This report describes the Managing Occupational Therapy in Rural Education (MORE) project, which is designing a pre-service training curriculum for occupational therapy students preparing to work in rural settings. Therapists need to have an understanding of rural school systems, educational aims, philosophy, and the structure of the system itself in order to integrate their services effectively. Students (N=58) at the University of Kansas Medical Center participated in the pilot MORE project. Pre- and post-tests were used to identify students' attitudes and expectations of children's classroom and social behavior, and the changes which occurred as the students acquired more information. One of the measures used was the S.B.S. Inventory of Teacher Social Behavior Standards and Expectations developed by Walker and Rankin (1980). Respondents rated appropriate classroom behaviors as critical, desirable, or unimportant to classroom function. Items were grouped into four content areas: cooperation with teacher and peers, independent work skills, communication skills, and attention ability. In all groupings, students decreased their "unimportant" ratings and increased "critical" ratings. The results suggest that occupational therapy students need to become aware that "ideal" classroom behaviors are not always "critical," and that educational personnel have the responsibility to teach children even if all adaptive behaviors are not intact. (TES)
MANAGING OCCUPATIONAL THERAPY IN RURAL EDUCATION: O. T.
STUDENT PERCEPTIONS OF ADAPTIVE CLASSROOM BEHAVIORS

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Managing Occupational Therapy in Rural Education: O.T. Student Perceptions of Adaptive Classroom Behaviors

Managing Occupational Therapy in Rural Education (M.O.R.E.), a grant project funded by Office of Special Education and Rehabilitative Services (OSERS) is designing a preservice training curriculum for occupational therapy students so that they might acquire those unique skills needed to work in rural educational settings. The project, currently in Year Two is directing it's efforts at improving the knowledge, skills, and attitudes of occupational therapy students in regard to the unique social, environmental, and educational needs of the rural setting. A variety of didactic and experiential learning opportunities are being utilized. For this project, rural is defined as a school district which has fewer than 150 inhabitants per square mile, or is located in counties in which less than 60% of the population lives in communities with less than 5,000 inhabitants (Helge 1984). School districts not considered rural are those who have over 10,000 students, or are determined by the United States Census Bureau to be located within a Standard Metropolitan Statistical Area.

The national geographical distribution of occupational therapists by county was analyzed in a study conducted by the American Occupational Therapy Association and supported by the Bureau of Health Professions, Department of Health and Human Services (Bracciano 1986). The results of the 3,076 counties studied revealed the ratio of occupational therapists to populations of 100,000 were as follows: 16.7% of the counties had more than 10 therapists, 15.3% had between 5 and 10 therapists and 12% had 1 to 4 therapists. However, the most significant finding was 56% of the counties had no occupational therapists. It was reported that as the population of an area increased, so did the concentration of occupational therapists. 1,724 (76.9%) of the 3,076 counties in the study which were without occupational therapists, were located in rural areas.

(Helge 1981) noted many special education professionals have left the rural settings for urban areas, as full implementation of PL94-142 has created job openings. This is compatible with the trend that occupational therapists tend to practice in larger population centers, located in predominately urban areas, where there are established occupational therapy programs, (Bracciano 1986).

Therapists need to have an understanding of rural school systems, educational aims, philosophy, and the structure of the system itself in order to appropriately integrate their services, (Regan, 1982). Rural preservice training has also been identified as a high priority need by the Council on Exceptional Children, and the National Education Association, (Helge 1981). A survey of occupational therapy personnel working in both urban and rural pediatric settings was conducted in four Midwestern states: Kansas, Missouri, Iowa, and Nebraska to determine what practicing therapists saw as needs for preservice training
(Dunn and Gray, 1988). The areas most frequently indicated for preservice training concentration across the rural and urban groups included knowledge about the basic sciences, child development, communication, evaluation and interpretation skills. The process of developing an Individual Education Plan, and educational philosophy and aims was also felt to be a necessity. This emphasizes the need currently practicing pediatric therapists feel there is for educationally related knowledge to be gained prior to accepting a position in the school system.

The urban and rural therapists participating in the 1987 survey also noted a variety of other areas of concern for occupational therapists working in educational settings. Although some similarities were noted in their responses, the most frequently sited concerns for rural therapists were: size of caseload, availability of space to work in, developing more effective consultation skills, having assess and resources for continuing education opportunities, prioritizing therapy time for students on caseload and determining criteria for amount and type of service. It was found that on the average rural therapists served 50% more schools, 25% more students on caseload, and traveled four times more miles per week than did urban therapists. These figures reemphasize the unique issues facing rural-based service personnel. Peganoff and Sprague (1987) reported similar needs and concerns in their report.

