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PARAPROFESSIONALS IN INCLUSIVE CLASSROOMS:
WORKING WITHOUT A NET

by

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A Dissertation
Submitted to the Graduate Faculty
of the
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in partial fulfillment of the requirements
for the degree of
Doctor of Philosophy

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1998

This dissertation, submitted by Carole Anne Milner in partial fulfillment of the requirements for the Degree of Doctor of Philosophy from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.

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This dissertation meets the standards for appearance, conforms to the style and format requirements of the Graduate School of the University of North Dakota, and is hereby approved.

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PERMISSION

Title Paraprofessionals in Inclusive
 Classrooms: Working Without a Net

Department Teaching and Learning

Degree Doctor of Philosophy

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Carole Anne Melner

Date

4-8-98

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I dedicate this dissertation to the memory of my daughter,
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tasks. The culmination of my doctorate will celebrate
Serena's life and stand as a reminder of what she could have
achieved. With all my love, this is for you.

ABSTRACT

This qualitative study was designed to answer the question: "What happens when a paraprofessional is assigned to provide individual, direct service to a student with disabilities in an inclusive classroom?" Selection of the primary participants, paraprofessionals, was completed by securing the cooperation of three paraprofessionals identified as successful by the school principals and the special education teachers supervising the paraprofessionals. Three paraprofessionals were observed in inclusive classrooms one morning and one afternoon per week throughout the fall semester of 1997. Interviews were conducted with the 3 paraprofessionals, 3 special education teachers, 11 general education teachers of inclusive classes, 3 middle school students with disabilities, and 6 high school students with disabilities. The data obtained from the observations, interview transcripts, and diagrams drawn by interviewees were initially analyzed using NUD•IST, a qualitative analysis software package, to generate the themes. Analysis was completed with the use of word processing software as a slightly more automated version of the typical index card sorting and categorizing process used by qualitative researchers.

The two major themes arising from the study are deficits in communication and deficits in preparation/training for

inclusion. These deficits were most prevalent in the interactions, and lack of interactions, between paraprofessionals and general education teachers, and between special education teachers and general education teachers. The areas of communication deficit concern (1) paraprofessionals' roles, responsibilities, and preparation, (2) general education teachers' responsibility for paraprofessionals, and (3) interpretation of goals of inclusion. The deficits in preparation/training were noted in (1) appropriate use of paraprofessionals to foster social inclusion of students with disabilities, (2) opportunities for on-the-job-training and modeling for paraprofessionals, (3) inservice about inclusion for general education teachers, and (4) supervisory training for special and general education teachers.

CHAPTER I
INTRODUCTION
Pilot Study

The topic for this dissertation was selected as a result of a serendipitous course assignment in Qualitative Research Methods. A course requirement was to select a site and do a limited qualitative study. I chose to observe an inclusive classroom. I was able to locate a suitable site through a contact in a middle school. The site was a seventh-grade literature class that included several students with disabilities. One of the students received additional academic support in the classroom through the services of a paraprofessional. I observed one period a week for 12 weeks and interviewed the literature teacher, the paraprofessional, and a nondisabled student.

After several observations, I noticed that the student receiving the direct services of the paraprofessional seemed to have very limited involvement in the class and in the work he completed with the assistance of the paraprofessional. He did not get out necessary materials until directed by the paraprofessional or physically perform the academic tasks. The paraprofessional read the book orally, asked the questions on the study guides, supplied some of the answers, wrote the answers, and turned the paper into the teacher.

The literature teacher presented lessons and supervised students as they worked on their assignments. He directed off-task students back to work, answered student questions, and encouraged students. As he moved around the room, he stopped intermittently to speak to students. He did not stop to talk to the target student with disabilities, although he did stop to talk to the paraprofessional. His attention remained centered on the students who did not receive assistance from the paraprofessional.

The discipline standards of the class were relaxed. Students ate candy, chewed gum, socialized as they worked, frequently worked in groups and pairs, and were free to move around the classroom at will. The target student and other students, with and without disabilities, in close proximity to the paraprofessional were held to stricter standards of behavior. Socialization was more limited, as was movement. The nondisabled student who was interviewed was unaware of the paraprofessional's role in the classroom, although she knew that he always helped the target student.

Interviews with the literature teacher and the paraprofessional revealed how they viewed their relationship with each other and the target student with disabilities. When asked to draw a diagram of their relationships, they drew similar diagrams. Both of them depicted linear relationships with the paraprofessional in the middle position between the teacher and the student(s) with disabilities. The paraprofessional referred to his function as that of a "filter" of teacher inputs. Additionally, the

teacher related that during parent-teacher conferences he told the target student's mother that he felt he really did not know her child at all. He suggested that she speak to the paraprofessional about questions she might have.

Need for the Study

Conclusions that could be drawn from the pilot study concerning possible undocumented effects of paraprofessionals giving direct service to limited numbers of students in general education classrooms intrigued me. Some of the dependent student behaviors and facilitative paraprofessional behaviors were familiar. While teaching in an elementary resource room for students with learning disabilities and serious emotional disturbances, I had noticed the same student-paraprofessional behavior pattern. It was most likely to occur when the paraprofessional became strongly vested in the student's academic success. As her desire to help them complete their work correctly increased, so did her tendency to assume responsibility for more of the tasks. A corollary to her behavior was the tendency for the student to relinquish more and more responsibility.

As I watched the interactions in the literature classroom, I wondered if this behavior pattern was inherent to the strategy of placing paraprofessionals with students with disabilities in inclusive classrooms. If, in fact, it has a high potential to occur in this situation, then making educators aware of the potential could be a first step toward remediating it.

Purpose of the Study

The purpose of this study was to describe the interaction of successful paraprofessionals with students with disabilities and general education teachers in inclusive settings in terms of what they do to advance inclusion academically, socially, and physically. The practice of using paraprofessionals as the primary support for included students is growing throughout the nation. There are benefits to general education teachers as tasks can be delegated to the paraprofessionals. Paraprofessionals frequently modify assignments, provide individual assistance to students, supervise and instruct small groups, and provide a second pair of eyes, ears, and hands to the advantage of the class. If this inclusive practice is going to continue, and potentially increase in the future, then educators need to know how to recognize and structure successful implementation of the practice.

As with all jobs, some paraprofessionals will be effective and successful, while others will be ineffective and unsuccessful. A study targeting paraprofessionals viewed as successful by their supervisors will provide a look into the practice of utilizing paraprofessionals in inclusive classrooms under the most favorable circumstances possible.

Delimitations

The delimitations proposed include time and location constraints and selection criteria for paraprofessionals. The observations and interviews took place between the start of the fall semester of 1997 and mid December of 1997. The

length of the observation days were from first period to midafternoon, with some variation due to university responsibilities and scheduling conflicts. The site was a midwestern school district of a city with a population of approximately 50,000. The selection of the paraprofessionals was made from those employed at middle or high schools who were viewed as successful by the supervising special education teacher and the school principal.

Limitations

Limitations that may have affected this study are the time of year, the level of assistance needed by the target students, and the selection of the paraprofessionals. The observation/interview period included the beginning of the school year and two major holidays, which can be disruptive to the typical school procedures. The existence of a high need for physical assistance in some students with disabilities, even dealt with in an appropriate manner, could have increased the difficulty in distinguishing between necessary assistive paraprofessional behaviors and those that reduced the students' responsibility in participating in their own education. The final possible limitation was in the selection of successful paraprofessionals. Eliciting the opinions of the special education teacher and the principal probably eliminated those paraprofessionals who are unsuccessful, but may not have eliminated those who are average or marginal. The term "successful" is open to personal interpretation. A paraprofessional may be viewed as successful due to

longevity, cooperativeness with staff, personality, or other reasons not related to classroom practices.

Research Question

The research question posed for this study was, what happens when a paraprofessional is assigned to provide individual, direct service to a student with disabilities in an inclusive classroom?

This qualitative-style question is general, open, and allows unanticipated variables to be incorporated into the subsequent conclusions. The beauty of qualitative research is that it allows researchers to pose questions and seek out answers throughout the life of the study. In qualitative research, you stand in the middle of a life situation, take in everything around you, and process the information to discover the links that create the events. Qualitative methods make research an adventure of seeking the threads of patterns and allowing the story of the patterns to create the cloth of the study.

CHAPTER II
REVIEW OF THE LITERATURE
Origins of Inclusion

The 1975 Education for All Handicapped Children Act (EHA), or P.L. 94-142, marked the start of the federal mandate to provide appropriate education for all children. This entitlement act established minimum standards for eligibility, services, and procedural safeguards. Since that time, the EHA has been amended to add more disability categories, extend service to early childhood, and make changes to terminology, including altering the title to Individuals with Disabilities Education Act (IDEA). These acts brought children into the public school system who had never received public education services. Many of these students entered the periphery of the school system in segregated self-contained programs. One requirement of IDEA, the least restrictive environment (LRE), is that public schools are obligated

to the maximum extent appropriate[,] children with disabilities . . . are educated with children who are nondisabled; and . . . removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and

services cannot be achieved satisfactorily.

(34 CFR Part 300.550 [b][1-2]).

The philosophies of normalization, integration, the regular education initiative, mainstreaming, and inclusion have all moved the education of children with disabilities closer to the center of the public education experience and the general education classroom, consistent with the requirements of LRE. The implementation of inclusive practices should facilitate successful participation of the child with a disability in the general education classroom. In this study I investigated the practice of using paraprofessionals to implement the inclusion philosophy. To adequately cover the topic, many issues need to be examined including: the philosophies and definitions of the steps toward inclusion, teacher preparation for inclusion, successful implementation of inclusion, inclusive practices, paraprofessional issues, and associated psychological/behavioral patterns.

Normalization

The first step toward bringing people with disabilities into society as individuals with the same worth, feelings, and rights as the nondisabled was created by Bank-Mikkelsen, head of the Danish Mental Retardation Service in 1959. It was initially published by Nirje, director of the Swedish Association for Retarded Children. The concept was imported to the United States through the writings of Klug and Wolfensberger. The normalization principle, in its simplest form, is the "utilization of means which are as culturally

normative as possible, in order to establish and/or maintain personal behaviors and characteristics which are as culturally normative as possible" (Wolfensberger, 1972, p. 28).

The implementation of the principle of normalization in the United States was primarily focused on removing people with disabilities from large residential institutions. People who had been institutionalized were returned to the community and small group homes were established (Lloyd, Singh, & Repp, 1991). In the public school setting, normalization was instituted by moving students with disabilities into the community through field trips and school initiated vocational placements (Tashie et al., 1993).

Integration

The integration concept of the 1970s and 1980s specifically targets children with severe-profound disabilities. The intent was to involve these children with nondisabled peers in age-appropriate activities. The opportunities for interaction were usually limited to non academic activities such as art, physical education, extracurricular events, and unstructured socialization. Instructional activities were confined to the segregated special education classroom (Giangreco & Putnam, 1991).

Mainstreaming

There are three main differences between integration and mainstreaming. Children with any disability were mainstreamed rather than just those receiving services under severe-profound categories. Mainstreaming was accomplished in

all areas, including academics. Typically, students were mainstreamed into general education classrooms for content areas that were not at all, or minimally, affected by their disabilities. Mainstreamed students received instruction in special education classrooms for areas assessed as deficient. The final difference distinguishing it from integration and inclusion is that the child was expected to accommodate to the demands of the general education classroom and increasing the amount of time in that classroom was contingent on the performance and achievement of the child with the disability.

Regular Education Initiative

In 1986, the term "Regular Education Initiative" (REI) came into general use within the American educational system through a publication by Madeleine Will (1986), Assistant Secretary of Education. She cited four basic problems with the current system of special education and proposed solutions that included the education philosophy of REI. The REI called for eliminating pull-out programs based on categories, the eligibility process, use of labels, and the need for the child with a disability to meet the standards of the regular education classrooms without accommodations (Greer & Greer, 1995). Jenkins, Pious, and Jewell (1990) defined the REI movement in terms of classroom and school responsibilities. The school level responsibilities include authorizing building principals to allocate resources and eliminating duplication of resources created by categorical programs which place special educational students in special education programs according to the special education label rather than

students' need. The regular classroom teachers' assume primary responsibility to:

(a) educate all students assigned to them; (b) make major instructional decisions for all students; (c) monitor the progress of all students; (d) provide instruction that follows a normal developmental curriculum; (e) manage instruction for a heterogeneous population; and (f) seek, use, and coordinate assistance for all students needing additional services. The responsibility for all aspects of the public education of children, regardless of the presence of a disability, would remain with the regular classroom teacher. (p. 473)

The REI does not eliminate the federal mandate to identify children who qualify for special education services, or to provide services consistent with Individual Education Plans (IEPs). When the IEPs specify use of a normal developmental curriculum the regular classroom teacher would retain primary responsibility under REI. However, if the IEPs specified a non developmental curriculum the responsibility would shift to the special educators (Jenkins et al., 1990).

The fundamental difference between mainstreaming and REI is the question of ownership--who is responsible for the education of the student. Under mainstreaming, educating a child with a disability is the responsibility of the special education teacher. The REI philosophy requires a change in the role of specialists from experts whose plans are to be obeyed to consultants who suggest actions regarding

procedures, materials, and instruction which can be accepted or rejected by the regular education classroom teacher (Jenkins et al., 1990).

Inclusion

"The present inclusion movement is an extension of the REI, with somewhat less emphasis on the system and significantly more emphasis on students and programs" (Murphy, 1996, p. 471). A universally accepted meaning of inclusion has not been established. The most common differences are in terms of which children are to be included, the extent to which a child is included, and which supports must be in place. The difference in the meanings of the terms "inclusion" and "full inclusion" is nebulous. Some of the literature specifies "full inclusion" as a child remaining in the regular classroom all of the time, while others describe it as when all of the children with disabilities are placed in the regular classrooms all of the time (Stainback & Stainback, 1992). The term inclusion, without the "full" qualification, can be used synonymously for full inclusion and will be used interchangeably throughout this document.

A commonality of articles published about inclusive practices is that they start by clarifying their understanding of inclusion. Murphy's (1996) article on the implications of inclusion defined inclusion as

the total integration of all students who have special needs--particularly those with disabilities--into the age-appropriate, regular education classrooms of their community schools, regardless of the nature or degree of

the needs involved. Special education and support services are provided within the regular education environment--nearly always within the regular education classroom itself. (p. 471)

The assumptions made by inclusionists who believe that all students should be taught in regular education classes are that all children with disabilities have the same educational and social needs and learn best in the regular classroom (Hawkins, Harvey, & Cohen, 1994).

The REI and broadest version of the inclusion philosophy are similar in that advocates of both views state that all students have the right to be included in all aspects of school life with their peers, regardless of their disabilities. The only difference between the "all the students-all the time" inclusion stance and REI's philosophy is who is ultimately responsible for decisions about instruction. Adopting the broadest version of inclusion would require that the dual system of special education and regular education be eliminated (Greer & Greer, 1995; Lipsky & Garner, 1991; Stainback & Stainback, 1992).

The difference between the broad definition of inclusion and mainstreaming centers on the length of time students are in the regular education classroom.

Inclusion deviates from the more established concept of mainstreaming in its pointed rejection of any form of segregated placement of students. Whereas inclusion begins with the assumption that the entire population of students with special needs belongs in regular education

classrooms, mainstreaming selectively integrates exceptional students into such classrooms on a case-by-case basis, depending on the needs of each student and the demands of the regular education classes . . . Under mainstreaming, the degree of integration is to be increased only if measures of student progress and needs indicate that such increase is appropriate. (Murphy, 1996, p. 472)

A distinction between the integration philosophy and broadly defined inclusion was made by Tashie et al. (1993): Just as learning real skills in real places does not mean that students are "pulled out" of the regular classroom, neither does it mean that students leave the school building during the school day to participate in separate community-based instruction. When truly included, students with disabilities are educated all day in regular education classes alongside typical peers. Leaving school to participate in separate community-based instruction runs counter to this value. (p. 9)

Tashie et al. (1993) operationally defined inclusion by specifying three basic assumptions:

(a) All students are full-time members of a regular class(es) and receive all special education and related service support in the classroom. (b) Necessary supports for teachers and students have been determined, and are in place (e.g., equipment and materials, paraprofessional support, training opportunities,

consultation time). (c) Learning priorities for students have been established and communicated among all team members. (p. 36)

Another writer, Stein, (1994) operationalized inclusion by specifying basic requirements for including students with disabilities:

(a) Educated in age-appropriate regular classes at the school they would attend if they did not have a disability, (b) provided with special services within the regular classroom setting, (c) receive individualized programming, (d) provided with support personnel within the school, (e) provided appropriate adapted materials and instruction, and (f) facilitation of socialization with non-disabled peers by limiting the number of students with disabilities per regular education classroom to two or three students. (p. 22)

A more moderate view of inclusion is that inclusion does not necessarily encompass all students with disabilities. The view that individual students are selected to be included, receiving special education services within the regular classroom, is the basis for the development of an assessment tool to determine which students should be included. The Scales for Predicting Successful Inclusion (SPSI) is designed to predict which students with disabilities are likely to be successful in inclusive classrooms (Gilliam & McConnell, 1997). The development of this scale demonstrates that the developers have embraced the

stance that a child may not be capable of being included, much like the mainstreaming view of earning eligibility.

The Team Inclusion Program (TIP) is based on the "most students-all of the time" inclusion position. The criteria a student must meet to be selected for inclusion are (a) mildly disabled, (b) achieving no more than two grade levels below current grade placement, (c) an ability to adapt to the regular classroom, (d) highly motivated to succeed, and (e) parents and student are supportive of the program (Beckers & Carnes, 1995). This program is similar to mainstreaming in that continued inclusion is earned by the student. The TIP student performance minimum standards are (a) passing grades in the inclusive classroom, (b) achieving IEP goals and objectives, (c) meeting the general pupil progression requirements, and (d) achieving the curriculum objectives on objective cards (Beckers & Carnes, 1995).

Some authors define inclusion in terms of attitude instead of criteria (Friend & Cook, 1993; Roberts & Zubrick, 1993). Friend and Cook defined inclusion as "an educational philosophy based on the belief that all students are entitled to fully participate in their school community" and values each person as an important, accepted member of the school and community (p. 53). The message of inclusion is "I will meet you on your terms where you are" (Haas, 1993, p. 34). This philosophy of inclusion is not based on the geographic placement of the child (Haas, 1993; Sapon-Shevin, 1994/5).

To summarize the findings from the overview of inclusion definitions, these basic requirements are essential in all

operationalized inclusion definitions: (a) included students remain with their peers in general education classrooms throughout the school day or class period; (b) special services are rendered in the general education classroom; and (c) included students and general education teachers receive support from special education teachers or paraprofessionals.

Factors that are not common to all definitions are (a) all students, regardless of their disabilities, are included in general education classrooms throughout the school day; (b) teachers must welcome children with disabilities in their classrooms; (c) general education teachers have the ultimate responsibility for implementing the IEP; (d) a low ratio of children with disabilities is maintained in class enrollments; and (e) inclusion is an attitude, not a placement decision. All of the definitions reviewed can be classified under one of the following categories: (a) all students--all of the time, (b) most students--all of the time, and (c) everyone is valued--choice of placement a not an issue.

Teacher Preparation for Inclusion

Elementary teacher education programs commonly require some type of coursework about disabilities. For example, at the University of North Dakota, the B.S.Ed. with a major in elementary education requires a 300 level course entitled, "Education of The Exceptional Student", an introductory course on identification, characteristics and educational needs of children with disabilities ("UND undergraduate," 1995, p. 79). This course is also open to middle and

secondary education students and associated majors as an elective.

Not all teachers have taken coursework that deal with issues, concerns, and strategies for working with children with disabilities. A review of 12 studies completed between 1991 and 1995 concluded that many teachers did not feel prepared for inclusion and that their teacher preparation did not include intensive instruction on how to teach students with disabilities (Schumm & Vaughn, 1992). The adoption of inclusion throughout the public school system and the need for further instruction is reflected in the development of courses specific to implementation of inclusive practices. At the University of North Dakota Inclusive Methods is required in several master's programs. It is offered as an elective for graduate level teacher education students and related majors.

Textbooks used in inclusive methods courses typically cover topics such as curriculum, instruction, assessment, historical/legal/procedural issues, classroom management, and collaboration. Under the collaboration heading, these textbooks contain zero to four pages of information on the utilization of paraprofessionals in inclusive settings (Friend & Bursuck, 1996; McCoy, 1995; Meyen, Vergason, & Whelan, 1996; Salend, 1994; Vaughn, Bos, & Schumm, 1997). Frank, Keith, and Steil (1988) demonstrated a need to train preservice teachers in paraprofessional supervision procedures, an area in which teachers typically have had no instruction. "Role expectations for the teacher as

instructional manager and for the paraprofessional as a teaching assistant will require additional preparation" (Wadsworth & Knight, 1996, p. 166).

A survey of practicing general education teachers' perceptions and planning for teaching mainstreamed students found that 98% of teachers surveyed from K-12 rated their knowledge and skills in planning for general education students as excellent or good, while only 39% rated planning for mainstreamed students as excellent or good. Seventy-five percent of the teachers indicated a willingness to participate in inservice training to improve their skills in working with mainstreamed students (Schumm & Vaughn, 1992). The recency of this survey suggests that similar findings would be obtained if the survey was completed with general education teachers who identified their classrooms as inclusive. "Regular education teachers find themselves facing classrooms sprinkled, sometimes packed, with students who formerly would have been taught elsewhere by specially trained teachers" (Bullough & Baughman, 1995, p. 85).

Successful Inclusive Programs

The literature is replete with personal stories and reflections of students, parents and teachers who view the implementation of inclusion as successful (Bostick, 1996; Carr, 1993; Cohn & Latus, 1994; "Growing in Independence," 1995; Wilmore, 1994). Personal stories and reflections contain a mixture of positive and negative views. Teachers of inclusive classrooms have reported that the experience was positive and students could be successful in inclusive

settings (Afzali-Nomani, 1995; Dubrul, 1993; Farlow, 1996; Friend & Cook, 1993; Logan, 1994; Merina, 1994; Ross & Wax, 1993; Sanacore, 1996; York, Vandercook, MacDonald, Heise-Neff, & Caughey, 1992). Fisher, Sax, and Pumpian (1996) declared, "As a rule, children who are fully included experience tremendous success. However, we need new tools, strategies, and resources to support students placed in general education, heterogeneous class settings" (p. 581). A parent of a child with a hearing impairment expressed that inclusion could not meet the needs of all children with hearing impairments and that a "key ingredient to [successful] full inclusion is the participation of parents in every aspect" (East, 1994, p. 167). Other parents, teachers, and advocates spoke to legislators to request a "stop of abuses done in the name of including the disabled" (Gordon, 1993, p. 37). The abuses they cite are returning or 'dumping' students in general education classroom without support from special education personnel, and using the return of students to the general education classroom as a cost cutting measure.

More recently, qualitative and quantitative research has been conducted with teachers and students (Baker, Wang, & Wallberg, 1994). Madden and Slavin (1983), in an updated review, noted that research findings favored placement of students with disabilities in regular classes using individualized instruction, cooperative learning, and resource room assistance over traditional classes as long as the programs focused on self-esteem and emotional adjustment

as well as academic achievement. Madden and Slavin focused on the most prevalent research topics in inclusion: social acceptance, peer interaction, variables that may predict successful transition from school to work place, and meaningful outcomes (Baker et al., 1994).

A review of studies on the efficacy of inclusive strategies by Block and Vogler (1994) concluded that there has been "limited evidence to support [the success of] many models for inclusions such as curricular adaptations, instructional adaptations, and people resources" (p. 42). The Consultation and Paraprofessional Pull-in System (CAPPS) utilized paraprofessionals who were specially trained and supervised by a single resource-consulting teacher to drill and review with individual students and small groups in the back of general education classrooms (Welch, Richards, Okada, Richards, & Prescott, 1995). The program was designed to combine three methods of service delivery: special education consulting teacher, paraprofessionals in the general education classrooms, and service delivery in the regular classroom or pull-in programming. To implement this program, funds originally allocated for two additional special education teachers were reallocated to fund six paraprofessionals.

The results on the efficacy of the program were reported in terms of teacher attitudes, student outcomes, and numbers of referrals for eligibility consideration. The researchers reported that 77% of the teachers at the CAPPS school preferred the CAPPS program over the traditional program,

while 44% of the teachers at the comparison school, which did not have the CAPPS program, preferred the CAPPS model. The efficacy of the program in terms of student outcome demonstrated that there was a statistically significant positive difference in Grades 1 and 4 in reading scores and no significant difference in Grades 2, 3, and 5 at the CAPPS school in comparison to the control school. The final measure of efficacy, referral rates, was summarized in this way:

"One year after employing the model, the rate of referrals and eligibility at the project site were reduced by nearly a third. Meanwhile, the number of referrals at the comparison site nearly doubled" (Welch et al., 1995, p. 23). If the numbers of referrals and eligibility determinations are converted into percent of accuracy in referrals, the outcome can be interpreted in another way. The accuracy percentages show that the two years prior to the program and the program year were fairly stable for both schools with an average accuracy of 60.1% at the CAPPS school and 31.3% at the comparison school. Further, although the number of referrals at the comparison school doubled during 1992/93, the overall percentage of students classified as eligible for special education services at that school was at 7%, while the CAPPS school had a population of special education eligible students of 20%. The outcome of this study reinforces Block, et al.'s contention that inclusion efficacy studies are inconclusive.

Inclusive Practices

Hallmarks of inclusive practices are co-teaching, collaboration and consultation, alternative instructional strategies, curriculum and assignment modification, and use of support staff (Sapon-Shevin, 1994/5; Summey & Strahan, 1997). Examples of instructional strategies that can be useful in inclusive settings include flexible grouping, peer tutoring, cooperative learning, cross-age tutoring, and hands-on instruction.

Modifications can be grouped in four basic categories: (1) reinforcement of activity or content area; (2) adaptation of activity or content area; (3) development of parallel activity; and (4) change of final outcome, although the activity is the same (Hammeken, 1995). Curriculum modification is done in many ways. The modifications can be as minor as providing a photocopy of a text page to reduce copying and as major as changing the mode of information transmission by replacing the printed textbook with an audiotaped version. Assignments can be modified by reducing the length, simplifying the vocabulary, reducing copying, extending completion time, providing advanced organizers, anticipation guides, graphic organizers (Horton, Lovitt, & Bergerud, 1990), and allowing use of technology (Chalmers, 1992; Hammeken, 1995).

There is a plethora of materials available to provide teachers with modification ideas (Beninghof, 1993; Chalmers, 1991; Chalmers, 1992; Hammekin, 1995; Kelly, 1980; Murphy, Meyers, Olesen, McKean, & Custer 1996; Pearce, 1996; Schumm &

Vaughn, 1995; Vaughn et al., 1997). The use of adaptations has been the subject of several studies in which general education teachers were asked which adaptations they would be willing to make for mainstreamed students. Schumm and Vaughn (1991) found the least feasible items included communication with mainstreamed students, changes in materials, use of computers, and individualized instruction. Adaptations considered most feasible related to the social or motivational well-being of the student which required the teacher to make little adjustment of curriculum or instruction. The findings of another study were that teachers view the most feasible adaptations as providing reinforcement and encouragement, establishing a personal relationship with the mainstreamed student, and involving students with learning disabilities in whole-class activities (McIntosh, Vaughn, Schumm, Haager, & Lee, 1993, p. 250). These two studies conflict, since the 1991 study found communication with mainstreamed students to be one of the least feasible adaptations, while the 1993 study listed a personal relationship as feasible.

The use of support staff in the form of paraprofessionals has been an increasingly common way to meet included students' needs (Murphy, 1996). This inclusive practice allows the general education teacher to delegate the tasks of individualizing instruction and modifying assignments to the paraprofessional.

Paraprofessionals

Generally, the term "paraprofessional" in the school setting refers to people employed to assist teachers and students in the classroom. They have been called teacher assistants, auxiliary personnel, classroom aides, clerical aides, education associates, education aides, instructional aides, teacher aides, paraprofessionals, and classroom volunteers (Cohen, 1982; Glen & McCoy, 1981; Lombardo, 1980). A general definition of a paraprofessional is an individual who works directly under the supervision of certified personnel and performs clerical and instructional duties (Glen & McCoy, 1981; Pickett, 1990). Harris and Schultz (1986) divided the roles of paraprofessionals into two distinct classifications: teacher aides and teacher assistants. The teacher aide role is to perform clerical tasks, prepare materials for instruction, correct student work, supervise during recess, lunch, and transition periods, and collect observational data. The teacher aide has no authority to make decisions and should be under the direct supervision of the teacher or other designated professional.

The other classification, teacher assistant, assumes greater responsibility and has some decision-making authority. Their roles are to provide direct support to the teacher by assuming some direct instructional responsibilities, to assist in instructional planning, and to deal with crises and behavior management problems (Harris & Schultz, 1986). Lombardo (1980) added a third category, associate. The associate would take more responsibility and

require less supervision by the professional. In school systems, a generic term such as "aide," "assistant," or "paraprofessional" is used for all persons employed to assist teachers in the classroom performing tasks that range from clerical to direct instruction of groups of students.

The use of unlicensed educators in educational settings is a relatively new phenomenon that began in the 1950s. One of the first nationally organized programs to train and employ teacher assistants occurred during the Work Projects Administration (WPA) in 1949. At that time, the role of teacher assistant or teacher aide included clerical, housekeeping, and monitoring chores (Pickett, 1990). The employment of paraprofessionals grew following an experiment in which the Ford Foundation funded the utilization of paraprofessionals in schools in 1953 at Bay City, Michigan. This program focused on placing paraprofessionals in overcrowded classrooms to provide teachers with clerical help (Lombardo, 1980). Federal funding was provided through Title I of the Elementary and Secondary Education Act of 1965. This legislation allocated \$75 million to employ teacher aides in schools (Lombardo, 1980).

The primary role of the paraprofessionals remained clerical until the late 1970s. The job title and responsibilities gradually transformed to the current paraprofessional model. By the 1980s, paraprofessionals were used more often in tutorial roles to meet the needs of individual students than as clerical assistants or non

instructional supervisors during lunch and recess (Wadsworth & Knight, 1996).

The first documented use of paraprofessionals with students with disabilities was in 1957 (Frith, 1982). In 1986, a survey found that more than 80% of daily contacts students with disabilities had with adults in educational settings were with paraprofessionals (Karan & Knight, 1986). The current paraprofessional model has extended the duties of these individuals to include monitoring inappropriate behavior, individual and small-group instruction, use of computers, assistance in skill generalization, and development of independence in mobility (Wadsworth & Knight, 1996). The need for paraprofessionals is expected to remain high. The Bureau of Labor Statistics listed teacher aides/education assistants as one of the occupations that are projecting a significant increase by the year 2005 ("Where will the jobs," 1997).

There are limits to what should be expected from a paraprofessional. They should not be expected to diagnose children, prepare lesson plans, substitute for a certified teacher, or be solely responsible for the classroom (Yatvin, 1995). The current trend of placing students in inclusive classrooms with paraprofessionals providing primary support brings forth another limitation for consideration. Glen and McCoy (1981) cautioned that paraprofessionals should not be placed in the position of having the primary responsibility to work with the most difficult children for most of the day nor should they be expected to perform tasks that are

parallel to the teacher's responsibilities (McKenzie & Houk, 1986).

A parallel to educational paraprofessionals exists in the health field. Barter and Furmidge (1994) report an increased emphasis on cost containment has heralded a reintroduction of unlicensed assistive personnel, also called nurse extenders or nurse assistants, into direct patient caregiving. There is concern that delegating care to an unlicensed assistant may jeopardize patient health as a few studies found that hospitals with low nurse-patient ratio have slightly elevated mortality rates (King, 1995). Although, in general, up to 30% of a patient's care can be delegated to the unlicensed assistive personnel, the delegation does not release the supervisor from ultimate responsibility for the care given.

