

FOCUS ON EXCEPTIONAL CHILDREN

PARAPROFESSIONALS AND SPECIAL EDUCATION

ROLE EXPECTATIONS OF PARAPROFESSIONAL STAFF IN SPECIAL EDUCATION

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The concept of differentiated staffing to meet the needs of exceptional children in the learning environment is neither new nor unique. Teacher aides, teaching assistants, and volunteer helpers in the classroom have been used extensively for many years to foster learning with children who have exceptional needs. The widely varying tasks performed by this auxiliary staff range from feeding children and near custodial duties to taking an active part in the instructional process.

AUXILIARY STAFF IN SPECIAL EDUCATION

In recent years there has been an increasing awareness of the important role auxiliary staff serve in the school setting. A considerable body of literature is now available which directs attention to the myriad tasks paraprofessional staff perform. Throughout this literature one can draw a thread of varying role descriptions and a returning theme of praise for the contribution of the paraprofessional staff. A strong emphasis is found in the literature on the need to differentiate the job descriptions or role expectations of the certificated and the noncertificated staff (Cruickshank & Haring, 1957; Esbensen, 1966; Branick, 1966; Blessing, 1967; Watson, 1971; Jacobson & Drije, 1972; Minneapolis Public Schools, 1972; and others).

As early as 1957 Cruickshank and Haring documented a method of selection, training, and utilization of lay persons from the community as teacher assistants for three types of situations in which exceptional children were being educated. These volunteer assistants participated in a preservice orientation session as well as inservice meetings throughout the year. Duties performed by the teacher aides consisted largely of child care, preparation of instructional materials, and report keeping. Interestingly, the authors note the possible value of employing trained help in regular classrooms into which exceptional children have been placed.

In attempting to deal with the question of job specifications for the teacher aide, Esbensen (1966) noted that there is some confusion about the issue. He suggested that while noncertificated personnel should not encroach upon the prerogatives of the regular

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teaching staff the aides may well be capable of performing tasks which have the effect of helping with the teaching progress. Esbensen indicated that the teacher has the proper qualifications to analyze the instructional needs of the students and to prescribe the instructional processes most suitable for formal schooling. The aide, under the supervision of the teacher, may be able to play an active role in the instructional process rather than merely serving as a clerical aide in an educational setting.

In 1967, Blessing reported on a three year federally funded investigation in process at that time on the effects of various class sizes and the employment of teacher aides as factors in achievement of elementary EMR children. It was his intention to gain information which could be helpful in the administration of classes for educable retarded children so that assistants might be used to alleviate a manpower shortage in the behavioral services. Savino et al. (1968) supported this concept of the positive contribution to be made to the mentally retarded by paraprofessional staff.

Watson (1971) discussed the problems of role overlap and spheres of authority as did Esbensen. Watson called for careful planning in the initial stages of making a job description for noncertificated staff. His role descriptions, similar to that reported by Cruickshank and Haring, are seen to be predominantly clerical, monitorial, and follow-up instructional. Here evidence is found on a curriculum for the training of supportive staff. The program recommends the inclusion of training in arts and crafts, physical education, recreational skills, music, and behavior management.

FOCUS ON EXCEPTIONAL CHILDREN is published monthly except June, July, and August as a service to those concerned with mentally retarded and emotionally disturbed children. This journal is abstracted and indexed in *Exceptional Child Education Abstracts*. Subscription rates, \$9.50 per year. Copyright 1974, Love Publishing Company. All rights reserved. Reproduction in whole or part without written permission is prohibited. Printed in the United States of America. Second class postage is paid at Denver, Colorado.

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Attempts to measure the effects of the employment of noncertificated staff on the achievement of students have been reported on by Cruickshank and Haring (1957), Blessing (1967), Frelow et al. (1974), Jenkins et al. (1974), and Schortinghuis and Frohman (1974). While the aspects of behavior that were measured differed in each instance, the conclusion can be drawn that the reporting authors indicated measures of growth which seemed to point to the inclusion of noncertificated staff as having a positive effect upon the learning process.

Attention has also been directed at the training and utilization of paraprofessional staff in institutional settings (Birch, 1963; Wieters, 1972). Curriculum developed for training purposes is oriented toward the importance of an understanding of the dynamics of the professional and the helper relationship as well as to the acquisition of knowledge and skills useful in promoting growth processes with the institutional residents. The very extensive *Manual for the Training of Paraprofessional Workers in Mental Retardation* (Wieters, 1972) describes such a training program organized into 12 instructional units which encompass the many facets of support services provided by paraprofessional staff as well as the responsibilities of the professional staff. Included in the many tasks performed by the target group of this paraprofessional training program are recreational planning and participation with the residents, instructional reinforcement, and daily living activities development.

