula

$$SS \text{ total} = \sum_j \sum_i (Y_{ij} - M)^2$$

$$SS \text{ within} = \sum_j \sum_i (Y_{ij} - M_j)^2$$

$$SS \text{ between} = \sum_j n_j (M_j - M)^2$$

with  $j-1$  degrees of freedom was used.  $j$  stands for the number of groups. The tabled F ratio at the .05 level for two groups and 67 degrees of freedom was found to be

4.00. The mean squares for the between groups was found to be 1.91; for the within groups it was .20. The computed F ratio was 9.55. Table 22 presents these results.

TABLE 22.--Analysis of variance between current roles and roles aspired to in an assumed ideal situation by teachers as those roles are expressed in CPC scores.

Source of Variation	df	Sum of Squares	Mean Square	F Ratio
Between Groups	j-1	14.90	1.91	$\frac{1.91}{.20} = 9.55$ S
Within Groups	66	12.99		
Total	67	37.89		

It is apparent both from inspection of the data and from this analysis of variance that there was a significant difference between the roles currently ascribed to by teacher-aides and the roles that would be ascribed to them in the assumed ideal situation by their teacher role mates. Twenty-five of the teachers apparently would expect their aides to perform more or higher level activities; three would apparently expect fewer or lesser activities to be performed by their aides; and six would apparently expect no change from the present performance of their aides in an assumed ideal situation.

Question 12:

Would teachers, on the assumption of being paired with an ideal teacher-aide, choose to perform fewer activities or different activities than those they perform as they work with their present teacher-aide?

Tables 7 and 11 presented the level, range, scope, and composite of professional competence of current roles and assumed ideal roles of teachers as reported by teachers themselves. From these two tables, Table 23 has been compiled, indicating the actual and the assumed ideal roles of teachers and the variances between these roles in terms of composite of professional competence scores. The variance here was taken as a measure of the willingness of teachers to adopt their own roles to changing roles of aides.

The current roles as reported by teachers and expressed in CPC scores ranged from .79 to 1.93 with a mean score of 1.45; their modified roles as identified by them for an assumed ideal situation ranged from .03 to 1.91 with a mean score of 1.1.

An inspection of the differences or variances between the actual and the modified roles as expressed in CPC scores in Table 23, indicated that most teachers would perform fewer activities or different activities in an assumed ideal situation than they perform in the actual situation.

A one-way analysis of variance and the F ratio were computed to test the statistical significance of these indicated changes. The level of significance decided upon was .05. Using this information the formula

TABLE 23.--Actual and ideal roles of teachers and variance between these roles as reported by teachers in terms of composite of professional competence.

Number Teachers	Actual	Ideal	Variance
1	1.69	1.31	-38
2	1.16	.557	- .603
3	1.14	.875	- .275
4	1.65	.43	- 1.22
5	1.62	1.32	- .30
6	1.93	1.71	- .22
7	1.69	1.74	.5
8	1.76	.76	- 1.00
9	0.0	.03	.03
10	1.76	1.24	- .52
11	1.15	.39	- .76
12	.79	.89	.10
13	1.66	1.30	- .36
14	1.46	.97	- .49
15	1.70	.89	- .81
16	1.39	.86	- .53
17	1.00	1.40	.40
18	1.29	1.39	.10
19	1.86	1.63	- .23
20	1.21	1.33	.12
21	1.00	1.22	.22
22	1.92	1.44	- .48
23	1.63	1.61	- .02
24	1.18	1.91	.73
25	1.51	1.03	- .48
26	1.81	1.21	- .60
27	1.72	.97	- .75
28	1.74	.90	- .84
29	1.36	.88	- .48
30	1.51	1.04	- .47
31	1.68	.89	- .79
32	1.69	.91	- .78
33	1.76	1.05	- .71
34	1.82	1.46	- .36
Total	45.52	37.53	
$\bar{X} =$	1.45	1.10	

$$SS \text{ total} = \sum_j \sum_i (Y_{ij} - M)^2$$

$$SS \text{ within} = \sum_j \sum_i (Y_{ij} - M_j)^2$$

$$SS \text{ between} = \sum_j n_j (M_j - M)^2$$

with  $j-1$  degrees of freedom.  $j$  stands for the number of groups. The tabled  $F$  ratio at the .05 level for two groups and 67 degrees of freedom was found to be 4.00. The mean square for the between groups was found to be .94; for the within groups it was .33. The computed  $F$  ratio was 2.85. Table 24 presents these results.

TABLE 24.--Analysis of variance between current roles and roles as they would be modified in an assumed ideal situation by teachers as those roles are expressed in CPC scores.

Source of Variation	df	Sum of Squares	Mean Square	F Ratio
Between Groups	$j-1$	22.64	.94	$\frac{.94}{.33} = 2.85 \text{ NS}$
Within Groups	66	21.70	.33	
Total	67	44.34		

It is apparent both from inspection of the data and from this analysis of variance that teachers would choose fewer activities in general.

Question 13:

Would teacher-aides, if they were free to choose, choose to have their teacher role-set mates perform fewer or different activities from those they presently perform?

Tables 9 and 13 presented the level, range, scope, and composite of professional competence of current roles and assumed ideal roles of teachers as reported by teacher-aides. From these two tables, Table 25 has been compiled indicating the actual and aide-preferred roles of teachers and variance between these roles as reported by teacher-aides in terms of composite of professional competence score.

The current roles of teachers as reported by teacher-aides and expressed in CPC scores ranged from .004 to 2.16 with a mean score of 1.45; their preferences for teacher roles ranged from .07 to 1.66 with a mean score of .95 as reported by the teacher-aides.

An inspection of the differences or variances between the actual and the preferred roles as expressed in CPC scores in Table 25 indicated that twenty-eight teacher-aides would choose to have their teacher role-set mates in an assumed ideal situation perform fewer or different activities than those they perform in the actual situation. Four of the aides would apparently choose more or higher activities for their teachers, and two would desire no change of role for their teachers on the assumed ideal situation.



TABLE 25. Actual and ideal roles of teachers and variance between these roles as reported by teacher-aides in terms of composite of professional competence.

Number Teacher- aides	Actual	Ideal	Variance
1	1.21	.76	- .45
2	1.72	1.46	- .26
3	1.63	1.53	- .10
4	1.12	.99	- .13
5	1.32	.82	- .50
6	1.73	.91	- .62
7	1.60	1.54	- .06
8	1.89	.16	-1.73
9	1.81	1.38	- .43
10	1.68	1.18	- .50
11	1.66	1.35	- .31
12	1.02	.56	- .46
13	1.81	1.11	- .70
14	.76	1.21	.45
15	.96	1.50	.54
16	1.72	.49	-1.23
17	1.44	1.66	.22
18	1.38	.07	- .31
19	.004	.07	.066
20	1.04	.75	- .29
21	1.59	1.26	- .33
22	1.62	.73	- .89
23	1.37	.55	- .82
24	1.37	.90	- .47
25	.50	.95	.45
26	1.32	.71	- .61
27	1.74	.95	- .79
28	1.85	.73	-1.12
29	2.16	.95	-1.11
30	1.46	1.09	- .37
31	1.77	.93	- .64
32	1.64	1.00	- .64
33	1.69	1.03	- .66
34	1.82	1.26	- .56
Total	49.32	32.54	
$\bar{X} =$	1.45	.95	

A one-way analysis of variance and the F ratio were performed with the CPC scores of the teachers' actual activities and assumed ideal activities as reported by teacher-aides. The level of significance decided upon was .05. Using this information the formula

$$SS \text{ total} = \sum_j \sum_i (Y_{ij} - M)^2$$

$$SS \text{ within} = \sum_j \sum_i (Y_{ij} - M_j)^2$$

$$SS \text{ between} = \sum_j n_j (M_j - M)^2$$

with  $j-1$  degrees of freedom.  $j$  stands for the number of groups. The tabled F ratio at the .05 level for two groups and 67 degrees of freedom was found to be 4.00. The mean square for the between groups was found to 4.13; for the within groups it was .18. The computed F ratio was 22.92. Table 26 presents these results.

TABLE 26.--Analysis of variance between current roles of teachers and roles preferred for teachers by their aide role-set mates in an assumed ideal situation as those roles are expressed in CPC scores.

Source of Variation	df	Sum of Squares	Mean Square	F Ratio
Between Groups	$j-1$	98.55	4.13	$\frac{4.13}{.18} = 22.92$ S
Within Groups	66	11.91	.18	
Total	67	110.46		

It is apparent both from inspection of the data and from this analysis of variance that teacher-aides definitely would choose to have their teacher role-set mates perform fewer or different activities in the assumed ideal situation.

Question 14:

Are there observable relationships between any one or any combination of the demographic characteristics of teacher-aides and the changes in professional character of roles aspired to by teacher-aides in an assumed ideal situation?

Table 27 shows the demographic characteristics of each of thirty-four teacher-aides as reported by their directors (see pp. 58-60). From this table the aides were distributed according to each of the five demographic characteristics. Then, holding these characteristics as independent variables, their relationship to the LPC and the SPC of each teacher-aide was determined. From this was calculated aspiration for change as it was related to each demographic factor. Aspiration was taken to be the calculated difference between self-reported actual performance and the preferred performance as reported for an assumed ideal situation. LPC and SPC were employed as the units of measure. The following formula was used:

TABLE 27.--Demographic data of thirty-four ABE teacher-aides as reported by directors with their CPC variances as reported by teachers and teacher-aides.

Number Teacher- aides	Age Range					Marital Status					Years of Teaching					Years of Teaching ABE					Poverty Area		Highest Level Education					CPC Variances					
																					Live in Live Out												
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	1	2	3	4	5	VOC				Teacher- aides	Teachers
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	1	2	3	4	5	1	2	3	4		
1	x					x					x					x															.16	.866	
2	x					x					x					x															.15	.26	
3			x			x					x					x															.54	.49	
4	x					x					x					x															.01	.21	
5	x					x					x					x															-.015	.14	
6			x				x				x					x															-1.157	.27	
7			x			x					x					x															.58	.142	
8	x						x					x				x															-.236	-.26	
9	x					x					x					x															.50	-.001	
10	x					x					x					x															.265	.774	
11			x				x				x					x															-.10	.27	
12					x		x				x					x															-.01	1.227	
13				x			x				x					x															-.05	.029	
14			x				x				x					x															.2	-.06	
15	x					x					x					x															0.0	.43	
16			x				x				x					x															-.143	.26	
17	x					x					x					x															.27	-.20	
18	x					x					x					x															0.0	.029	
19	x					x					x					x															.52	-.08	
20	x						x				x					x															.34	-2.50	
21			x			x					x					x															.87	.14	
22	x						x				x					x															.56	.429	
23			x			x					x					x															1.148	.779	
24			x			x					x					x															.23	.74	
25	x					x					x					x															.03	.053	
26	x					x					x					x															.69	.55	
27	x					x					x					x															.66	.59	
28			x				x				x					x															.93	.88	
29				x			x				x					x															.94	.31	
30	x						x				x					x															.91	1.13	
31	x					x					x					x															0.0	.71	
32			x			x					x					x															.805	1.009	
33			x			x					x					x															1.21	.75	
34	x					x					x					x															3.64	.76	
	19	9	5	0	1	22	12	-	-	-	26	7	1	-	-	19	11	3	1	-	27	7	5	5	-	12	10	2					

$$\begin{array}{l}
 \Sigma \frac{LPC_{AA}}{N_A} = \text{Mean Initial Level } (MIL_{AA}) \\
 \Sigma \frac{LPC_{AI}}{N_A} = \text{Mean Preferred Level } (MPL_{AI})
 \end{array}
 \left. \vphantom{\begin{array}{l} \Sigma \frac{LPC_{AA}}{N_A} \\ \Sigma \frac{LPC_{AI}}{N_A} \end{array}} \right\} A$$
  

$$\begin{array}{l}
 \Sigma \frac{SPC_{AA}}{N_A} = \text{Mean Initial Scope } (MIS_{SA}) \\
 \Sigma \frac{SPC_{AI}}{N_A} = \text{Mean Preferred Scope } (MPS_{SI})
 \end{array}
 \left. \vphantom{\begin{array}{l} \Sigma \frac{SPC_{AA}}{N_A} \\ \Sigma \frac{SPC_{AI}}{N_A} \end{array}} \right\} B$$

$$(A) \quad MIL_{AA} \pm MPL_{AI} = \pm \text{Aspiration for Change in Level (ACL)}$$

$$(B) \quad MIS_{SA} \pm MPS_{SI} = \pm \text{Aspiration for Change in Scope (ACS)}$$

Reference to Table 28 demonstrates the relationship between the age of teacher-aides and aspiration for change in level and scope of activities to be performed.

The mean aspiration score for change in level of activities for the nineteen youngest teacher-aides each less than 20 years of age, was -13.1; the mean aspiration score for change in scope of activities was 10.57. This appears to say that these aides aspire to perform at lower levels, but to perform more activities at those lower levels.

The mean aspiration score for change in level for the nine teacher-aides, each between 20 and 29 years of

TABLE 28.--Relationship between age and aspiration for change of activities on the role of teacher-aides.