The nurse who must supervise from off-site has a particular duty to assess the knowledge, skills, and judgement of the unlicensed assistive personnel before assignments are made. Regular supervisory visits and impeccable documentation will help the registered nurse ensure that care provided by assistive personnel is adequate. (Barter & Furmidge, 1994, p. 38)

The unlicensed assistive personnel have frequent contact with the patients and may be the most likely to see changes in medical conditions. An intensive care nurse stated, "Many [unlicensed assistive personnel] don't even know to bring an unstable vital sign to somebody's attention" (King, 1995). Just as the unlicensed assistant may not recognize the need

for medical intervention, a paraprofessional in an inclusive classroom may not recognize the need for an educational intervention. One general education teacher, quoted in a study concerning teacher readiness for inclusion, stated, "Our least educated people are being used to work with your neediest population" (Ross & Wax, 1993, p. 8).

Paraprofessional Preparation

A paraprofessional, by definition, does not possess the academic degrees associated with professionals. The training and certification requirements of education paraprofessionals vary from state to state. A 1979 survey of state education agencies found that 86% of the 44 states that responded did not have certification standards for paraprofessionals (Frith & Lindsey, 1982). Paraprofessionals employed in educational settings have been known to possess a wide range of educational training and education-related experiences. Some paraprofessionals do not even have a high school diploma or equivalent, while others may have a college degree (Frith, 1982; Gardner, 1975; Lombardo, 1980; Morehouse & Albright, 1991; "Who is a paraprofessional," 1990). Generally speaking, local school districts seem to be able to unilaterally establish the minimum requirements of a paraprofessional (Lombardo, 1980). One survey listed special education aides (paraprofessionals) as a separate category and found that 90% of the responding states did not specifically certify the position.

Education and experience are only part of what is believed to help paraprofessionals perform at a satisfactory

level. Authors agree that paraprofessionals need to have different competencies, depending on the job requirements of their educational setting (Barres, 1993; Gardner, 1975; Harris & Schultz, 1986; Lombardo, 1980; Lund, 1981; McKenzie & Houk, 1986; Pickett, 1990). However, general criteria for being successful as a paraprofessional can be formulated from research. A survey in 1977 rated adaptability and dependability as the most important personal characteristics in becoming a successful paraprofessional. Secondary characteristics predicting success were tolerance, cooperativeness, versatility, and resourcefulness (Glen & McCoy, 1981).

Lund (1981) identified several attributes associated with successful special education paraprofessionals. He determined successful paraprofessionals are

(a) self-motivated, (b) confidential, (c) appreciative of positive behaviors, (d) considerate, (e) competent with instructional approaches, (f) knowledgeable about handicapping conditions, (g) active in pursuing professional growth, (h) cognizant of the complexities of good teaching, (i) aware of due process procedural safeguards, and (j) positive in their feelings about making a contribution. (p.4)

The characteristics that were noted in unsuccessful paraprofessionals included (a) dependency on teacher for directions; (b) gossiping behavior; (c) lack understanding of students with disabilities; (d) view themselves as "mini-teachers"; (e) devalue the importance of the IEP;

(f) do not like the requirements of the job; and (g) have poor skills in child management, communication with the teacher, and instructional methods (Lund, 1981). Awareness of characteristics that predict successful paraprofessionals can aid in selecting paraprofessionals to facilitate inclusion in general education classrooms, as their presence adds another interacting element in the classroom experience.

Classroom Interaction

The placement of paraprofessionals within classrooms, working directly with children instead of completing clerical tasks, may change the interaction patterns of teachers and students. Researchers have investigated interaction patterns between teachers, students with disabilities, and students without disabilities. In a comparison of teacher interactions with learning disabled first graders and their nondisabled peers, criticism, warnings, and process feedback comprised the teacher-LD exchanges to a greater degree than the teacher and nondisabled peers' interactions. Feagans and McKinney (1981) found that teacher interactions with students with learning disabilities were more likely to be about student behavior than academics. In 1982, Dorval, McKinney, and Feagans asserted that the general education teachers initiated more frequent interaction with learning disabled students than with average achieving students, but the content was primarily associated with inattentiveness and rule infractions (Schumm et al., 1995; Siperstein & Goding, 1985; Slate & Saudargas, 1986).

Attempts by students with learning disabilities to initiate interaction were more likely to be ignored by teachers and peers than interaction initiated by nondisabled peers (Byran, 1974). Roberts and Zubrick (1993) found the rejection of students with disabilities was overwhelmingly related to disruptive behavior as perceived by peers. A first-grade mainstreamed student was found to be at risk of exclusion because he performed different activities, needed extra help, and used materials other students associated with play, while they did academics (Schnorr, 1990).

Research suggests general education teachers are intolerant of extreme deviance, especially behavioral deviance, in their classrooms (Gersten, Walker, & Darch, 1988), so when a paraprofessional is assigned to work primarily with such a child, the general education teacher's low tolerance level and tendency to focus on behavior management issues could foster a greater reliance on the paraprofessional as the main contact for the child. This situation could impede the development of a relationship between the teacher and the student with disabilities. Zigmond and Baker (1995) stated that "paraprofessionals, where available, assumed a significant level of responsibility in teaching, monitoring, and adapting instruction for students with learning disabilities" (p. 177).

The involvement of the paraprofessional in exchanges between teachers and students happens even in situations in which the paraprofessional has a very limited role.

Paraprofessionals hired as sign language interpreters for children with hearing impairments act as the child's voice and ears in the inclusive classroom. Their jobs require that they only repeat, in the appropriate mode, exactly what the speakers say. This can be more difficult in practice than in theory. One sign language interpreter said, "When I'm interpreting, I try to leave my feelings at the door. But sometimes that's difficult, and I find myself saying, 'Excuse me, I need to interject here. You're missing each other's point'" ("A bridge between," 1993, p. 38).

Psychological and Behavioral Patterns

Bowen's family systems theory of triangles provides a vehicle to examine the relationships among the general education teacher, paraprofessional, and student with disabilities. The Bowen triangle is a structure created from a reactive, emotional process involving three people.

"Triangles are simply a fact of nature. To observe them requires that one stand back and watch the process unfold" (Kerr & Bowen, 1988, p. 134). Triangulation is the process that happens between the members in the triangles (Hansen & Okun, 1984).

Bowen's triangulation theory states that a basic mechanism, anxiety, creates triangulation (Bowen, 1978). A parent-child-teacher triangle is usually centered on control and authority issues (Hansen & Okun, 1984). In the inclusive classroom, the three people most likely to comprise the triangle are the general education teacher, the paraprofessional, and a student with disabilities. Six other

possible triangles are the (a) student with disabilities, parent, and general education teacher, (b) student with disabilities, parent, and paraprofessional; (c) student with disabilities, peers, and teacher; student with disabilities, peers, and paraprofessional; (d) student with disabilities, special education case manager, and general education teacher; and, (e) student with disabilities, special education case manager, and paraprofessional. The general education teacher-special education teacher-paraprofessional triangle may also include added difficulties due to role conflict as they may not have a clear idea of the scope and responsibilities of their respective jobs (Bacharach, Bamberger, & Mitchell, 1990). The majority of the pressure may be on the paraprofessional who, in essence, has two masters. Role conflict is defined as the "simultaneous occurrence of two or more sets of pressures such that compliance with one would make compliance with the other more difficult" (Kahn, Wolf, Quinn, Snoek, & Rosenthal, 1964, p. 15). The combination of unclear roles and potentially conflicting directions may increase the tension in the triangular relationship. Within this triangle, territoriality may present problems as the paraprofessional's job always takes place in others' rooms. Kane (1983) characterized territoriality as a "zealous guarding of function . . . which extends to the use of space, equipment, tests, [and] procedures" In the case of the special education paraprofessional, the territoriality may extend to the ownership of the students with disabilities.

Bowen's theory states that the triangle is "an automatic, emotional response that is influenced by two factors, the degree of differentiation of self and the level of anxiety in the . . . system" (Miller & Winstead-Fry, 1982, p. 27). The differentiation of self is the degree to which a person can make decisions and act, based on rational thought rather than emotional responses. The differentiation of self within the triangles could be applied to the classroom-family system to understand the actions of the members of the triangle. The triangle provides a framework with which to define function of the relationship in terms of what, how, when, and where.

The strategy of placing a paraprofessional in the inclusive classroom may foster changes in student functioning. The potential outcomes of the relationship system could be examined by investigating the extremes of learned helplessness and empowerment.

Learned helplessness, in the educational setting, is a tendency to be a passive learner who depends on others for decisions and guidance (Lokerson, 1992). Students with disabilities, facing continual academic failure and receiving constant assistance from teachers and paraprofessionals, are in a situation that may promote the development of learned helplessness. Ferguson (1995) reported "students walking through hallways with clipboard-bearing adults 'attached' or 'velcroed' to them or sitting apart in classrooms with an adult hovering over them," unlike any others in the class (p. 284). The entire system of education, which places children

under the guidance of professionals or experts in pedagogy, creates the disabling nature of professionalism (Szymanski & Trueba, 1994). Szymanski and Trueba (1994) stated that "societal institutions that have been invented to assist . . . individuals can also serve to oppress those individuals and professionals are in pivotal positions to facilitate empowerment or erect additional barriers" (p. 15). Illich, Zola, McKnight, Caplan, and Shaiken (1977) expressed the helpless feelings of the person receiving professional services:

My world is not a place where I do or act with others. Rather, it is a mysterious place, a strange land beyond my comprehension or control. It is understood only by professionals who know how it works, what I need and how my need is met. I am the object rather than the actor.
(p. 87)

The characteristics of learned helplessness that can be observed in students with disabilities are passivity, giving up easily, procrastination, decreased problem-solving ability, frustration, lowered self-esteem, and depressed mood (Maier & Seligman, 1976).

Empowerment is at the other end of the spectrum of possible student behavior outcomes. Price (1990) stated, "The greatest service possible to individuals with severe disabilities would be to increase their independence, or ability for self-determination, to the fullest extent possible" (p. 15).

A program at one school was designed to empower students experiencing difficulty with the education system. The results demonstrated that students could be given the tools to empower themselves through the actions of professionals and non professionals of the education system. Students were given academic instruction and assistance without eliminating choice and personal responsibility (Lamperes, 1994).

Recognition of the potential disempowering effects of professional/paraprofessional support is the basis of some New Hampshire schools' policy of "aid and fade" as they constantly assess the amount and type of support that is appropriate for each student (Tashie et al, 1993).

CHAPTER III
METHODS AND PROCEDURES

The Question

What happens when a paraprofessional is assigned to provide individual, direct service to a student with disabilities in an inclusive classroom?

The initial step in designing a research project is to clearly state the research question. The question, and how it is stated, facilitates determination of the appropriate approach to employ to answer the question. Questions best answered through statistical, or quantitative, methods are those that state questions in terms of differences between groups, relationships between variables, or effects of one or more variables on another variable or variables.

The research question for this study is stated in terms of "what happens when." It does not hypothesize a difference between groups (i.e., students with disabilities and those without disabilities), a relationship between, or effects of one or more variables (i.e., presence of paraprofessional and increased achievement of students with disabilities). The open ended research question calls for procedures used in qualitative methods which allow observation and examination of events as they occur without a specific, anticipated hypothesis.

Another important task is to clearly define the terms used in the research question. The clarification helps in determining the criteria for selecting subjects and settings. Four terms, "paraprofessional," "direct service," "student with disabilities," and "inclusive or inclusion," are defined as follows:

- A paraprofessional is an individual employed to assist teachers and students. Preparation and training is typically conducted through inservice and on-the-job training. Minimum requirements for the position are a high school diploma or GED and a desire to work with children.
- Direct service is the delivery of remedial or compensatory instruction provided through direct contact with special education personnel. Conversely, indirect service, or consultation, is direction provided to a teacher by special education personnel without direct contact between the student and the special education personnel.
- A student with a disability or disabilities is any school age child or youth who meets the criteria established by federal definitions of disabling conditions and has an Individual Education Plan (IEP) on file.
- Inclusion is assumed to be implemented when:
 - (1) School administration and faculty define their program as inclusive, and (2) students with disabilities receive at least part of their instruction within the

general education classroom with special education support in the form of modifications of general education class assignments, requirements, materials, and personnel support to the extent necessary for the student to be successful as viewed by teachers and parents.

The definition of inclusion can be further honed in terms of three major features of classroom involvement: academic, social, and physical.

- Academic inclusion is occurring when the academic requirements are modified in such a way that the student with disabilities profits from the classroom instruction and performs academic tasks much like nondisabled peers in form, substance, and outcome.
- Social inclusion is occurring when the student with disabilities interacts with nondisabled peers in ways nondisabled peers interact with each other.
- Physical, or proximal, inclusion is occurring when the student with disabilities is seated within the standard configuration of seating of nondisabled peers in that classroom (i.e., within the rows or tables as established).

Entering the Field

In the spring of 1997, I submitted a request to conduct research in middle schools and high schools to the superintendent. Approval was given for research in the school system during the fall semester of 1997. The approval specified that no more than 21 students would be interviewed.

The second week of the public school fall semester, I delivered letters, with stamped, self-addressed return envelopes, to the principals and special education teachers of two middle schools and two high schools (Appendix A). Lists of special education teachers who supervise paraprofessionals were provided by the school secretaries. The letters requested identification of three paraprofessionals viewed as successful in inclusive settings. No definition was given for the term successful. Recipients of the letters used their own understanding of successful in nominating paraprofessionals. Since the letters were sent at the beginning of a school year, paraprofessionals listed by recipients were likely to have at least one year of experience in their positions.

Using the selection process described by Olson, Chalmers, and Hoover (1997), I generated a list of paraprofessionals nominated by both the principal and special education teacher of each school. This list consisted of five paraprofessionals, three at the middle schools and two at the high schools. I contacted all five and received three tentative affirmative responses. After further discussion, I determined one of the high school paraprofessionals would not fit the parameters of the study as she only assisted students in special education classes, not inclusive settings. The other two paraprofessionals, one at a high school and the other at a middle school, agreed to participate and signed informed consent letters (Appendix B).

To locate a third paraprofessional, I repeated the nomination process with a school system at a nearby city, after receiving permission from the superintendent. A third paraprofessional, working at a middle school, agreed to participate. The final list of participating paraprofessionals included (identified by pseudonym): Jessica, a paraprofessional of a middle school class for students with mild/moderate mental retardation; Marsha, a paraprofessional of a middle school class for students with serious emotional disabilities; and Sharon, a paraprofessional of a high school class for students with serious emotional disabilities. (Note: All participating paraprofessionals were female as no males were nominated.)

At each site, prior to beginning observations, I introduced myself to the principals and special education teachers who supervise the paraprofessionals selected. I met with each paraprofessional and obtained signed informed consent forms (Appendix B) and the paraprofessional's daily schedule.

At one of the Marsha's middle school, I was able to introduce myself to the individual classroom teachers by attending one of their team meetings. I explained what I would be doing in their classrooms and requested permission to observe and interview them. They all agreed and signed informed consent forms. One teacher on Marsha's schedule was not part of that team, so I obtained permission to observe in her room during the first time I accompanied Marsha to that room.

The two other school sites do not have team meetings, so I obtained permission to observe when I observed each teacher for the first time. The teachers were told that my continued presence in their classroom was contingent on their permission.

Collecting Data

Observations

Throughout two thirds of the fall semester, I observed each paraprofessional one morning and one afternoon per week, barring scheduling difficulties and paraprofessional absences. Observing in half-day units increased the amount of travel necessary to maintain a Tuesday through Thursday observation schedule but reduced possible stress on the paraprofessionals by decreasing the length of each observation.

The weekly rotation was dictated, in part, by Jessica's schedule. Tuesday and Thursday afternoons Jessica accompanied students to the YMCA for swimming sessions. Therefore, Wednesdays were the only afternoons I could observe her in inclusive classrooms. I observed Jessica on Tuesday mornings and Wednesday afternoons. Tuesday afternoons and Thursday mornings I observed Sharon. The final paraprofessional, Marsha, was scheduled for Wednesday mornings and Thursday afternoons. When I had prior notice of schedule changes due to special events, I was able to continue observations by modifying the site schedule.

While observing, I attempted to be as unobtrusive as possible. The paraprofessional and I generally arrived after

most of the students so I was able to sit at the periphery of the classrooms while remaining close to the paraprofessional. Whenever possible, I stayed within hearing distance of the paraprofessional. The desire to hear interactions between the paraprofessional and individuals in the classroom had to be balanced with the need to be inconspicuous. I remained in one place in the classrooms, unless I believed I could move around without distracting or disrupting the class.

During the observations, I focused more on the interactions and behaviors of paraprofessionals, students, and teachers than the academic content of the course. One way I was able to remain focused was to refer back to narrow, direct questions related to the research question. The questions focus primarily on observable events related to inclusion issues of academics, socialization, and physical proximity. The focusing questions were

- In what way(s) do the paraprofessional and general education teacher facilitate socialization between the student with disabilities and the nondisabled peers?
- In what way(s) do the paraprofessional and general education teacher facilitate academic inclusion such that the activities and outcomes are comparable to the nondisabled peers?
- In what way(s) do the paraprofessional and general education teacher facilitate the physical proximity of the student with disabilities to nondisabled peers?
- What pattern of interaction exists between students with disabilities and nondisabled peers?

- Are students with disabilities' behaviors analogous to nondisabled peers?
- What pattern of interaction exists between students with disabilities and the general education teacher?
- What pattern of interaction exists between students with disabilities and the paraprofessional?
- What pattern of interaction exists between the teacher and the paraprofessional?

The focusing questions were also used during the interviews. I asked, "What do you do to facilitate the inclusion of students with disabilities academically, socially, emotionally, and physically?" The responses led me in different directions and what became significant were not the answers to the questions, but the implications of those answers compared to actions observed in the classrooms. These questions are not answered by this study but facilitated the development of themes.

I used an AlphaSmart Pro to take field notes. The AlphaSmart is similar to computer keyboards in size and weight but is cordless and has a four line LCD text screen above the function keys instead of a full screen. Up to 64 pages of ASCII text can be saved in the built-in memory. The electronic tool's only function is to save text until it can be downloaded into a word processing program in a computer. I chose to use the AlphaSmart instead of a laptop computer because it was less distracting for students as it does not have an upright color screen or the potential for use with games. It was also less expensive than the two laptop

computer batteries required to keep a computer functioning eight hours. Use of the AlphaSmart allowed me to take notes continuously, by touch typing, without looking away from what was happening.

After each day of observation, I connected the AlphaSmart to my computer and downloaded the text into a word processing document. Once in the word processor, I ran a spell check as the initial step to clean up the basic notes. To elaborate the field notes, I went through the notes a second time, adding words, phrases, and sentences to recreate the events of the day as completely as possible. I also downloaded a file of thoughts to add to a journal of areas to investigate during interviews or data analysis.

Interviews

The initial interviews with the paraprofessionals were completed informally while changing classes, before, and after observations. They were cooperative in divulging information about their work histories, academic backgrounds, and personal lives. The formal interviews with the paraprofessionals were problematic to schedule, because they did not have any time off during the day (other than their thirty minute lunchtimes). Jessica did have free time Tuesday and Thursday afternoons when her charges were supervised by lifeguards, so I interviewed her at the YMCA. Marsha agreed to be interviewed after school hours, and Sharon's supervising special education teacher substituted for her so she could be interviewed during the school day. In most cases, formal interviews with students, teachers, and

paraprofessionals were scheduled during the school day. By the end of November, more of my time was spent interviewing than observing in the classrooms.

I interviewed 3 special education teachers, 3 middle school students with disabilities, 6 high school students with disabilities, and 11 general education teachers, in addition to the 3 paraprofessionals. The interviews of the paraprofessionals, special education teachers, and general education teachers were conducted using lists of questions to provide some consistency in information gathering. Additional questions were formulated during the interviews in response to the interviewees' answers. The lists of interview questions are included in Appendix C. All of the interviews were audiotaped, with the interviewees' permission.

Although scheduling interviews sometimes presented problems, all of the interviewees, except one, were immediately cooperative. The exception was a high school general education teacher who was reluctant to be interviewed due to time constraints. The interview with her was rescheduled five times. The first time she was absent, and the next three times she was too busy for the interview. She imposed a 10 minute time limit for the final interview scheduled. However, after 10 minutes she volunteered to answer additional questions.

Parental permission was required to interview students. The special education teachers assisted in securing informed consent from the parents. The teachers sent the consent forms home with the students I selected as potential interviewees.

Of the middle school students interviewed, two were enrolled in the class for students with mental retardation, and the third was enrolled in the class for students with serious emotional disabilities. All of the high school students were members of the class for students with serious emotional disabilities. When interviewing the students with serious emotional disabilities, I used a set of prompt cards with the following words: best at, depend on, favorite subject, hate, help, learn, need, teacher, want, and worry. The cards were not presented in any consistent order. They helped the student start talking and assisted in developing a dialogue. The students were also told they could skip any card or stop the interview at any time. I did not use the prompt cards when interviewing the students with mental retardation. Adding the task of reading to the interview would have placed an unnecessary burden onto the process.

Data Analysis

Data analysis was completed with the use of computer programs. The elaborated field notes and transcribed interviews were formatted in Tex-Edit 2.7, a word processing program which efficiently removes prior formatting, places line breaks at predetermined intervals, and saves the documents as ASCII text. The documents were then imported into qualitative data analysis software.

The qualitative data analysis program used in the analysis was Non-numerical Unstructured Data Indexing Searching and Theorizing (NUD•IST), Version 3 for Macintosh. NUD•IST provides a graphical-numeric system to code text.

Each document was opened and coded, line by line, with a branching index of categories. The program does not make decisions about the meaning of the text. It does, however, keep the data organized so it can be quickly and easily searched, sorted, and retrieved on the basis of user defined categories.

The flexible tree-structured index system of categories and subcategories provides a pictorial, or graphic, view of theory as it develops. Each category becomes a node on the tree containing all data coded, or labeled, with the numerical node identifier. One of the strengths of the program is the ease in which categories can be reordered to further investigate emerging categories, themes, and theories. Another strength is the capacity to continually incorporate additional data for ongoing analysis. The data included in each node can be collated into a node report. New nodes can be created by combining data from several nodes according to operations such as "intersection" and "union." The intersection operation would generate a node report containing only text that appears in both or all the nodes specified. A union operation would produce a node report containing everything in all nodes indicated. These sorting operations, and others, assist in examining the relationships in the data.

Familiarity with the data was increased through the numerous reviews during each step in the process. Field notes were examined through a minimum of four processes: initial input of raw notes, elaboration of the notes, coding, and

node report generation. Interviews were reviewed during transcription, coding, and node report generation.

The initial codes sorted the data into categories closely aligned with the areas covered in interviews with the adults. Using sorting operations to compare data from observations and perceptions expressed by interviewees allowed me to recognize consistencies and inconsistencies between the beliefs and actions. This facilitated the development of the major themes of deficits in communication and preparation, which will be fully described in Chapter IV.

The process described seems quite straightforward and, in theory, should have progressed smoothly. This process, as described, does not include the reality of "software glitches."

Using the themes developed in NUD•IST, I opened a word processing document for each category, or subtheme, which later became the basis for the assumptions. I read through every field note and transcript, copying sections and pasting them into the appropriate word processing documents, along with reference information of date, place, and speaker identity. At one point, I had twenty-two documents open simultaneously. In essence, I duplicated the coding and sorting process of NUD•IST. The major difference between what I did with word processing documents and what NUD•IST would have done was the element of time. What should have taken moments for NUD•IST consumed in excess of fourteen hours. As I wrote Chapter IV, I opened the appropriate category documents with the relevant data for each section, copied

from the category document, and pasted the excerpts into the Chapter IV document. To keep track of which excerpts had been used from the category documents, I again highlighted, or selected, the excerpts and changed the font style to ~~strikeout~~. This allowed me to leave the excerpts in the category documents for future reference if the need should arise, while indicating which excerpts had been used.

Although this copy-paste process was less efficient than NUD•IST, it was also much more efficient than the index card method of sorting and classifying data used by researchers who do not use computers.

CHAPTER IV

DESCRIPTION AND INTERPRETATION

Introduction

Presenting data collected in qualitative research presents some difficulties. Quantitative data can be summarized in tables and graphs. These tables and graphs provide snapshots of the data that assist the reader in understanding the findings and implications of the study. Qualitative data require that a picture or snapshot be created through a narrative created from field observations, interviews, and documents.

Over the course of two and a half months, I observed 3 paraprofessionals, 14 general education teachers, and an uncounted abundance of students in two middle schools and one high school. I also interviewed 3 paraprofessionals, 3 special education teachers, 3 middle school students, 6 high school students, and 11 general education teachers. The amount of data amassed could take multiple volumes to fully document. The amount of time available to analyze and document the data and the time constraints of the readers require a concise summary of the study.

My solution to the need for presenting the data concisely (while maintaining the integrity of the data) is to create a composite, or aggregate day, for each

paraprofessional. A recent dissertation completed at the University of North Dakota used a similar format to present qualitative data. In 1997, Marci Glessner presented her data by creating a representative teacher from data gathered in observations and interviews of two teachers.

I decided to create a separate aggregate day for each paraprofessional, because their experiences, behaviors, and situations were so diverse a single aggregate day would misrepresent the data. It would also conceal or eliminate the differences that provide insight into the relationships and interactions of the paraprofessionals and teachers.

The aggregate days are developed primarily from the field notes of observations. When appropriate, some quotes from interviews are incorporated into the narrative. For each class period, I combined all of the field notes in a word processing document. I identified blocks of text that were representative of common or notable events and behaviors, and removed blocks of text irrelevant to the themes developed in the data analysis. Some spurious information has been retained to facilitate development of a fluent, illustrative narrative. Each class period aggregate includes information from three to six different observations. The next three sections of Chapter IV are the aggregate days for Jessica, Marsha, and Sharon.

The paraprofessionals' aggregate days allow a method to present observable data but is not conducive to recounting most of the data obtained from interviews. The final section

of this chapter, Themes, incorporates interview data and relates the observations with the interviewees' statements.

Jessica

Jessica is a paraprofessional for a middle school teacher of youth with mild to moderate mental retardation. She completed a health care course of study. Prior to working as a Certified Nursing Assistant (CNA) paraprofessional, she was a home health care assistant and provided 11 years of day care in her home. She started working as a paraprofessional two years ago so that her work schedule would be the same as her daughter's school schedule. As a home health care nurse, she had to work frequently during weekends and evenings.

Jessica is a lean, physically fit woman with shoulder length brown hair. She usually wears pants and low heeled shoes because her job requires lifting, bending, and stooping. Jessica has a very positive attitude and works well with children. She is a reliable, conscientious, and independent worker.

The School

This middle school is located in a state in the northwest quarter of the United States. The school has a student population of approximately 460 children and 38 teachers. The school district encompasses a community of 8,600 residents. The middle school, Prairie Middle, is currently housed in a relocatable building and one wing of the high school while a new middle school is constructed.

There are no state mandated credentialing systems, employment guidelines, or duties specified for

paraprofessionals in the public schools in this state (Pickett, 1996). The hiring guidelines specified by the special education administration office for nonspecialized paraprofessionals include a minimum of a high school diploma or equivalency and a willingness to work with children. Two specialized paraprofessional roles that do require certification within the specialty are Certified Nursing Assistant and Vocational Education Assistant.

Aggregate Day

Jessica starts her day in the special education room. The room is located on the corner between the middle school hall and a short hallway that serves as an exit to the parking lot and relocatable classrooms. Carts of stacked folding chairs are stored in the hallway directly across from the classroom door. The janitor's storage area and office is the only other room that opens into the short hallway.

The middle school resource room for students with mild to moderate mental retardation shares a room with the high school class for students with moderate retardation. The middle school class is contained in less than half of the available floor space of the room. Both classes share a coat rack to the left of the classroom door. To get to the middle school class area, you must walk through the high school area.

The rooms are divided by a curtain on the far side, a freestanding room divider down the center of the room, and the edge of a small area carpet on the near side. The middle school area is L-shaped with the teacher's desk, a

kidney-shaped table, eight chairs, adaptive equipment, and shelves of materials in one leg of the L. This area covers the back quarter of the floor space on the hallway side of the room. The other leg of the room extends the rest of the way across the back wall and contains a raised physical therapy bed, a gray steel supply cabinet, and stacks of boxes along the back wall. A curtain hangs across the space between the two legs of the L-shaped area to provide privacy in the physical therapy area.

The middle school section of the room is cramped, with little space to move between the boxes of materials stacked around the edges of the room. Every horizontal surface, except the kidney-shaped table, is covered by stacks of papers and books. A royal blue bulletin board covers the top half of a room divider. Students' names are listed on the left side of the blue background. Pegboard-type hooks hang in rows across the board under headings of 10 through 100, in increments of ten. White tags with the students' names hang from some of the hooks.

Students rummage through school bags, hang up their coats, and chatter. Jessica hangs up her coat and puts her purse into the locked cabinet. She walks over to Hank, a sixth grader with cerebral palsy, kneels down beside his motorized wheelchair and greets him. She takes the large handkerchief from his lap and wipes the spittle from his chin. She talks with Hank until the late bell sounds and says, "The hall's clear now, let's go." Jessica starts Hank off by pushing the wheelchair's hand control forward.

They leave the classroom, turning left to go down the middle school hallway.

First Period

Jessica enters the science classroom, following Hank. She grasps the wheelchair control and steers so he is facing forward, parallel to the rows of student desks. The other students are already at their desks, getting papers and books out of their book bags, talking with one another, opening textbooks, sharpening pencils, sorting through papers. Jessica wipes Hank's chin one more time and then walks around the front of the room, past the teacher to the last row of student desks. As she walks away, Hank slumps forward and closes his eyes.

Standing in the front of the room at a freestanding lectern, the teacher, Mr. Adams, is calling roll. Behind him, on the royal blue painted front wall, is a chalkboard with cork bulletin boards at each end. A schedule of assignments is written on the left end of the chalkboard. The classroom, room 237, is located in the middle school wing of the high school. The hallway side walls and opposite outside wall are painted a light blue. The front and back walls are a darker blue. Blackboards hang on the front and back walls with cork bulletin boards attached to each end. A bookcase stands under the bulletin board on the left end of the front chalkboard. The teacher's desk sits in the front corner of the room, along with an overhead projector and a file cabinet covered with stickers, against the outside, light blue wall. A

kidney-shaped table is located in the left front corner of the room.

A sign language interpreter sits at the kidney-shaped table, facing the student desks. There are five rows of desks with six desks in each row. The student desks have slide runners instead of individual legs, with bookshelves under each of the navy blue plastic seats. Animal pictures hang from the fluorescent light louvers on the white acoustical tile ceiling. Other posters about science, classroom rules, attitudes, and animals are displayed over the chalkboards and the two windows covered by royal blue window mini blinds.

Jessica pushes the door of the gray storage cabinet on the outside wall closed as she moves a chair down the aisle between the fourth and fifth rows of student desks. She sits beside Lewis, a student with mental retardation. Mr. Adams calls up all students who ride the bus. The sign language interpreter signs as Mr. Adams speaks. Jessica leans forward and speaks to the boy who sits in front of Lewis. "Ronnie, you ride a bus. Go on up." Ronnie, a boy with mental retardation, sits for a minute and then gets up. When the teacher asks Ronnie his address he responds, "I don't know." Jessica stands and moves forward, telling Ronnie his address. She returns to her seat by Lewis.

As Ronnie returns to his seat, he says "shut up" to the boy in front of him. Jessica leans toward Ronnie and whispers to him as he frowns. In the center back of the room four kids toss a beany baby around, playing keep away and laughing

aloud. Jessica talks quietly with Lewis and Ronnie. She does not look toward the laughter.

Mr. Adams attaches the amplifier microphone to his shirt collar, which transmits his voice to the hearing aids of the student with impaired hearing, saying, "Take out the lab with the chromatography, and the other lab too. Hand in the lab from yesterday, with the five questions done on the back." Ronnie flips through his papers with a perplexed look on his face. Jessica goes to him and picks out the correct paper from his hand and passes it forward.