Training Levels and Duties of Paraprofessionals

Efforts at clarifying the role expectancies of noncertificated personnel have resulted in varying categorical descriptions and rankings. While they vary with respect to their labeling and numbers of levels, a clear picture emerges of the need for a more clearly defined and differentiated job description. The early (1967) work of the Wisconsin State Department of Public Instruction, the University of Wisconsin Extension Division, and the Research and Development Center for Learning and Re-Education described several levels of aides and aide functions: (1) assistant teacher (tutorial); (2) instructional aide (arranging materials); (3) the supervisory aide (working with large groups of students); and (4) the clerical aide.

Paraprofessional Aides in Education (Rittenhouse, 1972) clearly delineates three basic types of aides employed in education—instructional, administrative and clerical, and community and social service. Within the instructional area the Bank Street College (New York, N.Y.)

personnel have further defined the several levels of duties to be performed by aides (see Rittenhouse in Figure 2). It is noted that these range from tasks of a routine or clerical nature to the teacher-intern. This excellent booklet differentiates between the spheres of authority for which each is responsible and clarifies where the roles of each may overlap. It could serve as the basis for a national paraprofessional paradigm.

A wide divergency among roles, expectations, titles, and, in some cases, expected levels of training becomes immediately apparent when one samples the available literature on the roles of teacher aides. An attempt to

organize some of this data appears in Figures 1 and 2. The varying professional titles are categorized according to the task competencies required of the teacher aide. Two special notations must be made. The material reported from the NEA Research Bulletin (1967) includes a listing of the 10 most important duties only; one may presume a total listing would be more inclusive of other teacher aide responsibilities. Also, the information reported from the *Teacher Aide Training Guide* (1970) and from the book by Beach (1973) were based upon the *Croft Leadership Action Folio No. 7* (1968).

Figure 1

TRAINING LEVELS OF PARAPROFESSIONALS

	No High School Diploma	High School Graduate	Some College Training	College Degree	Special Training Course or Workshop	Oral, Performance and/or Written Exam	Experience in School as an Aide
Blessing	TRAINING LEVEL UNSPECIFIED						
Wisconsin State DPI, UW and R&D Center			Assistant Teacher	Assistant Teacher			
Cruickshank				(Ideally) Teacher Aide	Teacher Assistant		
Esbensen	Teacher Aide	Teacher Aide	Teacher Aide		Teacher Aide		
Beach		Instructional Aide					
NEA Research Bulletin		Teacher Aide			Teacher Aide		
Teacher Aide Training Guide					Teacher Aide		
Rittenhouse		Instructional, Clerical and Admin. Aide					
Minneapolis Public Schools			Aide II-30 credits Assistant-60 credits			Aide I & II, Assistant	Aide II, Assistant

Figure 2 (Continued)

PARAPROFESSIONAL APPELLATIONS AND CONCOMITANT DUTIES DESIGNATIONS

	Bleeding	Wisc. State DPI, UW, R&D	Cruik- shank	Ebensen	Beach	NEA Research Bulletin	Teacher Aide Training Guide	Rittenhouse	Minneapolis Public Schools
NON-INSTRUCTIONAL (Continued)									
Help supervise cafeteria	Teacher Assistant	Supervisory Aide	Teacher Assistant	Teacher Aide	Supervisory Aide		Teacher Aide	Administrative Aide	Teacher Assistant
Order & return A-V materials					Teacher Aide		Teacher Aide		
Handle A-V equipment	Teacher Assistant	Instructional Aide		Teacher Aide	Teacher Aide	Teacher Aide	Teacher Aide	Instructional Aide	Teacher Aide I & II
Serve as liaison person between home and school					Teacher Aide		Teacher Aide	Community & Social Service Aide	Teacher Aide II
INSTRUCTION RELATED									
Correct student work					Teacher Aide	Teacher Aide	Teacher Aide	Instructional Aide	Teacher Aide I & II
Observe children and write reports					Teacher Aide		Teacher Aide	Instructional Aide	
Assist in preparing instructional materials	Teacher Assistant	Instructional Aide	Teacher Assistant	Teacher Aide	Teacher Aide		Teacher Aide	Instructional Aide	Teacher Aide I & II
Reinforce learning with small groups	Teacher Assistant	Instructional Aide	Teacher Assistant	Teacher Aide	Teacher Aide		Teacher Aide	Instructional Aide	Teacher Aide I & II
Tutor individuals		Assistant Teacher		Teacher Aide	Teacher Aide		Teacher Aide	Instructional Aide	Teacher Aide II
Listen to oral reading	Teacher Assistant			Teacher Aide	Teacher Aide		Teacher Aide	Instructional Aide	Teacher Aide I & II
Direct students in use of programmed materials	Teacher Assistant	Assistant Teacher		Teacher Aide	Teacher Aide		Teacher Aide		
Help children with special handicaps			Teacher Assistant	Teacher Aide	Teacher Aide		Teacher Aide		Teacher Assistant
Read and tell stories	Teacher Assistant			Teacher Aide	Teacher Aide	Teacher Aide	Teacher Aide	Instructional Aide	