Age Range	No.	Mean Initial Score		Mean Preferred Score		Aspiration for Change	
		LPC	SPC	LPC	SPC	Level	Scope
Less than 20	19	23.3	17.23	36.4	27.8	-13.1	10.57
20-29	9	23.88	10.60	28.35	26.24	-4.47	15.64
30-39	5	34.97	17.98	32.6	14.98	2.37	-3.00
40-49	0	--	--	--	--	--	--
Over 50	1	28.2	31.11	23.5	30.40	4.7	-.71

of age, was -4.47; the mean aspiration score for change in scope was 15.64. This seems to indicate that these aides would prefer to perform slightly lower level activities but to perform considerably more activities. These two groups of aides currently performed at almost identical levels and each group apparently would prefer to move to a lower level but function more intensively at that lower level.

The mean aspiration score for change in level of activities for the five teacher-aides, each between 30 and 39 years of age and performing currently at relatively low competence levels, was 2.37; the mean aspiration score for change in scope of activities was -3.0, which showed these aides aspiring to perform at a very slightly higher level but to perform slightly fewer activities.

The aspiration score for change in level for the one teacher-aide 50 years of age or over was 4.7; the aspiration score for change in scope was -.71, which showed this aide aspiring to perform slightly higher level

activities but slightly fewer activities. It appears that the older aides aspire to little if any change in the activities which comprise their working roles.

Very little relationship is demonstrated in Table 28 between age of teacher-aides and their aspirations for change in role. The modest changes of teacher-aides and their aspirations for change in role apparently desired by younger aides seem not to involve a move toward higher level activities as postulated by Pearl and Riessman.

Table 29 demonstrates the relationship between marital status of teacher-aides and aspirations for change in level and scope of activities to be performed.

TABLE 29.--Relationship between marital status and aspiration for change of activities in the role of teacher-aides by teacher-aides.

Marital Status	No.	Mean Initial Score		Mean Preferred Score		Aspiration for Change	
		LPC	SPC	LPC	SPC	Level	Scope
Single	22	17.1	15.47	29.54	20.86	12.44	5.39
Married	12	26.75	18.65	28.99	18.44	2.24	-.21

The mean aspiration score for change in level of activities for the twenty-two single teacher-aides was -12.44; the mean aspiration score for change in scope of activities was 5.39 which showed these aides aspiring to perform activities at lower levels but to perform more activities at those levels.

The mean aspiration score for change in level for the twelve married teacher-aides was -2.24; the mean aspiration score for change in scope was -.21 which showed a very slight aspiration for change toward performing fewer activities at lower levels of professional competence.

Table 30 demonstrates the relationship between residence of teacher-aides and aspirations for change in level and scope of activities to be performed.

TABLE 30.--Relationship between residence and aspiration for change of activities in the role of teacher-aides.

Residence	No.	Mean Initial Score		Mean Preferred Score		Aspiration for Change	
		LPC	SPC	LPC	SPC	Level	Scope
Poverty Area	27	29.98	24.78	41.71	23.00	-11.73	-1.78
Outside Poverty Area	7	15.09	16.32	32.3	21.21	-17.39	4.89

The mean aspiration score for change on level of activities for the twenty-seven teacher-aides living within the poverty area was -11.73; the mean aspiration score for change in scope was -1.78 which showed these aides aspiring to perform activities at considerably lower levels and with very slightly less intensity.

The mean aspiration score for change in level for the seven teacher-aides living outside the poverty area was



-17.39; the mean aspiration score for change in scope was 4.89 which showed these aides aspiring to perform at much lower levels of competence but to perform more activities at the lower levels.

This suggests a moderate relationship between residence of teacher-aides and aspiration for change in level and scope of activities to be performed. While the aides generally seem to aspire to lower levels of responsibility, those who live out of the poverty areas appear willing to work more intensively, that is, to perform more functions, at the lower levels of professional competence.

Table 31 demonstrates the relationship between teacher-aides' years of experience in teaching Adult Basic Education and aspirations for change between the level and scope of activities they currently perform and those they would prefer to perform.

TABLE 31.--Relationship between years teaching ABE and aspiration for change of activities in the role of teacher-aides.

ABE Teaching Experience	No.	Mean Initial Score		Mean Preferred Score		Aspiration for Change	
		LPC	SPC	LPC	SPC	Level	Scope
One year	19	31.56	18.10	35.4	24.87	-3.84	6.77
Two years	11	34.13	20.14	31.2	16.74	2.93	-3.40
Three years	3	25.84	6.42	26.61	16.54	-.77	10.12
Four years	1	6.00	1.00	37.00	22.80	-31.00	21.80

The mean aspiration score for change in level of activities for the nineteen teacher-aides with one year of teaching ABE was -3.84; the mean aspiration score for change in scope was 6.77 which showed an apparent aspiration toward moderately lower level and considerably more intensive activities.

The mean aspiration score for change in level of activity for the eleven teacher-aides with two years of teaching ABE was 2.93; the mean aspiration score for change on scope of activities was -3.40 which suggests an aspiration for very minor changes toward higher level and less numerous activities.

The mean aspiration score for change in level of the three teacher-aides with three years of teaching ABE was -.77; the mean aspiration score for change in scope was 10.12 which showed an apparent desire to work more intensively at the same level of professional competence.

The aspiration score for change in level of activities for the one teacher-aide with four years of teaching ABE was 31.0; the aspiration score for change in scope was 21.80. This suggests a desire for a major change in role toward more activities at a very much lower level of professional competence.

These data on teaching experience are generally, though not entirely consistent with those on age, marital status, and residence, in indicating aspirations toward

lower rather than higher level roles and a desire to work more intensively at the lower levels.

Table 32 demonstrates the relationship between teacher-aides' level of education and their aspirations for change in the level and scope of activities in their roles as teacher-aides.

TABLE 32.--Relationship between level of education and aspiration for change of activities in the role of teacher-aide.

Level of Education	No.	Mean Initial Score		Mean Preferred Score		Aspiration for Change	
		LPC	SPC	LPC	SPC	Level	Scope
1st to 6th	5	25.39	14.47	26.42	24.31	-1.03	9.84
7th to 8th	5	34.44	22.23	34.01	20.24	.43	-1.99
9th to 10th	0	--	--	--	--	--	--
Above 10th	12	35.39	19.21	34.10	16.93	1.29	-2.28
High School Graduate	10	31.58	16.78	29.97	20.79	1.61	4.01
Vocational School	2	25.25	25.37	25.25	33.09	20.0	7.72

The mean aspiration score for change in level for the five teacher-aides with fewer than six years of schooling was -1.03; the mean aspiration score for change in scope was 9.84. This showed these aides preferring to do very slightly lower level activities but considerably more activities.

The mean aspiration score for change in level for the five teacher-aides who had completed 7th or 8th grades

in school was .43; the aspiration score for change in scope was -1.99 which showed almost no aspiration for change in either level or scope of activities.

The mean aspiration score for change in level for the twelve teacher-aides who had completed ten or more years in school was 1.29; the aspiration score for change in scope was -2.28 which showed only minute aspiration for higher level activities but for decreases in the number of activities.

The mean aspiration scores for change in levels of activities for those who had completed high school or vocational school were of no apparent significance (1.6 and 0.0 respectively), but the aspiration scores for change in scope were positive (4.01 and 7.7 respectively). This seems to suggest a marked desire of these high school or vocational school graduates to perform a larger number of activities at the same or nearly the same level of competence.

These findings are somewhat surprising. Pearl and Riessman, as well as others who discuss career opportunities for the under-educated and the poor, assume an aspiration to prepare for and perform jobs which call for higher levels of professional competence. These data give no general evidence of such a desire. In fact, such aspirations as seem significant suggest a desire to perform lower level activities but to perform more of them

and presumably, to perform them better as training and experience are increased.

Tables 7 and 11 (pp. 76 and 94) showed the activities currently performed and those which reportedly would be performed in an ideal situation by thirty-four teacher-aides and as expressed in ratios or levels (LPC) and scope (SPC) of professional competence. From these the thirty-four teacher-aides were grouped into four quartiles,  $Q_{1A} \dots Q_{4A}$  on the basis of their current activities' initial ranking on the LPC scale.

$Q_{1A}$  consisted of eight teacher-aides with the eight highest initial ranks on the LPC scale.  $Q_{2A}$  consisted of the eight teacher-aides with the next highest initial ranks on the LPC scale.  $Q_{3A}$  consisted of eight teacher-aides with the next highest initial ranks on the LPC scale; and  $Q_{4A}$  consisted of ten teacher-aides for whom LPC and SPC scores were not calculated because the raw data were incomplete or included zeros which could not be interpreted. Unfortunately, some teacher-aides did not respond to all the statements on the PCS, thus rendering their partial responses unusable for this analysis.

Table 33 shows the relationship between initial level and scope of activities performed by twenty-four teacher-aides and the aspiration of those aides for different levels and intensities of activities in an assumed ideal situation.

TABLE 33.--Relationship between initial level and scope of activities performed by teacher-aides and the aspirations of those aides for different levels and intensities of activity in an assumed ideal situation.

Quartiles	Initial Mean Score		Preferred Mean Score		Aspiration Score	
	LPC	SPC	LPC	SPC	LPC	SPC
$Q_{1A}$	13.30	8.22	20.35	19.63	-7.05	11.41
$Q_{2A}$	30.24	12.09	28.24	20.52	2.00	8.43
$Q_{3A}$	36.4	5.73	26.79	13.44	9.31	7.71
$Q_{4A}$	0	0	0	0	0	0

The mean aspiration for change score on level of activities for  $Q_{1A}$  was 7.05; the mean aspiration for change score on the scope of activities was 11.41. This suggests that these eight teacher-aides who have been performing relatively few activities at very high level, would prefer to perform lower level activities, but a wider scope of activities at the lower levels.

The mean aspiration for change score on level of activities for  $Q_{2A}$  was 2.00; the mean aspiration for change score on the scope of activities was 8.43. This points out that  $Q_{2A}$  group of teacher-aides, who have been performing at rather low levels and moderately broad scope prefer to do activities at slightly higher levels, but with still greater scope of involvement.

The mean aspiration for change score on level of activities for  $Q_{3A}$  was 9.31; the mean aspiration for change score on the scope of activities was 7.71. This points out that these eight teacher-aides who have been performing relatively few activities and at very low levels aspire to perform much higher level activities and with moderate increases in scope of involvement.

These data seem to suggest that aides on all quartiles aspired to perform more of the classroom services to ABE students, but that they do not, at least at this point aspire to perform significantly higher level functions. In fact, it is interesting to note that those currently performing at the highest level report a desire to relinquish their most demanding tasks and to perform, even after fully trained and given their choice of activities, at lower levels of professional competence.

Question 15:

Are there observable relationships between any one or any combination of the demographic characteristics of teachers and the changes those teachers report that they would make in the professional character of their own roles, assuming that they were to be matched with fully competent and willing aides in an ideal situation?

Table 34 showed the demographic characteristics of each of thirty-four teachers as reported by their directors (see pp. 58-60). From this table the teachers were distributed according to each of the six demographic characteristics. The mean of LPC and SPC scores descriptive of

current roles of teachers in each group were compared with the LPC and SPC scores descriptive of roles these teachers reported they would adapt if paired with a fully competent and willing (ideal) aide. The calculated difference was taken as a measure of the willingness of teachers to adapt their roles to accommodate upward mobile aides. The following formulas were used:

$$\left. \begin{aligned} \Sigma \frac{LPC_{TA}}{N_T} &= \text{Mean Initial Score } (MIS_{LA}) \\ \Sigma \frac{LPC_{TI}}{N_T} &= \text{Mean Adapted Score } (MAS_{LI}) \end{aligned} \right\} A$$

$$\left. \begin{aligned} \Sigma \frac{SPC_{TA}}{N_T} &= \text{Mean Initial Score } (MIS_{SA}) \\ \Sigma \frac{SPC_{TI}}{N_T} &= \text{Mean Adapted Score } (MAS_{SI}) \end{aligned} \right\} B$$

$$(A) \quad MIS_{LA} \pm MAS_{LI} = \pm \text{Adaptation of Level (AL)}$$

$$(B) \quad MIS_{SA} \pm MAS_{SI} = \pm \text{Adaptation of Scope (AS)}$$

Reference to Table 35 demonstrates the relationship between the age of teachers and adaptation scores, performed currently and those to be performed if matched with an ideal aide.



TABLE 34.--Demographic data of thirty-four ABE teachers as reported by directors with their CPC variances as reported by teachers and teacher-aides.

Number Teachers	Age Range					Marital Status					Years of Teaching					Years of Teaching ABE					Residence		Highest Level Education					CPC Variances	
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	In	Out	1	2	3	4	5	Teachers	Teacher-aides
1		x					x						x									x		x				-.38	-.45
2			x			x							x									x	x					-.603	-.26
3		x				x					x											x						-.275	-.10
4			x				x				x											x		x				-1.22	-.13
5		x					x								x							x			x			-.30	-.50
6					x				x			x				x					x							-.22	-.61
7			x				x				x										x					x		.5	-.06
8				x			x						x									x			x			-1.00	-1.73
9		x				x					x											x				x		.03	-.43
10			x				x						x									x						-.52	-.50
11				x			x						x									x						-.76	-.31
12					x		x								x						x					x		.10	-.46
13				x					x					x								x						-.36	-.70
14		x				x							x								x					x		-.49	.45
15					x		x						x									x				x		-.81	.54
16	x						x						x								x							-.53	1.23
17		x					x						x								x							.40	.22
18		x					x						x									x						.10	-.31
19		x					x				x											x	x					-.23	.066
20				x			x				x											x						.12	-.29
21			x				x						x								x							.22	-.33
22			x					x						x							x					x		-.48	-.89
23		x					x							x							x							-.02	-.82
24	x						x							x								x						.73	-.47
25					x		x							x								x						-.48	.45
26			x				x						x								x							-.60	-.61
27		x					x						x								x							-.75	-.79
28		x				x							x								x							-.84	-1.12
29		x					x							x								x						-.48	-1.11
30			x				x						x								x							-.47	-.37
31			x				x						x									x						-.79	-.64
32		x					x							x							x							-.78	-.64
33		x					x							x							x							-.71	-.66
34			x				x							x								x						-.36	-.56
2 14 10 4 4 5 26 1 2 - 6 4 10 9 5 20 9 5 - - 15 19 3 13 6 6 6																													

The mean adaptation score for change in level for the two teachers, each less than 20 years old was  $-.14$  and the comparison score for change in scope was  $-.46$  which showed almost no willingness to change in either level or in scope.