As the students sort their papers, Mr. Adams writes "chapter 11 test" on the board and hands out review sheets to the first person in each row. As Ronnie passes it back, Jessica reaches out for it but Lewis reaches past her, takes one and passes the rest back. After three pages have been given out and passed back, Jessica picks up the pages and straightens them into one neat stack. After the last page is given out, Mr. Adams hands out a stapler to be passed around the room. When the stapler reaches Lewis, Jessica takes the stapler instead, staples the papers, passes the stapler to the next person, bypassing Lewis.

"It is quiet working time," announces Mr. Adams. Jessica talks to Brian, a boy with mental retardation, sitting behind Lewis, as she sorts through Lewis' papers. Jessica tells him, "Get your science book out." Brian responds, "I don't even know where it is." Jessica goes to the bookcase at the front of the room and gets a textbook for Brian. He takes it from her with a look of resignation and sighs deeply. Jessica

looks over Lewis' shoulder, points to the first question on the review sheet, and reads, "What is the title of the chapter?" She continues, "You need to write small to fit in the blank." She stands by Ronnie and flips the pages in his book.

Jessica reaches over to Lewis's desktop, turns the review worksheet to face her, and writes on the page. Lewis sits and faces forward, not looking at his materials. He appears angry, scowling with his lips pursed tightly together and his brow furled. Throughout the classroom, students are reading, writing, and whispering to their neighbors. Mr. Adams sits at the kidney-shaped table facing the students, looking at student papers. Lewis continues sitting as Jessica reads through some Ronnie's old class notes and completed worksheets. Jessica reads a part of the notes to Ronnie. She places some of the completed worksheets on Lewis' desktop.

Brian goes to the mechanical pencil sharpener on the outside wall and sharpens his pencil until several people, including Jessica, stop and look at him. She motions for him to return to his desk. Jessica reads another question aloud, flips through Lewis' book, and then points out the answer to Lewis. Ronnie turns around in his seat and waits for help. He asks her where to find an answer. Jessica flips through the textbook, scanning for the answer. As she does this, Ronnie looks around, and does not appear to join her in the search for the answer he needs.

Lewis finishes copying a word from the text Jessica had pointed out, he puts down his pencil, puts his hands in his

lap, and sits motionless. He remains that way until Jessica finds the answer for Ronnie and refocuses her attention on Lewis. She checks what he has written and then flips through the book to find the next answer. She directs Lewis to copy the answer in the next blank and then returns to Ronnie's side, who is slumped down in his seat. As soon as she starts looking in his book, Ronnie sits up straighter and looks around the room. Jessica points out the paragraph with the answer to Ronnie. As she moves back to check on Brian, Ronnie gets up and gets a Kleenex. He wanders around the front of the room, looking at posters, touching several items on the teacher's desk as he walks past.

Ronnie returns to his desk, picks up his stack of notes and completed lab worksheets, brings them to Jessica, and asks a question. Jessica takes Ronnie's lab pages up to the teacher and asks a question. Mr. Adams pulls out a file and shows Jessica a completed page. She returns to Ronnie and tells him the answer.

Mr. Adams sorts the papers he had been reading and then passes back worksheets. He puts stacks of them on the desktop of the first seat of each row. After Bill picks out his papers, Jessica takes the stack and pulls out the labs for each of the three boys with whom she has been working and passes the rest back to the last two boys. She hands out the papers to Ronnie, Lewis, and Brian.

Unless directed to write something, Lewis continues to sit with his hands in his lap, frowning. His book is open with his pencil lying on it. Jessica moves from Ronnie to

Lewis to Brian, finding answers and directing them to write the answers on the review sheet. Sometimes she stops by Lewis' desk and writes something on his sheet. Scowling, he sits without moving at all and shows no outward interest in what others are doing.

With 10 minutes left in the period, Mr. Adams returns to the lectern and asks the first student in the first row to tell the answer to question number one. He continues around the room, calling on each student as he moves through the rows. When an incorrect answer is given, he asks for volunteers to supply the correct answer. Several students in the center of the room eagerly wave their arms, seemingly to attract his attention.

With five minutes left in the period, another paraprofessional, Sally, enters and kneels by Hank, waking him. A few students look over at Hank and the paraprofessional as they start moving but quickly return to their work. Sally uses the wheelchair control to maneuver the chair around so that it faces the door. Hank then takes over and presses the control so the chair moves forward and out of the room. Other than the fleeting looks from a few students, no acknowledgment is given to their departure.

The students in the fourth row are being called on when the period ends. As he dismisses the class, Mr. Adams reminds the students to study for the test and turn in any late work. Jessica tells Lewis to put his things away as she leaves the classroom to go to the second period class.

As Jessica walks purposefully through the throng of children, to drop off a copy of the review sheet at the special education classroom, she explains, "I try to keep Lewis from making noise and bothering others while I help the other two boys. I spend so much time just getting Lewis to write legibly on the line that I don't have time to help the others like I should." In the special education classroom, a student is talking to Mrs. Bateman as Jessica tells her, "Here are the worksheets for today. None of the boys are done." Mrs. Bateman nods, acknowledging Jessica while continuing to listen to the student. Jessica leaves the classroom, going to the industrial tech room in the closest high school hallway.

Second Period

As she enters the shop, she smiles and calls out to Robert, a student with mental retardation. He is sitting on a tall stool at one of the nine worktables arranged in the front left quarter of the shop. The room is a typical woodworking shop room. There are outlet boxes hanging from the ceiling over the worktables. Numerous cabinets line the hallway wall and the back inside wall of the classroom. A traditional grouping of student desks arranged in five rows of six desks covers the back left quarter of the room. There is a grouping of six machines with three drill presses and three scroll saws in the front third of the right side of the room. A planer, a table saw, and a set of four scroll saws fill the next third of the room. Around the entire room,

tools are hanging from pegs or stacked on shelves. A double door exits the outside wall onto a parking area.

The teacher, Mr. Mack, calls the middle school students to a worktable at the center front of the room to explain how to finish the CD holders they had been building. Students from two classes are present in the shop, since the shop is shared by the middle and high schools. The room is very busy, noisy, and crowded. Mr. Mack raises his voice to be heard over the din.

Robert gets a hammer out of a cabinet and then walks toward the teacher and other students. Jessica stops him, saying, "We don't need tools yet." He goes back to the worktable and leaves the hammer on the table. As he goes up to join the teacher, Jessica picks up the hammer and puts it back in the cabinet.

Mr. Mack explains how to glue in dowel rods and complete the finish sanding. He reminds everyone to wear safety glasses while using tools and to start working. Robert grabs his project from the worktable and hurries to the belt sander without putting on safety glasses. Jessica calls, "Robert, Robert," while making motions of a circle around an eye with a finger. Robert stops, "Oh, I forgot," and goes to get a pair of safety glasses.

Some students gather around Mr. Mack to have their projects checked while others use palm or belt sanders. Jessica stands near Robert as he uses the large disk sander. She encourages him to continue sanding rough spots. Other students stand nearby, waiting for a turn to use the sander.

Robert looks at his project and relinquishes the sander to a waiting person. Two boys jostle each other until one takes control of the sander. The other boy pulls back, laughing, and waits for another chance to use the machine.

Robert and Jessica walk toward the worktable. Jessica returns the safety glasses she had been wearing back to the container at the front of the room while Robert selects some dowel rods from a stack in the center of the worktable. Pete, a general education student, reaches for the same dowel rod Robert holds in his hand. They start pushing at each other. Pete growls, "I'm going to hit you." As Jessica reaches the worktable, they separate and start sanding on their projects. Robert makes a few impatient swipes with a sanding block and then quickly switches to an electric palm sander. Robert intently sands a corner of the end of the CD holder, creating small, hollowed out dips in the surface.

Pete, in a plaintive tone, says, "Why do I have to sand the glue off?" He starts sanding the outside of the unit. Jessica instructs, "It's not on the outside, it's on the inside." He stops sanding. She takes sandpaper and sands the inside area where the glue dripped and dried in droplets.

Jason, a general education student, continues to sand his project and does not seem to notice that it has fallen apart. When he sets it upright, it collapses. He gets a screwdriver from the tool cabinet and tries to drive a new screw into the separated parts. Pete makes motions with the back saw as if to cut on Robert's project without actually touching it. Robert pushes him away and looks toward Jessica.

Pete laughs, grabs his goggles, and takes them back to the bin. He joins three boys playing with a retractable tape measure.

Jessica calls to Pete, telling him to show his project to the shop teacher. Mr. Mack shows him places he needs to sand some more. As he walks back toward the worktable, someone throws a small segment of dowel rod at him. He picks it up, yelling, "Who threw this?" Brandon, a general education student, calls out "him," pointing at Robert. Pete chases Robert as he runs away from the table, laughing. Pete throws the dowel rod piece as Robert dodges away. Pete mutters as he returns to the table and immediately gets into a shoving fight with another boy who had touched his project. Jessica steps between the two boys and stops Pete by taking him by the shoulder and speaking quietly. Jessica leads Pete to another worktable away from the other boys.

Mr. Mack remains near the machinery and students bring their projects to him to check periodically. Kids mill around, waiting to use tools. Jessica stands at the room's front with folded arms. Pete picks up plug ends from the floor and throws plugs across the table so they bounce on the floor. He moves to the next table and makes striking motions with a hammer at a turkey made from pumpkin and wood pieces the teacher left on display. He puts down the hammer and then uses a large metal file to hit at it. Jessica approaches, saying, "You should not be doing that." He puts the file down and goes back to the pieces of his projects, trying to

balance the irregular shapes in a stack. He takes a screwdriver and pokes at Sam's project while Sam sands it.

Jessica asks, "What are you waiting for, Sam, don't you know what to do next?" Sam picks up the palm sander and a pencil and starts to use the electric sander to sharpen the pencil. Jessica takes the pencil from him, saying "no" in a firm voice. As she brings the pencil to the front table, Sam takes another pencil from the worktable and crushes it in a vise. Jessica attempts to redirect Sam, "You need to concentrate the sanding right here," pointing out the place on his project. He does not look at her but talks to Robert. Jessica continues, "You need to work," to which Sam replies, "I know it," in an angry tone of voice as he starts the sander.

Jessica and Robert take his project to be checked by Mr. Mack. Sam picks up the smashed pencil from the floor under the vise and uses a wood chisel to get the lead out of the pencil pieces. Mr. Mack announces, "Time to clean up." Robert grabs a shop broom and vigorously sweeps, sending clouds of sawdust into the air. Two other boys join him in sweeping. Jessica picks up hand tools, including the wood chisel Sam was using, and puts them in the tool cabinet. As the bell rings, Sam leaves the classroom, his project still sitting on the worktable. Jessica talks with Mr. Mack, explaining, "I'm here to help Robert. He's impulsive and doesn't follow rules very well, but I feel sorry for Sam and I try to help him even though he's not in special ed."

Jessica returns to the special education room. Jessica moves one of the name tags on the blue bulletin board as she states that Robert earned one stick. Ellen Bateman, the special education teacher, explains, "They know that they earn, well, sticks, points. You know, anyone else would use them as points but sticks are more visual for me and I like it. For this age, it is more concrete, and they work for that. Now, Jessica has these three kids in science in the morning. If they work, they get sticks. She comes back to the classroom and she'll say, 'well, he gets two, he only gets one because he wasn't listening today,' or whatever. So, they [paraprofessionals] get a chance to reinforce what they [students] have done right or what they have done wrong."

Third and Fourth Periods

Jessica works with students in the special education room during the third and fourth periods. As a Certified Nursing Assistant, she handles all the jobs which involve bodily fluids, including changing Hank's diapers. She spends most of third period with Hank, doing physical therapy on the therapy bed in the back corner of the room, separated from the teacher and the other students in the special education room by a curtain. She also does body brushing, a technique based on Sensory Integration, on Lewis. She says, "He is much calmer and less aggressive when he is brushed every day." During fourth period she feeds Hank his lunch. He has difficulty swallowing and gags frequently while he eats.

Fifth Period

At 12:30, after the late bell, Jessica returns from her 30 minute lunch break and gets Hank ready for the trek across the parking lot to the relocatable school building. As Hank wheels across the parking lot, Jessica urges him to use his high speed. He grins lopsidedly in response as he continues in low. They enter the first classroom on the left, the art room. The walls of the art room are painted off-white, capped by a white suspended ceiling. To the left of the classroom door are two full length cabinets and the teacher's desk. There is a computer on a small desk to the right of the door, beside a cabinet and a sink unit. The outside walls are made of corrugated aluminum. There are two bookcases storing supplies on the north outside wall. The east back wall is illuminated by two windows, one at each end of the wall. Hank enters the classroom with Jessica and rolls up to the open side of the first of three rows of abutted rectangular tables. This row is the only one that has enough space for him to maneuver the chair, other than the back side of the last group of tables.

The art teacher, Mrs. Monet, stands at the front of the room surrounded by students. The room is awash with chatter and the sounds of movement and activity. The class is working on drawings of a still-life arranged on top of the cabinet against the front wall.

Jessica removes Hank's speech board from his wheelchair, placing it in the basket attached to the back of the chair, so he can sit closer to the table. Two of the kids sitting

nearby say "hi" to Hank as he wheels up to the table. Jessica gets the watercolors, a paintbrush, paper, and a bowl of water from the cabinet by the sink. She secures the paper to the table with a piece of tape on each corner; the paint palette is secured with tape across the two ends of the holder. Jessica stabilizes the bowl of water with an x of masking tape. Jessica repositions Hank's chair so he can see the still-life and still reach the table.

Jessica wets the bristles and then holds the paintbrush out for Hank to take. He puts out a lot of effort as he concentrates on taking the brush. It takes several attempts before he can grasp the paintbrush. He coughs with the effort. He sweeps the tip of the brush across the paint. Jessica instructs, "You should rinse your brush out between each color." She reiterates, "Mrs. Monet wants you to rinse between colors," as he tries to go to another color without rinsing the brush. As he hits the tips into the correct color, Jessica praises him, "Good, good, good." Hank smiles.

Jessica dabs at spittle on Hank's mouth and chin. Hank is painting with the purple. He puts the brush into the water, pulls it out, and pokes it into the green paint. Hank puts the brush into another color without rinsing. Jessica reminds, "You are not supposed to mix the paints." Hank does it again and smiles. Jessica leans forward to look into his face. She repeats the instruction. He starts painting again. As he lifts the brush, Jessica points to the water, "Which one are you going for? Red?" Hank dabs it in the blue. Jessica taps at the top of the paper, "Can you put some color

up there?" He mixes the paints again. Jessica repeats, "Mrs. Monet asked you not to do that."

Hank reaches down and paints on the paper on his lap that protects his pants. He starts to dab the brush on his shirt, so Jessica holds her hand between his shirt and the brush. "Are you going to put color on my hand again?," asks Jessica, smiling.

Hank returns to work on his painting. As he works, grunting with effort, Jessica rubs his back. Hank rinses the brush, then reaches for one color and a second color. Jessica reminds, "You are not supposed to mix them." He continues to go from one color to the next. She speaks more sharply, "You are mixing them again." Hank smiles and then rinses the brush. It requires him to move his entire upper body to swirl the brush in the bowl. He continues to go from one color to the next. Jessica stops the brush movement, "You've got lots of blue on the brush, now put some on the paper." Hank dabs the brush at the tape securing the paper to the table.

Jessica directs, "Now we'll rinse it again." Hank does not comply but strokes the tip on the paper. He has created a mass of darkness on the center of the page. As he moves to the paint, Jessica stops his arm, "Do you want red?" She insists, "You have to rinse," as she guides his arm to the water. After each stroke, she says, "Rinse," and guides his brush to the water and back to the paints. She moves his arm to dab the brush onto the bottom of the bowl to rinse the brush. Hank leans to his right, away from Jessica. She moves him slightly to sit him upright. He lets go of the brush and

she takes it. Jessica asks, "You done?" He just sits, looking at his lap.

Jessica tells Hank she will have to clean up before he can draw. She pulls the tape off the paper. He reaches and pulls one piece of tape off the bowl. Jessica states, "You have to relax your hand so I can take it," as she takes the tape from him. He pulls at the tape securing the bowl of water. She stabilizes the bowl while he pulls the tape off. As she takes the tape from him she says, "Thank you." He hits at her to get her attention. Jessica asks, "What?" He touches himself on the chest. She writes his name on the painting.

Mrs. Monet has finished cutting paper for students at the paper cutter. The teacher moves from student to student, checking progress. When she reaches the front of the room she leans over to Hank, "Nice job working today, Hank. That was a good painting." Turning to Jessica, she says, "It was good to see him use the paintbrush the way he did."

Jessica takes Hank's painting to the cutting board and cuts it down to the correct size. She brings the painting, a piece of black construction paper, and a stapler to Hank. She tells him to press the stapler to attach the painting to the construction paper. It jams and Jessica responds by saying, "Oh, Hank, we really goofed it up now." She clears the jammed staples, places it on the table, and puts Hank's hand on the stapler. Jessica places her hand over his hand and presses the stapler down. On the next staple, she guides his hand. Jessica directs, "Do it this way, you have power that way."

He presses. On the fourth try she removes her hand and says, "You do it."

Jessica pulls the wheelchair away from the table. Hank yawns as Jessica prepares the drawing surface. Jessica stabilizes the paper on top of a spiral notebook placed on a small, clear acrylic table top that attaches to the wheelchair.

Jessica tries to put the pencil in Hank's hand and he leans over and hangs his head. She kneels down and talks quietly to him. Then she stands, points out the still-life arrangements, saying, "Do what you can." He sighs and takes the pencil. Hank controls the pencil by twisting his shoulder back and forth. His entire torso jerks as he scribbles chaotically. His tongue protrudes as he attempts to control his scribbles. He looks at what he has done, frowning. Jessica responds, "It's just your interpretation of what you see." Mrs. Monet pauses as she walks by and tells Hank, "I just want you to do as much as you can by yourself." He continues making abrupt, laborious marks on the paper. Then he grins, reaches over, and marks on Jessica's hand. She smiles at him, "This, however, is not the paper."

A fly lands on his face, she brushes at it. It lands on another place. Hank blinks, turns his head. Jessica brushes at it again. She lifts her eyebrows and smiles when Hank motions to the paper attached to his table top. She wipes the spittle off his chin. After a few minutes she asks if he is done. When he drops his head forward in a movement reminiscent of nodding, she removes the paper.

A few minutes before the period ends, Hank and Jessica leave for his sixth period class. They travel two thirds of the way down the hall to the social studies classroom on the west side of the hallway. Jessica takes control of the wheelchair and parks it against the left side of the hallway, just before the classroom doorway. Jessica explains, "The teachers say he blocks the hallway with his chair so we come early and wait for the bell." Jessica reattaches the speech board while they wait. She explains, "He doesn't use this much but he might want to talk." She demonstrates how it works by pressing several keys while Hank bats at her hand. The speech board pronounces, "Do not touch. This is not a toy." She laughs, saying, "That's what he said to me this morning." Hank grins and laughs in reply.

Fifth period ends, and the children pile out the classroom door. Jessica helps Hank into the classroom and backs up his wheelchair so he faces the front of the room. She wipes his chin one more time and stuffs the handkerchief between his right leg and the wheelchair. She reminds him to stay in the room until Sharon, another paraprofessional, comes for him.

Sixth Period

Jessica returns to the middle school wing in the high school building. The computer lab is located at the south end of the hall. The kitchenette unit with a sink, refrigerator, and stove advertise that this was not always a computer lab. Last year it was the teacher's lounge. The room has Macintosh LCs set up on low tables arranged around three walls and on a

10 station table in the center of the room. The walls and suspended ceiling tiles are white, illuminated by recessed fluorescent lights covered by clear panels. Two windows, extending from the countertop level to the ceiling, are on the outside wall. A table is situated in front of the kitchenette.

Ten students sit at the computers in the center of the room, four are at computers on the north wall, and one more sits alone at a computer on the south wall. Jessica sits at a chair beside the lone student, a heavily freckled boy with short, brown hair. Jessica greets him with a question, "What lesson are you working on, Lewis?" Lewis shrugs his shoulders as he types and sings, "Dum dum da dum dum." Jessica looks at the monitor screen and then leans back in her chair.

Lewis stops singing, "I have two more days, and then two days off and then come back. I have two more days, and then two days off and then come back." Jessica says, "What did mom and dad say about your diving yesterday?" Lewis responds, "Oh," removing his hands from the keys. Jessica interjects, "Maybe I shouldn't talk to you anymore or you'll not be as fast."

Mr. McIntosh, the teacher, leaves his desk and ambles around the room, pausing to look at monitors and speak to students. Kids talk quietly, although they continue to type. When Mr. McIntosh reaches the front of the room, he instructs the students to shut down their computers and line up to go to another room for a test. The room quiets as all the students leave, except Lewis.

Lewis continues to talk as he types, using only one hand occasionally. He sings, "da, da, da," removing both hands from the keyboard between touching each key. When he types incorrect letters, Jessica says, "Oops," and presses the delete key. Lewis adds the phrase "That's my point" repeatedly as he talks to her. Jessica reminds, "If you keep saying that you'll lose sticks." Lewis quickly replies, "Yeah, sorry, sorry, sorry."

Looking at the screen, Lewis says, "Oh, girl, that's one of my words." He reads, "The girl said." Jessica instructs, "The next word is Hilda. It's a name, names are capitalized." Lewis utters, "Heeeello. I messed up again. Why do I keep doing that! I'll learn. Why do I always keep doing that?" Jessica smiles and chuckles quietly.

Jessica inquires, "What's the next word?" Lewis reads, "Goat." Jessica corrects, "Girl." Lewis declares, "Giraffe. Yup." Lewis continues to talk, read, and sing as he types, letter by letter, looking back and forth from the screen to the keyboard. He generally uses only his index fingers.

Mr. McIntosh and the other students return to the classroom. Lewis quiets as they enter, remaining silent for three minutes. Although Lewis glances up as the students enter, he does not talk to them or enter their conversations.

Jessica encourages Lewis to read the words on the screen, saying, "You know the last one." Lewis reads, "Yesterday." She continues to prompt, "What's the next word?," when she thinks he should know the word. She supplies words when he hesitates or misreads. At the end of the drill,

Jessica commends, "You are still doing five words a minute, no errors," when Lewis completes the drill.

Lewis asks, "Can't I play the Dirt Bike now?" Jessica replies, "One more drill." Jessica watches the screen as Lewis continues. Chiding gently in a lilting voice, she says, "You didn't capitalize VI." He smiles back and, mimicking her intonation, says, "Well, I can fix that."

A boy across the room starts a game with loud sound effects. Mr. McIntosh adjusts the speaker to reduce the volume. Lewis calls to Mr. McIntosh, "Hey, you!" Jessica chides, "You know how to call him, Mr. McIntosh." Lewis makes eye contact with the teacher. "Mr. McIntosh," he calls. The teacher approaches Lewis, "How are you doing?" Lewis responds with an affirmative answer, without looking at his teacher. Mr. McIntosh nods and continues around the room.

Jessica directs, "You can play the Dirt Bike game now." Lewis starts the game but does not know how to play it, although he intently watches the demo repeat on the screen. Jessica suggests he try another game, like Solitaire or Tetras. Lewis only shakes his head in response. Most of the other students, having completed drills, play computer games or use drawing programs. At the bell, Jessica reminds Lewis to turn the computer off. Jessica leaves the room and works her way through the throng of students on their way to the relocatable classrooms.

Seventh Period

Jessica joins two of the resource room students, a girl and a boy, sitting at a sewing machine. The girl, Melinda, is

slightly overweight, with shoulder length brown hair, wire rim glasses, and wearing a gray Nike t-shirt, jeans, and athletic shoes. Andy, the boy, has brown wire rim glasses and short, black hair that sticks straight up on the top of his head. He wears a gray t-shirt, light blue jeans, and white athletic shoes. Jessica sits at the sewing machine and helps Andy thread the machine, while Melinda stands nearby. Melinda pulls up another chair, sits back, and looks around the room.

The room is in the relocatable, with a pebbly surface, off-white walls on three sides. The outside wall is made of aluminum siding. The floor is tan, with specks of dark brown, white, and black. There is an open cabinet for projects on the wall by the door. Two closed cabinets are on the hallway wall, with an ironing board, and lower and upper kitchen style cabinets in the corner of that wall. A tall open cabinet by the ironing board is partitioned into three columns of 15 bins to hold projects. The north wall has U-shaped sections of kitchen style cabinets with a double sink in each section. White countertops cover the bottom woodgrain metal cabinet. The upper cabinets are off-white metal. A majority of the floor space is filled with rectangular tables and folding chairs. Two to four sewing machines are stationed on each table. The teacher's desk and file cabinet are situated in the northeast corner of the room, in front of one of the two classroom windows.

The teacher, Mrs. Westinghouse, sits at a sewing machine by the north wall and demonstrates to several students surrounding her. Melinda leaves Jessica and Andy and joins

the students around the teacher. Melinda asks if she can stay after school to work on her project. Mrs. Westinghouse says, "You can stay tomorrow. Do you have religion [class]?" Melinda mumbles an inaudible response as she shakes her head and returns to her sewing area.

The students, in groups of two or three, share sewing machines. There is constant movement as 11 boys and 10 girls sew, iron, gather materials, talk to each other and to Mrs. Westinghouse. The machine threaded, Jessica shows Andy how to pin two pieces of fabric together and explains how to maintain a quarter inch seam allowance. She reviews starting the machine and reverse. Melinda pulls her chair up closer and listens. Jessica places the fabric under the presser foot and holds the fabric as Andy runs the machine. Andy is sitting directly in front of the sewing machine. Jessica reaches over and lifts the presser foot, turns the fabric, holds and guides the fabric for the seam. Andy only runs the pedal. When the seam is complete, he pulls the fabric out. Jessica adjusts the wheel so the needle is up. She says, "I like the needle to be up." She takes the fabric from Andy and holds it out for him to snip the threads. Jessica shows Andy where to fold the fabric to make a casing for the drawstring and helps Andy position it under the machine needle. Andy takes over control of the machine and fabric. Jessica warns, "You are pulling it over, don't pull it over...That's better." Jessica holds the project up, saying, "We sure did a good job on our bag." Andy retorts, "My bag." Jessica

instructs Andy, "Turn it right side out and then hand it in for a grade."

Melinda changes seats so she can use the sewing machine. Jessica holds out a piece of black yarn for Melinda to cut for her drawstring. Melinda takes the fabric from Jessica and positions it on the machine. Jessica grasps and guides the cloth as Melinda runs the machine by pressing the foot pedal. The outer seam completed, Jessica lays the drawstring under the seam and pins the seam down. For the final pin, she holds the fabric for Melinda to finish the pinning. Jessica places the fabric under the presser foot, lowering it on the fabric. The casing done, Jessica pulls the bag out and lets Melinda cut the thread.

Andy returns to the table with his drawstring bag of candy. He explains, "Mrs. Westinghouse put candy in it when she graded it." Andy watches for a few moments and then travels around the room, looking at others' projects.

Jessica tells Melinda to fold the fabric inside out for the final seam. When Melinda hesitates, Jessica takes it and shows her the difference between the right and wrong sides of the fabric. Jessica finger presses it down and places it on the machine. Both Melinda and Jessica guide the fabric as Melinda starts the machine. Jessica urges, "Stop," explaining why Melinda should not sew over the drawstrings. Jessica coaches, "Backward, forward, backward." Jessica directs her to lift the needle at the end of the seam and starts to lift the presser foot, but Melinda reaches past her and does it

herself. After Melinda turns the bag, Jessica matches the ends of the drawstring and ties it into a bow.

When Melinda turns in her bag to be graded, Andy returns. Jessica asks, "Do you already have candy in here?" Andy replies, "Yeah." She requests, "Can I have a piece?" Andy hesitantly says, "I'm saving it for my friends but you could have one." Jessica chuckles, "I'm just joking, don't tempt me!"

Mrs. Westinghouse calls for attention and directs the students to put away everything they were using. Jessica instructs, "Melinda, come and get the needle out and put it in your needle holder." To Andy she says, "You need to take the thread out of the machine." Melinda returns their materials to the project bins while Andy unplugs the machine.

All the students sit at the tables while Mrs. Westinghouse explains they will be starting cooking and will need to divide into three groups for the cooking unit. They are to pick one of the kitchen sections by standing in the section. The teacher calls students' names one at a time in an apparently random fashion. Melinda picks the center group and stands with three other students. When Andy is called, he picks the group on the left with four girls. Two of the girls in the group tell him to leave, "We have enough, go somewhere else." The teacher does not intervene. Andy appears unsure and stands apart from all three groups. After all students are in groups, Mrs. Westinghouse directs Andy to join Melinda's group. Jessica tells him, "You'll work with Melinda and me anyway."

Seventh period, and the school day, end at the bell. Jessica says "good-bye" and returns to the main school building. Her final job of the day is to take Hank to his bus. She gathers his belongings and holds the building exit open as he wheels out to the parking lot. Jessica talks to Hank, teasing him about his favorite super hero, Spiderman. When the bus appears, Jessica moves the parking access barrier so it can enter. After loading Hank on the bus with the wheelchair elevator, Jessica can officially end her day.

Marsha

This is Marsha's twelfth year as a paraprofessional. She has worked with at-risk preschool students, students with physical disabilities, and students with mental retardation. She has worked in the class for students with serious emotional disabilities (SED) for three years. Marsha graduated from college with an elementary teaching degree. She never found a full-time teaching job but worked as a substitute teacher for many years. She chose to work as a paraprofessional, so she could have a regular schedule and a permanent position.

Marsha is a short, stout woman. She has short, black hair in a "no-fuss" style. She usually wears pantsuits and is wearing navy pants with a matching sleeveless vest over a white shirt today. She has a businesslike demeanor and remains focused on her task. She tends to walk slowly, but purposefully.

Martha is overqualified, more than meeting the local standards for a paraprofessional of a minimum of a high

school diploma, or equivalency, and a minimum age of 18. This state does not have a mandated credentialing system, employment guidelines, or duties specified for paraprofessionals in the public schools (Pickett, 1996). She does not receive monetary compensation for having a teaching degree.

The School

This school, River View Middle, is located in a state in the northwest quarter of the United States. The school has a population of approximately 400 students and 37 teachers. The building also houses an elementary school temporarily. River View Middle is one of three middle schools serving a community of 71,000.

Aggregate Day

Marsha's day officially begins at 8:40 when the announcements start. She hangs her coat in the closet in the classroom for seriously emotionally disturbed students. The classroom is part of a relocatable, erected 10 feet from the back door of the seventh-grade hallway. The room is large and airy. Gray walls are topped by a suspended ceiling of white acoustical tiles. Blue industrial grade carpeting spans the room. One door leads to the central hallway and the other, a fire door, leads to the outside. Two teachers' desks are placed at opposite sides of the room. Two rectangular tables provide seating for up to 12 students, although there are only 10 wooden chairs placed around the tables. Two double windows on the two outside walls and overhead fluorescent lights provide lighting. A double cabinet stands against the

outside wall beside the fire door. A blackboard hangs on the inside wall that abuts the next classroom. A closet juts into the room at the corner of the two inside walls. A microwave, supported by an apartment-sized refrigerator, stands against the outside of the closet. A bulletin board hangs on the wall between the closet and the hallway door.