A SPECIAL EDUCATION TEACHER AIDE TRAINING PROGRAM

The need for assistance for special education teachers as well as for teachers in the regular program has already been acknowledged, but teacher aides specially trained in working with handicapped children have been difficult to find. Personnel at Santa Fe Community College in Gainesville, Florida, recognized this need and sought a solution. In 1973 the Career Associate in Special Education, or CASE, program was funded by the Bureau for the Education of the Handicapped, HEW, the first program of its type to be funded at the community college level in the U.S. The CASE program is designed to prepare students for careers in exceptional child education. In the program a student may elect one of several alternatives. After completion of three quarters the student receives the Career Associate in Special Education Certificate, which qualifies him or her to work as a paraprofessional in an exceptional child classroom or in a similar exceptional child service program. The student may elect to complete the six quarter program, at which time he receives an Associate in Science or Associate in Arts degree from Santa Fe. This qualifies the student to work as the teacher's assistant in special education or to transfer to a college or university to complete a baccalaureate degree. While the program includes course work which will enable a student to pursue his academic work toward the acquisition of a teacher certificate in the area of special education, the CASE program emphasizes training and employment at a paraprofessional level.

The curriculum of the CASE program provides a foundation in the areas of child growth and development, psychology, teaching methods in reading and mathematics, children's literature, and social science, as well as competency-based courses in special education. Guest speakers with expertise in each area of exceptional child education are invited to speak to CASE students. Local special educators as well as nationally known leaders in the field conduct workshops to acquaint CASE students with local and national trends in special education.

The course work of the first quarter of the CASE program provides an overview of special education, ranging from the gifted child through the visually and auditorially handicapped, emotionally disturbed, orthopedically handicapped, learning disabled, and mentally retarded. Field trips to exceptional child educational facilities are an integral part of the first quarter learning experiences.

In the second quarter of the program students begin on-the-job training in special education classrooms in

addition to their Santa Fe class work. They spend eight hours per week in practicum experiences both in the public schools and in nearby residential facilities. Beginning with observations, the students gradually participate more in the classroom routine.

During the third quarter students develop additional skills through courses, as well as more extensive involvement in exceptional child classrooms. It is during their internships that CASE students participate in one of the unique aspects of the program. CASE students are assigned to a classroom along with senior year student teachers from the Department of Special Education at the University of Florida. Because of this joint placement, University of Florida students gain experience not only in teaching but also in planning classroom activities with the additional help of a teacher assistant with a special education background. Seminars related to the coordination of this process are conducted jointly by Santa Fe Community College CASE personnel and University of Florida Department of Special Education faculty.

The curriculum for the first year of the CASE program includes five specialized courses as well as a number of existing college courses. The schedule of courses for the one-year certificate program is listed in Figure 3.

Figure 3
CASE - First Year

Schedule of Courses - Term I

BE 100	The Individual in a Changing Environment	3
EC 150	Orientation to the Handicapped	3
ED 110	Orientation to Education	
	or	
EH 231	Children's Literature	3
PY 200	General Psychology	3
EH 100	The English Language	3
		15 hours

Schedule of Courses - Term II

EC 220	Seminar in Special Education	4
EC 151	Techniques for Facilitating the Development of Handicapped Individuals	3
PY 220	Study of Child	3
MS 100	Principles of Mathematics	3
		13 hours

Schedule of Courses – Term III

EC 221	Seminar in Special Education	4
EC 152	Techniques for Facilitating Development of Handicapped Individuals	3
MS 200	Mathematics for Elementary School Teachers	3
SE 100	The Sciences	3
ED 231	Reading and Language Arts Skills in the Elementary School	3
		16 hours

Knowledges and skills which are felt to be necessary for paraprofessional staff to exhibit in order to work effectively with exceptional children and with supervisory personnel have been identified and incorporated into the

competencies written for each of the five special education courses offered during the one year certificate program. Data gathered from the surveys conducted by the CASE project staff and reported upon later in the article of the teachers of special education and of Sunland Residential Training Centers for Retarded Children were helpful in identifying areas of emphasis for the training program. The competencies were written in a manner which are functional for the students and staff connected with this program. During the 1974-75 school year these competencies are undergoing field testing and revision. A sample from one of the seminar courses (EC 221) is included here (see Figure 4). This course, Seminar in Special Education Practicum, consists of six hours of weekly practicum experience in addition to an instructional meeting. Content in the curriculum for this classroom instructional phase of