TABLE 35.--Relationship between age of teachers and the level and scope of activities they would reserve to themselves if matched with ideal aides.

Age Range	No.	Mean Initial Score		Mean Adapted Score		Adaptation Score	
		LPC	SPC	LPC	SPC	Level	Scope
Less than 20	2	21.26	27.06	21.12	26.60	$-.14$	$-.46$
20 to 29	14	21.18	33.78	19.03	19.58	2.15	-14.20
30 to 39	10	20.05	34.47	19.24	20.76	.81	-13.71
40 to 49	4	19.41	30.45	21.08	17.90	-1.67	-12.55
50 and above	4	21.66	22.97	22.54	22.44	$-.88$	$-.53$

The mean adaptation score for change in level for the fourteen teachers 20 to 29 years of age was 2.15; the mean score for change in scope was -14.20 which showed a willingness of these teachers to adapt their roles to slightly higher level activities and to relinquish many of their, presumably lower level activities to their better qualified aides.

The mean adaptation score for change in level of activities for the ten teachers 30 to 39 years of age was .81; adaptation score for change on scope was -13.71 which showed the teachers expecting to perform at the same general

level but willing to relinquish a major share of activities to their assumed better qualified aides.

The mean adaptation score for change in level of activities for the four teachers 40 to 49 years of age was -1.69; the mean score for change in the scope was -12.55 which suggested that these teachers were unwilling to assume higher level activities for themselves but that they were willing to allow their fully qualified aides to share activities at their relatively unchanged level of professional competence.

The mean adaptation score for change in level for the four teachers 50 years of age and over was -.88; the measure for change on scope was -.53 which indicates that these older teachers would make no significant change in either level or intensity of their own roles to accommodate expanding roles for their aides even if those aides, as assumed, were fully competent to perform higher level functions.

A slight shift can be observed from lower to higher levels of activities by the fourteen teachers between the ages of 20 and 29 years. Interestingly, twenty-eight teachers (fourteen aged 20-29, ten aged 30 to 39, and four aged 40-49) between 20 and 50 years of age, while like their younger and older colleagues, would not move to higher level professional roles for themselves, would relinquish many activities, at their same role levels, to permit expanding roles for their upward mobile aides.

Table 36 demonstrates the relationship between marital status of teachers and the scores representing adaptation in level and scope of roles they report they would adapt if matched with fully competent and willing (ideal) aides.

TABLE 36.--Relationship between marital status of teachers and the level and scope of activities they would reserve to themselves if matched with an ideal aide.

Marital Status	No.	Mean Initial Score		Mean Adapted Score		Adaptation Score	
		LPC	SPC	LPC	SPC	Level	Scope
Single	5	24.80	30.91	25.22	13.76	-.42	-17.15
Married	26	21.61	22.66	19.05	21.02	1.56	-1.64
Separated	1	17.18	31.11	19.85	28.63	-2.67	-2.48
Widowed	2	20.66	36.84	17.21	26.15	3.45	-10.69

The mean adaptation score for level activities in the role of five single teachers was  $-.42$ ; the mean adaptation score for scope was  $-17.15$ . This suggests that these single teachers would not change the level of their own roles but that they would be very generous in sharing activities with aides who aspired to perform at the same level with them.

The mean adaptation score or change in level of activities in the role of twenty-six married teachers was  $-1.56$ ; the mean score for change on scope of activities was  $-1.64$  which showed very little willingness to change adaptation in level or scope of activities to permit

expanded functions for ideal aides. It should be noted, however, that the initial and continuing level of professional competence these teachers describe for themselves is much higher than that for the single group.

The one separated teacher reported a level change score of -2.67; a scope change score of -2.45 which suggested that she would change from her initial high level and intensive role to one demanding moderately less of her in both level and scope of professional competence. She gives no indication of major change in role to accommodate a competent and aspiring aide.

The mean adaptation score for activities of two widowed teachers was 3.45; the mean adaptation score for scope was -10.69 which showed marked willingness towards adaptations of their own roles. They would apparently move to higher level roles for themselves and relinquish a major share of their activities to their better qualified aides.

Table 37 demonstrates the relationship between residence of teachers and the adaptations they report that they would make in their own roles on the presumption of being matched with fully competent and willing (ideal) aides.

The mean adaptation score for change in level of activities in the role of fifteen teachers who live within the poverty area was 3.10 and the score for change in mean scope was -12.50 which showed that these teachers would

TABLE 37.--Relationship between residence of teachers and the level and scope of activities they would reserve to themselves if matched with ideal aides.

Residence	No.	Mean Initial Score		Mean Adapted Score		Adaptation Score	
		LPC	SPC	LPC	SPC	Level	Scope
In Poverty Area	15	21.96	33.92	18.86	21.42	3.10	-12.50
Out Poverty Area	19	21.84	32.24	21.21	19.74	.63	-12.50

adapt higher level activities for themselves and relinquish many of their activities, thus affording their aides an opportunity to perform both at higher levels and with greater intensity.

The mean adaptation score for change in level of activities in the role of the nineteen teachers who live outside the poverty area was .63; the mean score for change in scope was -12.50 which showed very little change in the level of activities for themselves but a willingness equal to that of their in-area counterparts to share their stable level activities with well-qualified aides.

Table 38 demonstrates the relationship between years of teaching experience and expressed willingness of teachers to adapt their own roles to accommodate fully competent and willing (ideal) aides.

The mean adaptation score for change in level of activities in the role of six teachers each with one year

TABLE 38.--Relationship between years teaching and level and scope of activities teachers would reserve to themselves if matched with ideal aides.

Years Teaching Experience	No.	Mean Initial Score		Mean Adapted Score		Adaptation Score	
		LPC	SPC	LPC	SPC	Level	Scope
One year	6	18.47	32.27	21.18	17.21	-2.71	-15.06
Two years	4	20.74	37.38	18.72	23.52	2.02	-13.86
Three years	10	20.54	33.03	19.13	20.24	1.41	-12.79
Four years	9	20.47	32.04	20.84	19.13	-.37	-12.91
Five years	5	23.84	39.51	19.03	24.86	4.81	-14.65

teaching experience was -2.71; the mean score for change in the scope was -15.06 which showed these teachers preferring to perform lower level activities but very willing to relinquish many of their activities to qualified aides.

The mean adaptation score for change of level of activities in the role of four teachers, each with two years teaching experience was 2.02; the mean score for change on scope was -13.86 which showed a willingness to move to slightly higher level activities and to yield opportunity for expanding scope of activity of their aides.

The mean adaptation score for change in level of activities in the role of ten teachers, each with three years teaching experience, was 1.41; the mean score for change on scope was -12.91 which showed a willingness to adapt to moderately higher activities for themselves and

to share many of their present activities with their better qualified aides.

The mean adaptation score for change in level of activities in the role of nine teachers, each with four years of teaching experience, was  $-.37$ ; the mean score for change on scope was  $-12.91$  which showed a very slight shift in level of activities by the teachers but a willingness to share activities of about the same level with competent aides.

The mean adaptation score for change in level of activities in the role of five teachers, each with five years of teaching experience, was  $4.81$ ; the mean score for change in scope was  $-14.65$  which showed a marked willingness to assume higher level roles for themselves and to give very major new responsibilities to the assumed ideal aides.

Table 39 demonstrates the relationship between years of teaching Adult Basic Education and the expressed willingness of teachers to make adaptations in their own roles to accommodate competent and upward mobile aides in their role-sets.

The mean adaptation score for change in level of activities in the role of twenty teachers, each with one year of ABE teaching experience, was  $1.71$ ; the score for change in scope was  $-10.16$  which showed modest upward change in the level of activities and a moderate willingness to share activities with qualified aides.



TABLE 39.--Relationship between years teaching ABE and the level and scope of activities teachers would reserve to themselves if matched with ideal aides.

Years Teaching ABE	No.	Mean Initial Score		Mean Adapted Score		Adaptation Score	
		LPC	SPC	LPC	SPC	Level	Scope
One year	20	21.78	31.64	20.07	21.48	1.71	-10.16
Two years	9	21.06	34.19	13.26	19.87	7.80	-14.32
Three years	5	23.69	33.12	22.07	17.54	1.62	-15.58
Four years	0	0	0	0	0	0	0
Five years	0	0	0	0	0	0	0

The mean adaptation score for change in level of activities in the role of nine teachers, each with two years of ABE teaching experience was 7.80; the mean score for change in scope was -14.32 which showed a willingness to make major adjustments in both level and scope of the teachers' own roles--moving to roles requiring markedly higher levels of professional competence and relinquishing a large number of activities to the assumed competent and willing aides.

The mean adaptation score for change in level and scope of activities in the role of five teachers, each with three years of ABE teaching experience, was 1.62; the mean score for change in scope was -15.58 which showed a willingness to adopt moderately higher level roles and to yield a major share of present activities to qualified aides.

Table 40 demonstrates the relationship between level of education of teachers and their expressed

willingness to make adaptations in their own roles if paired with fully competent and willing (ideal) aides.

TABLE 40.--Relationship between level of education of teachers and the level and scope of activities they would reserve to themselves if matched with ideal aides.

Level of Education		Mean Initial Score		Mean Adapted Score		Adaptation Score	
		LPC	SPC	LPC	SPC	Level	Scope
Less than Bachelor's degree	3	17.79	24.48	22.24	20.07	4.45	-4.41
Bachelor's degree	13	31.33	34.49	18.87	19.92	12.46	-14.57
Graduate work	6	20.60	28.49	19.43	24.39	1.17	-4.10
Master's degree	6	20.57	34.69	17.28	22.74	3.29	-11.95
Post Master's study	6	26.51	29.64	19.56	14.89	6.95	-14.75

willingness to make adaptations in their own roles if paired with fully competent and willing (ideal) aides.

The mean adaptation score for change in level of activities in the role of three teachers, each with less than a bachelor's degree, was -4.45; the mean score for change in scope was -4.41. This seems to show that teachers with lower levels of schooling would adopt roles requiring lower levels of competence for themselves and

relinquish moderate numbers of activities to their aides, if paired with fully competent and upward mobile aides.

The mean adaptation score for change in level of activities in the role of thirteen teachers, each with a bachelor's degree was 12.46; the mean score for change in scope was -14.57 which showed that these teachers would perform markedly higher level activities and relinquish a large number of their present activities to the assumed qualified aides.

The mean adaptation score for change in level of activities in the role of six teachers, each with graduate work, was 1.17; the mean score for change in scope was -4.10 which showed a slight upward adaptation from already higher level activities for themselves and a modest sharing of present activities with their more qualified aides.

The mean adaptation score for change in level of activities in the role of six teachers, each with a master's degree, was 3.29; the mean score for change in scope was -11.95. This showed a considerable willingness for adaptation upward from already higher level activities and for relinquishing a major share of current roles to ideal aides.

The mean score for adaptation in level of activities in the role of six teachers, each with post master's study, was 6.95; the mean score for change in scope was -14.75. This reveals a willingness to make major

adaptations to higher level and more narrowly defined roles for the professional teacher and more willingness to increase both level and scope of activities for qualified aides.

Tables 9 and 13 (pp. 82 and 100) showed the activities currently performed and those that would be performed by teachers if matched with fully competent and willing (ideal) aides, as expressed in level and scope ratings of professional competence. From these, the thirty-four teachers were grouped into four quartiles,  $Q_{1T}$  ...  $Q_{4T}$  on the basis of their current activities (initial) ranking on the LPC scale.

$Q_{1T}$  consisted of eight teachers with the eight highest initial ranks on the LPC scale.  $Q_{2T}$  consisted of the nine teachers with the next highest initial ranks on the LPC scale.  $Q_{3T}$  consisted of eight teachers with the next highest initial ranks on the LPC scale; and  $Q_{4T}$  consisted of the nine teachers with lowest initial ranks on the LPC scale. This is represented in Table 41.

This table shows the relationship between initial level and scope of activities performed by the thirty-four teachers and the different levels and intensities of activities those teachers report that they would perform if matched with a fully competent and willing aide in an assumed ideal situation. From these data (current and ideal roles) the differences were computed. These

TABLE 41.--Relationship between initial level and scope of activities performed by teachers and the self-reported willingness of those teachers to perform at different levels or intensities of activity if paired with an assumed ideal aide.

Quartiles	Initial Mean Score		Adapted Mean Score		Adaptation Score	
	LPC	SPC	LPC	SPC	LPC	SPC
$Q_{1_T}$	16.47	27.21	19.13	23.93	-2.66	-3.28
$Q_{2_T}$	20.24	30.13	19.81	19.85	.43	-11.28
$Q_{3_T}$	21.81	36.39	20.84	20.01	.97	-16.38
$Q_{4_T}$	25.62	35.05	17.35	20.66	8.27	-14.39

differences in level and scope were taken as measures of the teachers' willingness to adapt their own roles to permit growth in competence of aides as they might ascend a career ladder.