First Period

Marsha spends first period in Mr. Flint's earth science class. This classroom is located on the far end of the seventh-grade hallway, near the front of the school. The building has high ceilings covered with white acoustical tiles. Highly varnished wooden beams span the classroom ceiling and continue through the hallway. Fixed windows run the length of the side wall from the ceiling to one foot above the doorway, allowing light to enter from the hallway. Windows, looking onto a patio fully enclosed by classrooms, fill the outside wall. A shelf that spans the length of the windows overhangs the radiator. Chalkboards hang on the front and side walls by the hallway. Three sets of wooden cabinets with glass covered doors, attached to the back wall above base cabinets, run the length of the wall. Nine labeled drawers in the base cabinet store lab supplies. Four large earth globes and one astronomy globe of the night sky rest on top of the upper cabinets. Small earth globes, two balance scales, and earth science textbooks are stacked on the counter of the base cabinets. A large aquarium, continually bubbling, stands against the wall to the right of the doorway of the storage room. A bulletin board hangs above the

aquarium, covered with blue paper and decorated with wrappers from snack foods and candy. A blackboard covers the wall to the left of the storage room door. Posters decorate the gray walls over both chalkboards. Student lab desks, joined in groups of three double desks, cover the light brown linoleum floor. Each set of double desks is joined to the next with a sink unit. Six rows of triple double desks allow up to 36 students to be seated.

Marsha enters the classroom after the period has started. Mr. Flint, a dark-haired, tall lean man in his late twenties, wearing tan pants, blue shirt, and dark tie, sits at his desk. Students are reading a section from the earth science textbooks. Their assignment, "read pages 63-65," is written on the chalkboard at the front of the room. Marsha leaves her looseleaf binder on a student table in the last row. She stands at the back of the room, leaning against the outside wall. She goes to students when they raise their hands to request help. As she walks by the front of the room, she greets another paraprofessional sitting beside a girl in the front row of desks.

After a few minutes, Marsha gets a textbook from the bookcase, opens to the assignment, and writes out the answers to questions in the text. Ten minutes later, Mr. Flint calls for the students' attention and begins asking them questions about the reading.

Marcus, a dark-haired small boy with an emotional disability, kicks the desk, making a drumming rhythm, as the teacher continues. Marcus grabs a pencil from in front of the

boy sitting to his left. The boy scowls and tells Marcus to give it back. Marsha leaves her seat and walks over to the boys. She motions at Marcus to give back the pencil. He returns the pencil and slumps in his chair.

Mr. Flint directs the students to look at the periodic table in their student planners, commenting that although the print is small, they should be able to read it. Marcus stands on his chair, leaving his planner open on the desk top, to show how he can read small print from that distance. Mr. Flint walks right by him, but does not comment on the behavior. Seconds later Marsha corrects, "Marcus." She goes over to him and talks quietly. He crouches on his chair. Marsha moves to the periphery of the row and leans against the wall as she watches the class.

Mr. Flint continues, "Marcus, look up here. Last chapter, I... ." Marsha returns to where she left her notebook, gets out a pen, and finds the science notes. She writes as the teacher reviews. He asks, "What is an atom? What is an element? What is the mass? The atomic number?" At each question, Marcus stands, raising his hand to be called on. Another boy, sitting near the front, also stands and waves his hand vigorously to get the teacher's attention.

While Mr. Flint continues questioning, Marsha listens, takes notes, and watches the class. When a woman comes to the classroom door, Marsha goes to her. They walk out into the hallway and Marsha pulls the door shut. After a few minutes, she returns to the room. Marsha goes to a girl in the center

of the room and speaks to her. Afterwards, she walks back to the rear of the room and stands by the side of the desks.

Mr. Flint hands back worksheets students had turned in last week. He directs students who had not yet completed the worksheets to leave the room while the class corrects them. Several boys stand and leave the room. Marsha retrieves a paper from her notebook and joins the students in the hall.

The students sit in the hallway along the wall. She explains a concept on the worksheet to one of the four boys, Marcus. Another paraprofessional works with the other three boys. Marsha sits by a boy, a general education student. Marcus turns to a nearby boy, saying, "Do you know what my favorite gas is?" He replies, "No." Marcus quips, "Helium."

Mr. Flint opens the door and calls the boys back to the classroom. Marsha takes the worksheet from Marcus and puts it into her notebook. Mr. Flint directs the students to work on their homework assignment until the bell rings. As students start to work on the assignment, Marsha gets up and helps students. When the bell rings, the students gather their belongings and leave the room. Marsha stacks her binder, folders, and books and goes to the next class on her schedule, seventh-grade English.

Second Period

Marsha enters Mrs. Bangles' English classroom and joins a boy sitting in the back at a rectangular table. All the other students are sitting at desks arranged in five rows of five desks per row. The desks face the front of the room that is elevated several inches by a platform that extends the

width of the room. The teacher's desk, piled high with papers, stands next to a Clavinova electric piano. The green chalkboard on the front wall is topped with the words, "Ya' havin' fun yet?" Another chalkboard, framed by bulletin boards, hangs on the side hallway wall. A theme of apples is apparent from the three dimensional paper apples hanging from the fluorescent lights suspended from the white acoustical tiled ceiling. Upper and lower kitchen style cabinets mounted across the width of the back wall are piled high with terrariums, books, binders, papers, knickknacks, and a small stereo system. A small table a few feet in front of the cabinets supports another terrarium containing a small snake. Another small table, pushed up against the outside wall, supports a wooden shelf storing papers and a tree branch that reaches to the ceiling decorated with plastic apples. The table Marsha sits at is across from this table and in front of the table with the snake.

Mrs. Bangles directs the students to take out the assignment they were given yesterday. She calls on students to supply the answers to the exercise.

Mrs. Bangles starts the next activity, "Let's look at page three in our blue packets." Marsha pulls blue pages out from the file folder sitting in front of Randall, a boy with a learning disability, as he continues to look at the paper they had corrected. Marsha opens the blue packet to the third page and makes a wavy line under a word in the directions at the top of the page. She places the packet of paper in front of Randall.

Mrs. Bangles' eyeglasses hang from her left ear at an angle and her sunglasses rest on top of her head, stuck into her long red hair. She puts her glasses back up on her nose to read the questions and then pulls them off her right ear so they dangle from her left ear as she speaks to the students. The half dozen bangle bracelets and large, dangling earrings jangle as she manipulates her glasses. She perches on a two drawer file cabinet in front of her desk.

Mrs. Bangles explains how to do the exercise and writes the first two examples on the board. Marsha talks quietly with Randall. She marks one of the answers on his sheet. He nods and marks a word on the next sentence after she reads the sentence orally. Mrs. Bangles announces they will have 10 minutes to complete the exercise. The students start writing as Mrs. Bangles walks around the room to spot-check their work. Marsha continues to work with Randall.

After the 10 minute work period, Mrs. Bangles instructs the students to quietly move their desks into groups of four. The students move into groups and get out literature books. Another boy, Albert (a student with an emotional disability), joins Randall at the back table. Mrs. Bangles writes "Charles, page 39" on the board.

Marsha hands each of the boys a literature book from the stack behind her. She directs, "Go to page 52. That's where the questions are." Marsha explains they will know what to listen for if they know the questions. Marsha reads the title and the name of the author and then asks, "Who would like to start?" When no one responds, she states, "I'll read the

first paragraph." She reads from Randall's book and holds it upright so they can both see the page. She points to the place she stops at when it is Randall's turn to read. Marsha continues to hold the book upright while Randall sits with his hands in his lap and reads orally.

When Randall stops, Marsha asks, "Was that one of the questions we read?" When the boys do not respond, she rephrases the passage Randall read. Albert writes down the answer to the question as Marsha states it.

Marsha continues to read from the middle of the first column through all but the last paragraph of the second column. Albert leans back in his seat with his arms crossed, his book lying open on the table, as Marsha reads. Marsha continues to hold Randall's book and turns the page when it is time.

Marsha directs Albert to read the next paragraph. When he stumbles on a word, Marsha supplies it. Mrs. Bangles has been moving around the room, listening to students read. She stands beside the table as Marsha tells Randall to take a turn. As he reads, Mrs. Bangles kneels by the table and listens. When he stops, she says to the boys, "If Randall has trouble with a word I want you to help. If Albert has trouble I want Randall to help. Don't have Mrs. Barton to do it all, she works so hard she works up a sweat."

When Mrs. Bangles leaves, Marsha has the boys read more of the story, and she continues to read only short sections. When Randall reads and pauses on the word "maneuvered," Marsha supplies the word quickly. Jeremy is not looking at

the book, but slumps in his seat with his head hanging backward.

Just before the period ends, Mrs. Bangles stops the students and directs them to put their desks back in rows. Marsha says, "Let's finish reading the story, okay?" Albert nods in agreement. Marsha reads the last two paragraphs and closes the book. Albert hands Marsha his book. She stacks up the books and puts them back on the table behind her. When Mrs. Bangles asks how many would prefer to work alone next time, Randall and one other student raise their hands. Mrs. Bangles directs the students to thank the others in their groups for working together. Marsha gets up and goes to Albert and thanks him. Randall remains at the table and does not thank anyone. The bell rings, class is dismissed.

Third Period

This classroom, in the other seventh-grade hall, is directly across the patio from Mr. Flint's science room. Two rows of fluorescent lights hang from the metal, ribbed ceiling vented with tiny holes. Twenty-five desks and chair units, situated in five rows, create a riot of colors and sizes. The teacher's wooden stool stands near a rectangular table at the front of the room. Green chalkboards hang on the front and back walls. White shades cover the bank of windows on the outside wall. Several plants sit on the counter over the radiator beneath the windows. On the back wall, a base cabinet with a sink extends half the width of the room. A dark gray file cabinet stands at the end of the cabinet. A rectangular table with four chairs is located in front of the

cabinet near the outside wall. The teacher's desk is located in front of the file cabinet, beside the rectangular table. A chalkboard extends from the cabinet unit to another built-in six-foot tall open bookshelf in the corner of the back and hallway side walls. A small, glass fronted red cabinet, labeled "fire blanket," hangs near the fire extinguisher which is attached to the side of the bookcase. A bulletin board on the inside wall sports a blue background decorated with multicolored letters spelling out "Math Really Counts." The periodic table hangs on the far end of the bulletin board.

Marsha enters the room and goes to the rectangular table at the back of the room. She sits at the table and opens her binder.

Miss Crick, a tall young woman with shoulder length brown hair streaked with blond, has given the students papers to correct. She calls out the correct answers as students mark others' papers. Mrs. Kauffman comes to the door and signals to Marsha, who leaves the room to talk to her.

While Marsha is gone, the class finishes correcting the papers and turns them in to Miss Crick. She then has the students move their desks into a circle and asks for volunteers to read a paragraph from the book orally. Miss Crick vigorously chews gum as she tells the volunteer where to start reading.

Marsha returns to the room and regains her spot at the table. Miss Crick asks questions of the class after each student reads a section orally. Marsha cues a girl sitting

across the circle by making motions. When the answer was "balance or scale" she makes a motion using two hands with her palms up, moving up and down to show a balance. Marsha watches students in the circle, but seems to focus primarily across the circle at the girl with long blond hair.

Miss Crick reads parts of the lesson aloud. She reads in a staccato voice to stress important points. She reads and talks in a rush the rest of the time. Throughout the period, Miss Crick alternates with students to read the chapter of the textbook. She asks questions frequently and supplies answers when no one volunteers to respond.

Marsha sits at the table and listens as the book is read. There does not appear to be any opportunities for her to assist students, although she occasionally signals Susan, the girl with blond hair, to look at her book or makes a gesture to indicate an answer to a question.

Near the end of the period, Marsha leaves to have lunch. The students are released within minutes of her departure.

Fourth Period

Marsha and Mrs. Kauffman, the teacher of students with emotional disabilities, assist in Mr. Flint's class during fourth period. This is the same classroom Marsha works in during first period.

Meter sticks lay on top of each desk. Several boys in the back two rows slap the meter sticks on tables. Robert keeps slapping the meter stick even after Mrs. Kauffman tells him to stop. She takes it from him and lays it along the front edge of the desktop.

Marsha passes out papers as Mr. Flint instructs the students, "Take notebooks out please." Mrs. Kauffman leans on the ledge below the windows, watching Mr. Flint. Jennifer says something to the boy next to her. He responds, "Shut up, you are stupid too." Mrs. Kauffman moves next to Jennifer and tells her, "Don't buy into it, just ignore him." Mr. Flint continues, "I've got fourteen sheets turned in . . . out of twenty-six." Jennifer turns toward the boy starting to talk. Mr. Flint, holding his finger to his lips in a "quiet" motion, says, "Jennifer."

Starting the lesson, Mr. Flint says, "What I need is for someone to refresh my memory." He writes headings on the chalkboard, "measure" and "abbrev," saying, "Tiffany, give me a measure of length." She responds, "Meter." Mr. Flint states, "Joe, what is the abbreviation for meter?" He replies, "m." Mr. Flint continues eliciting measures and the abbreviations, writing them as the students announce them. Some of the students copy as he writes on the board.

Marsha moves around the room, speaking quietly to students as Mr. Flint continues. Mrs. Kauffman shows a boy how to set up the table of measures from the board into his notes. A boy raises his hand. Mr. Flint responds, "Joe?" He asks, "Do we have to write all this down?" Mr. Flint replies, "I would recommend it."

Marsha assists students at the front of the room while Mrs. Kauffman stands in the back. Robert slaps the meter stick against his desk. Marsha approaches and talks quietly

stick against his desk. Marsha approaches and talks quietly to him, pulling the yardstick away and placing it on the shelf under the windows.

Mr. Flint dictates the rules for converting in the metric system as kids add them to their notes. Marsha moves to the back of the room and helps Robert when he raises his hand. He says, "I don't get it." She explains the conversion rule again. Mr. Flint directs the students to recite the rule in unison.

Mr. Flint writes several conversion problems on the board. He says, "Raise your hand when you have an answer." Several students answer correctly. When a student offers an answer without specifying the unit of measure, Mr. Flint says he is incorrect. Robert calls out, "That's retarded. It's right." Mr. Flint responds, "It's wrong without the label. That's why I want everything in here labeled." The boy sitting next to Robert pokes his pencil in Robert's side. Robert bats at him, smiling.

After a few more examples, Mr. Flint announces the homework assignment and tells them to start working on it. Marsha walks to the back of room, opens her notebook, and writes down the conversion rule and the assignment. Students take the meter sticks and start measuring each other, the length of the desktops, and other items in the room.

Marsha and Mrs. Kauffman move around the room and help students line up the meter sticks to measure things. Mrs. Kauffman sits down beside Robert, turns pages in his notebook and helps him start writing down the problems.

Marsha joins Mrs. Kauffman at the back of the room and they talk briefly. Mrs. Kauffman leaves the room. Marsha copies the problems from the board on two different papers and brings the papers to two boys at the front of the room. After a few minutes, Mrs. Kauffman returns, stopping to speak to Mr. Flint on her way back in. Marsha looks over Ralph's shoulder, saying, "Nice job." Marsha stops by another boy who says loudly, "I don't know how to convert it." Mr. Flint, standing nearby, responds, "Why not? I just spent forty minutes explaining it."

Ralph drums his pencil on the table top. Mrs. Kauffman asks him if he needs help. Ralph replies, "I know it all." The bell rings and students pack up. Mr. Flint stands at the door saying "good-bye" to the students as they leave, sometimes giving "high fives." Marsha and Mrs. Kauffman talk and laugh as they leave the room to return to the resource room in the relocatable school building.

Fifth and Sixth Periods

Marsha and Mrs. Kauffman, the special education teacher, work with students in the SED resource room during fifth period. Most academics are provided in the general education classrooms, so the primary reason students are scheduled into the resource room is for tutorial assistance.

During sixth period, Mrs. Kauffman attends the team meeting to participate in planning and consultation. Marsha supervises students in the SED room. Two students are scheduled to be in the room during sixth period, although others may drop in for extra help.

Seventh Period

Miss Prime's classroom, next to Mrs. Bangles', is similar in size, color scheme, and placement of windows, chalkboard, bulletin board, kitchen style cabinets, and door. A six-foot tall bookcase stands against the front wall by the classroom door. Miss Prime's desk is in the back of the room against the hallway side wall. A paper stacker, Macintosh LC computer and ImageWriter printer are arranged on a table behind her desk, making an L-shaped work space. The countertop of the base cabinets is stacked with boxes, from one end to the sink at the end by the outside wall. A projector screen hides the center section of the front chalkboard. Miss Prime, a small lean woman with shoulder length brown permed hair, wearing a blue sweatshirt, black leggings, and sneakers, sits on a tall stool by the overhead projector in front of the screen.

Marsha enters the room and places her materials on the counter in the back of the room. She remains standing and leans against the counter. Miss Prime, using the overhead projector, starts class with a review. She directs, "Raise your hand if you can answer without a calculator." About half the students raise their hands. A boy, a general education student with dark curly hair calls out, "Pick me!" Miss Prime stops, makes eye contact, and says, "If you are going to help me, then help me, Robert." He replies, "Okay." Miss Prime calls on another student for the answer. When Miss Prime writes the next problem on the overhead, Robert, laying back in his seat with his feet resting on the bookrack of the desk

in front of him, raises his hand but does not call out. Miss Prime calls on him for the answer. Miss Prime continues with the review, calling on several students.

Robert takes out a calculator and pushes buttons. He drops his head back and calls to Marsha for help. She moves up by him, looks at the calculator, and answers him.

Miss Prime starts the new topic, simplifying fractions, and writes a definition for improper fractions on the overhead. A boy rips his paper as he erases. Marsha takes a scotch tape dispenser from the teacher's desk and hands it to him. She puts the tape back after he has finished with it. She watches the class, to help as she is needed.

Miss Prime does some examples of simplifying fractions on the overhead. She asks students to raise their hands if they know the answer. After several examples, she asks if anyone does not understand how to get the answer. She assigns the next 25 problems and tells the students to start.

Marsha directs Robert to write his name on his paper, which he does. Miss Prime and Marsha move around the room and help students. When no one needs help, Marsha looks at contents of boxes in back of the room. She throws away some trash sitting on the counter.

Joshua calls out to Miss Prime, "I forgot my book." Robert chimes in using a singsong voice, "I need a drink." Miss Prime replies, "You can get one back there." Robert asks, "Where?" Marsha points to the faucet in the back of the room. Robert gets a drink and returns to his desk. He looks at the girl next to him and says, "Why are you so ugly?"

Marsha goes next to him, bends over, and says something quietly to him. Robert whines, "She started it." Miss Prime says, "You stuck there, Fred?" Robert calls out, "I'm stuck." Miss Prime stops by Robert's desk after talking to Fred.

Marsha stops by Brent, a student with an emotional disability, whose arm is raised. "Stretching or a question?," she asks. He shakes his head. Robert calls out again, "I'm stuck." When no one comes he moves his arm in a hitting movement at the teacher. Robert calls out, "Mrs. B., what is a simple fraction for this?" Marsha walks closer to him and says, "Four and a half." John, a general education student, reaches out and taps Marsha's arm to get her attention. She turns and helps him complete the problem by asking him the next step and guiding him through the process. She remarks, "See, isn't that reassuring, you can do it."

Brent lays his head down on his open book. Marsha says, "Brent, are you having an energy problem this afternoon?" Brent sits up and Marsha directs him to start the next problem. She reminds him he did not do his English either. When Marsha moves away to help others, Brent lays his head down again. She turns back to him, taps his elbow, and says, "No, this just does not happen." Marsha encourages Brent, "I'll be back, see how many you can get done."

Announcements interrupt the class. Mrs. Prime reminds them to stay quiet and listen. When the announcements end, she warns them that only five minutes are left to finish their work. Students continue working, with the assistance of Marsha and Mrs. Prime, until the bell rings. Marsha leaves

with the students, returning to the SED room to leave her notebook and retrieve her coat.

Sharon

This is Sharon's fifth year as a paraprofessional in the classroom for students with Serious Emotional Disabilities (SED). Prior to working as a paraprofessional, she ran a day care center in her home. A past client, knowing that she wanted a change, brought her the application to become a paraprofessional because she thought Sharon was good with children.

Sharon is a petite woman of 4 feet, 11 inches. She has shoulder length blond hair. As usual, she is wearing a dress and medium height heels. She has a bubbly personality, laughs heartily and frequently, and is outgoing with students and staff. She has two children, a son in the seventh grade, and a daughter, a ninth grader, at this school.

Sharon attended college, receiving a nursing degree, and easily met the local standards for a paraprofessional of a minimum of a high school diploma, or equivalency, and a minimum age of 18. This state does not have a mandated credentialing system, employment guidelines, or duties specified for paraprofessionals in the public schools (Pickett, 1996).

The School

This school, Mount Richards High, is located in a state in the northwest quarter of the United States. The school has a population of 1,325 students and 104 teachers. Mount Richards High encompasses ninth through twelfth grades. The

building also houses a middle school with over 400 students in grades six through eight. Mount Richards High is one of three high schools serving a community with a population of 71,000.

Aggregate Day

Sharon arrives at the classroom for students with serious emotional disabilities by 7:45 to prepare for first period. She has a set schedule to follow, but absences of other paraprofessionals or changes to student schedules can affect her schedule. Sharon reviews the lists of students' assignments posted on the bulletin board on the back wall of the classroom. The bulletin board is covered by papers with course titles for sticky notes detailing assignments due. Thumbtacked worksheets are attached under course titles. A white marker board hangs on the front classroom wall. The far side of the board is covered with classroom rules: no food/drink, no bathroom breaks during class, nobody leaves early, no physical contact, three warnings, charges will be filed, do not go into teacher desks or books, cliff notes do not leave room, and no calculators leave room. Both side walls have built-in supply cabinets and counters that extend the length of the walls. The counter on the wall by the classroom door is covered by teacher's editions of textbooks and computer equipment. The far counter is stacked with audio cassette tapes labeled with textbook titles. Two teachers' desks stand at the periphery of 25 trapezoid tables set in rows for students. Posters about positive attitudes decorate the walls of the room.

Sharon's first stop on her schedule is algebra. She gathers her materials and joins the horde of students in the hallways.

First Period

Mrs. Euclid's classroom conforms to the basic classroom design of this school, much like the SED classroom. White marker boards hang on the front and both side walls with a bulletin board across the back wall. A room-width counter, with wiring access holes for computer cords, is attached under the bulletin board. The floor is covered by multi-hued blue carpeting. Lighting is provided by recessed fluorescent lights in the suspended ceiling of white acoustical tiles. Maps of the earth depicted as a donut, oblate spheroid, cube, cone, and cylinder cover the left half of the bulletin board. Grades, listed by student number, and a poster of a graphic calculator cover the right side.

Sharon sits at the last desk in the fifth row of student desks. Just as students prepare for the class, Sharon takes out an algebra textbook, looseleaf notebook, and a pencil from her book bag. Mrs. Euclid stands at a lectern at the center front of the room and takes roll. She is average height with short brown hair. She has an athletic build and is wearing a nylon exercise suit with white athletic shoes.

Mrs. Euclid starts the lesson on factors and multiples by calling on students to step count in 2s, 3s, 4s, 5s, and 10s. She explains the difference between least common multiple and greatest common factor, along with clues they can use to solve both types of problems. Mrs. Euclid puts

several problems on the board and asks for volunteers to solve them. She reminds the students, "Use your calculators if you can't do it in your head." After many examples and correct responses, she assigns "problems three through fifty-two, the evens." After two students ask her to repeat the assignment she writes it on the board. Sharon chews gum, takes notes during the lesson, and copies the assignment on a post-it note.

Alexis, a paraprofessional from the learning disabilities class, enters the room and gets a textbook from the stack on the counter at the back of the room. She perches on the counter in the back of the room and looks over today's lesson in the book. A boy, Aaron, a student with an emotional disability, comes into class and gives Mrs. Euclid a slip of paper. When he is seated, Sharon goes to him and asks if he needs a calculator. As she turns back, she stops and stoops down by David, a student with an emotional disability. He is a tall boy with blond hair that is long on top and shaved from the top of the ears to the nape of the neck. She stoops by his desk and talks with him as he completes a few problems.

As students raise their hands for help, Mrs. Euclid, Alexis, and Sharon go from student to student and give assistance. When a student asks to borrow a calculator Sharon returns to the SED classroom to get one. As she returns with several calculators, the teacher walks out of the room. Cathy, wearing a crocheted vest and a floppy hat, reminiscent of the seventies, leaves her seat and talks with another girl

in the front of the classroom. After a few minutes Cathy, a general education student, calls out to Sharon, "Hey lady, can I go to my locker?" Sharon responds, "If you make it quick."

Sharon returns to her student desk and recopies the notes from today's lecture. She hands Aaron the notes and assignment. He thanks her and continues to work on the assignment. Both paraprofessionals walk around and answer students as they raise their hands. The room is quiet, and most students seem to be working.

Cathy returns without a calculator and immediately starts talking with the girls around her. Sharon asks her where the calculator is. She shrugs, returns to her desk, and opens her notebook to a clean piece of paper.

Mrs. Euclid returns and stands at the front of the room, talking to Alexis. Sharon finishes helping a student and joins Mrs. Euclid and Alexis. Sharon explains what happened with Cathy while Mrs. Euclid was out of the room. Mrs. Euclid calls, "Cathy, I need a word with you," and motions for Cathy to join her in the hallway. The murmur of Mrs. Euclid's voice could be heard in the classroom as she talks to Cathy. After a few minutes, Cathy returns and flops into her seat. Mrs. Euclid rejoins the class, seating herself at her desk to check student papers.

For the remainder of the period, Sharon and Alexis travel the room, helping any students who request help. The noise level begins to increase as more and more students complete their assignments. When the buzzer sounds, Sharon

packs up her materials and returns to the SED classroom, carrying the post-it note with the algebra assignment.

Second and Third Periods

Sharon works in the SED classroom during the second and third periods. Three of the 40 students labeled as seriously emotionally disabled remain in the classroom all day. The other students are scheduled into the room during their study hall periods and can drop in for help during other periods. Sharon assists students who request help or appear to be struggling with their work. Stephanie, an eleventh grader, reports, "[She] deals with the school work and how [they] can make this easier for [us] and adjusting it to what [our] needs are at the time." Sharon also socializes with students when their work is completed.

Fourth Period

Sharon's fourth period class, informal geometry, is across the hall and one room down from the algebra class. The basic floor plan and color scheme are the same as the algebra classroom. The history of mathematics, as told by Isaac Asimov, is illustrated by a large poster covering most of the bulletin board on the back wall. A stack of folders labeled with students' names is placed under a sign declaring "completed work." A list of student grades and a poster about positive attitudes hang on the walls.

Mr. Winslow, partially bald, wearing a light brown tweed sport jacket with brown pants and a navy shirt with a red tie, stands at the overhead projector in front of his desk. The projector light shines on a screen that recesses through

a slot in the ceiling when not in use. Twenty-seven students sit at three rows of double tables. The aqua legs of the student chairs clash with the muted blue tight napped carpeting.

Mr. Winslow calls roll as students unpack their book bags. Sharon walks to the back of the room and sits in the last desk in the first row. A shortage of textbooks means Sharon does not have a copy. She borrows a book from the boy in front of her and the two boys share a book.

Mr. Winslow directs, "Get out yesterday's assignment." As students rustle through papers, Sharon calls to Alan, a student with an emotional disability with dark hair and a husky build. He comes to the back of the room and kneels by her. Sharon asks, "Did you do it?" Alan replies, "No, I didn't get it done," and returns to his seat.

Mr. Winslow reviews concepts presented in the last two days and then starts asking students to state their answers on the assignment from yesterday. When students give an incorrect response, he explains how they may have gotten that answer. When an answer is considerably different from the correct response, he has several students give their answers and writes them on the marker board. Then he looks for a pattern of similar answers and the class determines the correct answer by popular acclaim. As the answers are given, Sharon copies the correct answers in her notebook.

After the students turn in their papers, Mr. Winslow details the assignment they will do in the computer lab. Sharon diligently writes down the requirements for the

assignment. While the teacher speaks, Alan leaves his seat and crouches next to Sharon, asking, "You wouldn't want to write this down, would you?" Sharon replies, "Sure." Alan returns to his seat and appears to listen to the directions given by the teacher, although he does not write anything down. Sharon takes out another piece of paper and recopies the directions for the assignment.

Mr. Winslow draws several diagrams on the board to show how to make a pattern that can be cut out and taped together to form a cube. He directs the class, "Get all your things together and go to the computer lab." Sharon closes her notebook and puts it into her book bag. She hoists her bag onto her shoulder and delivers the piece of paper to Alan. He takes the paper with a glance and thanks, as he stacks his books. Mr. Winslow exits, closely followed by a throng of chattering students. Sharon walks beside Alan, questioning him about his understanding of the assignment as they enter the computer lab.

The lab is housed in a corner room. Several large windows provide a view of the main hallway. The ceiling, walls, and carpeting are consistent with the building-wide color scheme. White topped rectangular tables line the walls and create an island in the center of the room. Six computers are installed on the center tables with another 24 spread around the perimeter. A laser printer, which serves all the computers, is situated on the end of the island tables.

Students scatter to the computers. Alan selects one of the computers on the island. He starts up the geometry

drawing program as Sharon finds a spot to put her book bag. Approaching Alan, she says, "I'm glad you know how to run these programs." He boasts, "I'm the best."

Sharon stays close to Alan most of the time, although she occasionally wanders to nearby students and looks at their computer screens to see what they have produced. She visits with Alan, sometimes talking about the assignment but also talking about a school dance, his after-school job, and his baggy, skate boarders' style pants.

Alan draws the diagram several times before he is satisfied. Some students wait for their diagrams to print while others cut them out and tape them into cubes. When Alan's diagram prints, he commands Sharon, "Get me some scissors." Sharon responds, "You can do it." Smiling, Alan replies in an exaggerated pleading tone, "No, you do it," as he raises his arms in a supplicating manner. Sharon urges, "Go ahead, get the scissors." Alan jokes, "My legs are broken," as he gets up from the computer and gets the scissors. He cuts out the diagram, as Sharon reminds him to cut carefully. Sharon brings the scotch tape to Alan. Laughing, Sharon holds the sides of the cube together as Alan, fumbling, tries to tape them. Once completed, Alan shows it to Mr. Winslow to get credit.

Alan gathers his materials and leaves the lab as the bell sounds. Sharon calls out, "See you later, Alan," as he sweeps out the door. Sharon joins the crush of students in the hallway and returns to the SED room to post the geometry assignment.

Fifth Period

General biology starts at noon, right after Sharon's half-hour lunch. She enters room 217 just as students return from lunch. This classroom is divided into two sections, a traditional classroom section at the rear of the room and the lab area comprising the front two thirds of the room. The linoleum flooring, off-white with a design of smaller pink and green squares every six feet, extends the length of the room. Built-in six-foot tall cabinets line the back wall. Motivational posters, homework assignment schedules, and daily assignments are posted on the cabinet doors. The student desks, arranged in five rows with five desks in each row, face the white write-on board and the teacher's lab table built on a raised platform. Carts storing an overhead projector, photography equipment, and assorted lab supplies stand beside the doorway to the adjoining supply and teacher office area. Around and over the white write-on board hang a poster of the periodic table, calendars, and motivational sayings. The decor is personalized with a mounted trout hanging over the office doorway.

Mr. Darwin, the teacher, leans against the lab table at the front of the lecture section. He is in his fifties, heavysset, with white hair and a ruddy complexion. He wears a denim shirt, khaki pants, and a navy tie embellished with colorful planets and asteroids.

Sharon perches on a tall stool at the student lab table closest to the back of the lecture section. This part of the room contains built-in units of three lab tables on each side

of the room. The base units of maple stained wood are topped by black countertops. A lab sink and four gas valves, located in the center of each of the six sections, are provided for every four students. Twenty-four stools mark the slots available for students. Glass fronted cabinets, storing textbooks and lab supplies, hang on both walls above the lab table units. Two more student lab units, located in the center of the lab, increase potential student stations to 32. The lab unit nearest the hallway door supports a greenhouse module and a sizable aquarium.

Sharon pulls out a looseleaf notebook and pencil. Mr. Darwin announces, "Use the first part of the period to finish your crossword puzzles." Students rifle through their books and notebooks and start work. Sharon goes over to a tall slender girl with short blond hair and looks at the paper on her desk. Sharon says, "Diane, bring your crossword to the back and let's get it done." She turns to the girl sitting behind Diane, stating, "Tina, you missed yesterday. Come on and we'll get it done." As they walk to the lab table, Sharon explains the assignment to Tina, a general education student. Diane, a student with an emotional disability, passes her crossword to Tina to copy what she had done the day before. Sharon points out that there is a quiz today. She calls Mr. Darwin over and asks, "Does the open note quiz include the crossword puzzle?" Mr. Darwin replies, "It sure does."