Figure 4

**GENERAL COMPETENCY: Utilization of Math Materials
(NO. EC 221 - 6)**

CLASS	COMPETENCY	COMPETENCY CLASS DEVELOPMENTAL ACTIVITY	COMPETENCY CLASS ASSESSMENT PROCEDURE
I	1. Assist child in learning the concept of more and less, many and few, using concrete and abstract materials.	Pace Maker Arithmetic Readiness Program Part A – Work Sheets	At the end of the unit the student will be able to demonstrate proficiency in all Class I competencies by: direction of the supervising teacher, role playing in classroom, at practicum site, in video tape with another student, and/or in simulated classroom setting with classmates.
I	2. Assist child in learning to count in sequence to 10 using auditory, visual, and kinesthetic materials.	Make and utilize a number line, <i>One, Two, Three Learning to Count</i> : Hallmark Children's Books Ordinal Placement Board: Teaching Resources	
I	3. Assist child to name the numbers 1 through 10 using appropriate materials.	Color by number, <i>Arithmetic Instructional Activities</i> , Book 2: Love Publishing Co. <i>Count to Ten with Cowboys and Indians</i> : Milton Bradley	
I	4. Assist child in learning numerical values of numbers 1 through 10 by at least two methods and/or materials.	Place Value Abacus Enlarged Place Value Sticks	
I	5. Teach the writing of numerals 1 through 10 utilizing at least two methods.	Number Concepts Level I, Continental Press, Number Readiness Posters, Cuisenaire Rods Classroom Kit, or teacher-made materials.	

the seminar includes Ethics in the Classroom, Employment Opportunities for Paraprofessionals, First Aid, Work Area Skills, Reading Materials, and Utilization of Math Materials.

Students enrolled in the Special Education courses receive a complete set of the competency expectations. Instructors and doctoral students assist in enabling students to successfully demonstrate their attainment of the skills listed for each course.

A further component of the CASE program is the inclusion of doctoral students in special education from the University of Florida. These doctoral candidates participate in supervised college teaching which is apart from their parent school. They also become involved in the supervision of the practicum activities of the teacher aides. These supervisory activities are, in turn, monitored by CASE personnel and by the University of Florida Department of Special Education faculty.

Special Education Teacher Survey

The CASE program has just completed the first full year of programming. In the early months of the project it was

determined that, in order to make the program appropriate and meaningful for special education in the geographic area in which the majority of the aides might be expected to seek employment, the curriculum should include training in the skills which would be expected of them by the special education teachers in Florida. In an effort to obtain data on the levels of responsibility and the areas of proficiency expected of the aides, an initial survey was sent to the Directors of Exceptional Children in each of the 67 counties of Florida. Data from the 48 responses indicated 377 teacher aides were currently employed and a need existed for an additional 480 aides. More explicit data about the role expectancies were obtained from classroom teachers of exceptional children where aides were employed. This second survey, reflecting 209 returned teacher responses of the 375 questionnaires sent out, sought information about duties of the aides, instructional materials and audio-visual equipment utilized by aides, as well as the instructional areas in which aides participated in the classroom. As indicated in Figure 5, the duties of the teacher aides included both noninstructional and instructional responsibilities.

Figure 5

FREQUENCY OF PARAPROFESSIONAL DUTIES AS REPORTED BY 209 SPECIAL EDUCATION TEACHERS

	Percent			
	Every Day	Frequently	Seldom or Never	No Response
Conduct small group lessons	68	22	2	8
Conduct individual lessons	67	28	2	3
Lunch supervision	63	13	17	7
Clean-up	60	16	5	19
Discipline children	56	34	10	
Playground supervision	56	23	15	6
Duplication of materials	56	20	13	11
Correct student papers	50	26	14	10
Record attendance	38	22	25	15
Collect lunch/milk money	35	26	33	6
Test students	22	30	48	
Type	21	33	29	17
Record grades	18	26	50	6
Confer with parents	7	41	45	7
Write lesson plans	6	15	69	10

Figure 6 indicates the duties within curricular areas of the aides. As seen in Figure 6, most aides participated in the areas of language arts, mathematics, and reading on a daily basis.

The instructional materials and audio-visual competencies needed by the aides essentially covered the range of materials which might be expected to be utilized within a classroom. Specific reporting of this data may be found in Figure 7.

A further survey was made of the training supervisors of the five Sunland Residential Training Centers for the

Mentally Retarded. In these centers, where 248 paraprofessionals and aides are employed, the job titles include teacher aide, resident training instructor, and crafts instructor. The results of the responses indicated most paraprofessionals are used for academic purposes, psychomotor-developmental tasks, helping to develop social life skills, and in instruction designed to facilitate the acquisition of functional life skills. A preference was noted for a demonstration of audio-visual skills rather than expertise in the use of instructional materials.