The mean adaptation score on level of activities for  $Q_{1_T}$  was -2.66; the mean adaptation score on the scope of activities was -3.28. This suggests that these eight teachers currently performing at a relatively high level and with relatively narrow scope would, if paired with a fully competent aide, perform slightly lower level activities themselves and would yield slightly more of their activities to the aides.

The mean adaptation score on level of activities for  $Q_{2T}$  was .43; the mean adaptation score on the scope of activities was -11.28. This suggests that these nine teachers currently performing at a high level and a fairly narrow scope, would, if paired with a fully competent aide perform much higher level activities and leave to their competent aides both much higher level activities and wider scope of functions.

The mean adaptation score on level of activities for  $Q_{3T}$  was .97; the mean adaptation score on the scope of activities was -16.38. This suggests a slight change in level of activities these teachers would reserve but a very major portion of their activities which they would relinquish to or share with their aides.

The mean adaptation score on level of activities for  $Q_{4T}$  was 8.27; the mean adaptation score on the scope of activities was -14.30. This suggests that these eight teachers were willing to assume much higher level activities and leave to their increasingly competent aides both much higher level and much fuller scope of functions.

Table 41 reveals that teachers in general are willing to relinquish many activities at their own levels of professional competence to aides who develop the requisite competence and aspiration.

There is an interesting tendency for teachers to agree upon the level (LPC = 17-21) and scope (SPC = 19-24)

of activities which should be performed by teachers if matched with fully competent and willing aides.

These questions (14 and 15) were directed towards increasing our knowledge of the relationship judged to be appropriate among teachers and teacher-aides in terms of the level and scope of involvement for each in an assumed situation where aides would be competent and willing to perform high level roles and in which they would be free to choose their roles.

It appears reasonable to say that the teacher-aides are willing to begin in the lower levels and be effective there before attempting the higher levels of activities (Table 40). It is not clear from these data that they generally aspire to perform significantly higher level functions. They seem to aspire to perform more activities at about the same levels of professional competence.

It would be expected that the schools would provide appropriate learning opportunities for these aides in performing more activities in the lower levels and in preparation for performing others at higher levels, so that they might move up to higher levels. Thus, they should engage aides in an open and trusting relationship to enhance their capacity to move upward.

Flexibility and willingness seem to generally characterize these teachers as shown in Table 41. An

observation of this table shows  $Q_{1T}$  performing at high levels but with narrower scope to facilitate their teacher-aides to perform more activities on a broader scope. These teachers are already performing on a high level, but it is indicated that they would further narrow their scope to give opportunity to their aides. Therefore, it would be expected that these teachers would provide the amounts and kinds of freedom, structure, and guidance that are most appropriate for the ascension of aides to the highest possible LPC.

$Q_{2T}$  and  $Q_{3T}$  indicated that they would also relinquish some of their activities or share them with their competent aides so as to facilitate their full involvement.  $Q_{4T}$  indicated a great change in level and scope of these lowest group of teachers to facilitate their competent teacher-aides. They were willing to move to much higher levels of activities and to a narrower scope to facilitate their competent aide. These teachers who show their willingness to provide this setting and appropriate learning conditions to their aides quite honestly will be trying to bring about change for upward mobility to aides.

### Summary

In this chapter data have been analyzed and assessed to observe the differences and similarities between actual activities and assumed ideal activities



performed and to be performed by teacher and teacher-aide pairs in ABE classrooms. The purpose has been to assess differences in role aspirations of paraprofessionals (aides) and differences in willingness of professionals (teachers) to make the professional aide adaptations which would facilitate professional advancement of their paraprofessional partners as a basis for drawing certain conclusions as to the feasibility of the career-ladder concept. The perceptions of teachers and teacher-aides as well as their characteristics were analyzed and discussed for evidence of opportunities for career-ladder ascension for indigenous paraprofessional workers in communities characterized by high concentrations of poverty.

All information was obtained from the responses made on the professional competence scale (PCS), a type of forced-choice checklist including forty-six activities commonly performed in ABE, by thirty-four teachers and thirty-four teacher-aides working together in ABE classrooms; and from a demographic data inventory submitted by directors describing each of the thirty-four teachers and the thirty-four teacher-aides.

The fifteen questions posed were answered by computing a set of measures of level, range, scope, and composite of professional competence of described roles in order to present and interpret the raw scores and to transform them into more meaningful forms. The

relationships of the teachers' roles to the teacher-aides' roles were determined and comparisons were made of actual and ideal roles of both teachers and teacher-aides.

One-way analyses of variance, the t-test and the F-ratio, scatter-diagrams, and other empirical treatments were employed. Differences were tested for significance at the .05 level.

In Chapter V the study is summarized, the conclusions are drawn based upon the results as stated, and recommendations are made for future research.

## CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Summary

The study is summarized and the conclusions are presented in this chapter. Recommendations for possible action and future study are also presented.

The principal tasks of the study were to identify the incumbent defined current roles of teacher-aides and teachers in selected role-sets in Adult Basic Education and to compare these roles with similarly defined ideal arrangements noting and analyzing the congruences and discrepancies in the roles thus defined.

The purpose of the investigation was to assess the "career-ladder" aspirations and opportunities of teacher-aides in Adult Basic Education. It was assumed that aspirations of teacher-aides would be indicated in differentials between current roles actually filled by teacher-aides and roles they defined for themselves by indicating activities they would perform in an assumed ideal situation where they would be really free to choose

what they would do. It was assumed that opportunity for career-ladder ascent would be indicated in differences between teacher defined current roles of aides and roles defined by teachers for "ideal" teacher-aides, and by differences between roles defined by teachers for themselves in interaction with their current teacher-aides and their roles as redefined on the assumption of working with "ideal" teacher-aides.

The propositions concerning the development of career-ladder opportunities for indigenous workers carry with them a call for rigorous definition and redefinitions of activities for teachers and for teacher-aides. This study has been concerned with the feasibility of career development as advocated in programs for indigenous paraprofessionals in the Adult Basic Education field.

The review of literature on paraprofessionals calls attention to the importance of the development of roles for paraprofessionals as a needed factor in schools and in other professional work settings, and the special appropriateness of the addition of teacher-aides in the field of Adult Basic Education. The need to institutionalize the concept of "new careers" by creating paraprofessional positions in the field of education through development and differentiation of levels of professional competence has been stressed.

Among others, attention has been placed upon the assumptions that the professional personnel in a school have the responsibility of maintaining the established professional controls of the teaching process, and that the principal responsibility of assigning activities and providing career-development opportunities to a teacher-aide resides with the teacher operating in her role-set.

Various terms concerned with the central concepts have been defined and four different measures of level and intensity of professional competence have been employed. A set of fifteen questions was formulated as a framework for organizing the study.

The study has been confined to the field of Adult Basic Education and to the teachers and teacher-aides working within public schools in the state of Michigan. The data were restricted to those obtained from a specially designed professional competence scale (PCS) administered to each of the thirty-four teachers and thirty-four teacher-aides, and to demographic data about them as provided by the directors of adult basic education in each of the schools in which they worked.

The analysis consisted of four principal parts. Part I dealt with the present patterns of function sharing between ABE teachers and teacher-aides working together in Michigan classrooms, as defined by each. It provided answers to four of the questions.

Part II dealt with the perceived ideal patterns of function sharing as indicated by hypothetical roles defined by each for both self and role mate as they would be preferred in an assumed ideal situation. It provided answers to four additional questions.

Part III analyzed each of these sets of role definition patterns in order to reveal significant differences within the population and to assess the relationships between the discovered differences and selected characteristics of the role incumbents. It provided answers to the remaining seven questions.

Part IV, presented in this chapter, involves such discussions and conclusions as have seemed to be justified by the analysis.

Analysis involved tabulation of the raw data as reported on the Professional Competence Scale (PCS) which was administered to the population of ABE teachers and teacher-aides and as reported on the demographic census form by directors.

A set of measures were employed to present and interpret the raw scores and to transform them into more meaningful forms. These were level of professional competence (LPC), range of professional competence (RPC), scope of professional competence (SPC), and composite of professional competence (CPC) (see pp. 72, 73). Actual and ideal roles were defined and analyzed by computing

these units of measure and treating them statistically. Scattergrams were constructed to compare and examine the levels and intensities of professional competence involved in the various role definitions. Scattergrams were examined, as were the tabulated data, for evidence of differences in role definition within groups, and between "actual" and "ideal" roles.

Relationships between the several definitions of the teachers' roles and the teacher-aides' roles were initially assessed by computing, from the CPC measures, one-way analysis of variance and the differences between means were tested for significance at the .05 level. The several patterns of variance in role definition were also examined in relation to demographic and other factors which characterized the teachers and the teacher-aides.

The principal findings were:

1. All forty-six activities were performed by one or more of the teacher-aides in the current situation.
2. There was much general agreement between teachers and teacher-aides on the level, range, scope, and composite of professional competence scores defining teacher-aides' current activities. The CPC mean scores .25 and .27 as reported by teachers and teacher-aides respectively suggested a non-significant difference or a high level of

agreement in the reports of teachers and of teacher-aides themselves as to the level and scope of activities of the teacher-aides.

3. Most activities of teacher-aides were concentrated in the lower three categories of professional competence, namely, the teacher-aide, teacher assistant, and teacher associate categories.
4. Both teachers and teacher-aides, reporting activities currently performed by teachers and teacher-aides working together, indicated a much wider range of shared current activities than they indicated for either teachers alone or teacher-aides alone.
5. The CPC mean scores 1.10 and .27 for jointly performed activities as reported by teachers and teacher-aides respectively revealed significant differences in their perceptions of the level of activities performed and hence in their definitions of shared roles.
6. Both teachers and teacher-aides reported teachers' current activities concentrated in the teacher, teacher associate, and teacher assistant categories.
7. The CPC mean scores of 1.45 and 1.45 for activities as reported by teachers and teacher-aides



respectively indicated close general agreement as to the overall roles currently performed by teachers. This general agreement between teachers and aides on the roles currently filled by teachers is consistent with their agreement regarding roles of teacher-aides.

8. Both teachers and teacher-aides reported that there are none of the forty-six listed activities which were not being performed by some of the teachers and some of the teacher-aides. However, while every activity was performed by one or more of either the teachers, the teacher-aides, or both teachers and teacher-aides, teachers most frequently performed in the top four categories: supervising teacher, teacher, teacher associate, and teacher assistant respectively and the involvement of teacher-aides was greatest in the three lowest categories: teacher-aide, teacher assistant, and teacher associate respectively.
9. Both teachers and teacher-aides included activities in all five levels on the PCS as they defined new roles for teacher-aides in the assumed ideal situation. All forty-six activities would be performed by one or more of the teacher-aides as reported by both teachers and teacher-aides. However, teachers and teacher-aides demonstrated an

apparent slight difference in definitions of teacher-aide roles. It showed CPC mean scores of .58 and .69 as reported by teachers and teacher-aides respectively. Teacher-aides generally expressed a desire to continue in roles at lower levels of professional competence, but having a wider range and fuller scope of involvement in these lower level activities.

10. Both teachers and teacher-aides identifying activities to be performed alternately or together in the assumed ideal situation revealed very little difference in the level and scope of roles seen as appropriate for shared work. CPC mean scores of 1.60 and 1.33 were calculated for teachers and teacher-aides respectively, thus showing very little difference between them as to the level and scope of roles as seen appropriate for shared work in an assumed ideal situation.
11. Both teachers and teacher-aides identifying activities to be performed only by teachers in an assumed ideal situation included activities from all five categories of the PCS as they defined new roles for teachers. It showed CPC mean scores of 1.1 and .95 as reported by teachers and teacher-aides respectively. This indicated very little difference in definitions of teacher roles.

12. Neither teachers nor teacher-aides identified any of the forty-six activities as not being appropriately performed by either teachers or teacher-aides in an assumed ideal situation. Both groups named every activity as being performed by one or more of either the teachers, the teacher-aides or both teachers and teacher-aides. However, activities identified in the teacher assistant category were least reported by the teachers (64.30); and activities identified in the teacher-aide (56.63), teacher associate (60.25), and teacher (63.52) were least reported by teacher-aides. Teacher-aides performed least activities in the teacher (55.03) and supervising teacher (56.16) categories. Teachers performed more activities in the teacher associate (78.36) and supervising teacher categories.
13. While teachers as a group and aides as a group were in very close agreement in their definitions of the current roles of teachers, it was viewed as significant that differences do exist with respect to definitions of teacher-aides' roles by the two groups (pp. 113-14). The F-ratios of 8.15 and 9.55 indicated this. Teachers and teacher-aides are apparently not in full agreement about

teacher-aide roles in either the actual situation or the assumed ideal situation.

14. There are significant differences between current roles of aides and roles aspired to in an assumed ideal situation. Analysis of variances between the actual and the assumed ideal roles as expressed in CPC scores revealed that twenty-two of the thirty-four aides do aspire to perform more or different activities; three aspire to perform fewer activities, and nine appear to aspire to no change in role. The F ratio of 8.15 showed a statistically significant difference between the roles currently performed by teacher-aides and the roles they aspire to perform in the assumed ideal situation, and that the general aspiration is toward roles of higher level and/or greater scope.
15. There were significant differences between current teacher-ascribed teacher-aide roles and roles that would be ascribed to competent and willing teacher-aides by their teachers in an assumed ideal situation. Analysis of variances between the actual and the assumed ideal roles as expressed in CPC scores indicated that at least twenty-five of the thirty-four teachers would allow teacher-aides to perform more or different activities in an assumed ideal situation; three would apparently expect

fewer or lower level activities, and six would suggest no change in role for their aides. The F ratio of 9.55 showed a statistically significant difference between the roles currently ascribed to teacher-aides and the roles that would be ascribed to them in the assumed ideal situation by their teacher role-mates.