The two girls work together on the crossword puzzle. Sharon and Mr. Darwin move around the room, checking on students' progress and answering questions. Students work in

groups of two and three, along with a couple who work alone. Tina and Diane discuss a new dress Diane is getting for a fashion show. Diane says, "I'm a statue. I stand there for a half hour." Sharon joins the girls and checks what they have written.

Another girl, Jennifer, a student with an emotional disability, comes to the lab table, asking Sharon, "Can I see the journals from last time?" Sharon pulls several pages of paper from a folder in her notebook and hands them to Jennifer. Sharon calls to Mr. Darwin, "How long do the entries have to be?" He replies, "Mostly a few sentences." Sharon looks to Jennifer and nods. Jennifer returns to her desk and starts copying the journal questions.

Sharon asks Diane, "Do you have all the journals?" Diane responds, "Uh, huh." Sharon passes some papers to her, "Do you need these notes?" Diane takes the notes and asks, "Does he want notes?" Sharon calls Mr. Darwin over, asking, "Do you want notes?" Diane tells the teacher, "So if I just give you my notebook it would be okay?" Mr. Darwin answers, "They need to be in the order I told you." He continues to explain how to arrange her notes. Sharon asks Mr. Darwin, "Do you have Tina's journal?" He replies, "I have them up here. You can look for them." Sharon and Mr. Darwin go to his teaching station and look through papers and notebooks.

Diane and Tina continue to work together until Mr. Darwin instructs everyone to return to their seats. He tells them to get paper for the quiz. Mr. Darwin writes the quiz on

the overhead as he gives the test. Sharon sits at the lab table and copies the test questions into her notes.

As the bell rings, Mr. Darwin asks for the papers to be passed to the front. Sharon packs up her materials, writes on a post-it note, and leaves the room. As she enters the crowd, a girl rushes by, calling, "Hi, Mrs. Walters." Sharon calls back, "Sarah, how's it going?" Sarah flashes a smile, replying, "Fine," as she hustles down the hall. Sharon continues down the hallway to the special education classroom to put the sticky note on the bulletin board under the name "Mr. Darwin." She visits with two students in the room until the late bell rings.

Sixth Period

Sharon returns to the science classroom, sitting at the same stool she used during fifth period. The teacher, Mrs. Newton, states, "Compliments to those who made it to sixth hour yesterday." Mrs. Newton, a large framed woman with wide shoulders, has platinum blond hair and wears athletic style clothes. As she writes the assignment on an overhead transparency, Sharon copies the information into her open notebook. Mrs. Newton continues, "This is the last day you can work on your leaf collections. Let's get started now." Mrs. Newton hands out field guides as the students get their materials organized.

Sharon stoops next to a girl, "Raven, do you need any help? Do you need that book?" Raven, a student with an emotional disability, nods in reply. Sharon suggests they move to the lab table to have enough space to spread out

Raven's leaves and papers. Students work alone and in groups. The low murmur of students talking slowly becomes louder. Mrs. Newton reminds, "I think that there is more than enough work listed so I shouldn't hear any talking."

Raven and Sharon look through the field guide to identify the leaves Raven has mounted on black construction paper. They discuss, "Could it be this one?" Sharon asks, "Where did you get these, Raven?" She replies, "The graveyard." Cheri, a general education student, joins them to also work on her collection at the lab table. She has identified all but three leaves. Sharon calls Mrs. Newton over to help Cheri identify one. Mrs. Newton quickly announces the leaf name and moves on to other students.

Sharon travels around the room, monitoring other students' progress. She frequently checks back with Cheri and Raven. Students get out textbooks and study, or socialize with others, when they complete their assignments. Five students are still working on their leaf collections as the dismissal bell rings. Sharon returns to Cheri and Raven and helps them gather up the materials they used. Sharon returns to her stool and waits for the seventh period class to enter. Sharon explains that since there is no homework assigned, just an ongoing assignment, she does not need to post the assignment on the SED room assignment board.

Seventh period

Mrs. Newton remains in the room as the sixth period students leave and the seventh period students enter. She spends this time organizing the materials needed for the

seventh period biology class. Sharon opens her binder to the seventh period section in preparation for class. As students enter, several girls stop by and exchange greetings with Sharon.

As the bell for the start of seventh period sounds, students look over their notes. A few minutes later, Mrs. Newton announces, "Put your notes away please and let's have some fun." She passes out a stack of papers, saying, "On the word bank, please don't mark them off when you use them." She distributes another stack of stapled papers, the tests, to the students.

As the students start the test, Sharon approaches Mrs. Newton, asking if she can help the two foreign exchange students with the test, since the student she normally assists is absent. Mrs. Newton agrees, so Sharon motions to the two girls. The two girls from Yugoslavia and Sharon move to a lab table at the far end of the room.

The first part of the test is a matching vocabulary test. Sharon reads the first clue, "tap root," and waits for the girls to select an answer. They look at each quizzically, shrug their shoulders, and look back at Sharon. She starts giving hints, waiting several seconds between each. "It's a vegetable . . . it's long . . . orange . . . don't you watch Bugs Bunny." The girls giggle, repeating "Bunny." Elena locates the answer, "carrot," and then points it out to the other girl, Mishie.

Sharon reads number two, saying, "The key word you are looking for means 'the outer area'." Mishie points at a word

on her paper, asking, "What is this?" Sharon reads, "Stomata, it's an opening." Sharon repeats the clue, "the outer area." Mishie, pointing at another word, asks, "Is it this one?" Sharon shakes her head, indicating no. Sharon hints, "Remember when we talked about the parts of the stem?" Sharon continues giving clues to help the girls remember. They sit and stare at Sharon but make no move to look for the word or select an answer.

Sharon asks, "Should I just go on to the next one?" Both nod in agreement. Sharon reads number four, "broad flat portion of a typical leaf." The girls just stare at their test papers. Mishie remarks, "This is a hard test." Elena nods in agreement. Sharon asks, "Do you want me to read all of them? Do you want me to read the words in the word bank?" The girls agree and follow along as Sharon reads the list aloud.

Sharon moves to number five, "the new stem growing up." With no response, Sharon moves on to six, reading "transpiration." Elena asks, "What is that?" Sharon replies, "Well, another word for transpiration is evaporation. Remember the questions about evaporation?" The girls locate the word evaporation and mark down the answer. They have now answered two of the test questions.

Elena points to the words, sap wood, and, with her brow furrowed, looks at Sharon. Sharon responds, "Sap wood is like, here the plant," pointing to a diagram. Mishie asks, "Like the heart wood?" Sharon replies, "Yeah."

Mishie comments, "I am not really prepared for this one." Sharon suggests, "Talk to the teacher if you want to. Mishie remarks, "I can read [the test], but I just don't know this stuff." Sharon asks Elena, "Do you feel the same?" Mishie goes to talk to Mrs. Newton. After a few minutes she returns, reporting they have to take the test now.

Sharon refocuses on the test, suggesting, "Why don't we start with the true-false and then work backward?" She reads number forty-nine "Perennial plants are adapted for rapid growth." When the girls look to Sharon as though waiting for more information, she explains the meaning of perennial and annual. Elena says, "True. . . . is that right?" Sharon shakes her head, stating, "I can't say a thing." Elena looks to Mishie, declaring, "I'm just guessing."

Sharon starts explaining test taking strategies, then stops herself and says, "It's not the time." She returns to reading the questions aloud, adding references to class lectures and discussions.

Some of the other students move to the extra credit demonstrations set out on the two lab tables on the left side of the room. Mishie and Elena talk about how hard the test is. Sharon sympathizes with them about the difficulty, adding that she does not really like botany. Sharon offers, "I really want to help you more, but I can't give you answers." Elena acknowledges, "I know you can't."

Sharon moves to the fill-in-the-blank section, "Name two functions of the stem. Remember what we did on those two worksheets?" Mishie states, "I couldn't find the worksheets

and I don't have a book." Sharon suggests, "You can talk to Mrs. Newton, or your counselor. That's no answer for this test, I know."

Martha, another student, stops by and speaks to Sharon, "I'm going now for my doctor appointment." Sharon reminds, "I'll take notes in English." Sharon returns to reading test to the girls. Mishie pulls Elena's answer sheet close to her and copies from it. Elena tells Sharon, "We always copy." Sharon asks, "Have you always?" Elena responds, "No. She has been here before this my first year." Mishie announces, "I give up, that's enough. It is not a tragedy if I get an F one time."

Seventh period ends at the bell. The students turn in their tests and leave. Sharon packs up her materials and joins the crush of students in the hall. She goes directly to the American literature class in room 212.

Eighth Period

This room was remodeled at the same time as the rest of the school and shares the same color scheme of multi-hued blue industrial carpeting, white suspended ceiling of acoustical tiles, and lit by fluorescent lighting. A white markerboard covers the front wall. The bulletin board on the back wall is decorated with posters promoting reading and a display of America's greatest authors. Built-in counters run the length of both side walls. The counter on the outside wall supports five computers and a printer. The counter along the hallway wall is stacked with textbooks and piles of papers. A plywood paper file system stands by the front

board, filled with papers. A six-foot tall cabinet, a bookcase loaded with American literature books, and a file cabinet stand against the back wall, blocking access to part of the counter attached to the hallway wall. Seven rows of five desks each fill the classroom. The teacher's desk, at the front of the room, abuts a rectangular table supporting a lectern. A tall stool stands in the center of the room in front of the white board.

As Sharon enters the room, the teacher, Mrs. Webster, stands at the lectern. Mrs. Webster is in her late fifties, with neatly coiffured gray hair and a classic style dress adorned at the neckline by a wide, floppy bow.

Sharon sits at the last student desk in the row of seats closest to the hallway wall. The students fill the four rows of desks nearest the outside wall of the classroom. Mrs. Webster passes back papers from yesterday's work and directs the students to file their papers in the second drawer of the file cabinet. Students chatter as they file their papers. When some girls giggle, Mrs. Webster says, "You girls just settle down right away," in a booming voice. She continues, "Okay, let's get these papers filed in." The students finish the task and return to their desks.

A low murmur of voices continues as Mrs. Webster directs, "Get out notes from yesterday...when I start talking I expect you to be quiet and listen." The sound of student voices stops as Mrs. Webster asks, "What is the first scene I told you we would be talking about?" She writes "self transformation" on the board. She conducts a review by

calling on students to respond to review questions. She does not wait for students to volunteer, but calls on them in a somewhat random pattern. "Jeff, what does return to Eden mean?" He replies, "I can't read my own writing." Mrs. Webster replies, "That's pretty bad," in a joking tone and calls on another student to answer the question.

Sharon pages through her notes, underlining items as Mrs. Webster asks questions of the students. Mrs. Webster scoots the stool closer to the student desks, perches on it, and summarizes the history of the Puritans in America as the students take notes. Sharon starts a new page of notes, dated with today's date.

Mrs. Webster moves to the left side of the white board and writes "Literary Terms" at the top. Under this, she writes "Iambic couplet." She defines the term and gives an example. Mrs. Webster comes over by Sharon, sitting on the outer fringe of the seating area, only while writing on the board. After she writes she usually walks closer to the students on the other half of the room.

Sharon copies notes from the board. A girl enters the room and hands Mrs. Webster a pass as she walks to a student desk. Sharon recopies the notes she has taken today, rips the notes out of her notebook, and passes it to the nearest student, indicating it should be passed on to the girl who entered late.

As Mrs. Webster continues adding terms to the list on the board, Sharon copies the notes. At the same time, she is rewriting a second set of notes from biology. Near the end of

the period, Mrs. Webster announces, "Your assignment for tomorrow is to write a poem using these ending words," as she lists some words on the board. Sharon writes the assignment in her notebook and then recopies the assignment on a sticky note for the assignment board in the SED room. When the bell rings, Sharon closes her binder and puts the materials in her book bag.

Sharon hurries down the hallway to talk to a teacher before she leaves. She asks the teacher if one of her students can turn in his late work and still get credit. Then she makes arrangements for him to retake a test later in the week. She thanks the teacher and returns to the SED room to post the assignment from Mrs. Webster's American literature class. She leaves her book bag in the cabinet and leaves for the day.

Interviews

The composition of the original pool of possible sites for this study was based on the premise that these sties employ the educational philosophy of inclusion. For the purposes of site selection, the existence of inclusion was demonstrated if school administration and faculty define their program as inclusive, and students with disabilities receive at least part of their instruction within the general education classroom with special education support in the form of modifications of general education class assignments, requirements, materials, and personnel support to the extent necessary for the student to be successful as viewed by teachers and parents.

The literature review, however, demonstrates that the criteria used to define inclusion vary widely. The basic elements common to most operationalized inclusion definitions were students with disabilities remain with their peers in general education classrooms throughout the school day or class period, special services are provided in the general education classroom, and students with disabilities and their general education teachers receive support from special education staff. Others defined inclusion by the amount of time a child remains in the general education classroom per day, general education teacher attitudes, ownership or responsibility for implementation of the IEP, the ratio of nondisabled to disabled, and inclusion as an attitude rather than a placement decision.

The variance in the definition of inclusion is not limited to policy makers, administrators, or authors. The teachers and paraprofessionals interviewed also defined inclusion in many different ways. The definition that includes all of the basic elements is offered by a middle school math teacher, Miss Prime.

Well . . . the idea is to get as many students with special needs into the classroom as possible with whatever help they need, including not just putting them in the room with the regular ed teacher, but putting them in the room with paraprofessionals or with support staff so that they can function . . .

A high school biology teacher, Mr. Darwin, also includes shared responsibility between special education staff

and general education staff, along with placement in general education classrooms, and support staff in the general education classrooms.

Some of the interviewees define inclusion in terms of physical placement. Mrs. Webster, English teacher at Mount Richards High, states, "Well, it's just giving students with problems a chance to be in a normal classroom situation and not shoved off to the side someplace, you know--special buildings and everything else." The paraprofessional at Prairie Middle, Jessica, refers to physical placement, saying "Inclusion, does it refer to putting the kids in, mainstreaming them? It means taking the kids that normally we shut away somewhere and putting them in with regular kids."

One teacher, Miss Crick, teacher of science at River View Middle, uses time in the general education classroom as the major defining characteristic of inclusion. "I'd have to say including them for a certain time during the week, and then they get pulled for some amount of the time."

The rationale for inclusion is reflected in some of the definitions of inclusion. Mrs. Bangles, English teacher at River View Middle, says, "the focus should not be the academics, but the focus should be social inclusion, and social skills, and social interaction." Mrs. Westinghouse, home economics teacher at Prairie Middle, echoes her interpretation. Socialization, as a purpose for inclusion, is implied when she states, "You've got the aide in there that's maybe helping two or three and they want them in that area . . . the first thing I think of is that you are totally

misconstruing the purpose that they're in there, because you're grouping them together."

Along with socialization, Mr. McIntosh, keyboarding teacher at Prairie, incorporates academics in his definition.

I think it's bringing special needs kids into a regular classroom where they can feel a part of it socially and gain some of the same things academically, not always in a separate room by themselves and it's, you know, including them in the regular classroom as a regular student.

Mrs. Bateman, the special education teacher at Prairie Middle, demonstrates she includes academic advancement as a part of inclusion, saying, "I think Hank's learning. That's the only reason I've got him in there, otherwise he would need to be here." This statement shows her belief that the purpose of inclusion, at least for Hank, is academics. Her beliefs might be different with other students, as she relates,

I can either modify it or I can do it. With a lot of stuff for my eighth graders it is just to copy. If I do it they copy it. Hopefully, they'll learn something from that and if they don't, they're not going to learn . . . I do the worksheet. They just copy it . . . I would probably help them find the answers but I don't have the time because I don't have them in, like, a study hall. I don't have a resource time with any of my kids. It's a choice of whether they are going to get all of their subjects in and, with help . . . and if I can provide

them help and they get all subjects in they feel better about that then they do spending an extra hour with me and where I'm helping them do something.

In further discussion, several teachers add stipulations to a student's inclusion in a general education classroom.

Mrs. Monet, art teacher at Prairie Middle, states,

I know inclusion means having students go through schools with normal students. I think as long as the person's mind is to the capacity where they can function with normal students, the handicap doesn't make a difference. Where it does make a difference is if their mind function is below the level of even simple learning. There have been students like that that have been included in the schools, and I guess I don't agree with that because it slows down all of the students. Not to say that I don't feel they need an education, I do. But I think that is something completely different than including a normal handicapped student, you know, where they have the capacity to learn just like everybody else.

Several individuals add a requirement that the student be able to benefit from inclusion when defining inclusion.

Mrs. Westinghouse, home economics teacher, believes students must be able to benefit from the socialization.

When you talk about inclusion in a regular classroom where they do nothing but sit and are in another world and have no idea, I don't know if it's benefiting them at all, because they--I can't help but wonder if they

feel excluded, because they're so lost. If everybody else is busily taking notes and they aren't able to even do that. I mean, how could you feel included? How can that be a social skill that's really helping you and making you feel good about yourself?

Her sentiments are reiterated by Mrs. Bangles, who observes, Social skill . . . that isn't happening in the classroom. I don't know how that could happen in the classroom . . . I don't think that . . . his [Randall's] thinking process is so slow. He can't keep up. Even with a small group discussion, he just can't keep up. Is it beneficial to put him in there? Is that helping Randall? Is it helping them? I don't know.

Miss Prime expresses concern that inclusion may limit a student's opportunity to benefit from special education services.

I think inclusion is keeping a child in a classroom to a point where it benefits them but then keeping them out to see the other benefits that are available to them as far as one-on-one, no distractions, those types of things.

The special education teacher at River View Middle, Mrs. Kauffman, shares Miss Prime's concern.

My definition? Well, I know the . . . you know, the legal term . . . and, my definition would be not across the board because I don't believe that it can be an 'all-for-one and one-for-all' situation. I think there are instances when kids are better off with the teacher

certain times, and then, you know, kind of at the teacher's discretion, not just 'everybody in.'

Jessica, a paraprofessional at Prairie Middle, expresses an appreciation of the inclusion philosophy, along with reservations.

It's a nice idea, and I don't mind the regular kids being exposed to them, but I don't quite get how it works. So, we're just putting them in there. The retarded and the handicapped are just there. I'm not sure why. To take up space? Because they're not able to function. If there's no point and it's only for social, I wonder if somehow there might be a different way.

Several other individuals specify criteria for determining when the inclusion philosophy should not be implemented. Sharon, paraprofessional at Mount Richards High, believes students should not be included "when it's going to hurt them . . . or the other students." Mrs. Webster, of the same mind, states,

I've got to say that maybe in a couple of instances that the inclusion may have gone too far. I don't know how to express that, but there are some students with problems so severe, and they're disruptive. There's one now, and the person who's working with him jerks him around.

It's, just to me, more like an animal-type situation.

It is important to understand individuals' definitions as they will affect the daily practices in implementing inclusion. The definition could affect how the general education teachers view their relationships with the special

education teachers and the paraprofessionals, their responsibility with the included students, and the paraprofessionals' role in the general education classrooms.

The special education teachers are typically responsible for monitoring students' progress and the implementation of the students' IEPs. Placement of a student in a general education classroom does not usually eliminate that responsibility. Inclusion, as implemented by most schools, requires placement of students with disabilities in general education classrooms with support in the form of materials, accommodations, and personnel. The special education teacher's job can vary from providing full-time direct service to part-time direct services, collaborating with general education teachers to provide information and assistance, and supervising paraprofessionals.

Tables 1, 2, and 3 in Appendix D show that few general education teachers have taken college coursework in special education. The tables also show a total lack of inservice about inclusion, other than during new teacher orientation. Mr. Flint, Mrs. Bangles, and Miss Crick attended an inservice program for new teachers which included information about inclusion. Miss Crick said, "They told us, but, I figured, I kind of didn't really listen because I thought, 'Ah, I can do it.'" Mrs. Bangles notes, "It made us aware that it was something we'd have to deal with. I don't know that it was helpful as far as doing the specifics. And, we got all those initials thrown at us." Mr. Flint concurs with the others, "I think they may have had something in there but I don't recall

anything specific." The paucity of inservice and preservice education concerning implementing inclusion places the task of informing the general education teachers on the special education teachers. River View Middle uses team scheduling that provides the general education teachers with daily meeting periods. Mr. Flint reports,

Betty [LD teacher] comes in, Ellen [Kauffman] comes in and they'll let us know if some of their students are having a bad day or if we need to do such and such for students or for testing, if they need to bring them out for testing. We can set up schedules for that, it really helps.

Even with the regular meetings, the communication between the general education teachers and the special education teacher is not as thorough as some teachers would like. The English teacher, Mrs. Bangles, says, "There is a breakdown of communication on follow-through. A lot of those decisions on how to handle those kids are left to the classroom teacher. There probably isn't enough interaction between us about the special ed students." This quote is emphasized by Figure 1 in Appendix E, that she drew in response to the request to diagram the relationship between the teacher, paraprofessional, and students. Mr. Flint, referring to a student problem, reports, "I haven't really sat down and discussed it with her [special education teacher]."

The other two schools do not use the team system or schedule interdisciplinary meetings to deal with student

issues. Prairie Middle staff report the additional difficulty of meeting with the special education teachers because they are housed in two separate buildings. Mrs. Monet says,

I've rarely seen the special ed teacher unless it's for an IEP or something where we have to be there, and especially now in this building where we're not in the same building. Then you can't get back and forth very easy. I never get over to the other building and they rarely get over here other than for the mail, I suppose.

Mrs. Westinghouse's home economics class is also housed in a building separate from the special education teacher and seeks her out only as needed. "I usually only [communicate] when there's a specific problem, and I don't think I probably have communicated this [student's problem] . . . I don't see Carla [the special education teacher]. Now, being in our situation where she's in the other building, I mean I just never see her--I never communicate with her." Mr. McIntosh agrees that since they moved into separate buildings,

We don't have a lot of daily [contact] because we don't have the lounge any more. That used to be a daily thing for everyone to come in the morning and visit. We've lost a lot of that interaction and some of the special needs students are the ones that are suffering because you don't have that interaction and that collaboration there. It takes a special effort to see them.

The staff of Prairie Middle relate two times they are most likely to communicate with the special education

teachers. Mr. McIntosh reports, "They usually will indicate to me there is a special needs student that is going to be in my class. Kind of go over some of the facts behind them." The other time is at the end of grading periods. Mrs. Bateman says, "They'll [general education teachers] ask me [how to evaluate students] when it comes time for report cards. Should I give them a grade or is S/U okay." For daily communication, she relies on the paraprofessionals to provide the communication between the general education teachers and her. "Some I talk to more often than others and some I NEVER talk to so, if they have an aide in the classroom, I let the aide deal with it. And the aide does all my in-between work."

At Mount Richards High, the special education teacher and general education teachers often meet on the run and in the hallways between classes. Mrs. Rogers, the special education teacher, says she meets with them,

. . . whenever I can. In the hallway, during their prep time, before or after school. Many times we have to use voice-mail to communicate or through the mailbox, or whatever, you know. So it's pretty hard to make all the communications that you need--you have to work at it. There's many nights I'm here until 6 o'clock . . . doing nothing but memos to teachers or . . . voice-mail . . . I think all special ed teachers have tried and tried and tried. [Communication] is, it will just always be a problem.

Along with communicating information, special education teachers are charged with providing direct assistance.

Sometimes they work in the general education classroom, co-teaching students. The absence of time to co-plan may translate into the special education teacher's assistance being limited to implementing the general education teacher's plans with the students. Mrs. Westinghouse reports experiencing this situation, recalling, "One of my first [included] students that was kind of lower in abilities, the teacher actually came with her all the time, so the teacher was playing the role of the para, I think."

One of the ways a special education teacher can assist the general education teachers is by scheduling a paraprofessional into the general education classroom when she is unavailable to work in the general education classroom. This allows the special education teacher time to instruct students with disabilities in the special education room, or complete other tasks such as testing students, while providing support in the form of personnel to the general education teachers.

Paraprofessionals working in general education classrooms perform a variety of tasks. The general education teachers at Mount Richards High cite tasks associated with academics as the major focus of the paraprofessionals' time. Mrs. Newton, biology teacher, cites her expectations as,

. . . interpret directions to their individual student or students according to their need. I expect them to communicate with me any special problems I need to address. I expect them not to give answers.

Mrs. Webster, English teacher, describes the

paraprofessionals' role as "to take notes, mainly, I think, and to help the students with their understanding of the subject." Mrs. Euclid, algebra teacher, places emphasis on the paraprofessional's level of knowledge of the content area.

During lecture paras should be listening and learning. A para who can't do the coursework isn't a help. One para studies the lesson the night before. I will help any of them learn the material before class time, if they want.

The general education teachers at the two middle schools view the paraprofessionals' job as dealing with both academics and behavior. Mrs. Bangles, English teacher, believes, "The function of most of the paras with a lot of LD kids is to keep them on task." She adds that behavior has not been a problem in her class, and she assumes the presence of the paraprofessional may be the reason. Miss Prime views the academic and behavior management functions as ultimately interrelated.

She just helps me. I just continue teaching like I always have been, and she's got three or four kids in the room that she kind of helps to stay on track. And then when it's homework time, we both help the kids with their questions. Pretty much she's here for a certain group of kids, and she, you know, makes sure that when I say, 'Take your books out,' that they take their books out. She makes sure that when it's homework time, that they're doing their homework. She is just like an extra pair of hands for me . . . she tries to keep the kids on

track, but she also . . . behaviorally . . . it kind of goes together. If she can get them to do what they're supposed to be doing, then their grades are going to come up.

Miss Crick expressed uncertainty about what she should be expecting from the paraprofessionals when they are working in her classroom. "I don't really know. I guess I never really discussed it with them." The caption of her diagram, Figure 2 in Appendix E, explains that she expects the teachers to "correspond with [her]" and the students.

How general education teachers describe the paraprofessionals' responsibilities in their classroom may be reflected in how they describe their relationship with the paraprofessionals. Mr. McIntosh says, "I would see it as part of being a team thing. I don't view it as being a boss to them or something. We're both out for the best interest of the students. That's our goal." Mrs. Westinghouse does not view herself as being in charge of the paraprofessional. "I don't feel that I'm their boss, that I'm their supervisor. I think of them as a helper to the student, so I don't really have a relationship to them." Miss Crick says she expects them "to be an extension of me." Mrs. Webster views them "as an assistant, you know, to help where I can't help." Her diagram, Figure 3 in Appendix E, illustrates that both adults connect with the students, but there is not connection between the adults.

The special education teachers may add other assignments onto the general education teachers' expectations for the

paraprofessionals. Mrs. Kauffman, teacher for seriously emotionally disturbed at River View Middle, states,

I would expect her to understand the material. Get the material that we would need. And, some of that is dependent upon what the teachers expect as well, and to kind of keep a working relationship between the teacher and me.

Mrs. Rogers, teacher for seriously emotionally disturbed at Mount Richards High, stresses academics with her paraprofessionals.

I expect them to be taking notes, learning the concepts. Right now we're trying to create our library of content in our binders and stuff, so when students come to the resource room, we have that stuff and we just have to go pull out that binder and look at the content, and say, 'Oh, this is what they covered today.' A lot of times our students have a hard time focusing from the overhead to here, so if we have the notes, they can copy them at their pace in our room. So, you know, note taking and concepting.

Mrs. Bateman, teacher for mild/moderately mentally handicapped, places emphasis on maintaining appropriate behavior in the general education classrooms.

That's their major concern. And that's what I usually put them in there for and that's what I tell them. If I'm having them sit with a kid that's a behavior problem and that's what they are there for, they are to handle

it the best they can. And, if that child is disruptive and the teacher needs to take over, then they need to have the teacher do that. If the child needs to be sent out, they can do that. But if, you know, the teacher should be taking over that part, okay. But, when they are working one-on-one, they usually can handle most of that. But I have had some real behavior problems with kids, the aides have to take, I mean, that's what they are there for.

As a paraprofessional working with students with mild/moderate mental retardation, Jessica states,

I wish I could say it was [helping students to learn] . . . all the time, but a lot of the time it's just to keep them quiet. For some, it's to assist them to learn. With Lewis, it's social, to be able to sit in a classroom, to be able to listen without making odd noises and movements.

The other middle school paraprofessional, Marsha, says she is to "get the assignments and help them . . . make sure they get their work done. You know, if there's a disciplinary situation, then intercede if needed or remove the student, if necessary, or come and get us."

Sharon views her job as providing security or moral support for the high schoolers from the class for students with serious emotional disabilities as they achieve academically.

I'm there for moral support, just to be there for them too. And, I always tell them that if they want me to do

something . . . like sometimes a teacher will hand me something to go copy--make more copies-- like for algebra tests and have me do that. I've collected assignments. I've . . . you know, not always, and some teachers, you know . . . I think they'll think that you over-step them, you know. One teacher says, "Why can't she [student] ask [me] if she can go to the bathroom?"

Sharon adds that her focus changes over time. When they first came to the SED room,

. . . they need that emotional support more than they do the academic. I mean, the academics will come if . . . you know, you have to want to learn. [Later I] make sure that they do their assignments. Make sure that they understand it.

Sharon attempts to label her job as she describes,

When I first walked in, I thought a para . . . I mean, I thought it was like teacher's aide, and you are, but you're not. I don't know how to say that. I don't feel like I'm a teacher's aide here. You know, I feel like I help [students] with their assignments, to get their assignments done. I don't feel like I help the teacher a whole lot in any situation, I really don't. I hate the word 'teacher's aide' because that's not what I do here.

Sharon would prefer to be called a paraeducator.

I guess paraeducator, for me, means sharing in the education of the child. Sharing so they can be educated. Paraprofessional, I'm not really sure, you know, where that name came from.

Marsha, working with middle school students with serious emotional disabilities says,

I'm kind of an extension and an interrelationship, kind of between the classroom teacher, the academic curriculum that the student is responsible for; and again, a liaison, but not a complete communicator between the classroom teacher and the supervising teacher in our setting.

Marsha relates her thoughts about how general education teachers view the paraprofessional's job.

I think they need to understand a little more fully. Sometimes I get the feeling that they don't quite understand why we're there, as much as we communicate with them, and we answer any questions that they have. I think they don't understand our role.

The common element in all the descriptions of paraprofessionals' duties is simply and clearly summarized by Andy, a middle school student with mental retardation. "I would tell her, like, her job is to help the kids, help out, and if they need help, go help them." This definition aligns with every definition offered by teachers and paraprofessionals.

Beyond providing information, assistance, and scheduling paraprofessionals to work in general education classrooms, the special education teachers have a duty to monitor programming provided for students with disabilities. When programming is provided through the direct services of a paraprofessional, part of that monitoring should include

supervising paraprofessionals in their role in the general education classrooms.

The minimum requirements for employment as a paraprofessional in both states is 18 years of age or older with a high school diploma or GED. Education beyond this level is a bonus, but not an expectation. Several of the general education teachers interviewed are unaware of the hiring guidelines. Mrs. Bangles describes the paraprofessionals' backgrounds as "they have to have college. To be a para, they have to have an education degree." She also states that paraprofessionals "working with the behavior problems, I think people need training [in behavior management]." Miss Crick discloses, "I have no clue. I have no idea. I do know. They do have a lot of special needs classes, right? You know, as far as like restraining, those types of things." Mrs. Newton, who had been a special education teacher in the past, says,

Well, I believe that in this district they need to have a teaching certificate. I thought that they used to. I would think at least, if not teaching, they would need a bachelor's in this district.

Mr. Flint relates his knowledge in term of individuals currently working as paraprofessionals. "I know Shanna has [college education], I'm not sure if she has a teaching degree. I know Anna has a teaching degree. They have teaching backgrounds." One teacher, Miss Prime, has a relative who once worked as a paraprofessional and bases her knowledge of hiring guidelines on that experience.