Figure 6

**PARAPROFESSIONAL DUTIES WITHIN CURRICULAR AREAS
AS REPORTED BY 209 SPECIAL EDUCATION TEACHERS**

	Percent			
	Every Day	Frequently	Seldom or Never	No Response
Language Arts	54	33	5	8
Mathematics	53	26	6	15
Reading	51	28	11	10
Physical Education	36	23	15	26
Social Studies	23	35	21	21
Arts and Crafts	18	3		79

Figure 7

**COMPETENCIES NEEDED BY PARAPROFESSIONALS
IN THE USE OF EQUIPMENT AND MATERIALS
AS REPORTED BY 209 SPECIAL EDUCATION TEACHERS**

	Percent		
	Yes	No	No Response
Record player	95	1	4
Filmstrip project	93		7
Tape recorder	93	1	6
16mm projector	92	2	6
Overhead projector	90	3	7
Cassette recorder	89	2	9
Slide projector	86	.4	13.6
SRA materials	73	10	17
Video-tape equipment	66	13	21
Continuous Progress laboratory materials	52	15	33
System 80	35	17	48
Hoffman readers	32	13	55

Special Education Student Survey

One part of the third quarter program of the CASE curriculum includes the dual placement (in one classroom) of CASE trainees with college seniors participating in their internships in special education. Information concerning their understanding of the function of teacher aides was gathered from the college seniors prior to their internship

experiences. The survey forms completed by these seniors (and juniors) at the University of Florida were the same forms previously completed by Florida special education teachers.

In addition, the survey was administered to the 1974 fall term CASE students during the initial phase of their program. Data from all three groups of subjects may be found in Figures 8, 9, and 10.

Figure 8
FREQUENCY OF PARAPROFESSIONAL DUTIES
AS PERCEIVED BY SPECIAL EDUCATION TRAINEES

	Percent											
	Every Day			Frequently			Seldom or Never			No Response		
	CASE	JR.	SR.	CASE	JR.	SR.	CASE	JR.	SR.	CASE	JR.	SR.
Conduct small group lessons	24.1	15.4	55.6	75.9	73.1	30.6	0	7.7	0		2.8	13.8
Conduct individual lessons	24.1	17.3	68.1	69.0	67.3	25.0	0	7.7	4.2	6.9	7.7	2.7
Lunch supervision	69.0	36.5	81.9	27.6	42.3	15.3	3.4	3.8	2.8		17.4	
Clean-up	72.4	17.3	65.3	24.3	73.1	29.2	3.5	3.8	5.5		5.8	
Discipline children	17.2	13.5	55.3	55.2	67.3	31.9	17.2	17.3	11.2	10.4	1.9	1.6
Playground supervision	79.3	40.4	76.4	20.7	57.7	11.1	0	1.9	5.6			6.9
Duplication of materials	9.4	5.8	56.6	81.8	90.4	33.8	3.4	3.8	9.6	5.4		
Correct student papers	27.6	17.3	50.0	66.1	76.9	40.3	4.3	5.8	5.6	2.9		4.1
Record attendance	34.6	23.1	47.2	58.6	69.2	36.1	6.8	7.7	15.2			1.5
Collect lunch/milk money	27.6	19.2	56.9	65.8	65.4	23.9	3.4	13.5	10.4	3.2	1.9	8.8
Test students	0	3.8	31.9	72.4	61.5	31.9	24.1	30.8	29.2	3.5	3.9	7.0
Type	0	5.8	27.8	75.9	75.0	38.9	20.6	13.5	22.2	3.5	5.7	11.1
Record grades	20.7	19.2	34.7	69.0	69.3	38.9	10.3	11.5	25.0			1.4
Confer with parents	3.4	0	11.1	82.8	55.8	36.1	13.8	44.2	51.4			1.4
Write lesson plans	3.4	5.8	20.8	69.0	42.3	29.2	17.1	48.1	50.0	10.5	3.8	

Figure 9
PARAPROFESSIONAL DUTIES WITHIN CURRICULAR AREAS
AS PERCEIVED BY SPECIAL EDUCATION TRAINEES

	Percent											
	Every Day			Frequently			Seldom or Never			No Response		
	CASE	JR.	SR.	CASE	JR.	SR.	CASE	JR.	SR.	CASE	JR.	SR.
Language Arts	17.2	53.8	55.5	55.6	30.7	40.3	17.2	15.5	4.2	10.0		
Mathematics	10.3	44.3	51.4	58.6	34.6	34.7	24.1	17.3	12.5	7.0	3.8	1.4
Reading	27.6	69.3	65.3	51.7	17.3	30.6	13.7	13.4	4.1	7.0		
Physical Education	44.8	51.9	63.9	41.4	25.0	19.4	10.2	23.1	15.2	3.6		1.5
Social Studies	0	28.8	54.2		46.2	33.3		26.9	12.5	26.9	9.7	
Arts and Crafts	0	0	1.4	0	0	0	0	0	0			
ADDITIONAL COMMENTS												
Self-Concept	3.4											
Behaviorism				6.8								
Science							3.4					
Music			2.8									

Figure 10
COMPETENCIES NEEDED BY PARAPROFESSIONALS
IN THE USE OF EQUIPMENT AND MATERIALS
AS PERCEIVED BY SPECIAL EDUCATION TRAINEES