16. The analysis of roles defined for themselves by teachers on the assumption of being paired with an ideal teacher-aide revealed only minor variances between the actual and the modified roles as expressed in CPC scores. The F-ratio of 2.85 showed no statistical significance. Further analysis revealed that most teachers would perform fewer activities at very slightly higher levels but that they would in many cases permit greatly increased sharing of activities by their more competent aides in an assumed ideal situation.
17. The analysis of aspirations of teacher-aides reveals that the aides would choose to have their teachers' role-set mates perform fewer or higher level activities from those they presently perform. It showed that twenty-eight of the aides would apparently choose fewer or different activities for their teachers; four of the aides would choose more or higher activities and two would

desire no change for their teachers in an assumed ideal situation. The F ratio of 22.92 gave evidence of the statistical significance of the expressed differences. It is clear that teacher-aides would choose to have their teacher role-set mates perform fewer or different activities in the assumed ideal situation, and that they in turn, would choose to perform more, though not generally higher level activities.

18. Very little relationship was seen between age of teacher-aides and their aspirations for change in roles.
19. Very slight relationships appeared to exist between marital status and aspiration for change. Single aides apparently aspired to fewer activities at lower levels of professional competence, while married aides aspired to lower level activities and the same scope.
20. A moderate relationship appeared to exist between residence of teacher-aides and aspiration for change in level and scope of activities to be performed. Aides living outside the poverty area appear willing to work more intensively or to perform more functions at the lower levels of professional competence (Table 30).

21. Very slight relationship is shown between years of experience and aspiration for change in level and scope of activities to be performed. Table 31 demonstrates that nineteen teacher-aides with one year of ABE teaching experience showed aspiration toward moderately lower level and considerably more intensive activities. The eleven teacher-aides with two years of teaching experience indicated very minor changes towards higher level and less numerous activities. The three teachers with three years of ABE teaching experience showed no apparent desire to work more intensively and at the same level of professional competence. The one teacher-aide with four years of experience showed a desire for a major change in role toward more activities at a very much lower level of professional competence.
22. The teacher-aides who completed high school and/or vocational school showed a marked desire to perform a greater number of activities at the same or nearly the same level of competence. The other teacher-aides showed no apparent aspiration to higher level or more extensive scope of activities.

23. A slight shift from lower to higher level activities was noted in the 20 to 29 age group of teachers, while other age groups relinquished many activities at their same role level to permit expanding roles for their upward mobile aides.
24. Single teachers reported that they would not change the level of their own roles; but they apparently would be generous in sharing activities with aides who aspired to perform at the same level with them. Married teachers described for themselves higher level activities. The one separated teacher suggested that she would change from her initial high level to one demanding less of her in both level and scope of professional competence, and permit a competent aide to perform both more and higher level activities.
25. Teachers who lived within the poverty area indicated that they would reserve higher level activities for themselves and relinquish many of their activities or share them with their assumed fully competent aides. Teachers who lived outside the poverty area reported that they would make very little change in the level of activities for themselves, but they revealed willingness to share these activities with their aides.



26. Teachers with one year of experience showed a preference to perform lower level activities but were very willing to relinquish many of their activities to qualified aides. Teachers with two years teaching experience showed a willingness to move to higher level activities and to relinquish or share their present activities in order to accommodate and utilize more competent aides. Teachers with three years teaching experience showed a willingness to adopt moderately higher level activities for themselves and to share many of their present activities with their better qualified aides. Teachers with four years of experience showed a very slight shift in level of activities but a willingness to share activities with competent aides. Teachers with five years of experience showed a marked willingness to assume higher level roles for themselves and to give many major new responsibilities for the assumed ideal aides (Table 38).
27. Twenty teachers with one year of ABE teaching experience showed modest upward change in the level of activities and a moderate willingness to share activities with qualified aides. Nine teachers with two years of ABE teaching experience showed a willingness to make major adjustments in

both level and scope of the teachers' own roles, moving to roles requiring higher levels of professional competence and yielding or sharing many activities to permit expanded roles for aides.

Five teachers with three years of ABE teaching experience showed a willingness to adopt moderately higher roles and to yield a major share of present activities to qualified aides (Table 39).

28. Three teachers with less than a bachelor's degree showed a tendency to adopt roles requiring lower levels of competence for themselves and relinquishing only moderate numbers of activities for their aides. Thirteen teachers each with a bachelor's degree showed themselves willing to perform markedly higher level activities, and to relinquish a large number of their present activities to the assumed qualified aides. Six teachers each with graduate work showed a willingness to share their present activities with their aides. Six teachers with a master's degree showed a considerable willingness to adopt upward from already higher level activities and to relinquish a major share of current roles to ideal roles. Six teachers, each with post master's study showed willingness to increase both level and scope of

activities to create new opportunities for qualified aides (Table 40).

### Conclusions

The evidence from this study leads to the conclusion that teacher-aides in general do not aspire to move toward full professional status.

It appears that a small portion of the teacher-aide population are exceptions to this general conclusion, and do aspire to assume both higher and fuller professional responsibilities. These few are most likely to be those with at least high school level of education, who are thirty years of age and over and who live outside the poverty area.

There also appear to be a few aides (approximately one to six in this population) who aspire to lower level activities. These aides are likely to have lower levels of formal education (six years or less), to be very young (under 20), to be living within the poverty area, and to be single.

Teacher-aides, at least as represented in this study give little evidence of such aspiration as is assumed by Pearl and Riessman, among others, who discuss career opportunities for the indigenous and the uneducated to move to higher levels of professional performance. In fact, such aspirations as seem significant in this study, suggest a desire to perform more

intensively at those lower and middle range levels, and become effective as training and experience are increased.

Teachers (at least in this population) seemed generally unwilling to move to higher levels of professional competence. They seem insistent upon concentrating their efforts in the middle range of the professional competence scale.

Teachers appear to be willing to share activities at several levels with qualified aides rather than to assume higher level activities for themselves and relinquish lower level activities to aides alone.

This apparently means that opportunities afforded by teachers to aides are likely to consist principally of parallel sharing of activities rather than a discrimination of rules by levels of professional competence as assumed on Pearl's and Riessman's hierarchy.

It appears that a minority of teachers are willing to assume higher levels of activities, and to completely delegate functions at lower but ascending levels to teacher-aides. These teachers are most likely to be twenty to twenty-nine years of age, married, living in the poverty area, having at least two years of ABE teaching experience and having at least the master's degree.

It appears that teachers generally are willing to redefine their own roles so as to accommodate teacher-aides if those aides are willing to accept responsibility

and training. However, the pattern of redefinition and sharing of roles seems to involve a parallel and general sharing of functions rather than a clear separation of functions by level. This in broad terms substantiates the thesis of Bowman and Kloph and Pearl and Riessman, but with a variation in the patterns of role sharing.

Teacher-aides (in this population) might have expressed greater aspiration toward higher level activities if training had been specified as part of the ideal situation they were instructed to assume. This instruction should be considered on any replication of this study.

#### Recommendations for Practice and for Future Research

If Adult Basic Education teachers and others are to provide their paraprofessional colleagues with the form of role adaptation and role development which will permit upward mobility of those who clearly aspire to earn higher professional status they should: (a) undertake the task of more clearly redefining the teachers' role; (b) identifying specialized functions involving duties and responsibilities in a framework similar to Riessman's five levels of ascending professional competence; (c) identify upward mobile paraprofessionals and match them with teachers willing to adjust their own roles to accommodate mobility; and (d) provide added responsibilities and in-service

training for the upward mobility of the paraprofessional in each level to attain the highest possible placement.

Further research is clearly indicated by the experience and findings of this very limited study:

1. The number of pairs of subjects used in this study has been severely limited. A replication of this study is desirable using a larger sample, preferably extended over several states that have Adult Basic Education teacher-aide programs.
2. Additional practices of teachers and teacher-aides working as team-mates in the classroom should be built into the professional competence scale. This would likely provide a wider range of scores and clearer discrimination of roles.
3. Career-ladder development training and vertical mobility of teacher-aides might be aided by studies of personality characteristics of teachers and teacher-aides.
4. Policies governing roles and relationships of teachers and teacher-aides should be analyzed in relation to what might be done by and for teacher-aides in the classroom.
5. An in-depth survey of roles which will lead to improved courses in instruction, supervision, methods, and curriculum is desirable to improve training and working arrangements for teacher

and teacher-aide pairs and to achieve more productive participation in this cooperative approach.

6. The approaches of this study might be applied to other educational, social work, or similar fields where paraprofessionals are employed, especially indigenous aides.
7. Teacher-aides who aspire to increase their level and scope of activities should be placed with teachers who are willing to yield some of their activities to that they may increase their experience and training and then develop the competence necessary for full professional status.
8. Teacher-aides who do not aspire to increase their level and scope of activities could be placed with teachers who are willing to work with them in the lower levels and those who are willing to share activities with the teacher-aides.
9. Teacher-aides who aspire to more activities could be placed with teachers who are willing to relinquish many activities at their own levels of professional competence to aides who would develop the requisite competence and aspiration to progress upwards but to less than full professional status.

10. Directions for gathering data on the professional competence scale should be directed towards including training in defining the assumed ideal situation. Aides assuming the reinforcement of training might express aspiration to higher levels of professional competence. This might be a motivating and challenging factor for aides who truly want to be certified professionals.

Pearl and Riessman's theory and concept of "new careers" suggest among others "job first and education later," and "service from rather than service to the poor." They suggest defining first what needs to be done and a population which needs something to do and then organizing the functions of work to meet the characteristics of the work-seeking population.

In accord with Pearl and Riessman's theory and discussions, if teacher-aides are to move effectively upward on a career development ladder, there must be definition and redefinition of roles by both teachers and teacher-aides in the role-set. Entry positions must have latitude for advancement and there must be opportunities for vertical mobility which would require flexibility in the training and educational establishment to allow the individual to go as far as his talents and motivation can carry him.



This study of role adaptation and career development proposed a strategy which may be used to view and reach decisions on the aspirations of aides and the adaptability of teachers or others for the upward mobility of aides and the willingness of teachers to bring into focus career development programs for aides.

The results of this study of teachers and teacher-aides in a classroom situation, with its career-ladder component developed an original and practical approach, which resulted in some vision and scope on role adaptations and career development for teachers and aides working as team-mates. It has not given support to Pearl and Riessman's theoretical model of developing full or complete careers for the indigenous worker, but could be a base for other approaches.

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## APPENDICES

## APPENDIX A

### INSTRUMENT DEVELOPMENT

## APPENDIX A

### INSTRUMENT DEVELOPMENT

#### Directions

You are given a packet of (5) yellow cards. On each yellow card is printed a general role as fulfilled by professional and/or paraprofessional workers in Adult Basic Education.

You are also given a packet of (60) white cards. On each white card is printed a task which might be performed by a professional and/or a paraprofessional in Adult Basic Education. These same tasks are also included on a printed list which is included for you. Please study the list and perform the following operations and answer the following questions:

First, will you please arrange the cards as follows:

1. Please distribute the packet of (5) yellow cards in a row across the back of a table or desk (as if they were to become column headings) reading from left to right: supervising teacher, teacher, teacher associate, teacher assistant, teacher-aide. (These will now represent possible roles in ABE teaching, ranked from highest to lowest on the basis of levels of professional competence generally required.)



2. Then, please take the packet of (60) white cards and distribute them in groups beneath the appropriate (5) yellow cards, placing each card in the lowest role category where the task might appropriately be performed.
3. Please check to be certain that each task is in the most appropriate role category according to your best judgment.
4. Then, will you please number the tasks in sequence, (1 requiring the highest order of professional competence) in each category.

When you have finished you should have five groups of cards numbered in order of level of professional competence required.

Second, place a rubber band around each bundle of yellow and white cards with the appropriate role card on top.

May we add a word of sincere thanks for your help.