I don't know. I don't think there are too many requirements because my sister-in-law was hired and then she ended up quitting because she couldn't make it on the income. She doesn't have any education background whatsoever. It seems to me that it's kind of, you know, if you know somebody in the education field that can give you an 'in' to get an interview, and then I think it's pretty much just based on the interview. If you can answer the questions the way they want them answered you can have the job.

Mrs. Rogers, the special education teacher at Mount Richards, is aware the general education teachers do not know the minimum standards for paraprofessionals. She states, "I figure it's really nobody's business as long as they do their job." Mrs. Kauffman comments, "No, I don't think they [general education teachers] know." Expressing some concern about who is hired, she says, "Sometimes they hire people off the street." Mrs. Bateman shares her concern, balance with practicality, "When you are paying only five dollars an hour, you don't get the best caliber of help always. The one [paraprofessional] that left had difficulty doing eighth grade work."

Paraprofessionals are expected to work under the supervision of certified personnel. One reason for this is the low educational requirements to hold the position. The level of independence and decision making that is given to the paraprofessionals by the general education teachers varies but does not appear to be connected to knowledge of

the paraprofessionals' educational background.

Paraprofessionals assist students and may modify assignments, determine students' grades, and deal with behavior problems. Mrs. Bangles imparts, "When it's grading time, I have them make the decision. . . . I ask all the paras how they feel their kids have done; and it's mostly an effort grade."

Miss Prime follows the paraprofessionals' lead in modifying assignments.

With all the LD kids I've had . . . I just want them to be successful. Anything that any of the LD teachers or the paras or anybody have said, 'Would it be all right?,' I would say, 'Yes.' So, you know, 'Would it be all right if they just did the evens?' 'Fine.' 'Would it be all right if they only did half of the questions on the test?' I don't care. Whatever they are capable of doing is . . . you know, I'm not going to say, 'If they don't take the whole test, they can't possibly pass.'

Mr. Flint relates how he deals with paraprofessionals modifying assignments.

As a teacher, I make the assignments and stuff and then they generally ask me what they can do to lighten it up for the kids and I basically give them the leeway to do what they feel is best . . . and they know their student a lot better than I do because they work with them one-on-one all day long so they know what they can and can't do. Basically, I just give them the leeway to do what they think is best.

The general education teachers did not define their relationship with the paraprofessionals as supervisory. That task is left to the special education teachers. However, none of the special education teachers interviewed described a systematic routine for supervising paraprofessionals in the general education classrooms. Mrs. Bateman explains,

No, I don't [see the paraprofessionals in the general education classrooms]. Most of my input from that would be from other teachers. And, all I know is, if they are not doing their job I find out from the regular teachers. And, I have had that happen, where the regular teachers have told me, so and so didn't show up or so and so is not working with the kids and then I'll talk to them about how is it you're working and how is it you're doing this and suggest other ways to do it.

This strategy has worked in identifying non-performance. Mrs. Westinghouse, a teacher at the same school, describes her actions when she thought a paraprofessional was not assisting the students.

My role at that point was, this is what I thought, that I went to the [special education] teacher. And, I voiced my concerns to the teacher. I have never said anything to the para. I don't think that's my role--I don't feel that I'm their boss, that I'm their supervisor.

The supervisory function of the special education teacher does appear nebulous. Mrs. Rogers supports a team,

rather than a hierarchical approach, to working with a paraprofessional.

I look at us as just a team. I'm not the boss. When we make decisions, if we can do them all together, I'll say, 'Well, what do you think? What do you want to do? What can we do here? Let's brainstorm.' But when it has to be a cut-and-dried decision, I guess I know when to step in.

At the same time, Mrs. Rogers recognizes her role in evaluating paraprofessionals' job performance. "I fired one [paraprofessional] last year. You bet, [for] incompetence."

Mrs. Monet thinks the special education teachers should observe in the inclusive general education classrooms (although her focus is primarily on the students).

I feel that they [special education teachers] should be on top of it a little more and know what the students are actually doing and see what's happening in the classroom. I think they need to do a little more classroom visitations because they don't really know what's going on in the classroom.

Both Mrs. Rogers and Mrs. Kauffman remark they believe the general education teachers would treat paraprofessionals differently if they knew their educational backgrounds. Mrs. Rogers discloses concern that the teachers would show them less respect (which may explain her contention the general education teachers do not need to know).

The special education teachers are not the only individuals with responsibility to students in the inclusion

philosophy. General education teachers have the same responsibility for students with disabilities as they do for the nondisabled students, but also must remain mindful of meeting the students' special needs. As recounted earlier, paraprofessionals function as a vehicle to meet some of the students' needs. One area of need that cannot be met by paraprofessionals, but can be cultivated by general education teachers, is socialization with peers. Several teachers interviewed cited socialization as one of the goals of inclusion. Mr. McIntosh explains what he does to encourage socialization.

I try not to separate, for instance Lewis. I wouldn't try to separate him or put him off by himself. I try to make sure their lesson is the same as everybody else's lesson. I try to include them in the classroom in terms of everything we do. Lewis sat out of the test. If he was in the class he would have, definitely would have taken the test.

Mrs. Monet also uses seating as a way of encouraging interaction between students with disabilities and students without disabilities.

A lot of times, I would let the handicapped student kind of pick any place, where the others, I would kind of assign. If someone actually requests to sit with them, then I will usually move that student to sit by them.

Grouping is a tool Mrs. Bangles utilizes.

Sometimes I'll place them with students who are cordial and then . . . I come right out and tell the people,

'You know, hey, I think so-and-so could really use you. I've put this person with you for a reason. I really think they can learn a lot from you today . . . ' I kind of do it that way, give them kind of a little bit of responsibility.

Mr. Flint also groups students to encourage them to work together appropriately.

Socially, I try to get the groups to, like with Maggie, try to get her involved in a group with other students and I don't try to jump in and I try to have [the paraprofessional] not jump in as much but to have the kids help Maggie out and have Maggie contribute to the group or like last year with some other students we had, just to get the kids, the students, working with each other and not the aide coming in and coming to the rescue to help the group, or me come in to help the group and have them work it out together. For the most part it works really well. Not just with Maggie [a student with mental retardation], I have some other students later in the day who, some very good students, their grades aren't as good, but they really help out the other students in the class. Students like Maggie.

Mrs. Newton maintains students with disabilities are set apart from the other students when paraprofessionals only assist students with disabilities.

I like [when the paraprofessionals help all the students], then it doesn't segregate the student that he or she is working with because I don't like to see that

either. But if they're helping others or at least answering questions they become more a part of the class. I think it flows better . . . I don't know, but I think it makes for a better classroom atmosphere.

The same situation is noted by Mrs. Westinghouse, "You have to remember that sometimes the para makes it a little wall around her too--we've got an adult there listening--you know, if [they] should do a little social conversation."

Miss Prime reports some students with disabilities who are allowed to go to the resource room for additional assistance do not do so because they do not want to draw attention to themselves. She makes arrangements with the students so they can get the help they need without appearing different from their peers.

They don't want other kids to know that they need extra help, which is too bad. I do give those kids the option, too, if they want to come and take their test before school or after school or by themselves if they want to instead of in the classroom with everybody else if they just want to come in.

Mrs. Webster helps students with disabilities feel like part of the class,

. . . treat[ing] them just like I do anybody else and I joke with them, just like one kid--he was interviewed in the paper and I told him, 'You know, Jamie, I really enjoyed your senior picture with your interview, but I was disappointed you didn't list me as your favorite

teacher.' He said, 'I told them, but they didn't print it.'

Although the general education teachers make efforts to help students become full participating members of their classes, some also have questions about how much assistance is given to students. Mrs. Monet wants to,

. . . have paraprofessionals just help, not do, for them. I really, really strongly believe that the more they can actually do themselves, the better, and I really stress that. I see a lot of paraprofessionals that come in when they haven't worked with them a lot doing for them rather than helping, and I guess I really don't believe in that . . . What I like to see is the students do the work themselves, even if there's a para there.

Mrs. Westinghouse reports the quality of home economics projects produced by students with disabilities assisted by paraprofessionals is better than average.

When Jessica was helping those two . . . sitting next to them, they did a wonderful project. They probably did better than many students that were in there because they had Jessica watching and stopping them if they were going to do something immediately that was wrong.

However, she also thinks the assistance from the paraprofessionals occasionally creates some difficulties in grading their work.

Actually, one thing with the para sitting next to them, many times they have all the right answers on a

worksheet because the para is writing them. Well, you know, if the para's writing in as I go along, of course they're going to get them all right. So, sometimes it is a little skewed when it comes to [grading].

Mrs. Bangles makes an effort to encourage the students to rely on each other rather than on the paraprofessional. She directly instructed students to ask each other instead of the paraprofessional, or "they would have asked Marsha if she would have helped them" instead of working as a group.

The students with disabilities frequently remain on the caseload of the same special education teacher and paraprofessional year after year. The paraprofessionals and students with disabilities may develop close relationships with each other through this extended contact. Mrs. Newton views the security of the relationships as potentially problematic for the general education teacher-student relationship.

[The paraprofessionals and students] start out that way and usually it just takes some gentle prompting and then they both realize that some students need to be reminded who the teacher is. It is very comfortable, they develop this relationship with the paraprofessional and that is good, but the real world is out there and it's not going to be so warm and cozy. They can't be so protected and sometimes some of the paras try to do that a little bit. So, yes, the student needs to speak with me.

Mrs. Bangles also recognizes the relationship between the students with disabilities and paraprofessionals. "I give up

so much ownership of the special ed kids to [the special ed teachers and paraprofessionals] that I would feel that if I step in, I would be intruding." The issue of ownership is something Marsha views as needing adjustment. She notes they are "our kids. We're working on it, see, we're working on it."

Limited opportunities for communication between the general education teachers and the paraprofessionals may be an obstacle in developing and maintaining a mutual exchange of information. Mrs. Westinghouse identifies part of the difficulty in communicating with the paraprofessionals.

They walk in with a student, and sometimes late, you know, and walk out with the student because they need to get to their next class. So, to tell you the truth, there isn't one-on-one communication with us as teachers . . . I'm hoping that if they had a question or something that they would just ask me like a student would ask, kind of ask me to come over and address something.

Mrs. Bangles acknowledges, "I see a problem of a lack of communication between the paras and myself." Miss Prime reports there is no time built into the schedule to confer with the paraprofessionals. "We don't really communicate, you know, we don't really know why they're here or what their job description is." Miss Crick usually only gives direct instructions if she is going to be out of the room, imparting, "Not unless I have to go to the bathroom. That's the only time. Or, if I have to go and photocopy something

really quick." Jessica states some teachers will talk with her a little, but,

. . . there's others that won't talk to you and you have to go to them to get everything pried out of them. Mr. McIntosh hasn't let me know what's coming beforehand, so there's really no way to prepare. And, if I approach him or ask him about it, he says, 'Don't worry about it, it's not going to matter anyway, don't worry about it.' But just to be acknowledged that we're there and we're giving worthwhile effort . . .

At a minimum, Jessica thinks,

. . . teachers should at least greet you and acknowledge that you're there and ask you about the child, at least say, 'This is what I'm going to expect of this person, please, could you see that he meets those qualifications.' I have not had one teacher yet that has done that . . . it would be nice to have a conversation about 'this is what I'm going to require.'

Sharon is proactive in contacting teachers and explaining her role in their rooms.

I always tell a teacher that I will be coming into their class before I ever just walk into their class.

Sometimes I tell a teacher . . . like the chemistry teacher, I said, 'I'm here and I will be taking notes, so in case she--or they--in case they aren't quite fast enough to write formulas down.'

Mrs. Newton uses that initial visit to orient the paraprofessionals.

I go through the class expectations with them just as the student receives. I outline my expectations for them and I make sure they have all of the resources. A lot of times they don't have a textbook and I make sure they have that because that's a big deal and I makes sure they have everything that the student gets.

The communication pattern between the general education teacher and paraprofessional may start on the first day the para is in the room. Miss Prime relates,

There are people that have paras in and out of their rooms all day long, and we've never been told what the responsibilities of the paras are and what they're in there for, you know . . . Some teachers just ignore them. . . .

Miss Crick, a first year teacher, is aware the paraprofessional has many years of experience in her role. Marsha has "been here before, so she just up and walked around and helped as much as she could. I don't really know if she knows what I expect. We haven't really discussed it." Her diagram, Figure 2, illustrates that they are all linked, but does not show an exchange of information.

Paraprofessionals are aware of the lack of preparation prior to their entry into the general education classrooms. They also feel a lack of preparation when they start working as paraprofessionals. Marsha recalls the directions she was given the first day she was to work in an inclusive classroom. "The special education teacher said, 'Okay, you're supposed to follow the kid with the red shirt.' That was kind

of it." Jessica's experience is similar to Marsha's. "I think some of it's just practice and jumping in . . . this is sink or swim."

The lack of direct communication about the paraprofessionals' duties can create confusion about the roles of the general education teacher, the special education teacher, and the paraprofessional. When Mr. Flint was asked if paraprofessionals receive any specialized training, he reported about training the special education teacher was pursuing.

I don't know for sure. I don't know. I think Marsha is, just because she's taking a class in special needs, but as far as specific training, I'm not sure. That's something to ask . . . I suppose.

Mr. McIntosh also referred to Jessica as a teacher when describing the benefits of having a paraprofessional in his room.

Jessica's been a big help there where they are getting special attention from that teacher but I always try to make a point, during the hour, to stop in and spend time with them and just encourage them and say hi, pat them on the back, make a comment about how things are going. Mrs. Newton relates that sometimes the paraprofessionals may do some things the teacher should do.

I feel, [the paraprofessional] is there as a resource and to help but not to replace the teacher and so I should be the one [to ask], cause I can, hopefully,

answer questions better on the subject and that's what, I never want to lose that contact.

The strength of the relationship between the students and the paraprofessionals, along with the deficit in communication of roles, may contribute to the paraprofessional assuming some of the teachers' roles. Sharon relates, "Some teachers don't understand. 'Well, why can't they ask me? I'm the teacher.' I've had teachers say that to me."

Teachers with limited experience and training in special education may contribute to the role confusion by passing much of the interaction with the student to the paraprofessionals. Mrs. Newton believes the use of paraprofessionals has,

. . . given some teachers that, either for lack of education or maybe even comfort level, the teacher doesn't need to deal with those students if they choose not to. Yes, I think it's changed. I think it's changed for the positive. But, only because I still take an active role. I do see teachers that sort of let the para and their student just go.

Mr. McIntosh volunteers,

They're a big help to me because they know the students so well. It made it easier in terms of being comfortable with the student. Having her there makes them a lot more comfortable in doing something like this [keyboarding]. When a great deal of the teachers' contact with the students is through the paraprofessional, students with limited

cognitive functioning may not recognize the difference between the paraprofessionals and teachers. Andy, a student with mental retardation, answers "Not that much" when asked to describe the difference between teachers and paraprofessionals.

Miss Prime divulges concerns about the presence of paraprofessionals in her classroom, related to the dearth of communication.

Sometimes it's hard for me to teach when she's in the room because, like if I start class and I get them settled down and they're all quiet and I start a lecture and then she comes in and the students that she works with will start to visit with her a little bit, so then the other kids aren't paying as close attention to me because they're wondering what she's talking about. Or, if I'm teaching, and a student isn't on track and she goes over, sometimes it's not a disruption at all because she's very quiet . . . and sometimes that's . . . if she's still standing up in the middle of the room, you know, and she's talking to the student and if she's 'ssspp-ssspp-ssspp,' it's just hard to teach over that. I don't know that there's any way around that, but a couple of times it's been frustrating for me . . . I kept thinking that if it's distracting for me, it's got to be distracting for the kids, because I'm trying to continue with my lesson and not stop while there's this THING going on. You know, and the kids aren't supposed to be talking when I'm talking, but she is. Sometimes

it's hard because, you know, I can't really stop and go, 'Excuse me.' And [the paraprofessionals are] trying to get the kids back on track, which is why they're there; but, at the same time, the other kids are watching and listening, and they're not focused on the teacher anymore, they're focused on the para and the student and what's happening there, and maybe if they were more aware of that that they just might try to be more discreet.

Aside from problems relating to communication issues, general education teachers view the use of paraprofessionals in general education classrooms as valuable and a positive strategy in providing services to students with disabilities. Mrs. Euclid voices an opinion shared by many general education teachers in inclusive settings.

A weakness of inclusion? I would like to see the [special education] teachers and paraprofessionals in the regular classrooms more, all the time.

Presenting the data from the interviews of general education teachers, special education teachers, and paraprofessionals, in a useful way is challenging. The numerous and varied responses to questions provide a glut of information that could easily become muddled as each interviewee's comments is added to the mix. To assist the reader in organizing the individual responses and the overall patterns, I structured the interviewees' comments in tables located in Appendix D.

The items included in the tables are clustered into topics, and phrases taken from replies to the topics. A bullet (•) indicates the interviewees' response was consistent with the phrase, although their wording is not indicated in the table. The tables group all staff interviewed by schools. For a table to be useful, it must be concise. To decrease the amount of text used, I used the following acronyms/abbreviations special education teacher (SET), general education teacher (GET), students with disabilities (SWiD), students without disabilities (SWoD), and paraprofessions (P).

Themes

The two overriding themes that developed from analyzing the interviews and observed events are deficits in preparation for inclusion and communication between individuals implementing inclusion. The deficits affect the general education teachers, special education teachers, and paraprofessionals. Ultimately, the deficits affect the students receiving special education assistance.

This section of Chapter IV lists the themes, assumptions (subthemes), and some examples of supporting data.

Theme I. Deficits in Communication Between the Paraprofessionals, Special Education Teachers, and General Education Teachers

Assumption 1: General education teachers do not know the educational background and training of paraprofessionals.

- ". . . they have to have college. To be a para, they have to have an education degree."

- ". . . working with the behavior problems, I think people need training [in behavior management]."
- "I have no clue. I have no idea. I do know. They do have a lot of special needs classes, right? You know, as far as like restraining, those types of things."
- "Well, I believe that in this district they need to have a teaching certificate. I thought that they used to. I would think at least, if not teaching, they would need a bachelor's in this district."

Assumption 2: General education teachers are not certain what paraprofessionals should be doing in their classrooms.

- "I don't really know. I guess I never really discussed it with them."
- Figure 2 in Appendix E explains that she expects the teachers to "correspond with [her]" and the students.
- ". . . we've never been told what the responsibilities of the paras are and what they're in there for, you know. . . . Some teachers just ignore them . . . "
- "Sometimes I get the feeling that they don't quite understand why we're there, as much as we communicate with them, and we answer any of the questions that they have. I think they don't understand our role, necessarily, and I guess maybe to help them understand our role."

Assumption 3: General education teachers, special education teachers, and paraprofessionals do not have ongoing, regularly scheduled communication.

- "I haven't really sat down and discussed it with her [special education teacher]."
- "I usually only [communicate] when there's a specific problem, and I don't think I probably have communicated this . . . "
- "Mr. McIntosh has never talked to me about what he's going to require of Josh."
- "There probably isn't enough interaction between us about the special ed students."

Assumption 4: A consistent definition with the goals of inclusion is not shared among the inclusion team members.

- River View Middle: "Well . . . the idea is to get as many students with special needs into the classroom as possible with whatever help they need, including not just putting them in the room with the regular ed teacher, but putting them in the room with paraprofessionals or with support staff so that they can function . . . " "Well, it's just giving students with problems a chance to be in a normal classroom situation and not shoved off to the side someplace, you know--special buildings and everything else." "Social skill . . . that isn't happening in the classroom Is it beneficial to put him in there? Is that helping him?"
- Prairie Middle: "the focus should not be the academics, but the focus should be social inclusion, and social skills, and social interaction." "I know inclusion means having students go through schools with normal students."

I think as long as the person's mind is to the capacity where they can function with normal students, the handicap doesn't make a difference."

- Mount Richards High: "Well, it's just giving students with problems a chance to be in a normal classroom situation and not shoved off to the side someplace, you know--special buildings and everything else."

Assumption 5: General education teachers and paraprofessionals do not know what kind of relationship they should have.

- ". . . teachers should at least greet you and acknowledge that you're there . . ."
- "I thought it was like teacher's aide, and you are, but you're not. I don't know how to say that. I don't feel like I'm a teacher's aide here. You know, I feel like I help [students] with their assignments, to get their assignments done. I don't feel like I help the teacher a whole lot in any situation, I really don't. I hate the word 'teacher's aide' because that's not what I do here."
- ". . . so I don't really have a relationship to them."
- Figure 3 in Appendix E illustrates that both adults connect with the students, but there is not connection between the adults. "Some teachers just ignore them [paraprofessionals] . . ."

Assumption 6: General education teachers provide little guidance or communication regarding their needs or preferences to the paraprofessionals.

- ". . . teachers should at least . . . ask you about the child, at least say, 'This is what I'm going to expect of this person, please, could you see that he meets those qualifications.' I have not had one teacher yet that has done that . . . it would be nice to have a conversation about, 'this is what I'm going to require.'"
- "That's another one that probably is lacking but, they walk in with a student, and sometimes late, you know, and walk out with the student because they need to get to their next class. So, to tell you the truth, there isn't one-on-one communication with us . . . "
- "I don't really know. I guess I never really discussed it with them. Two of them have been here before, so they just up and walked around and helped as much as they could and . . . We just got, Wendy just got hired. She's new, and so I don't really know if she knows what I expect. We haven't really discussed it."
- ". . . if she's still standing up in the middle of the room, you know, and she's talking to the student and if she's 'ssspp-ssspp-ssspp.' it's just hard to teach over that . . . I'm trying to continue with my lesson and not stop while there's this THING going on. You know, and the kids aren't supposed to be talking when I'm talking, but she is. Sometimes it's hard because, you know, I can't really stop and go, 'Excuse me.'"

Assumption 7: Lack of role definition creates confusion in differentiating paraprofessional roles from teacher roles.

- "So, to tell you the truth, there isn't one-on-one communication with us as teachers." (referring to paraprofessional)
- "Jessica's been a big help there where they are getting special attention from that teacher . . . "
- Andy, a student with mental retardation, answers, "Not that much" when asked to describe the difference between teachers and paraprofessionals.
- "One of my first [included] students that was kind of lower in abilities, the teacher actually came with her all the time, so the teacher was playing the role of the para, I think."

Communication Issues

The diagrams drawn by the general education teachers show several patterns of interaction between paraprofessionals, students, and general education teachers (Appendix E). Three of the eight figures portray the communication between the paraprofessional and the general education teacher as unidirectional, from the teacher to the paraprofessional. They do not include an indication of communication from the paraprofessional to the teacher. One diagram, Figure 3, illustrates a complete lack of connection between the teacher and paraprofessional. Another diagram, Figure 4, includes reciprocal interaction between the paraprofessional and the teacher, although it was added after

a long pause and is discounted by direct quotes from the teacher. Figure 5, the diagram drawn by Mr. Darwin, is the only diagram that shows reciprocal interaction between the student, paraprofessional, and teacher. It is also the only diagram that places the student above the paraprofessional and teacher, who are shown on the same level.

The lack of communication is not one sided, but is shared by all the adults implementing inclusion. Individuals observed and interviewed are functioning as groups, or teams, while maintaining continued ignorance about many issues which could affect how they include students.

Theme II: Deficits in Preparation of General Education Teachers, Special Education Teachers and Paraprofessionals for Inclusion.

Assumption 8: General education teachers delegate decision making about modifications of content and what students should be required to learn to paraprofessionals.

- "Anything that any of the LD teachers or the paras or anybody have said, 'Would it be all right?,' I would say, 'Yes.' So, you know, 'Would it be all right if they just did the evens?' 'Fine.'"
- "I basically give them the leeway to do what they feel is best . . . and they know their student a lot better than I do because they work with them one-on-one all day long so they know what they can and can't do. Basically, I just give them the leeway to do what they think is best."

- "Jessica's been a big help there where they are getting special attention from that teacher but I always try to make a point, during the hour, to stop in and spend time with them and just encourage them and say hi, pat them on the back, make a comment about how things are going."
- Marsha, sitting by Randall, goes over his paper with him. She moves ahead of the teacher as they look at the item together. She quietly reads the sentences to him, explaining the answers. Randall listens attentively to Marsha and does not attend to what Mrs. Bangles is saying.

Assumption 9: Paraprofessionals have limited opportunities to observe special education teachers and learn through modeling.

- "The special education teacher said, 'Okay, you're supposed to follow the kid with the red shirt.' That was kind of it."
- "I think some of it's just practice and jumping in . . . this is sink or swim."
- During sixth period, Mrs. Kauffman attends the team meeting to participate in planning and consultation. Marsha supervises students in the SED room.
- She spends most of third period with Hank, doing physical therapy on the therapy bed in the back corner of the room, separated from the teacher and the other students in the special education room by a curtain.

Assumption 10: Uninformed use of paraprofessionals may reduce integration of students with disabilities into the general education classroom due to the paraprofessional's proximity.

- "You have to remember that sometimes the para makes it a little wall around her too--we've got an adult there listening--you know, if [they] should do a little social conversation."
- When Andy is called, he picks the group on the left with four girls. Two of the girls in the group tell him to leave, "We have enough, go somewhere else." The teacher does not intervene. Andy appears unsure and stands apart from all three groups. After all students are in groups, Mrs. Westinghouse directs Andy to join Melinda's group. Jessica tells him, "You'll work with Melinda and me anyway."
- One student sits alone at a computer on the south wall. Jessica sits at a chair beside the lone student . . . Although Lewis glances up as the students enter, he does not talk to them or enter their conversations. (Prairie Middle)
- The first thing I think of is that you are totally misconstruing the purpose that they're in there, because you're grouping them together."

Assumption 11: Paraprofessionals are not trained to distinguish between assisting students to perform and "doing for" the students.

- "I see a lot of paraprofessionals that come in when they haven't worked with them a lot doing for them rather than helping." . . . "Nobody's really taught us. Where is the line there? Do you ask for them? Do you not?"
- Prairie Middle: Jessica directs her to lift the needle at the end of the seam and starts to lift the presser foot, but Melinda reaches past her and does it herself . . . Jessica goes to him and picks out the correct paper from his hand and passes it forward . . . When the stapler reaches Lewis, Jessica takes the stapler instead, staples the papers, passes the stapler to the next person, bypassing Lewis.
- River View Middle: Mrs. Bangles says to the boys, "If Randall has trouble with a word I want you to help. If Albert has trouble I want Randall to help. Don't have Mrs. Barton to do it all, she works so hard she works up a sweat." . . . When Randall reads and pauses on the word "maneuvered," Marsha supplies the word quickly. Jeremy is not looking at the book . . . Marsha continues to hold the book upright while Randall sits with his hands in his lap and reads orally . . . Marsha continues to hold Randall's book and turns the page when it is time . . . Marsha cues a girl sitting across the circle by making motions. When the answer was "balance or scale" she makes a motion using two hands with her palms up, moving up and down to show a balance.
- Mount Richards High: She starts giving hints, waiting several seconds between each. "It's a vegetable . . .

it's long . . . orange . . . don't you watch Bugs Bunny . . . Sharon repeats the clue, "the outer area." Mishie, pointing at another word, asks, "Is it this one?" Sharon shakes her head, indicating no . . . Sharon recopies the notes she has taken today, rips the notes out of her notebook, and passes it to the nearest student, indicating it should be passed on to the girl who entered late.

Assumption 12: Special education teachers do not institute procedures to evaluate how the paraprofessionals function in the inclusive settings from direct, systematic observation.

- "No, I don't [see the paraprofessionals in the general education classrooms]. Most of my input from that would be from other teachers. And, all I know is, if they are not doing their job I find out from the regular teachers."
- "I don't see [the special education teacher]. Now, being in our situation where she's in the other building, I mean I just never see her--I never communicate with her."
- "Some I talk to more often than others and some I NEVER talk to so, if they have an aide in the classroom."
- "I feel that they [special education teachers] should be on top of it a little more and know what the students are actually doing and see what's happening in the classroom. I think they need to do a little more

classroom visitations because they don't really know what's going on in the classroom."

Assumption 13: Special education and general education teachers are not aware of their responsibilities in supervision of paraprofessionals in the general education classrooms.

- "I have never said anything to the para. I don't think that's my role."
- "I don't view it as being a boss to them or something."
- "I don't think that's my role--I don't feel that I'm their boss, that I'm their supervisor."
- "I look at us as just a team. I'm not the boss. When we make decisions, if we can do them all together, I'll say, 'Well, what do you think? What do you want to do? What can we do here? Let's brainstorm.' But when it has to be a cut-and-dried decision, I guess I know when to step in."

Assumption 14: General education teachers are not receiving inservice about their role in inclusion beyond new teacher orientation.

- "I'd say not, other than maybe a tidbit here or there. You know, I'd say it's certainly been the role of the [special education] teacher to provide us with any information that we have."
- ". . . it [new teacher orientation] made us aware that it was something we'd have to deal with. I don't know that it was helpful as far as doing the specifics. And, we got all those initials thrown at us."

- "I think they may have had something in there but I don't recall anything specific."
- "They told us, but, I figured, I kind of didn't really listen because I thought, 'Ah, I can do it.'"

Assumption 15: The presence of a paraprofessional decreases the interaction between included students and general education teachers.

- The teacher approaches Lewis, "How are you doing?" Lewis responds with an affirmative answer, without looking at his teacher. Mr. McIntosh nods and continues around the room.
- "They're a big help to me because they know the students so well. It made it easier in terms of being comfortable with the student."
- "Given some teachers that, either for lack of education or maybe even comfort level, the teacher doesn't need to deal with those students if they choose not to."

Preparation Issues

The deficit of training, or preparation, for inclusion affects all three adults. The only inservice provided for general education teachers addressing inclusion was reported to be part of the new teacher orientation. Teachers who were employed prior to the implementation of inclusion are unlikely to have received any inservice about inclusion.

The task of informing the general education teachers falls to the special education teachers and, sometimes, their paraprofessionals. Few teachers reported the special education teachers informed them a paraprofessional would be

attending their classes. Those who did, however, did not inform the teachers about the paraprofessionals' role or their responsibilities about their roles. The deficit in pre-placement communication probably contributes to the continued lack of on going communication between the general education teachers and the paraprofessionals.

The paraprofessionals report little inservice. One school did not provide any inservice whatsoever. The other two schools did have a paraprofessional program in place and required 20 hours of inservice per school year. The topic covered during the fall was identification of personality traits of successful paraprofessionals and general education teachers. The paraprofessionals who attended the inservice did not feel it provided any information that would help them do a better job as paraprofessionals.

A final training need is in the area of supervision. Special education teachers with paraprofessionals become supervisors without having any preparation or idea of what they should be doing to appropriately supervise them. The problem is compounded when the paraprofessionals are not working under their direct supervision, but in other teachers' rooms who do not know they are also supervisors. The coursework special education teachers take in college teaches them how to deal with educational and emotional deficits in students. As students have moved into general education classrooms, a component of collaboration has been added to many special education teacher preparation programs. Collaboration stresses equity in working with others. The

inequality of supervisor-employee relationships, and how to manage this relationship while continuing to work as a team, is probably not addressed by all teacher preparation programs.

Deficits in communication and preparation for inclusion were evident across settings and participants. Some deficits, such as awareness of paraprofessionals' roles, were less apparent in one setting than another, but were still present in all settings. The assumption supported by a preponderance of events was Assumption 11, Paraprofessionals are not trained to distinguish between assisting students to perform and "doing for" the students, with 21 clearly distinguished instances or comments found across settings.