	Percent								
	Yes			No			No Response		
	CASE	JR.	SR.	CASE	JR.	SR.	CASE	JR.	SR.
Record player	96.6	98.1	100	3.4	1.9	0	0	0	0
Filmstrip projector	96.6	98.1	95.8	3.4	1.9	2.8	0	0	1.4
Tape recorder	96.6	100	100	3.4	0	0	0	0	0
16mm projector	96.6	96.2	97.2	3.4	3.8	1.4	0	0	1.4
Overhead projector	96.6	100	98.6	3.4	0	0	0	0	1.4
Cassette recorder	96.6	100	100	3.4	0	0	0	0	0
Slide projector	96.6	96.2	98.6	3.4	3.8	1.4	0	0	0
SRA materials	75.9	88.5	86.1	3.4	5.8	9.7	20.7	5.7	4.2
Video-tape equipment	96.6	88.5	88.9	3.4	7.7	8.3	0	3.8	2.8
Continuous Progress laboratory materials	75.9	67.3	79.2	10.3	23.1	12.5	13.8	9.6	8.3
System 80	55.2	53.8	56.9	6.8	19.2	12.5	38.0	27.0	30.6
Hoffman readers	55.2	71.2	81.9	6.8	11.5	5.6	38.0	17.3	12.5
Language Master	69.0	75.0	93.1	3.4	11.5	4.2	27.6	13.5	2.7

Discussion of Student Survey

Seniors in special education teacher training most nearly approximate the perceived rank order of duties provided by the special education teachers surveyed. The responses of the CASE students (in the "Every Day" category) are significantly positive, $r = .5737$, $p < .05$. This result is different from juniors in teacher training. No obvious reason for the difference exists, because both the CASE students and junior students are neophytes with little or no teaching experience.

Follow-up surveys of CASE students upon completion of the training program will provide insight into the utility of the program for classroom teacher/aide integration.

The instructional materials and audio-visual competencies needed by the aides essentially covered the range of materials which might be used in a classroom. Specific reporting of these data is contained in Figure 7.

Method

Questionnaires to determine the perceived ranked frequency of classroom duties and desired competencies within curricular areas and use of equipment and materials for paraprofessionals were completed by special education teachers (N=209), seniors in teacher training (N=72), juniors in teacher training (N=52), and participants in the CASE program at Santa Fe Community College (N=29). Data from the questionnaires were analyzed by calculating Spearman Rank-Order Correlation Coefficients, using the SPSS computer program (Nie et al., 1970), to determine the extent of the agreement between groups concerning perceived aide duties. Responses to the frequency of performance of duties were recorded in three categories: every day, frequently, and seldom or never. The results are presented in Figure 11.

The Community College as a Training Site for Paraprofessional Staff

The location of this training program is a community college. This allows students to benefit from an open-door admissions policy, low tuition (currently \$103.00 per quarter), an extensive counseling program, and a learning skills laboratory, as well as abundant financial aid and job placement services. Students who experience difficulty in assimilating all of the necessary information in their course work are assisted through tutoring provided by CASE staff or through other college-help programs.

The typical community college population includes students representative of a wide range of ages and levels of academic achievement. Programs of study available for students attempt to meet the needs and varying goals of the students by offering a complete program of freshman and sophomore liberal arts courses as well as many career and technical programs. In some instances courses are designated as either college transfer or occupation oriented. Thus, students have the option of going directly into employment in the area of their training or of continuing into an upper division college either immediately or at a later date. In this way the concept of a career ladder is an integral part of the college program.

A further advantage of including training programs in special education in a community college is the ready availability of the college to the residents of an area coupled with the responsiveness of the community college to the actual needs of that area. In this manner, the program can be designed to meet specific needs without the overriding need to present a program inclusive of all the characteristics of a four-year college program. Such a community college based program also lends itself to the

Figure 11

CLASSROOM TEACHER RESPONSES COMPARED TO OTHER GROUPS

Group	Everyday		Frequently		Seldom/Never	
	r	p	r	p	r	p
CASE	.5737	.013	.3562	.096	.6240	.006
Seniors	.7792	.001	.4131	.063	.8079	.001
Juniors	.3870	.077	.0252	.465	.5964	.009

training of personnel who are permanent residents. Thus, a goal of providing trained staff to assist in the educational processes of exceptional persons in any given region is more nearly accomplished.

While the community college must assume the major responsibility for training special education paraprofessionals, it becomes immediately obvious that a community college/university joint effort results in increased benefits to the students at the community college and the university as well as enriching the preparation programs of both. This means, however, a clearcut delineation of the role of the community college and the university as it relates to the respective preparation programs.