## LIST OF ACTIVITIES

1. Regular teach one or more classes
2. Describe ABE programs to community groups
3. Recommend students for promotion and graduation
4. Decide on the grading system to be used
5. Evaluate the ABE program
6. Officially represent ABE on civic groups
7. Make daily teachers' plans
8. Keep up-to-date on the latest developments in content and teaching materials for ABE
9. Arrange and conduct advisory committee meetings
10. Refer adult students to agencies which might help them
11. Talk with employers about jobs for ABE students
12. Recommend students for jobs
13. Determine class level of new ABE students
14. Contact industries, welfare agencies, clubs, churches, and others to talk about ABE
15. Recommend instructional equipment for purchase
16. Design instructional materials
17. Inform school officials of community problems and special needs
18. Administer and interpret tests
19. Determine appropriate teaching methods
20. Determine methods of instruction

21. Select instructional materials
22. Design the ABE course of study
23. Find resource people to enrich the ABE program
24. Collect data on problems of individual ABE students
25. Attend faculty meetings
26. Orient new adult students
27. Arrange special observances of birthdays, promotions, anniversaries, or other events important to ABE students
28. Help students select books at the library
29. Discuss job possibilities with ABE students
30. Help adults choose courses
31. Make decisions about content of ABE curriculum
32. Search out library materials
33. Identify special talents of ABE students
34. Help to make ABE students feel comfortable in class
35. Telephone adult students at home when necessary
36. Attend professional meetings
37. Make personal contacts with ABE prospects
38. Read professional journals
39. Convince under-educated adults that ABE is valuable
40. Inform adults of community services available to them
41. Call on adult students who have been absent from class
42. Attend ABE workshop at a University
43. Help individual students with their lessons
44. Arrange enrichment programs such as trips, speakers, films, and others

45. Grade test papers
46. See that the classroom is appropriately arranged for each class meeting
47. Keep attendance records up to date
48. Make up calendar of class activities and keep it up to date
49. Store teaching materials in orderly manner
50. See that instructional materials are neatly arranged for use
51. Assist adult students outside of classes
52. Operate audio-visual equipment
53. Duplicate things like tests, forms, letters, and teaching materials
54. Maintain inventory of recordings, tapes, and other teaching equipment
55. Keep records of adult students' grades
56. Decide what subjects adults need to study
57. Occasionally assist in teaching a class
58. Collect data on needs for ABE in the community
59. Serve on faculty committees of the school
60. Provide information about state guidelines for ABE

Ranking of Activities into Levels  
of Teacher Competences

Supervising Teacher

1. Evaluate the ABE program
2. Inform school officials of community problems and special needs relating to ABE
3. Arrange and conduct advisory committee meetings
4. Collect data on need for ABE in the community

5. Contact industries, welfare agencies, clubs, churches, and others to talk about ABE
6. Provide information about state guidelines for ABE
7. Officially represent ABE on civic groups
8. Describe ABE programs to community groups
9. Design the ABE course of study

#### Teacher

10. Make decisions about content of ABE curriculum
11. Regularly teach one or more classes
12. Determine appropriate teaching methods
13. Make daily teacher's plans
14. Select instructional materials
15. Decide on the grading system to be used
16. Recommend students for promotion and graduation
17. Administer and interpret tests
18. Recommend instructional equipment for purchase
19. Serve on faculty committees of the school
20. Attend faculty meetings

#### Ranking of Functions into Levels of Teacher Competences

42. Duplicate things like tests, forms, letters, and teaching materials
43. Operate audio-visual equipment
44. Maintain inventory of recordings, tapes, and other teaching equipments
45. See that instructional materials are neatly arranged
46. Search out library materials

## **APPENDIX B**

### **INSTRUMENTS**

## APPENDIX B

### DIVISION OF DUTIES BETWEEN TEACHERS AND TEACHER AIDES IN ADULT BASIC EDUCATION

FORM A: TEACHERS

SCHOOL: \_\_\_\_\_ YOUR NAME: \_\_\_\_\_

Your aide's NAME: \_\_\_\_\_

#### INSTRUCTIONS

TEACHER: On the pages that follow you will find a list of things which teachers or aides often do in Adult Basic Education. Most of them are probably done by you or your aide. You may do some of them together or take turns. Maybe some are not done at all. I would like to know how these things are divided between you and your aide this year.

In Column Actual of the answer sheet carefully darken one space beside each of the statements given:

- 1 = for each thing your aide usually does alone
- 2 = for each thing you and your aide usually do alternately or together
- 3 = for each thing you usually do alone
- 4 = for each thing not done by either you or your aide

No doubt you sometimes wish you and your aide might divide your work differently. I would like to know how you believe your work should be divided if you had a really ideal aide. Please imagine that you have an aide who is capable and willing to do anything on the list, but you are still the teacher and she is still the aide. With such an ideal aide would you divide the work in your classroom differently? Would you do different things? Would you expect your aide to do different things? Would you leave things pretty much as they are now?

In the Column Ideal of the same answer sheet carefully darken one space beside each statement:

- 1 = for each thing your ideal aide would usually do alone

- 2 = for each thing you and your aide would usually  
do together or by turns
- 3 = for each thing you would usually do alone
- 4 = for each thing which would not be done by either  
you or your ideal aide

Please return this form to your director as soon as you  
have finished marking it.

THANK YOU!



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FORM A: Teacher

YOUR NAME:

YOUR TEACHER-AIDE'S NAME:

SCHOOL:

Please complete this form and return it to your Director.

Be sure your marks are heavy and black. Erase completely any answer changed.

ACTIVITIES	ACTUAL	IDEAL
1. Evaluate the ABE Program	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
2. Inform school officials of community problems and special needs relating to ABE	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
3. Arrange and conduct advisory committee meetings	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
4. Collect data on need for ABE in the community	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
5. Contact industries, welfare agencies, clubs, churches, and others to talk about ABE	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
6. Provide information about state guidelines for ABE	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
7. Officially represent ABE on civic groups	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
8. Describe ABE programs to community groups	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
9. Design the ABE course of study	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
10. Make decisions about content of ABE	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
11. Regularly teach one or more classes	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
12. Determine appropriate teaching methods	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
13. Make daily teacher's plans	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
14. Select instructional materials	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
15. Decide on the grading system to be used	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
16. Recommend students for promotion and graduation	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
17. Administer and interpret tests	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
18. Recommend instructional equipment for purchase	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
19. Serve on faculty committees of the school	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.

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ACTIVITIES	ACTUAL	IDEAL
20. Attend faculty meetings	1 2 3 4 5	1 2 3 4 5
21. Keep up to date on the latest developments in content and teaching materials for ABE	1 2 3 4 5	1 2 3 4 5
22. Help adults choose courses	1 2 3 4 5	1 2 3 4 5
23. Read professional journals	1 2 3 4 5	1 2 3 4 5
24. Attend professional meetings	1 2 3 4 5	1 2 3 4 5
25. Identify special talents of ABE students	1 2 3 4 5	1 2 3 4 5
26. Inform adults of community services available to them	1 2 3 4 5	1 2 3 4 5
27. Occasionally assist in teaching a class	1 2 3 4 5	1 2 3 4 5
28. Arrange enrichment programs such as trips, speakers, films, and others	1 2 3 4 5	1 2 3 4 5
29. Assist adult students outside of classes	1 2 3 4 5	1 2 3 4 5
30. Help individual students with their lessons	1 2 3 4 5	1 2 3 4 5
31. Orient new adult students	1 2 3 4 5	1 2 3 4 5
32. Make personal contacts with ABE prospects	1 2 3 4 5	1 2 3 4 5
33. Grade test papers	1 2 3 4 5	1 2 3 4 5
34. Help students select books at the library	1 2 3 4 5	1 2 3 4 5
35. Help to make ABE students feel comfortable in class	1 2 3 4 5	1 2 3 4 5
36. Convince under-educated adults that ABE is valuable	1 2 3 4 5	1 2 3 4 5
37. Call on adult students who have been absent from class	1 2 3 4 5	1 2 3 4 5
38. Keep attendance records up to date	1 2 3 4 5	1 2 3 4 5
39. Telephone adult students at home when necessary	1 2 3 4 5	1 2 3 4 5
40. Arrange special observances of birthdays, promotions, anniversaries, or other events important to ABE students	1 2 3 4 5	1 2 3 4 5
41. Make up calendar of class activities and keep it up to date	1 2 3 4 5	1 2 3 4 5
42. Duplicate things like tests, forms, letters, and teaching materials	1 2 3 4 5	1 2 3 4 5

ACTIVITIES	ACTUAL	IDEAL
43. Operate audio-visual equipment	1 2 3 4 5	1 2 3 4 5
44. Maintain inventory of recordings, tapes, and other teaching equipments	1 2 3 4 5	1 2 3 4 5
45. See that instructional materials are neatly arranged	1 2 3 4 5	1 2 3 4 5
46. Search out library materials	1 2 3 4 5	1 2 3 4 5

DIVISION OF DUTIES BETWEEN TEACHERS AND  
TEACHER AIDES IN ADULT BASIC EDUCATION

FORM B: TEACHER AIDES

SCHOOL: \_\_\_\_\_ YOUR NAME: \_\_\_\_\_

YOUR TEACHER'S NAME: \_\_\_\_\_

INSTRUCTIONS

TEACHER AIDE: The next few pages list things which teachers or teacher-aides often do in Adult Basic Education. Most of them are probably done by you or your teacher. You may do some of them together or take turns. Maybe some are not done at all. I would like to know how these things are divided between you and your teacher this year.

In Column Actual of the answer sheet please carefully darken one space beside each statement:

- 1 = for each thing you usually do alone
- 2 = for each thing you and your teacher usually do together or take turns doing
- 3 = for each thing your teacher usually does alone
- 4 = for each thing not done either by you or your teacher

We all sometimes wish our work could be divided differently. I would like to know what you would really like to do. Imagine that you already know or could learn to do any of the duties on the list. If you were free to choose, would you do different things? Would your teacher do different things? Would each of you keep on doing about the same things you do now?

In Column Ideal of the same answer sheet please darken one space beside each of the same statements:

- 1 = for each thing you would do alone if you were really free to choose

- 2 = for each thing you and your teacher would usually do together if you were free to choose
- 3 = for each thing your teacher would usually do alone if you were free to choose
- 4 = for each thing which would not be done by either you or your teacher if you were free to choose

Please return this form to your director as soon as you have finished marking it.

THANK YOU!

PRINTED IN U. S. A.

FORM B: Teacher-Aide YOUR NAME: YOUR TEACHER-AIDE'S NAME:  
SCHOOL:

Please complete this form and return it to your Director.

Be sure your marks are heavy and black. Erase completely any answer changed.

ACTIVITIES	ACTUAL	IDEAL
1. Evaluate the ABE program	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
2. Inform school officials of community problems and special needs relating to ABE	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
3. Arrange and conduct advisory committee meetings	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
4. Collect data on need for ABE in the community	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
5. Contact industries, welfare agencies, clubs, churches, and others to talk about ABE	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
6. Provide information about state guidelines for ABE	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
7. Officially represent ABE on civic groups	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
8. Describe ABE programs to community groups	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
9. Design the ABE course of study	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
10. Make decisions about content of ABE	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
11. Regularly teach one or more classes	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
12. Determine appropriate teaching methods	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
13. Make daily teacher's plans	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
14. Select instructional materials	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
15. Decide on the grading system to be used	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
16. Recommend students for promotion and graduation	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
17. Administer and interpret tests	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
18. Recommend instructional equipment for purchase	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
19. Serve on faculty committees of the school	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.

ACTIVITIES	ACTUAL	IDEAL
20. Attend faculty meetings	1 2 3 4 5	1 2 3 4 5
21. Keep up to date on the latest developments in content and teaching materials for ABE	1 2 3 4 5	1 2 3 4 5
22. Help adults choose courses	1 2 3 4 5	1 2 3 4 5
23. Read professional journals	1 2 3 4 5	1 2 3 4 5
24. Attend professional meetings	1 2 3 4 5	1 2 3 4 5
25. Identify special talents of ABE students	1 2 3 4 5	1 2 3 4 5
26. Inform adults of community services available to them	1 2 3 4 5	1 2 3 4 5
27. Occasionally assist in teaching a class	1 2 3 4 5	1 2 3 4 5
28. Arrange enrichment programs such as trips, speakers, films, and others	1 2 3 4 5	1 2 3 4 5
29. Assist adult students outside of classes	1 2 3 4 5	1 2 3 4 5
30. Help individual students with their lessons	1 2 3 4 5	1 2 3 4 5
31. Orient new adult students	1 2 3 4 5	1 2 3 4 5
32. Make personal contacts with ABE prospects	1 2 3 4 5	1 2 3 4 5
33. Grade test papers	1 2 3 4 5	1 2 3 4 5
34. Help students select books at the library	1 2 3 4 5	1 2 3 4 5
35. Help to make ABE students feel comfortable in class	1 2 3 4 5	1 2 3 4 5
36. Convince under-educated adults that ABE is valuable	1 2 3 4 5	1 2 3 4 5
37. Call on adult students who have been absent from class	1 2 3 4 5	1 2 3 4 5
38. Keep attendance records up to date	1 2 3 4 5	1 2 3 4 5
39. Telephone adult students at home when necessary	1 2 3 4 5	1 2 3 4 5
40. Arrange special observances of birthdays, promotions, anniversaries, or other events important to ABE students	1 2 3 4 5	1 2 3 4 5
41. Make up calendar of class activities and keep it up to date	1 2 3 4 5	1 2 3 4 5
42. Duplicate things like tests, forms, letters, and teaching materials	1 2 3 4 5	1 2 3 4 5

ACTIVITIES	ACTUAL	IDEAL
43. Operate audio-visual equipment	1 2 3 4 5	1 2 3 4 5
44. Maintain inventory of recordings, tapes, and other teaching equipments	1 2 3 4 5	1 2 3 4 5
45. See that instructional materials are neatly arranged	1 2 3 4 5	1 2 3 4 5
46. Search out library materials	1 2 3 4 5	1 2 3 4 5



DIVISION OF DUTIES BETWEEN TEACHERS AND  
TEACHER AIDES IN ADULT BASIC EDUCATION

FORM C: The Director of Adult Basic Education

NAME OF AIDE: \_\_\_\_\_

WORKD WITH: \_\_\_\_\_  
(Name of teacher)

INSTRUCTIONS

Please check on the answer sheet provided each statement as it pertains to the teacher aide of Adult Basic Education:

1. Age Range:

- 1 = below 20
- 2 = 20-29
- 3 = 30-39
- 4 = 40-49
- 5 = 50 or above

2. Marital Status:

- 1 = single
- 2 = married
- 3 = separated
- 4 = widow(er)
- 5 = divorced

3. Years of teaching Adult Basic Education:

- 1 = 1 year
- 2 = 2 years
- 3 = 3 years
- 4 = 4 years
- 5 = over 5 years

4. Years working with this teacher in Adult Basic Education:

- 1 = 1 year
- 2 = 2 years
- 3 = 3 years
- 4 = 4 years
- 5 = over 5 years

## 5. Aide lives:

- 1 = within the poverty area
- 2 = outside this poverty area

## 6. Highest School Grade Completed:

- 1 = 1st to 6th grade
- 2 = 7th to 8th grade
- 3 = 9th to 10th grade
- 4 = above 10th grade, but did not graduate
- 5 = High school graduate

## 7. Vocational School:

- 1 = attended vocational school but did not graduate
- 2 = graduated vocational school

## 8. College:

- 1 = attended college but did not graduate
- 2 = graduated
- 3 = graduated 4-year college

Please check on the same answer sheet each statement as it pertains to the teacher who is teamed with the aide:

## 1. Age Range:

- 1 = below 20
- 2 = 20-29
- 3 = 30-39
- 4 = 40-49
- 5 = 50 or above

## 2. Marital Status:

- 1 = single
- 2 = married
- 3 = separated
- 4 = widow(er)
- 5 = divorced

## 3. Years of teaching Adult Basic Education:

- 1 = 1 year
- 2 = 2 years
- 3 = 3 years
- 4 = 4 years
- 5 = over 5 years

4. Years working with this aide in Adult Basic Education:

- 1 = 1 year
- 2 = 2 years
- 3 = 3 years
- 4 = 4 years
- 5 = over 5 years

5. Teacher Resides:

- 1 = within the poverty area
- 2 = outside the poverty area

6. Highest level of education completed:

- 1 = less than bachelor's degree
- 2 = college degree (bachelor)
- 3 = graduate work, no degree
- 4 = graduate degree, Master
- 5 = post master's study

FORM C: Director	YOUR NAME:	YOUR TEACHER-AIDE'S NAME:
SCHOOL:		
Please complete this form and return it to your Director.		
Be sure your marks are heavy and black. Erase completely any answer changed.		
ACTIVITIES	ACTUAL	IDEAL
1. Evaluate the ABE program	1. 2 3 4 5	1. 2 3 4 5
2. Inform school officials of community problems and special needs relating to ABE	1. 2 3 4 5	1. 2 3 4 5
3. Arrange and conduct advisory committee meetings	1. 2 3 4 5	1. 2 3 4 5
4. Collect data on need for ABE in the community	1. 2 3 4 5	1. 2 3 4 5
5. Contact industries, welfare agencies, clubs, churches, and others to talk about ABE	1. 2 3 4 5	1. 2 3 4 5
6. Provide information about state guidelines for ABE	1. 2 3 4 5	1. 2 3 4 5
7. Officially represent ABE on civic groups	1. 2 3 4 5	1. 2 3 4 5
8. Describe ABE programs to community groups	1. 2 3 4 5	1. 2 3 4 5
9. Design the ABE course of study	1. 2 3 4 5	1. 2 3 4 5
10. Make decisions about content of ABE	1. 2 3 4 5	1. 2 3 4 5
11. Regularly teach one or more classes	1. 2 3 4 5	1. 2 3 4 5
12. Determine appropriate teaching methods	1. 2 3 4 5	1. 2 3 4 5
13. Make daily teacher's plans	1. 2 3 4 5	1. 2 3 4 5
14. Select instructional materials	1. 2 3 4 5	1. 2 3 4 5
15. Decide on the grading system to be used	1. 2 3 4 5	1. 2 3 4 5
16. Recommend students for promotion and graduation	1. 2 3 4 5	1. 2 3 4 5
17. Administer and interpret tests	1. 2 3 4 5	1. 2 3 4 5
18. Recommend instructional equipment for purchase	1. 2 3 4 5	1. 2 3 4 5
19. Serve on faculty committees of the school	1. 2 3 4 5	1. 2 3 4 5

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ACTIVITIES	ACTUAL					IDEAL				
20. Attend faculty meetings	1	2	3	4	5	1	2	3	4	5
21. Keep up to date on the latest developments in content and teaching materials for ABE	1	2	3	4	5	1	2	3	4	5
22. Help adults choose courses	1	2	3	4	5	1	2	3	4	5
23. Read professional journals	1	2	3	4	5	1	2	3	4	5
24. Attend professional meetings	1	2	3	4	5	1	2	3	4	5
25. Identify special talents of ABE students	1	2	3	4	5	1	2	3	4	5
26. Inform adults of community services available to them	1	2	3	4	5	1	2	3	4	5
27. Occasionally assist in teaching a class	1	2	3	4	5	1	2	3	4	5
28. Arrange enrichment programs such as trips, speakers, films, and others	1	2	3	4	5	1	2	3	4	5
29. Assist adult students outside of classes	1	2	3	4	5	1	2	3	4	5
30. Help individual students with their lessons	1	2	3	4	5	1	2	3	4	5
31. Orient new adult students	1	2	3	4	5	1	2	3	4	5
32. Make personal contacts with ABE prospects	1	2	3	4	5	1	2	3	4	5
33. Grade test papers	1	2	3	4	5	1	2	3	4	5
34. Help students select books at the library	1	2	3	4	5	1	2	3	4	5
35. Help to make ABE students feel comfortable in class	1	2	3	4	5	1	2	3	4	5
36. Convince under-educated adults that ABE is valuable	1	2	3	4	5	1	2	3	4	5
37. Call on adult students who have been absent from class	1	2	3	4	5	1	2	3	4	5
38. Keep attendance records up to date	1	2	3	4	5	1	2	3	4	5
39. Telephone adult students at home when necessary	1	2	3	4	5	1	2	3	4	5
40. Arrange special observances of birthdays, promotions, anniversaries, or other events important to ABE students	1	2	3	4	5	1	2	3	4	5
41. Make up calendar of class activities and keep it up to date	1	2	3	4	5	1	2	3	4	5
42. Duplicate things like tests, forms, letters, and teaching materials	1	2	3	4	5	1	2	3	4	5

ACTIVITIES	ACTUAL	IDEAL
43. Operate audio-visual equipment	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
44. Maintain inventory of recordings, tapes, and other teaching equipments	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
45. See that instructional materials are neatly arranged	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.
46. Search out library materials	1. 2. 3. 4. 5.	1. 2. 3. 4. 5.

**APPENDIX C**

**LIST OF SCHOOL DISTRICTS**

## APPENDIX C

Michigan Department of Education  
Bureau of Educational Services  
ADULT EDUCATION AND COMMUNITY SERVICES UNIT  
Box 420, Lansing, Michigan 48902

### ADULT BASIC EDUCATION PROGRAMS 1969-1970

School District and County	Address	Number of Returns
Battle Creek Public Schools Calhoun County	73 Capital Ave., N.E. Battle Creek, Mich. 49016	3
Benton Harbor School District Berrien County	400 Pipestone Ave. Benton Harbor, Mich. 48706	5
Covert Public Schools	Covert, Mich. 49043	1
Detroit Public Schools Wayne County	5057 Woodward Detroit, Mich. 48202	6
Ferndale School District Oakland County	881 Pinecrest Ferndale, Mich. 48220	5
Godwin Heights Public Schools Kent County	1536 Street, S.W. Wyoming, Mich. 49508	4
Grand Rapids Public Schools Kent County	143 Bostwick Ave., N.E. Grand Rapids, Mich. 49502	1
Holland School District Ottawa County	61 West 16 Street Holland, Mich. 49423	3
Lakewood Community Schools Ionia County	Route 3, Velte Rd. Lake Odessa, Mich. 48849	1



Lansing School District Ingham County	3426 South Cedar St. Lansing, Mich. 48910	2
Muskegon Public Schools Muskegon County	349 West Webster Ave. Muskegon, Mich. 49440	1
West Ottawa Public Schools Ottawa County	294 West Lakewood Blvd. Holland, Mich. 49423	2
Total		34

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**APPENDIX D**

**COVER LETTERS**

505 West Owen Hall  
Michigan State University  
East Lansing, Michigan 48823  
June 12, 1970

Dear Sir/Madam:

On May 7, 1970, I sent you questionnaires soliciting information from you and from your Teachers and Teacher-Aides working together in Adult Education. You may recall that this information is to be used in a Dissertation study that I am conducting at Michigan State University.

We feel that the proposed study could make a worthy contribution to Teacher, Teacher-Aide programs.

Therefore, we would like very much to have your participation in order to make this a success. If the questionnaires were not received or have been misplaced, I would be happy to forward to you other copies of the questionnaires.

Your cooperation in this effort will be greatly appreciated.

Yours truly,

(Lina R. Godfrey)  
Tel: 355-3914

LRG: 1

505 West Owen Hall  
Michigan State University  
East Lansing, Michigan  
May 7, 1970

The Director of Adult Basic Education

Dear Sir/Madam:

I am a doctoral student in the College of Higher Administration and Continuing Education at Michigan State University.

For my research activity, I am making a study of "Role Adaptation and Career Development: A Study of Role Definition and Role Interaction Among Teachers and Teacher-Aides in Adult Basic Education," in the Public Schools in the state of Michigan.

I am hereby soliciting the cooperation of you and your staff in gathering the data. We feel that this study may reveal significant contribution to those of us in the field of Adult Basic Education.

Enclosed are three sets of questionnaires to be answered by (1) the director, (2) the teacher, and (3) the aide that works with the respective teacher.

Please distribute the respective questionnaires to one teacher and one aide in each of four buildings.

Please be kind enough to be responsible for returning the completed questionnaires and directions in the enclosed envelopes within the next ten days.

Thank you in advance for your cooperation.

Yours truly,

(Lina R. Godfrey)  
Tel: 355-3914

505 West Owen Hall  
Michigan State University  
East Lansing, Michigan 48823  
July 31, 1970

Dear Fellow Worker in ABE:

I am a doctoral student in the Program of Higher and Continuing Education at Michigan State University.

For my research activity, I am making a study of "Role Adaptation and Career Development: A Study of Role Definition and Role Interaction Among Teachers and Teacher-Aides in Adult Basic Education in the Public Schools in the State of Michigan."

Professor Russell Kleis, my advisor and director for this research activity, has suggested that I contact you and solicit your help. This, I would greatly appreciate. We feel that this study may result in a significant contribution to those of us in Adult Basic Education and to others.

I have prepared an extensive list of Teacher, Teacher-Aide tasks in Adult Basic Education and would be grateful for your help in classifying them. It might require forty minutes of your time.

Please meet Mr. David Boggs and me in 105 E. Holden at 3:00 P.M. on Monday, August 3, 1970.

Thank you in advance for your cooperation.

Yours truly,

(Lina R. Godfrey)

APPENDIX E

DISTRIBUTION OF RAW DATA FOR CURRENT  
AND IDEAL ACTIVITIES AS REPORTED BY  
TEACHER-AIDES, TEACHERS, AND  
TEACHER-AIDES AND TEACHERS

213

[illegible]

TABLE E.2.--Current roles--aide alone (1); aide and teacher (2); teacher alone (3); as defined by role sets.