CHAPTER V
IMPLICATIONS AND RECOMMENDATIONS

Summary

This qualitative study was designed to answer the question, what happens when a paraprofessional is assigned to provide direct service to a student with disabilities in an inclusive classroom? Selection of the primary participants, paraprofessionals, was completed by securing the cooperation of three paraprofessionals who were identified as successful by the school principals and the special education teachers supervising the paraprofessionals. To gather qualitative data related to the research question, I observed three paraprofessionals one morning and one afternoon per week in inclusive classrooms throughout the fall semester of 1997. I also interviewed 3 paraprofessionals, 3 special education teachers, 11 general education teachers of inclusive classes, 3 middle school students with disabilities, and 6 high school students with disabilities.

I examined observation field notes, interview transcripts, and diagrams drawn by interviewees using NUD•IST, qualitative analysis software, for the initial generation of themes. Analysis was completed with the use of the ClarisWorks 5.0 word processing software as a slightly more automated version of the typical index card sorting and categorizing process.

The two overriding themes that evolved from analyzing the data were a deficit in communication and a deficit in preparation/training for inclusion. These deficits were most prevalent in the interactions, and lack of interactions, between paraprofessionals and general education teachers and between special education teachers and general education teachers. The areas of deficit concern (a) paraprofessionals' roles, responsibilities, and preparation, (b) general education teachers' responsibility for paraprofessionals, and (c) interpretation of goals of inclusion. The deficits in preparation/training were noted in (a) appropriate use of paraprofessionals to foster social inclusion of students with disabilities, (b) opportunities for on-the-job-training and modeling for paraprofessionals, (c) inservice about inclusion for general education teachers, and (d) supervisory training for special and general education teachers.

Discussion of Major Findings

Theme I. Deficits in Communication Between the Paraprofessionals, Special Education Teachers, and General Education Teachers

Assumption 1: General education teachers do not know the educational background and training of paraprofessionals.

When unlicensed assistants were first employed in classrooms, their responsibilities were primarily clerical (Pickett, 1990). On-the-job training was all that was necessary to learn how to grade papers, copy materials, decorate bulletin boards, and run errands. Their responsibilities have become greater and involve delivering

instruction to students but the training required for the position has not been increased. Both school systems I observed hire noncertified individuals who are not required to be educated beyond high school to deliver instruction to students with disabilities. All of these individuals are called paraprofessionals, a term that implies advanced training.

The American Heritage College Dictionary (1993) defines professional as "(1a) of, relating to, engaged in, or suitable for a profession, (1b) conforming to the standards of a profession, (2) engaging in a given activity as a source of livelihood or as a career, (3) performed by persons receiving pay, and (4) having or showing great skill" (p. 990). The definition of para is listed as "Subsidiary; assistant; i.e., paraprofessional" (p. 1092). The professional definitions 1a and 1b and the definition of para could be combined to create a definition of assistant suitable to conform to standards of a profession. This appears to be the definition accepted by the general education teachers interviewed. If the third definition of professional is combined with the para definition, the meaning would be assistant performing for pay. This may be a more appropriate meaning for the paraprofessionals employed by schools.

While I taught at an elementary school in Indiana, the title of unlicensed individuals was changed from teacher aide to paraprofessional. The title change equated paraprofessionals with paralegals and paramedics, implying

advanced training, when it was explained to the special education teachers.

Paralegal is defined as "of, relating to, or being a person with specialized training who assists an attorney" (American Heritage College Dictionary, 1993, p. 990).

Paramedic is a "person who is trained to give emergency medical treatment or assist medical professionals" (p. 990).

Paraprofessional is a "worker trained to assist a professional" (p. 991). All three definitions include training although training is not a prerequisite in most states for individuals employed as paraprofessionals in classrooms (Pickett, 1990).

The specialized training provided to paraprofessionals hired by the school system I was employed by consisted of a set of self-study lessons in a looseleaf binder. The only documentation of training was a sheet the special education teacher signed to record completion of multiple choice questions at the end of each section. The correct answers to the multiple choice questions were included in the last section of the binder, along with the form to document completion.

The change of title implying specialized training appeared to be designed to increase the status of the unlicensed staff to be more consistent with their responsibilities, even though advanced training was not provided. My classroom aide, Kyra, returned from a meeting with the news that, instead of a raise, the job title was being elevated from aide to paraprofessional.

The hiring guidelines are readily available from the superintendent or personnel offices. Evidently, general education teachers do not inquire about paraprofessionals' educational background or the hiring criteria.

Assumption 2: General education teachers are not certain what paraprofessionals should be doing in their classrooms.

Several general education teachers expressed that they really did not know what the paraprofessionals should be doing in the classrooms (Welch et al., 1995). They expected the paraprofessionals to know what they were doing, and they did not ask the special education teachers what the paraprofessional should be doing. The emphasis is probably placed on the entry of the student with disabilities instead of the entry of the paraprofessional. The general education teachers may be reassured by the announcement that a paraprofessional will be accompanying the potentially problematic student. The question of the paraprofessionals' role may never arise.

Assumption 3: General education teachers, special education teachers, and paraprofessionals do not have ongoing, regularly scheduled communication.

The inclusion of students with disabilities is best accomplished through a collaborative effort of special education teachers, general education teachers, and support staff, such as paraprofessionals. Collaboration requires ongoing and regularly scheduled communication.

River View Middle schedules daily team meetings of 50 minutes. The team meetings allow the general education

teachers and special education teachers to discuss concerns and plan for instruction. The paraprofessional supervises the resource room and never attends the team meetings even though she is an integral part of the collaborative effort.

Mount Richards High does not schedule daily meetings and the special education teacher collaborates through chance meetings in the halls and by leaving messages for the general education teachers. Face-to-face meetings between the special education teachers and general education teachers are frequently limited to case conferences.

There is even less communication at the other middle school, Prairie. The special education teacher indicates she interacts primarily with the other special education teacher in the classroom and the paraprofessionals. She only speaks with the general education classroom teachers if they seek her out, and at case conferences.

One of the factors affecting the communication level between the general education teachers and special education teachers is classroom placement. Both middle school special education classrooms were situated outside the middle school hallways. Last year, Mrs. Kauffman's classroom was directly across from the office. She reports that it has become more difficult to maintain communication with teachers since her classroom was moved outside the building to the relocatable, even though she attends the team meetings regularly. Next year her classroom is going to be moved even farther away from the team in which she works. She is concerned that communication may be dramatically impaired. The effect of

proximity is also evident at the high school, as Mrs. Rogers remarked she was on excellent terms with the English teachers because they are in the same hallway.

Assumption 4: A consistent interpretation stating the goals of inclusion is not shared among the inclusion team members.

The responses to "What is your interpretation of the educational philosophy of inclusion?" were as varied as the definitions listed in Chapter II. Many of the definitions stress the physical placement of the student with disabilities in the general education classroom (Murphy, 1996). Staff of all schools cite the primary goals of inclusion as (a) socialization between student with and without disabilities (Roberts & Zubrick, 1993) and (b) exposure to academic content. However, individuals within each school, serving the same students, do not communicate the reason why students are included (i.e., the goals for each student).

Mrs. Bateman, special education teacher of students with mild/moderate mental retardation, maintains conflicting views of the goals of inclusion for her students. She stated that Hank would not be in a general education classroom if she thought he was not learning, although Hank does not demonstrate that he is learning in any way. At the same time, she does the students' work when she completes worksheets and has them copy. No evidence of learning can be obtained from that activity. She has them copy so they will fit, implying socialization goals, in the classroom. She holds academics as

a goal for inclusion but practices in a way that undermines academics. If the special education teacher, the person most likely to have a clear definition of inclusion, does not clearly view the goals of inclusion, the other faculty could not be expected to share one definition of inclusion.

However, since Mrs. Bateman rarely communicates with general education teachers, her views are probably not communicated to the other faculty.

Of the three commonalities in a majority of definitions of inclusion listed in Chapter II, no one included all three. They were: (a) included students remain with their peers in general education classrooms throughout the school day or class period; (b) special services are rendered in the general education classroom; and (c) included students and general education teachers receive support from special education teachers or paraprofessionals. Three general education teachers expressed that students with disabilities should remain in the general education classrooms, and support from personnel should be present in the general education classroom.

Many of the faculty at the schools in this study defined inclusion in terms of who should not be included rather than who should be. None of the interviewees defined inclusion as a way of valuing students with disabilities as important members of the school, the definition used by Roberts and Zubrick (1993).

My interest in how individuals define the educational philosophy of inclusion has not abated. I am continuing

research on this issue via a qualitative survey posted on the internet. At this time, I have received over 130 responses to the survey.

Assumption 5: General education teachers and paraprofessionals do not know what kind of relationship they should have.

The general education teachers and paraprofessionals interviewed expressed their relationships in several ways (Wadsworth & Knight, 1996). They labeled the relationships as assistant to the students, team member, "extension of me," and no relationship. One paraprofessional said she wished the teacher would at least say hello to her, while the same teacher stated they were team members. Their view of their relationship was not shared. Labeling their relationship as a team allows teachers to view the paraprofessional as having equal responsibility for students, thereby passing much of the direct responsibility for the included students' activities in the general education classroom to the paraprofessionals.

None of the general education teachers expressed that they were supervisors or in charge of the paraprofessionals (Frank, Keith, & Steil, 1988). However, unlicensed personnel should be supervised. All of the paraprofessionals observed spent over half of their days in the general education classrooms where they are essentially on their own to evaluate their performance.

In some ways, paraprofessionals are viewed as guests in the general education classroom. It is the teacher's

classroom and the paraprofessionals are only there by virtue of student need. The ownership of the class may create a difficulty in territoriality (Kane, 1983), as the paraprofessional remains a visitor rather than a member of the class.

Assumption 6: General education teachers provide little guidance or communicate their needs or preferences to the paraprofessionals.

Scheduling time to encourage collaboration between the general education teachers and paraprofessionals presents a difficulty. Paraprofessionals are likely to enter the general education classrooms with the students, without an opportunity to discuss the general education teachers' expectations. As hourly employees, the paraprofessionals are likely to be paid only for the time during the school day that students are present. Since paraprofessionals are not available before or after school and do not have class periods without responsibility for students, all collaborative efforts must take place during class time. Teachers would need to interrupt their teaching to offer guidance or communicate what they want the paraprofessional to do. Extended exchanges are not possible when students are present and may be in need of assistance.

Assumption 7: Lack of role definition creates confusion in differentiating paraprofessional roles from teacher roles.

General education teachers and students may not recognize the differences in the roles of special education teachers and paraprofessionals. This is apparent when they

refer to paraprofessionals as teachers, or when a special education teacher is referred to as acting as the paraprofessional. The lack of role definition means paraprofessionals may be asked to make decisions they are not prepared to make and should not be asked to make (Yatkin, 1995).

Teachers and paraprofessionals do not wear uniforms or signs that declare the level of their education and expertise or even their job titles. They cannot be distinguished by how they are introduced. Some paraprofessionals are called mister or missus, and sometimes students call special education teachers by their first names. This lack of definition creates an illusion that a classroom is overseen by several teachers, while the truth may be the presence of one teacher and two unlicensed, untrained individuals.

This myth of the many teachers is reminiscent of what I experienced when I worked as a nurses' aide at a nursing home. Every employee at the nursing home wore uniforms. Housekeeping and food service personnel wore blue scrubs. The nursing staff wore white uniforms. During the night shift, four nonlicensed, minimally trained nurses' aides and one licensed nurse cared for all the residents. Actually, the aides performed all patient care except delivering medications. The aides answered patient call lights, changed bedding, and took pulse, respiration, and temperatures while the only licensed nurse remained at the nurses' station. The aides were instructed not to correct patients when they called us nurses. If the patients requested something that we

could not do, such as dispense medication, we were to state we would ask the head nurse. We were instructed to maintain the illusion we were nurses to reassure the residents that their care was appropriate. Several nurses' aides could be hired for the same cost as one trained, certified nurse. The illusion I experienced at the nursing home is continuing with the current trend to reduce costs by hiring more nurses' aides and fewer nurses (Barter & Furmidge, 1994).

The myth of many teachers may create the same illusion. The care, or teaching, is appropriate because trained professionals are present and in charge. Just as King (1995) cautions that the increased reliance on unlicensed assistive personnel may jeopardize patients' lives, the increased reliance on paraprofessionals may jeopardize the educational success of students with disabilities.

Theme II: Deficits in preparation of general education teachers, special education teachers and paraprofessionals for inclusion.

Assumption 8: General education teachers delegate decision making about modifications of content and what students should be required to learn to paraprofessionals.

During the observations, I noted numerous times paraprofessionals assumed total responsibility for modifying students' assignments (McKenzie & Houk, 1986; Yarkin, 1995). Sometimes they made the modifications without speaking to the teachers, and at other times they asked if a modification would be acceptable. Every time the general education teachers were asked about the modifications, the response was

affirmative. Sometimes the teachers appeared not to even consider what was said but interrupted the question to agree.

Changing or decreasing what students are required to do may alter what students have the opportunity to learn. In math, completing only the first half of the problems would be likely to eliminate the more difficult problems. Eliminating the word problems could reduce practice in applying computation to everyday situations.

In other subjects, modifying assignments becomes even more complex. Arbitrarily eliminating the odd numbered problems could affect the students' ability to understand the content or build on the knowledge they have acquired. Paraprofessionals are expected to recognize which concepts are most important and must be included without necessarily having the educational background or training to do so. Teachers do not identify the minimum content students with disabilities must learn to be considered successful even when their definition of inclusion stresses academic achievement.

Assumption 9: Paraprofessionals have limited opportunities to observe special education teachers and learn through modeling.

Paraprofessionals hired to assist in implementing inclusion face more difficulties in learning how to do their jobs than those who work in self-contained special education classrooms. Providing on-the-job training is usually considered to be the special education teachers' responsibility. When the paraprofessionals work in the same classroom with the special education teacher, continual

training in the form of directions, modeling, and feedback on specific events can be provided. Paraprofessionals who spend much of their time in general education classrooms have limited opportunities to learn from the special education teachers. Paraprofessionals are hired to extend the reach of the special education teacher so that services can be provided to more students and in several places at one time.

The need to be in different places means the paraprofessionals may not have enough contact with the special education teachers to become effective as support personnel. Sometimes paraprofessionals may have more contact with other paraprofessionals than with their assigned special education teachers. In that case, paraprofessionals may be doing more of the training of other paraprofessionals than special education teachers. Some paraprofessionals may learn all they need to know with the limited contact possible between the special education teacher and the paraprofessionals.

Assumption 10: Uninformed use of paraprofessionals may reduce integration of students with disabilities into the general education classroom due to the paraprofessional's proximity.

One of the major goals of inclusion is for the students with disabilities to become full members of the general education classrooms (Roberts & Zubrick, 1993; Saper-Shevin, 1994/5; Tashie et al., 1983), without regard to whether the stress is placed on academics or socialization. The placement of a paraprofessional in the general education classroom can

impede the students' acceptance of the students with disabilities when the paraprofessional works primarily with a few students, all of whom have disabilities (Wolfenberger, 1992). The effect of the paraprofessional's proximity to the students with disabilities was noticeable in the pilot study, River View Middle, and Prairie Middle. The nearness of another adult, the paraprofessional, inhibits the normal off-task interaction between students. In this way, students with disabilities receiving direct service from a paraprofessional may actually be held to a higher standard of behavior than other students. This higher standard may result in the students with disabilities being unable to interact with peers even though they may be in adjacent desks. The inhibiting presence of the paraprofessional actually creates an invisible wall, separating those who need assistance from those who do not need assistance.

Wolfensberger (1992) addressed the effects of proximity in his social role valorization theory. The essence of the theory is that people tend to label others by the company they keep. An individual who is associated with others who are disabled has their disability label reinforced. When a paraprofessional works with several students with disabilities, they tend to be grouped together so the paraprofessional can help all of them. This may be an efficient use of the paraprofessional but presents an impediment to the students being viewed as part of the class.

Assumption 11: Paraprofessionals are not trained to distinguish between assisting students to perform and "doing for" the students.

Paraprofessionals are scheduled into general education classrooms to assist students with disabilities. Paraprofessionals doing things students with disabilities could do for themselves is one of the results of the lack of training. Numerous times I observed paraprofessionals perform tasks that students should have been doing. Some of the things were minor, such as stapling papers together or turning the page of the book. Others were much more important, including sounding out words or guiding the fabric when sewing in home economics.

Doing the work for the students can reinforce their beliefs that they cannot do certain tasks but need someone to do it for them. It can result in learned helplessness as students may not see their effort, or lack of effort, affecting the outcome (Lokerson, 1992). Once they accept their effort does not change what happens, they are likely to relinquish control of future tasks to others. This reduces the chance the students will act independently as they wait for someone else to take care of their needs (Maier & Seligman, 1976).

Assumption 12: Special education and general education teachers are not aware of their responsibilities in supervision of paraprofessionals in the general education classrooms.

As the only licensed faculty members in a classroom receiving the services of a paraprofessional, the teachers must assume responsibility for the supervision of the unlicensed paraprofessionals. Although this makes sense legally and practically, teachers are unaware of the need for them to act as supervisors. General education teachers and special education teachers often do not receive training to act as supervisors (Frank, Keith, & Steil, 1988).

None of the general education teachers interviewed believed they had any role in supervising the paraprofessionals. It is understandable that they would not be aware of their responsibility as they are not informed, trained, or given criteria and guidelines to use in supervision.

The special education teachers interviewed avoided terminology that might put them in the supervisory position and stress that they work as a team with the paraprofessionals. However, there is some awareness on the part of the special education teachers that they are ultimately responsible for the paraprofessionals' performance. Mrs. Rogers acknowledged her responsibility when she stated she fired a paraprofessional she considered to be incompetent.

Assumption 13: Special education teachers do not institute procedures to evaluate how the paraprofessionals function in the inclusive settings from direct, systematic observation.

Scheduling paraprofessionals in general education classrooms while special education teachers work with students in other rooms translates into an inability for the special education teachers to observe paraprofessionals while they work. The scheduling conflict is one of the difficulties in special education teachers supervising paraprofessionals in general education classrooms. A second difficulty is that special education teachers are not prepared to supervise other adults or fulfill supervisory roles (Frank, Keith, & Steil, 1988).

Should special education teachers arrange their schedules to observe the paraprofessionals in the general education classrooms, they still may not be able to perform systematic, constructive observations as the criteria for the observations are not established (Barres, 1993; Gardner, 1975; Harris & Schultz, 1986; Lombardo, 1980; Lund, 1981; McKenzie & Houk, 1986; Pickett, 1990). The criteria of a successful paraprofessional, as viewed by administrators, may be that they do not bring problems to the office. A special education teacher may equate success of the paraprofessional with whether the students with disabilities comply with the class standards of behavior. This is unfortunate as it bases the evaluation of the paraprofessional on the absence of the students' misbehavior rather than on the performance of positive behavior by the paraprofessional. This is similar to Mrs. Kauffman's practice of waiting for a complaint from a general education teacher to become aware of nonperformance by a paraprofessional. It is effective in discovering poor

performance but is useless in improving adequate or good performance levels.

Assumption 14: General education teachers are not receiving inservice about their role in inclusion beyond new teacher orientation.

Many teachers currently employed in public schools started teaching before the schools adopted inclusion. These teachers were not prepared in college to work with students with disabilities or collaborate with special education teachers and paraprofessionals (Friend & Bursuck, 1996; McCoy, 1995). Newer teachers may have heard about the philosophy of inclusion in college courses, but may not have received any practical instruction regarding their own role in inclusion (Schumm & Vaughn, 1992). As long as inclusionary methods are not required in all teacher education programs, preparation for inclusion must be provided by the school systems.

One of the two school systems I observed provides some inservice on inclusion. Information about inclusion is provided as part of the two day new teacher orientation. No inservice on inclusion has been provided for long-term teachers. The other school system did not even cover inclusion during the new teacher orientation.

Assumption 15: The presence of a paraprofessional decreases the interaction between included students and general education teachers.

During the pilot study, I found the general education teacher did not interact with the student receiving direct

services from a paraprofessional. A deficit in interaction also occurred at the other three sites, but to a lesser degree.

There are several reasons general education teachers may interact less frequently with students with disabilities working under the supervision of paraprofessionals. The most logical explanation is that since the paraprofessional is assisting the students with disabilities, the teacher should work with students who are not receiving the extra assistance. Limited interaction due to this reason can be avoided by having the paraprofessionals work with any students needing assistance instead of working only with students with disabilities.

Comfort levels may be another explanation. Students with disabilities are likely to have more frequent contact with the paraprofessionals than their fourth or fifth period general education teachers. They may be more comfortable asking the paraprofessional a question, as they have developed a relationship with them. Bowen's theory of triangulation explains that students may pull another person, the paraprofessional, into the interaction rather than deal directly with a less familiar, and potentially threatening, authority figure (Bowen, 1978). On the other hand, the general education teacher may be more comfortable relinquishing interaction with the students with disabilities to the paraprofessionals.

Studies have shown that general education teachers tend to interact less frequently with students with disabilities

or focus interactions on behavior concerns (Schumm et al., 1995; Siperstein & Goding, 1985; Slate & Saudargas, 1986). The presence of a paraprofessional reduces the teachers' need to intervene in behavior matters as the paraprofessional's proximity may inhibit inappropriate behavior.

Recommendations for Practice and Research

Practice Recommendations

This study has illuminated deficits in the implementation of inclusion. Recognition of problem areas provides the first step in correcting problems. Some corrective steps could be taken during preservice preparation in college or vocational courses while others must be implemented at the work sites.

1. One to two year programs in vocational schools should be established to train paraprofessionals. The coursework should include instruction in modification of assignments, collaborative techniques, behavior management, crisis intervention, and practica in school settings with students with varying disabilities.
2. Teacher education programs need to include at least one course on inclusive methods covering accommodations, content modification, and the teacher's role with paraprofessionals.
3. Special education teacher and administrator preparation programs should include a course on supervision techniques for use with unlicensed staff.
4. Inservice training covering the definition of inclusion, accommodations, content modification, and the

role of paraprofessionals and general education teachers should be provided to teachers and unlicensed staff members.

5. District-wide supervision and evaluation procedures, observation schedules, and performance criteria should be developed for use by administrators, general education teachers, and special education teachers to identify needs and assist paraprofessionals in improving job performance.

6. School districts should hire an individual with educational background in inclusionary methods, covering strategies, accommodations, and managerial training as a paraprofessional director. This individual would observe paraprofessionals on a regularly scheduled basis, make suggestions for improvement or changes, collaborate with general education teachers and special education teachers about effective use of paraprofessionals, and conduct inservice with paraprofessionals on areas identified as needs.

7. School districts should develop manuals for general education teachers of inclusive classrooms and special education teachers that include basic information about paraprofessionals' roles, checklists for use in determining the amount of guidance needed by paraprofessionals, profile sheets to indicate student needs, tips on how paraprofessionals can best assist students, and ideas to enhance communication between paraprofessionals and general education teachers.

8. Paraprofessionals' paid working hours should be extended by a minimum of 30 minutes beyond the student day to facilitate collaboration and regular communication with teachers.

9. Paraprofessionals should be participants in the case conferences. Involvement in developing plans and awareness of concerns expresses by other case conference participants, such as general education teachers and parents, could improve their performance.

Research Recommendations

1. This study should be repeated with randomly selected paraprofessionals instead of those nominated as successful by principals and special education teachers. The paraprofessionals I observed are considered successful and may be exceptional individuals.

Observations of randomly selected paraprofessionals may more accurately indicate the performance that could be expected from the average paraprofessional.

2. Discovering how paraprofessionals learn to perform their jobs could provide information useful in the development of paraprofessional training programs. This study should be repeated with newly hired, inexperienced paraprofessionals and include observation of their interaction with the special education teachers and any training they receive from other paraprofessionals or teachers.

3. A quantitative survey of paraprofessionals, supervising special education teachers, and at least two

general education teachers the paraprofessionals work with should be done to address questions related to the assumptions. One difficulty with this survey is that the general education teachers' reports occasionally conflicted with the paraprofessionals' reports and third party observations.

4. Some programs have been developed to train paraprofessionals to work in inclusive classrooms. However, the paraprofessionals who participated in workshops based on the programs felt the topics did not address their needs. A survey of paraprofessionals to determine what they believe they need to learn could provide valuable information for use in developing inservice and preservice training programs.

5. This study should be repeated with paraprofessionals, teachers, and students at the elementary level. The departmentalization of middle and high schools could be a contributing factor in the communication deficits noted in this study.

Concluding Comments

The paraprofessionals in this study are committed, caring, individuals compensated for their efforts with low wages combined with personal satisfaction from helping children in need. Like beginning trapeze artists, they swing into the void hoping for success as they rely on their partners to support them in their task. Trapeze artists approach their task with strength from training and unfailing support from team members, secure in the knowledge that a

safety net will protect them from harm. Unlike trapeze artists, paraprofessionals are afforded minimal training, limited support and guidance from educated professionals and are required to work without a net.

APPENDIX A

SAMPLE LETTERS TO PRINCIPALS AND TEACHERS

University of **N**orth **D**akota
 Bureau of Educational and Applied Research
 Box 7189, Grand Forks, ND

Date

Name
 School
 Street
 City, State

Dear Name

I am planning to conduct a qualitative study for a dissertation during the Fall semester of 1997 at middle schools and/or high schools in your school district. I have obtained permission from your superintendent.

I need information from you in order to select appropriate participants for a study on the relationship between teachers, paraprofessionals and students in inclusive classrooms. I will be asking principals and special education teachers to identify paraprofessionals they feel are successful in inclusive settings. Some paraprofessionals who are identified will be contacted to obtain permission to observe and interview them. Your nomination does not obligate them to participate. During the course of the study, the classroom teacher, paraprofessionals and a maximum of twenty-one students will be interviewed after informed consent is obtained. Feel free to contact me, Carole Milner, at 777-3244 or 775-6267 or my advisor, Dr. Myrna Olson at 777-3188 if any concerns arise in the future.

Please write the names of one or more paraprofessionals that you feel are successful in inclusive settings on the lines below. Your responses will remain confidential. When contact is made, the individuals will be told their names were selected from a list of paraprofessionals provided by the school. Please return this letter in the enclosed envelope. Thank you for your assistance.

Sincerely,

Carole Milner, M.S.
 Graduate Research Assistant

 Successful paraprofessionals at (school) identified by (addressee)

APPENDIX B
SAMPLE CONSENT FORMS

University of **N**orth **D**akota
Bureau of Educational and Applied Research
Box 7189, Grand Forks, ND

Dear

I am a doctoral graduate student conducting research to be used in a dissertation. The purpose of observing your class is to allow me to learn about the implementation of inclusion with the assistance of paraprofessionals. To do this, I will need to observe and also, on three or more occasions, interview you to increase my understanding of what is happening in the class.

I will be using what I learn to write a dissertation about the relationship between teachers, paraprofessionals and students in inclusive classrooms. I will use pseudonyms to ensure that confidentiality of identities and personal information is maintained. You have the right to withdraw from the study at any time without penalty.

I trust that observing in your class will not cause any disruption to your usual routine. Please feel free to ignore my presence and carry on as usual. I will be observing throughout the Fall semester of 1997. Feel free to contact me, Carole Milner, at 777-3244 or 775-6267 or my advisor, Dr. Myrna Olson at 777-3188 if any concerns arise in the future.

I have read this consent and understand my right to confidentiality and to terminate participation.

Participant

Date

Carole Milner, M.S.

Date

University of **N**orth **D**akota
Bureau of Educational and Applied Research
Box 7189, Grand Forks, ND

Dear

I am a doctoral graduate student conducting research to be used in a dissertation. The purpose of observing you is to allow me to learn about the implementation of inclusion with the assistance of paraprofessionals. To do this, I will need to observe and interview you to increase my understanding of what is happening in the class.

I will be using what I learn to write a dissertation about the relationship between paraprofessionals, teachers, and students in inclusive classrooms. I will use pseudonyms to ensure that confidentiality of identities and personal information is maintained. You have the right to withdraw from the study at any time without penalty.

I trust that observing you in classrooms will not cause any disruption to your usual routine. Please feel free to ignore my presence and carry on as usual. I will be observing throughout the Fall semester of 1997. Feel free to contact me, Carole Milner, at 777-3244 or 775-6267 or my advisor, Dr. Myrna Olson at 777-3188 if any concerns arise in the future.

I have read this consent and understand my right to confidentiality and to terminate participation.

Participant

Date

Carole Milner, M.S.

Date

U niversity of **N** orth **D** akota
Bureau of Educational and Applied Research
Box 7189, Grand Forks, ND

Dear _____

As a graduate student, I am requesting your permission to interview your child, _____ as part of a research project I am doing concerning the relationships between teachers, paraprofessionals and students in inclusive classrooms. The use of paraprofessionals in general education classrooms may have changed the relationship between teachers and students, and students with other students. This study is designed to look into the interaction between the students, teachers and paraprofessionals. The study consists of observations and interviews of teachers, paraprofessionals and students.

The interviews will primarily focus on issues of school, friends, socializing, teachers, paraprofessionals and leisure, using open-ended interview questions.

The student has the right to decline to answer any questions and may withdraw from the project at any time without penalty. The student's name will not be used in reports, as a pseudonym will be used for all participants and the site. Permission to participate can be withdrawn at any time. Feel free to contact me, Carole Milner, at 777-3144 or 775-6267 or my advisor, Dr. Myrna Olson at 777-3188 if any concerns arise in the future.

The interviews will be schedule throughout the Fall semester of 1997. The interviews can be done during the student's study hall period or after school hours at a time and place agreed upon by the researcher and parents.

I, _____, the parent/guardian of _____ have read all the above and agree to allow my child to participate in this study. I understand that I may withdraw child from the study at any time and that all identifiable information will be kept confidential.

Parent/Guardian Signature	Date
Student Signature	Date
Carole Milner, M.S.	Date

APPENDIX C
INTERVIEW QUESTIONS

INTERVIEW QUESTIONS

General Education Teachers

1. What is your background in teaching?
2. What kind of training in your education did you have about special needs kids?
3. What exposure to special education/people with disabilities during your college education?
4. When did you have your first experience with special needs populations?
5. When you think about it now, did the experience change anything about how you thought about special needs?
6. Can you recall any experiences when you were in public school yourself in which you would say that somebody was really different? Kids we would think of now as special needs kids?
7. What is your understanding of the educational philosophy of inclusion?
8. What preparation did you have for inclusion?
9. Do you think you need to know more about special needs?
10. If they were to offered inservice on special needs things, what kind of topics do you think you would want to see?
11. What do you do to foster inclusion socially, emotionally, educationally, and physically?
12. What is your role with: included students, non-disabled students, paraprofessionals and special education teachers.
13. How do you view the relationship between included and non-disabled students?
14. What accommodations should teachers make, and how?
15. How do you balance the needs of included students and non-disabled students?
16. You have had some experience now with inclusion, what do you think are the strengths of inclusion?

17. What about weaknesses in the inclusion system?
18. Do you think the middle school concept has any affect on the inclusion concept?
19. What is the role of the paraprofessional in your classroom?
20. Do you have any concerns about the utilization of paras in classrooms?
21. Questions about events observed in class.

Paraprofessional

1. How did you become a paraprofessional?
2. What is your background as a paraprofessional?
3. What training have you received to be a paraprofessional?
4. What kind of training have you received to related to special needs kids?
5. What was your personal history of experience with special needs populations?
6. What is your understanding of the educational philosophy of inclusion?
7. What are your responsibilities in inclusive classrooms? In resource room?
8. What do you do to foster inclusion socially, emotionally, educationally, and physically?
9. What is your role with: included students, non-disabled students, regular education teachers, and special education teachers.
10. Describe/diagram the relationship between you, the teacher, and the included students.
11. How do you view the relationship between you and the teachers?
12. Have your experiences with special needs changed your thoughts/beliefs about special needs populations?

13. Can you recall any experiences you had as a student in public schools with special needs kids?
14. What was your relationship with special needs kids when you were a student?
15. If you were to be in charge of setting up inservice, what topics would you want to have covered?
16. You have had some experience now with inclusion, what do you think are the strengths of inclusion?
17. What about weaknesses in the inclusion system?
18. What accommodations should teachers make, and how?
19. How do you balance assisting included students while fostering independence?
20. Questions about events observed in class.