It may be that, at least in some instances, university personnel will experience some difficulty in assuming a subordinate role to that of the community college. It should be pointed out, however, that it is the community college that traditionally and from an historical point of view has evidenced both the willingness and expertise to provide prepared personnel that require less than a four year degree in order to meet the demands for community-based support services. It is suggested that this position was obtained both as the result of unwillingness of the university to participate in preparation programs that fall somewhat below a perceived level of "professionalism" as well as the inability of university personnel to conceptualize a system that has the potential for enormously enhancing the productivity of its own product.

The willingness, indeed eagerness, of the university to participate with the community college in the preparation of special education paraprofessionals at the community college level while at the same time training special education teachers at the university level is a commendable effort. The hope that at some point in the future the two will be placed in the same classroom and will immediately become a smoothly functioning, highly efficient team cannot be assumed. The requirement that the special education paraprofessional and the special education teacher practice in the classroom as a smoothly functioning, highly efficient team may only be reasonably assured if such is an objective of the training program for both.

Further, it may yet be shown that the mildly handicapped child in the regular classroom will be well served when the services of a special education paraprofessional are made available to the regular classroom teacher. Such will, perhaps, remain as mere speculation until the community college and the university, with mutual respect, enter into a preparation partnership.

It should be emphasized at this juncture that there is a clear demand that special education paraprofessionals be trained by community college faculty who themselves evidence both appropriate training and an experiential background in exceptional child education. Without this requirement, the usefulness, functional levels, and value of the paraprofessional must be held in question.

Further, one of the greater benefits accruing from the community college/university partnership results from the opportunity of the doctoral level university student to take an active part in the training of the paraprofessional. While the placement of the doctoral level student with the community college supervisor requires that the community college faculty member hold an earned doctorate in special education, the directing of the activities of the doctoral student, if such is to be a worthwhile learning experience, demands that level of appropriate training.

It is of some importance to the paraprofessional wishing to take advantage of the career ladder opportunities that the community college faculty be appropriately trained and experienced in exceptional child education. The Santa Fe Community College paraprofessional training program includes a faculty, the director and coordinator of whom both have earned doctorates in special education. All of the doctoral students have had classroom teaching experience in exceptional child education and are duly certified, and one of the doctoral students assigned to the project is on leave from the faculty of a major university. This makes it both advisable and efficient for the University of Florida to accept specific courses from the CASE program in lieu of similar university courses for those CASE students wishing to pursue a four-year degree.

Because of the need for close cooperation between the community college and university faculties in a joint preparation program, it is strongly emphasized that specific time and, when necessary, financial resources must be allocated in order to assure that time will be available for joint staff meetings. It is suggested that optimal coordinating and planning activities cannot be effectively carried out, if such is an additional responsibility of either of the existing faculties.

While it is yet to be determined what all of the possible contributions are that will be made to exceptional child education by the trained paraprofessional, the CASE program has demonstrated both the economical aspects and efficiency of a community college based training program. It is hoped that the continuation of the CASE program will provide sufficient data to demonstrate that not only do paraprofessionals make a difference, but that

trained paraprofessionals make a significantly greater difference in the education and training of exceptional boys and girls.

It is apparent that the concept of differentiated staffing in the instructional process of exceptional children has been implemented in a number of educational settings. Various kinds of training procedures have been designed to enable paraprofessional staff to master the skills necessary to perform their responsibilities successfully. The training programs and the tasks performed by auxiliary staff described here are representative of the more traditional and of some of the newer programs under way at this time. There is every reason to believe that additional formats for training as well as the assignment of additional responsibilities to the trained paraprofessional is within the realm of logical and creative use of additional sources of aid to help in the normalization process of exceptional children.

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ALERT

The Council for Exceptional Children's 53rd Annual International Convention will be held in Los Angeles April 20 - 25. Co-headquarter hotels will be the Biltmore and the Los Angeles Hilton.

For more information, contact:

The Council for Exceptional Children
1920 Association Drive
Reston, Virginia 22091

On August 13 - 17, the *Scandinavian Summer Seminars 1975* are presenting a topic of special interest—"Special Education in Scandinavia." This seminar and the nine others on the program will be conducted in English. For further information, contact:

Det Danske Selskab
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CLASSROOM FORUM

*Edited by Alwyn H. Holloway
Georgia State University &
South Dekalb Children's Center*

I have a student in my second grade class who is doing well in most academic areas but has very poor fine motor coordination and writing skills. What are some things that I can do to help him improve in such areas?

Unless a child has adequate gross motor skills, it is very difficult for him to write with a small pen or pencil within narrow spaces. Until a child can hold a pencil firmly and can trace simple patterns, he is not ready for pencil and paper activities and should be worked with on gross motor and chalkboard activities. It is felt that prerequisites to writing are adequate speech and reading (perception) as well as motor skills. Unless these are adequately developed, writing will be very difficult, and splinter skills might result. Since the child in question appears to be doing well in most areas, we can probably assume that he is ready to begin a different approach to writing. Suggestions as to remedial procedures and reinforcement will be discussed here.