No.	Activity																																														(1)	(2)	(3)	
	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	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46				
1	2	3	3	3	3	2	3	3	2	3	3	3	0	3	2	3	3	3	3	3	3	3	2	3	2	1	3	2	1	3	3	3	3	3	1	1	1	3	1	2	1	2	3	3	8	9	28			
2	0	3	2	3	3	1	0	2	3	3	1	0	2	2	2	2	0	1	3	3	1	2	2	0	1	3	2	2	3	1	2	3	1	3	2	1	2	0	1	1	1	2	1	3	1	13	15	12		
3	2	3	2	1	3	0	2	2	3	2	2	3	2	2	2	2	3	3	1	2	3	0	3	2	3	1	2	2	1	2	2	2	1	1	1	1	2	3	1	0	0	2	2	2	10	22	10			
4	3	3	3	3	0	0	3	3	3	2	3	0	3	3	3	3	3	3	3	3	2	3	3	0	3	3	1	3	2	2	3	3	2	0	0	3	1	3	0	1	1	2	3	3	7	4	27			
5	3	3	2	3	0	3	3	3	3	3	3	0	2	3	3	3	3	3	3	3	3	3	0	3	3	1	3	2	2	3	1	2	3	2	3	3	1	1	3	3	1	1	2	3	3	8	8	27		
6	3	3	3	3	0	3	3	3	3	3	3	3	0	0	3	3	3	3	3	3	3	3	0	3	3	2	2	2	2	2	3	1	3	3	1	1	1	2	1	3	2	1	2	0	3	7	5	26		
7	2	3	3	2	3	3	3	3	2	3	3	3	3	3	3	3	3	3	3	3	2	3	3	3	0	3	2	2	2	2	2	2	1	3	3	1	2	1	3	2	1	2	2	2	4	21	20			
8	3	3	3	3	3	3	3	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	0	3	1	3	1	2	2	2	7	14	22					
9	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	45	0			
10	2	3	3	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	10	34				
11	3	2	2	2	0	2	3	2	3	2	2	3	2	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	0	31	13		
12	3	2	2	2	0	2	3	2	0	3	2	0	2	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	0	3	3	2	2	2	2	2	
13	2	3	3	3	1	0	3	3	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1	9	34		
14	3	3	2	2	2	3	2	3	3	3	2	0	0	3	3	3	3	3	3	3	3	2	2	3	3	3	2	2	3	2	3	2	2	1	0	2	2	2	2	2	3	3	2	0	2	2	2	2	2	
15	3	3	3	3	3	2	3	3	3	3	3	3	0	3	3	3	3	3	3	3	3	2	0	3	0	3	3	0	3	2	3	2	3	2	3	3	3	3	3	3	3	3	3	3	3	3	0	8	32	
16	1	3	2	2	3	3	3	3	2	2	2	0	3	3	3	3	3	3	3	3	3	1	0	2	3	0	0	2	1	2	2	3	3	2	3	3	1	1	2	1	0	1	0	2	1	3	9	15	14	
17	2	3	2	3	3	3	0	3	2	2	3	0	3	2	3	3	2	3	3	3	3	2	1	3	2	3	2	3	3	2	2	3	3	2	3	0	3	0	2	0	3	2	2	2	2	2	2	2	18	21
18	2	2	3	2	3	3	3	2	2	2	3	0	3	2	3	3	3	3	3	3	3	2	2	3	2	2	3	2	2	3	2	2	3	3	2	2	0	1	3	2	2	2	2	2	2	1	24	18		
19	3	3	3	2	3	3	3	3	3	3	3	3	3	0	2	3	3	3	3	3	2	1	2	3	3	0	2	3	2	2	2	1	2	3	0	3	0	2	1	0	1	2	2	3	2	6	14	21		
20	2	2	3	2	2	3	3	2	1	3	3	2	3	2	2	2	3	3	3	3	2	2	3	2	2	3	2	2	2	2	2	2	3	3	2	2	1	2	2	1	2	1	1	2	6	28	12			
21	1	2	3	3	3	3	3	2	2	3	3	3	3	3	2	3	1	3	2	2	2	3	0	3	3	3	2	3	2	2	3	2	2	3	3	2	2	2	3	2	2	2	2	3	3	2	18	25		
22	3	3	3	2	3	3	3	3	3	3	3	0	3	2	2	3	3	2	2	2	3	3	0	2	3	3	3	3	0	2	2	0	3	1	2	3	3	0	0	2	3	2	2	2	1	16	22			
23	1	3	3	2	3	2	3	3	3	3	3	3	3	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1	6	39			
24	3	3	2	2	2	2	3	2	0	3	2	0	2	2	2	2	3	3	3	3	3	2	3	3	0	2	2	3	2	2	3	2	2	3	3	3	3	3	3	2	3	2	2	2	0	23	20			
25	3	3	2	2	3	3	2	3	3	2	2	0	3	0	3	3	3	3	3	3	3	3	2	0	3	2	3	3	3	3	3	3	3	3	0	0	2	3	0	0	1	2	1	3	2	2	14	20		
26	2	3	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	0	9	35			
27	1	3	3	3	3	3	3	3	2	2	3	3	3	3	3	0	3	3	3	3	3	2	3	3	3	3	3	3	3	1	3	2	3	0	3	3	2	3	3	2	1	1	2	3	4	10	30			
28	2	3	0	2	3	2	3	3	3	3	3	3	3	3	3	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	3	3	3	3	3	3	3	2	2	2	3	0	13	31			
29	2	2	2	2	3	3	3	3	2	3	3	3	3	3	3	0	3	3	3	3	3	2	0	2	2	3	3	2	0	2	2	2	2	1	3	2	2	2	3	3	2	0	1	2	3	2	23	17		
30	2	3	3	2	3	3	3	3	3	3	3	3	0	2	0	3	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	0	3	3	3	3	3	3	3	3	3	3	3	0	12	30		
31	3	3	2	3	3	2	3	3	3	3	3	3	3	3	2	2	3	2	3	3	3	3	3	3	3	3	3	3	3	2	2	3	3	3	3	3	3	2	2	3	1	3	3	3	3	3	11	32		
32	1	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1	9	36			
33	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	0	11	35		
34	3	3	3	3	3	3	3	3	2	3	3	3	3	3	2	3	2	3	3	3	3	3	3	3	3	3	3	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	0	9	37	



TABLE E.3.--Ideal roles--aide alone (1); aide and teacher (2); teacher alone (3) as defined by teacher-aide.

No.	Activity																																														(1)	(2)	(3)	
	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	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46				
1	3	3	2	1	3	2	2	1	2	1	2	2	0	2	2	0	0	1	3	1	1	2	0	1	2	0	2	2	1	2	2	2	1	2	1	3	3	1	2	1	1	1	1	2	1	18	18	4		
2	2	3	3	2	2	2	3	3	1	2	3	2	3	1	3	3	2	0	1	2	0	2	2	0	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	7	19	9		
3	0	3	3	2	2	3	3	3	1	3	2	3	3	3	3	3	3	3	1	3	1	3	2	3	2	3	2	2	2	2	2	2	2	2	3	3	1	3	3	1	1	2	1	2	2	9	11	25		
4	2	3	1	2	2	1	3	2	3	2	2	0	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	33	6
5	2	3	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	2	2	0	2	2	2	2	2	3	0	3	0	3	2	2	0	1	2	2	2	1	26	11		
6	2	3	3	2	2	2	2	0	3	2	3	0	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	28	9	
7	2	3	3	2	1	3	3	3	2	3	3	2	3	3	3	3	3	1	2	3	1	3	3	2	3	2	3	1	1	2	2	2	2	2	3	3	0	1	3	3	2	1	2	2	2	8	17	20		
8	2	2	2	2	0	2	0	0	2	2	0	2	2	3	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	35	1		
9	2	2	2	3	3	3	3	2	3	2	3	2	3	3	3	3	3	2	1	3	1	2	3	2	3	2	2	3	2	1	3	3	1	2	3	3	3	3	3	1	1	1	1	2	2	8	14	24		
10	3	3	0	0	3	3	0	2	2	2	2	2	3	1	2	2	2	3	2	0	2	3	3	3	2	0	2	0	2	2	2	2	2	2	3	2	2	3	2	2	1	3	0	0	1	2	3	20	16	
11	2	2	2	3	3	3	2	3	2	3	2	2	3	2	2	2	3	2	0	2	0	0	3	3	3	2	0	0	0	2	3	2	0	3	2	2	3	0	3	0	2	0	2	0	2	0	20	16		
12	3	2	1	2	2	1	1	2	3	2	2	0	0	0	1	2	1	2	0	1	0	0	1	1	1	2	0	1	0	1	1	1	0	2	1	1	1	1	1	1	3	3	1	2	0	21	11	4		
13	3	2	0	1	2	3	3	0	2	1	3	0	0	0	3	3	0	0	1	3	0	0	0	3	3	1	0	1	0	1	0	0	1	3	3	0	1	0	1	2	0	1	0	2	10	7	11			
14	3	3	0	2	3	3	0	2	3	0	2	0	3	1	0	2	3	2	0	3	0	0	0	2	2	0	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	1	0	2	2	2	2	18	11	
15	2	3	3	2	2	3	3	3	2	3	3	0	0	3	3	3	3	3	2	3	0	3	3	3	0	3	2	2	2	2	2	2	2	2	3	0	3	0	3	3	2	0	2	3	0	2	0	14	22	
16	2	2	2	1	0	0	2	2	1	2	2	1	2	0	3	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	1	0	0	0	2	7	20	8					
17	3	2	0	3	0	3	3	2	3	3	3	0	2	1	3	3	0	2	2	2	2	3	0	0	0	0	1	2	1	1	0	0	0	0	0	0	0	0	0	2	3	1	0	2	2	0	2	6	10	11
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1		
19	0	0	0	0	1	1	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	2	2	0	0	0	1	0	1	0	2	0	0	0	0	0	2	0	0	0	1	0	0	0	6	5	1			
20	1	3	0	2	2	2	2	0	3	2	0	2	2	3	0	1	0	0	0	2	2	2	2	3	0	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4	26	7		
21	1	3	3	1	3	1	3	3	1	2	3	3	2	3	1	2	2	3	1	2	2	3	2	2	2	2	2	1	1	3	2	3	2	3	0	3	0	1	2	3	2	2	1	1	2	1	13	15	15	
22	2	2	3	3	1	3	3	3	3	2	3	3	3	3	3	3	2	0	2	1	2	0	0	3	2	2	2	2	1	2	0	2	2	2	2	2	2	2	2	2	3	0	2	1	1	2	7	17	14	
23	1	3	2	1	1	1	2	2	1	2	0	2	2	0	2	2	2	3	1	1	2	0	2	1	2	2	1	1	1	1	2	1	2	3	2	3	1	1	2	1	1	1	1	1	1	23	16	4		
24	3	2	1	1	2	1	2	2	3	1	2	3	2	1	1	2	3	1	1	2	2	1	1	3	1	2	1	1	2	1	1	1	1	1	1	1	1	1	2	2	3	1	2	1	1	25	15	6		
25	2	2	2	2	2	2	0	3	2	3	2	3	2	3	3	3	3	2	0	2	1	3	3	2	2	3	2	1	2	2	2	2	2	2	2	3	2	2	2	1	1	2	2	1	1	9	21	14		
26	1	2	2	0	2	0	2	2	1	2	3	2	3	3	3	3	2	3	2	0	3	1	2	1	2	0	3	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	8	18	10		
27	2	3	3	1	2	2	2	2	2	2	2	2	3	2	2	2	2	3	2	1	2	2	3	1	2	1	2	0	1	2	3	3	2	0	0	3	1	1	2	2	2	2	2	2	1	10	24	9		
28	1	2	3	1	2	2	2	2	2	2	3	2	3	1	2	2	2	2	2	1	2	2	2	3	1	2	1	1	0	1	2	3	3	1	0	3	3	3	1	2	2	2	2	1	1	15	21	9		
29	2	2	3	2	1	1	3	3	1	2	3	1	3	1	1	2	2	2	2	1	2	0	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	8	22	9		
30	3	2	3	2	2	1	2	3	2	2	3	1	3	1	1	2	2	2	2	1	1	1	1	2	2	3	1	1	2	1	2	2	3	1	1	2	2	1	0	2	1	3	1	2	0	2	15	19	8	
31	1	3	2	1	1	1	3	2	2	1	3	1	2	3	1	2	2	3	1	2	2	2	3	1	2	1	3	3	1	1	2	2	2	2	1	1	3	1	1	1	1	2	2	1	20	17	9			
32	1	3	2	3	3	2	2	2	1	2	2	3	2	1	2	1	2	1	2	1	2	3	2	1	2	1	2	3	2	3	2	3	2	3	3	3	3	2	3	2	2	2	1	1	1	2	13	20	13	
33	2	2	2	3	2	1	3	2	2	2	3	1	2	1	1	2	3	3	0	1	3	1	2	3	1	3	3	1	1	1	2	3	3	1	1	2	2	2	2	3	1	3	1	2	2	15	17	13		
34	1	3	3	1	3	1	2	3	3	2	3	3	0	3	2	1	2	2	3	2	2	3	1	3	2	2	3	3	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	13	14	18		

TABLE E.4.--Ideal roles--aide alone (1); aide and teacher (2); teacher alone (3); as defined by teacher-aide.

No.	Activity																																														(1)	(2)	(3)	
	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	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46				
1	2	1	3	2	2	2	3	3	1	2	3	2	3	1	3	3	2	3	1	2	3	2	2	2	2	2	1	1	1	0	1	2	2	0	1	2	2	1	0	3	1	1	2	1	2	0	2	13	19	10
2	2	0	3	2	2	0	1	2	2	1	1	1	1	0	2	2	1	0	2	2	1	2	2	2	2	2	1	1	1	2	1	1	2	1	0	1	2	0	3	1	1	2	1	2	0	2	17	12	7	
3	3	1	3	2	1	0	2	2	2	2	3	1	0	3	2	2	1	2	1	2	1	2	2	2	2	2	2	2	2	1	1	2	1	0	1	2	0	3	2	1	2	2	2	3	15	18	7			
4	2	1	3	2	2	2	2	2	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	1	0	0	2	2	2	2	4	31	2			
5	0	1	2	3	2	2	0	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	0	2	3	2	3	2	2	2	2	15	22		
6	3	2	3	3	2	0	3	3	3	2	0	3	3	3	0	2	3	3	3	0	3	3	3	3	3	3	1	1	1	2	2	3	3	2	2	3	1	1	0	1	1	0	0	3	8	6	22			
7	2	3	3	3	2	3	3	3	3	3	3	3	3	3	3	2	3	3	2	2	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2	2	3	0	2	3	2	1	2	2	2	3	20	21		
8	2	2	2	2	2	2	2	3	3	2	2	2	2	2	2	2	3	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	36	7		
9	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	45	1		
10	2	3	2	2	0	2	3	3	0	3	3	2	3	2	3	2	3	2	3	2	0	1	3	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	2	2	2	2	2	2	2	3	20	7		
11	2	2	2	0	2	0	2	2	2	2	3	2	2	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	2	2	2	0	0	1	3	3	2	35	4			
12	3	2	2	3	0	1	1	1	0	1	2	2	0	2	1	2	2	2	2	3	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	0	2	2	3	2	2	2	2	2	8	22	8		
13	2	2	2	3	2	2	3	3	3	2	2	3	2	3	2	3	2	2	2	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	33	10		
14	2	0	3	2	2	2	3	2	3	2	2	0	2	0	2	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	2	3	1	2	2	2	2	2	2	3	34	6			
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