APPENDIX D
INTERVIEW MATRICES

Table 1. Interview responses from Prairie Middle staff.

	Jessica Walters	Mrs. Bateman	Mrs. Monet	Mr. McIntosh	Mrs. Westinghouse
Background:					
Number years teaching		6	23	1	19
Subject/Position	Para	SET MR	Art	Comp	Home Ec
College Course on SWiD:					
Survey/Introduction		●		●	
Advanced coursework		●	●		
Field Exp/Practicum		●			
Adapted PE					
Inclusion Definition Includes:					
Most SWiD in Gen. Ed. class				●	
SWiD sometimes in Gen. Ed	●			●	●
For socialization	●			●	●
For academics				●	
Spec. Ed support in Gen. Ed class					
SWiD must meet behavior standards		●			
SWiD must meet academic standards					●
SWiD cognitively equal to SWoD			●		
SWiD must show effort		●			●
Same as mainstreaming	●	●			
Inservice Prep. for Inclusion:					
New teacher orientation					
Para training (2 hr meetings)	●				

Table 1. Interview responses of Prairie Middle staff. (cont.)

	Jessica Walters	Mrs. Bateman	Mrs. Monet	Mr. McIntosh	Mrs. Westinghouse
Inservice Desired on Special Ed:					
Accommodations					●
Info. about individuals					
Behavior management					
Para's role			●		
Their Responsibility to Para:					
None/ Do not know	●		●		●
Supervisory/Boss					
Equal/Partner	●	●			
Relationship with Paraprofessional:					
Team member		●		●	
Assistant to Students	●		●		
"extension of me"					
None					
Inclusion Strengths:					
Modeling by SWoD					●
Exposure benefits SWoD	●			●	
Eliminates stigma				●	
Increase SWid self concept			●		
Inclusion Weaknesses:					
Disruption in class					
Lack of modifications					
"Just sitting there"	●	●			●
Slows SWod academic progress			●		

Table 1. Interview responses from River View Middle staff.

	Marsha Barton	Mrs. Kauffman	Mr. Flint	Mrs. Bangles	Miss Crick	Miss Prime
Background:						
Number years teaching						
Subject/Position	Para	SET SED	Sci	Eng	Sci	Math
College Course on SWiD:						
Survey/Introduction		●	●			
Advanced coursework		●				
Field Exp/Practicum		●				
Adapted PE						●
Inclusion Definition Includes:						
Most SWiD in Gen. Ed. class	●					
SWiD sometimes in Gen. Ed		●	●	●	●	●
For socialization		●		●		●
For academics						●
Spec. Ed support in Gen. Ed class						●
SWiD must meet behavior standards	●	●				
SWiD must meet academic standards						
SWiD cognitively equal to SWoD			●			
SWiD must show effort	●		●	●		
Same as mainstreaming						
Inservice Prep. for Inclusion:						
New teacher orientation			●		●	
Para training (20 hr meetings)	●					

Table 1. Interview responses of River View Middle staff. (cont.)

	Marsha Barton	Mrs. Kauffman	Mr. Flint	Mrs. Bangles	Miss Crick	Miss Prime
Insservice Desired on Special Ed:						
Accommodations					●	
Info. about individuals			●			
Behavior management				●	●	●
Para's role	●					
Their Responsibility to Para:						
None/ Do not know			●	●		●
Supervisory/Boss						
Equal/Partner	●	●				
Relationship with Paraprofessional:						
Team member	●	●				
Assistant to Students			●	●		●
"extension of me"	●				●	
None						
Inclusion Strengths:						
Modeling by SWoD		●				●
Exposure benefits SWoD						
Eliminates stigma	●					
Increase SWid self concept			●		●	
Inclusion Weaknesses:						
Disruption in class		●	●	●		●
Lack of modifications			●	●	●	
"Just sitting there"	●					
Slows SWod academic progress		●				

Table 1. Interview responses from Mount Richards High staff.

	Sharon Roberts	Mrs. Rogers	Mrs. Euclid	Mr. Darwin	Mrs. Newton	Mrs. Webster
Background:						
Number years teaching		4	8	15	11	25
Subject/Position	Para	SET SED	Alg	Bio	Bio	Amer Lit
College Course on SWiD:						
Survey/Introduction		●		●	●	
Advanced coursework		●		●	●	
Field Exp/Practicum		●			●	
Adapted PE						
Inclusion Definition Includes:						
Most SWiD in Gen. Ed. class		●		●		
SWiD sometimes in Gen. Ed	●		●		●	●
For socialization	●	●	●	●		●
For academics	●	●	●	●		●
Spec. Ed support in Gen. Ed class				●		
SWiD must meet behavior standards						●
SWiD must meet academic standards						
SWiD cognitively equal to SWoD						●
SWiD must show effort						
Same as mainstreaming						
Inservice Prep. for Inclusion:						
New teacher orientation						
Para training (20 hr meetings)	●					

Table 1. Interview responses of Mount Richards High staff. (cont.)

	Sharon Roberts	Mrs. Rogers	Mrs. Euclid	Mr. Darwin	Mrs. Newton	Mrs. Webster
Insservice Desired on Special Ed:						
Accommodations		●	●	●		●
Info. about individuals	●					
Behavior management						
Para's role						
Their Responsibility to Para:						
None/ Do not know	●					●
Supervisory/Boss						
Equal/Partner	●	●	●	●		
Relationship with Paraprofessional:						
Team member	●	●	●	●		
Assistant to Students			●		●	●
"extension of me"		●				
None						
Inclusion Strengths:						
Modeling by SWoD			●	●		
Exposure benefits SWoD		●	●		●	●
Eliminates stigma						
Increase SWid self concept				●		
Inclusion Weaknesses:						
Disruption in class						●
Lack of modifications						●
"Just sitting there"	●	●	●			
Slows SWod academic progress					●	

APPENDIX E
RELATIONSHIP DIAGRAMS

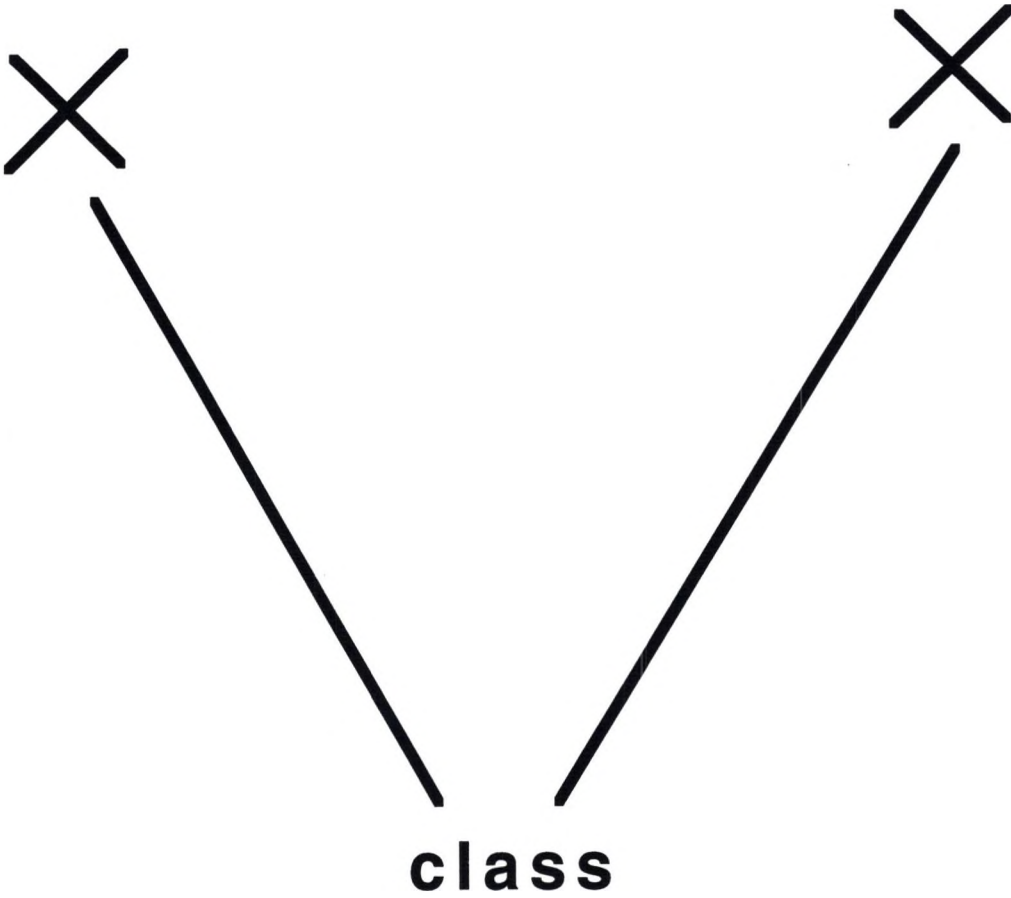
Teacher**Para.**

Figure 1. Mrs. Webster at Mount Richards High School.
"I teach the class and the para helps the kids, too."

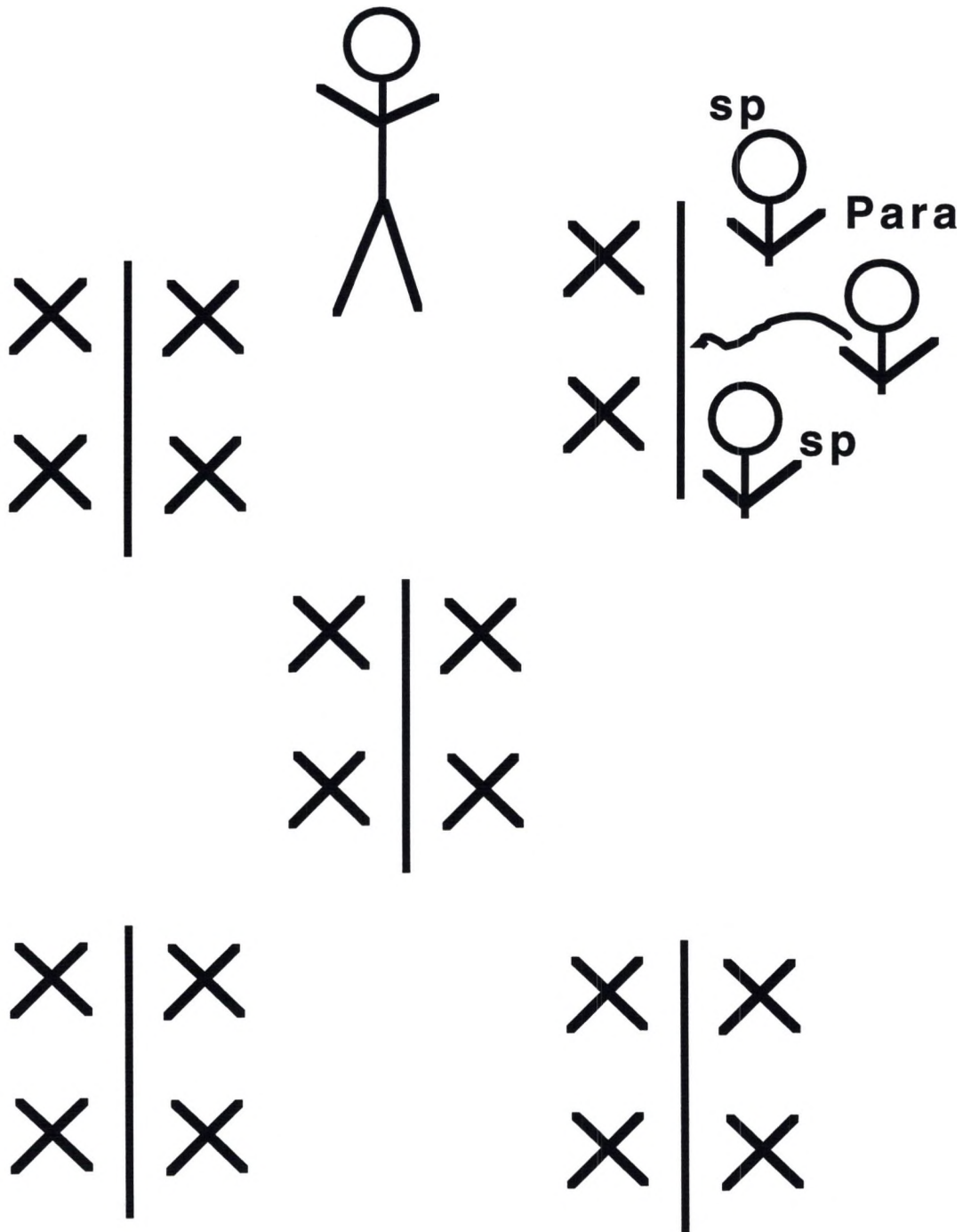


Figure 2. Mrs. Westinghouse, Home Economics at Prairie Middle: "The para sits back a little and here's the table and students...and then you've got that little shadow there(indicates para). And then if it need be, when you are writing or something, then all of the sudden I see this scooting up."

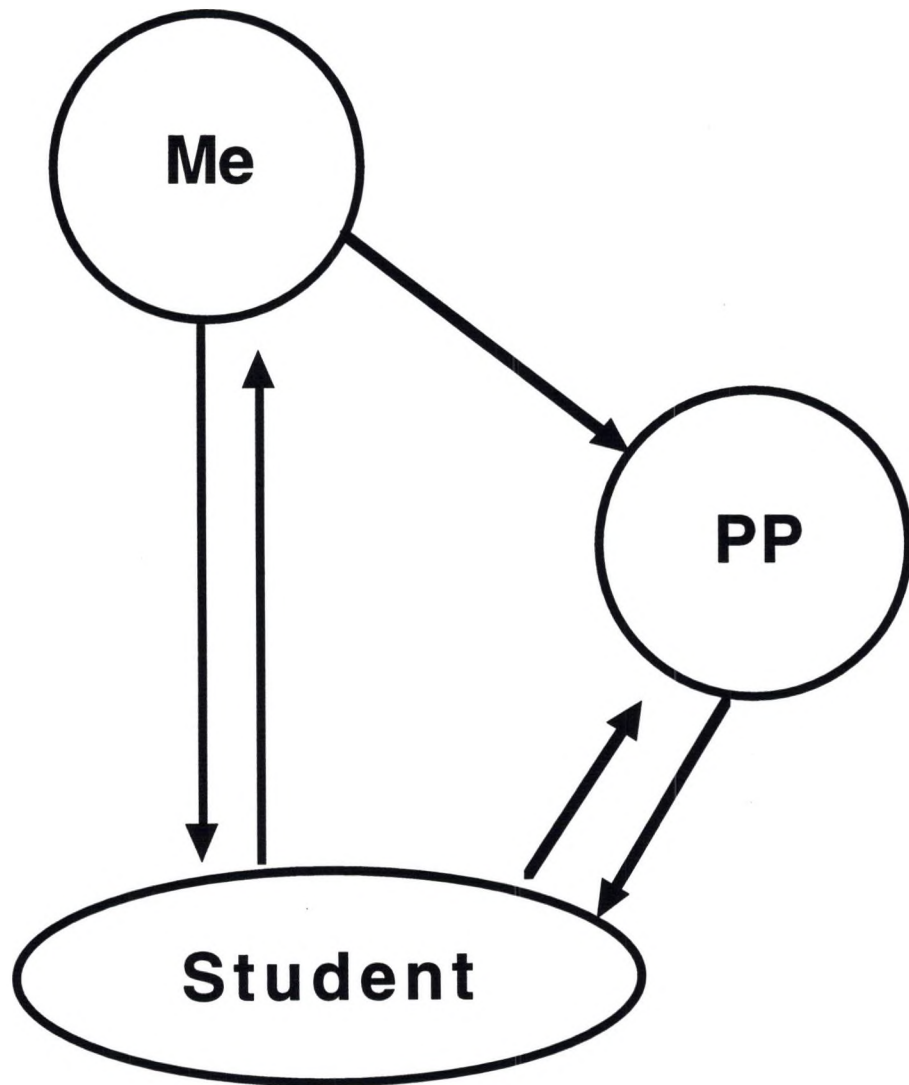


Figure 3. Mr. Flint, Physical Science at River View Middle:
"We both help the students understand and learn."

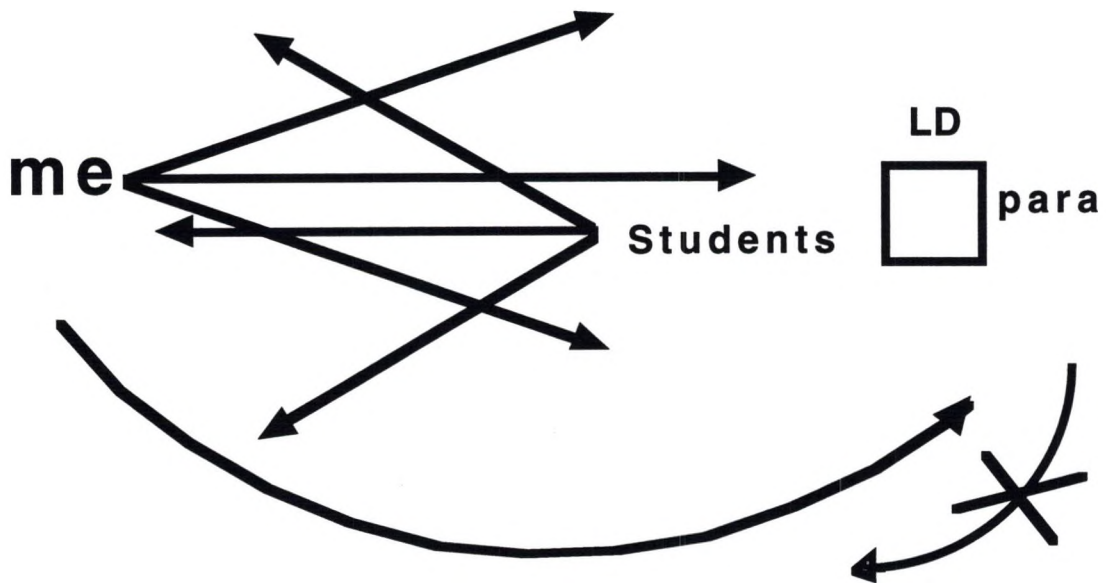


Figure 4. Mrs. Bangles, English at River View Middle:
"I interact with the students, and they interact with me. The
para works with kids at the back and we share....well, I
guess we don't very much."

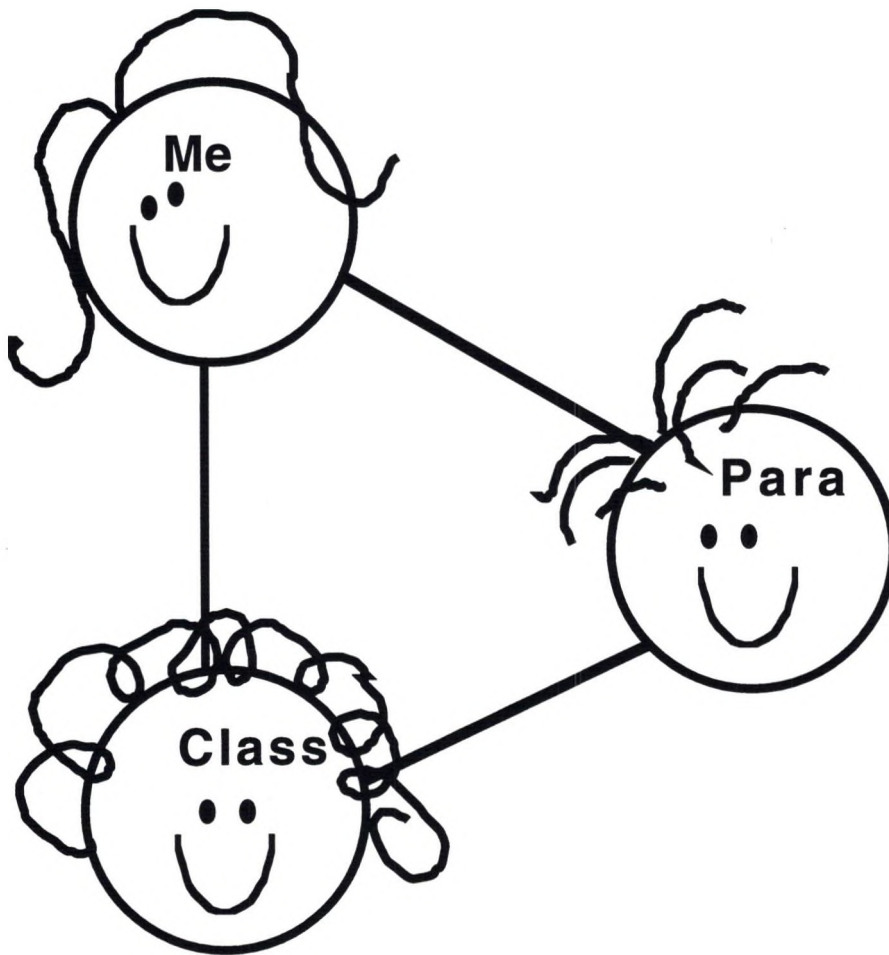


Figure 5. Miss Crick, Science teacher at River View Middle:
"I have to say just basically a triangle because I think I'd put myself at the top and they might think I'm "High hog", but this is where it starts is with me, up here teaching my class. And, so the I teach my class, then off to the side the paras that need to correspond with me and need to correspond with the class. Curly headed kids."

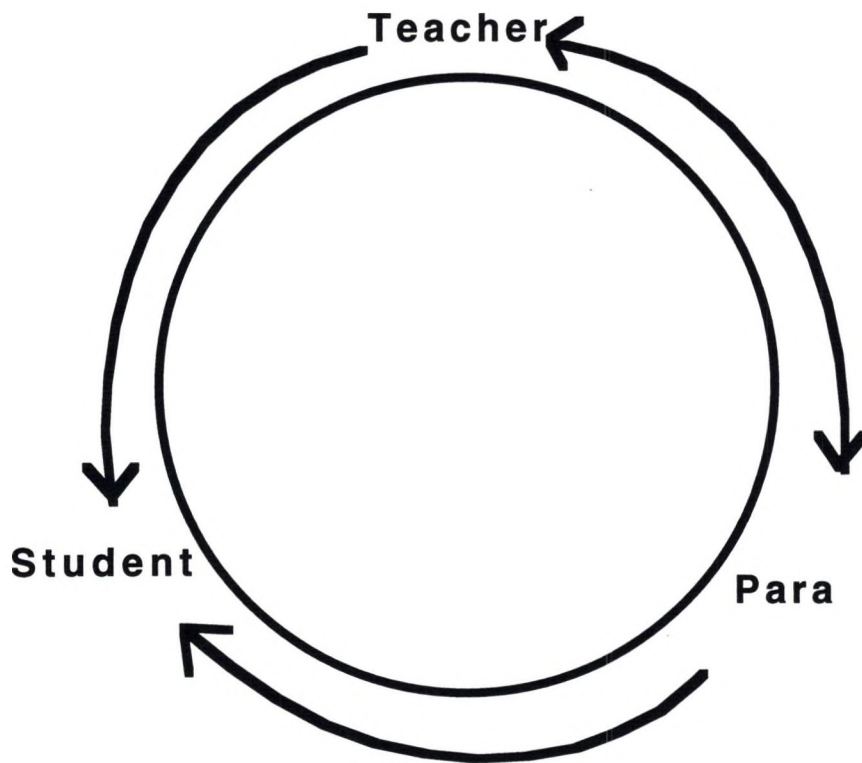


Figure 6. Miss Prime, Mathematics teacher at River View
Middle: "We both work with the kids." A long pause before
adding double ended arrow line between teacher and
paraprofessional.

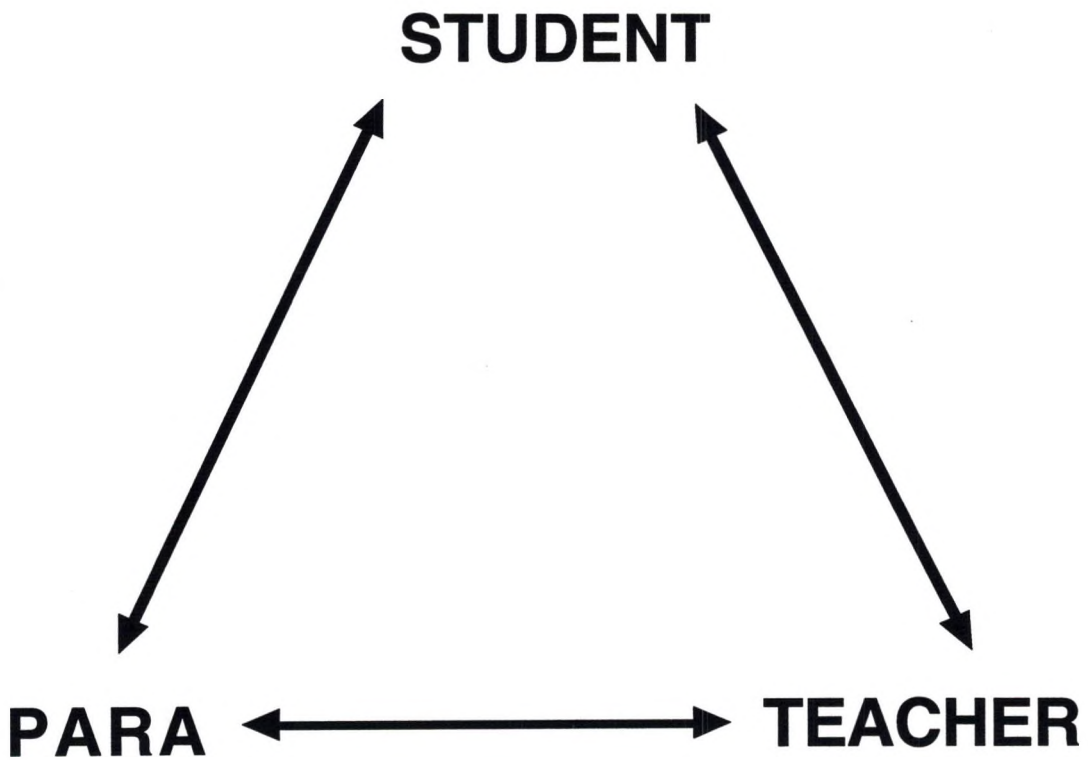


Figure 7. Mr. Thomas, Biology teacher at Mount Richards High:
"We work as a team. We both help the students."

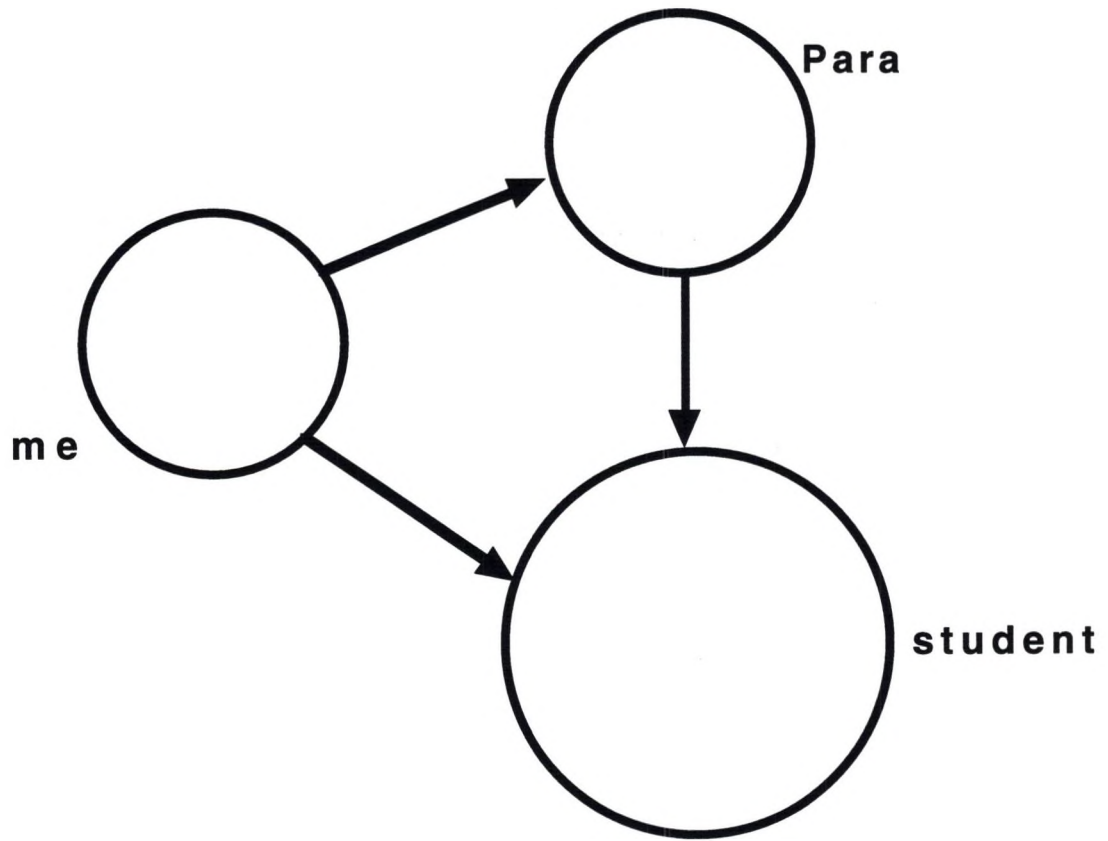


Figure 8. Mrs. Monet, Art teacher at Prairie Middle: "I introduce, the para helps, the student needs to learn. I really believe I need to present to the para as well as the student. She needs to present to the student."

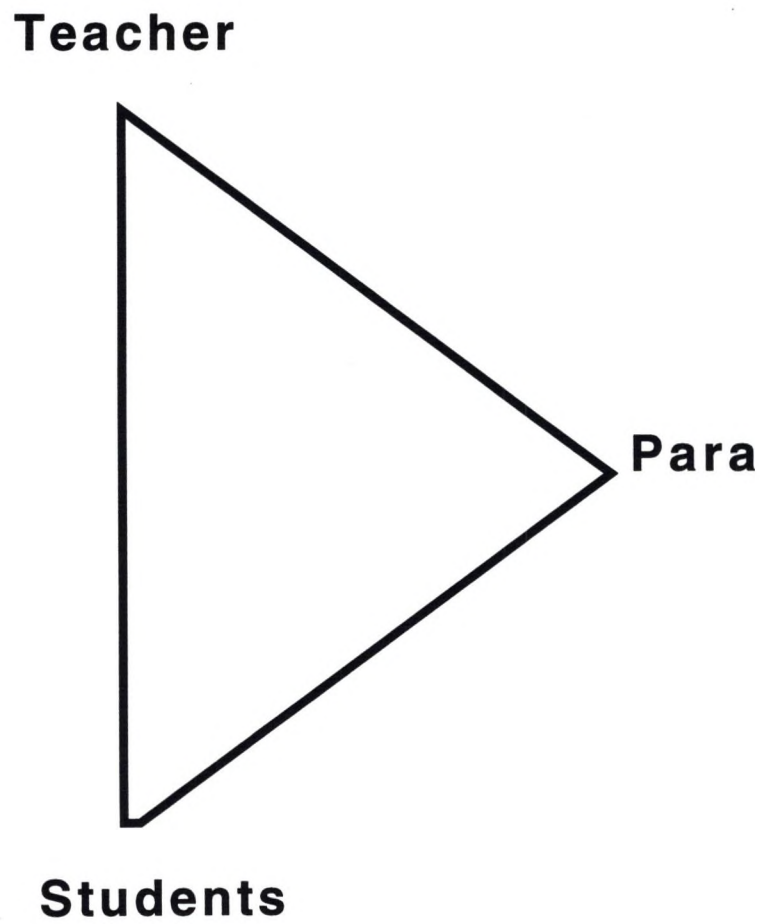


Figure 9. Mrs. Newton, Science teacher at Mount Richards High

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