There are many activities and devices through which writing may be made easier for the child. Many such materials can be teacher made, though there are many good commercial materials available. (A brief list of some commercial materials will be listed at the end of this section.) In almost all activities utilized, a multisensory approach can be employed. The student sees the pattern or form made (visual), he verbalizes the movements (auditory), and he performs the described movement.

Activities and training at the chalkboard utilize larger motor actions than are possible in desk activities. Such exercises help to encourage larger motor control to be established before expecting fine motor perfection. Ideas for chalkboard training are clearly stated by Kephart (1960) and Getman (1968). These sources give basic structure to chalkboard activities, but the teacher herself can devise many creative and fun activities that encourage

the development of motor skills. Activities at the chalkboard might include large scribbles, circles and double circles, horizontal and vertical lines, shapes, etc. Gradually as performance improves, the size is decreased and pencil and paper activities can be employed.

The typewriter can be used in addition to other means of training. It requires less fine motor coordination than writing per se, yet can serve to help improve fine motor skills. This is also a very motivating activity.

When the child is ready to begin training in writing, a decision must be made as to whether manuscript or cursive writing will be taught. For the child who has a disability in writing, cursive writing can have the following advantages: (1) less starting and stopping and, therefore, more fluid movements, (2) the whole gestalt or the word is felt since letters used are connected, and (3) fewer reversal problems. Cruickshank (1960) discusses the strokes involved in cursive writing and gives an order of presentation of letters that is very helpful.

When beginning to work with production of letters, the student should first deal with large forms of the letter, for example, one large letter per page. Strokes in the letter can be color cued. The Color Graph Cards by Petersen Directed Handwriting Systems is a good commercial device. Screening can be placed over the large letter form for the child to trace, verbalizing what is being done. Other methods of reinforcing the motor patterns in making the letters include the following:

1. Make *raised letters* by using white glue to outline a colored form of the letter. This makes the letter tactually stimulating. Beaded letters are available commercially. However, "glue" letters, or those made from sandpaper, serve much the same purpose and are much less expensive.
2. *Dot to Dot letters* can be prepared by the teacher. The student connects the dots to form letters. This should be repeated several times so that the movements can become automatic. The student should also verbalize movements.
3. *Clay pan* is a very helpful device. Plasticene clay (or other modeling clay) is spread out onto a cookie sheet. (Light heating enables easier spreading.) Letter form is sketched in the clay by the teacher initially. The student then uses a stylus, pencil, or pen to go over the sketched letter form until the bottom of the pan is seen. The resistiveness of the clay encourages the development and use of muscles.

4. *Sand pan* is very similar to the clay pan. A pan is filled with moist sand. The student makes the letter in the sand and repeats the process several times. *Finger painting* and other art media can be used in various ways to reinforce writing patterns.
5. The *size* of the pencil or pen being used by the student is important. Initially large pencils, pens, or magic markers should be used. A regular pencil or pen might be used if its circumference is enlarged by inserting a sponge from sponge hair curlers over the pencil. The surface could also be enlarged by placing modeling clay over the place where the student is to hold his pencil. This "crutch" can gradually be eliminated as fine motor skills improve.
6. The Lite-Brite (a commercial game or toy) can be used to help reinforce forms, patterns, or letters. The teacher punches out the letter to be emphasized on a blank paper, and the student then places the "lite" peg into its proper hole.

The student is never asked initially to form the letters by himself from recall. He may trace the letter, connect dots to form letters, then copies letters from a pattern at his desk. Letters can later be connected to form words in the same manner. The size of the letters is gradually reduced from one letter per page to several. Later when the student is expected to form letters between lines, certain cues can be used to make it easier for the student to perform adequately. A few such cues are listed below:

1. Large lined paper, perhaps with red lines on the outside edge to say "STOP!"
2. Tactile starting and stopping points, made by dots of glue or of sandpaper.
3. Masking tape can be placed on the outside edge of the top and bottom lines, so that the student has a cue for stopping. Glue can also be placed over the top and bottom lines for tactile stimulation.

The above mentioned activities are certainly not all inclusive. It is hoped that these suggestions will help encourage creative and sequential teaching.

Listed below are a few commercially available kits that help in sequential teaching of cursive writing:

Learning to Write

Educator's Publishing Service, Inc.
75 Moulton Street
Cambridge, Massachusetts 02138

Cursive writing is taught in a structured program using the face of a clock as a mnemonic device.

I Can Do! Handwriting Series for Children with Special Needs

The Zaner-Bloser Company
613 Park Street
Columbus, Ohio 43215

This includes teaches manuscript and cursive writing and prewriting exercises and chalkboard activities.

Dubnoff School Program 3

Teacher Resources
100 Boylston Street
Boston, Massachusetts 02116

The kit includes sequential teaching ideas for cursive writing as well as supplemental activities and games for reinforcing fine motor skills.

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