In order to better prepare preservice occupational therapy students to accept positions in rural school systems, students at the University of Kansas Medical Center have been participating in the M.O.R.E. project. They have participated in learning opportunities that have been designed to make them better prepared to deal with rural education needs. Questionnaires and tests have been used to identify status of knowledge and changes that occur as students acquire more information about the educational environment. This paper reports on one of the measures used, the S.B.S. Inventory of Teacher Social Behavior Standards and Expectations, developed by Walker and Rankin (1980). This questionnaire describes appropriate or adaptive classroom behaviors and asks the respondent to classify the behaviors as critical, desirable or unimportant to classroom functioning. It was felt that students must first have an awareness of classroom needs and demands before additional competencies could be addressed.
**Methods**

**Population:**

Students enrolled in the Occupational Therapy Curriculum at the University of Kansas Medical Center in Kansas City, Kansas were asked to participate in the data collection by responding to questionnaires. Although four classes have currently participated at some level thus far data from one of the classes is compared in this study. The Fall 88 class (N=58) being reported here participated in the project during their second (Fall 87) and fourth semester of study. They received pilot materials covering only portions of the rural education needs identified by practicing therapists. Their questionnaire data served as pre and post test data for the pilot materials.

**Instruments/Materials:**

The occupational therapy students were asked to complete The SBS Inventory of Teacher Social Behavior Standards and Expectations (SBS) (Walker and Rankin, 1980). This questionnaire is designed to determine respondent’s attitudes and expectations of children’s classroom and social behavior, in general. For Part I respondents are asked to rate 56 descriptions of adaptive, appropriate classroom behaviors, as either Critical, Desirable, or Unimportant to classroom function. It is felt that the demands placed on handicapped children when they are in regular classrooms include not only academic, but also social and interactive expectations (Walker, McConnell & Clark, 1983). Occupational therapists who work in schools must have a realistic understanding of these expectations in order to facilitate integrated educational opportunities.

**Procedures:**

The occupational therapy students were asked to complete the SBS during a one-hour time period. The students completed the SBS pre test in the Fall of 1987 and the SBS post test in the Fall of 1988. Students were given an abstract outlining the M.O.R.E. project and a letter stating their participation was requested but not mandatory. Each student was given the questionnaire to complete. As the surveys were completed and returned, each student indicated their code number on a master list developed for longitudinal comparison purposes; project staff did not have access to the student’s names when analyzing data.

Responses from each questionnaire were tabulated, and frequency of responses in each category was analyzed. The percent of occurrence of each responses was used as the point of comparison for the group.

**Results**

Of the 58 occupational therapy students, 39 students (67%) com-
pleted the pretest questionnaire. 19 students (33%) of the students in this class chose not to participate. Seventeen occupational therapy students (32%) of 53 possible, chose to participate in post testing. Responses were analysed first by grouping items into four content areas: Cooperation with Teacher and Peers (Cooperation), Independent Work Skills (Independence), Effective Communication Skills (Communication), and Ability to Attend (Attention). Communication items address issues such as speaking clearly and appropriately. Independence addresses work/study/time management behaviors. Cooperation - following rules, sharing materials, participating with group processes, and Attention listening and concentration skills. The percentage of responses to items on the SBS in these groupings is presented in graph 1-4. Table 1 contains examples for each grouping. In each case, students increased the number of "Critical" adaptive behaviors and decreased the number of "Unimportant" adaptive behaviors for classroom functioning. The "Desirable" category remained stable across two groupings (Communication and Independence), increased slightly in one (Attention) and decreased in the other (Cooperation). Graph 5 shows the changes that occurred in five specific items which had greater than 20% shifts in ratings from the pretest to the post test.

Discussion:

Pilot teaching activities demonstrated some successful outcomes. In all the groupings chosen, students decreased their "Unimportant" ratings. None of the adaptive behaviors described on the SBS should be rated unimportant, as these behaviors are desirable for regular classroom instruction. This is important for occupational therapy students to realize before accepting a position as a rural-based school therapist because many children with handicaps will be integrated into regular classrooms. Understanding which behaviors are expected in the classroom will increase the therapists' ability to collaborate on common goals with educational team members. For example, a child who has difficulty organizing their worksheets and school materials (a "Desirable", but not "Critical" behavior) may benefit from an occupational therapy consultation. The teacher and therapists can implement some strategies to help this child such as making a "map" of where materials are placed in their desk, placing a basket in the classroom for papers to be completed, and one for already completed papers. Allowing this child to complete smaller portions of school work at one time may be another strategy which could be effective. It is imperative that the occupational therapy students begin to think in terms of the educational model for them to work effectively in the rural school systems.

The increase in "Critical" ratings may reflect the student's responses to their newly acquired knowledge about children and classrooms, perhaps causing them to overrate certain behaviors as critical. Students may now be rating a child's ability to sit up straight in his seat as "critical" because of the pre-survey training emphasis placed on proper positioning to enhance movement in a physically handicapped
child. Development of professional skills such as interpersonal communications are also reinforced with the occupational therapy students. The OT students, recognizing the importance of cooperation and communication skills in their own personal development, maybe generalizing that these skills are "critical" for all persons in the role of student, including children in public schools. These responses point out several implications for student training. First, students need to become more aware that "ideal" classroom behaviors are not always critical, and children can still be taught without a perfect set of behaviors. Furthermore, they had to become aware that educational personnel have the responsibility to teach these children even if all adaptive behaviors are not intact. In fact, therapy students need to recognize that the occupational therapist plays a key role in collaborating with classroom teachers to design strategies to accommodate maladaptive behaviors.

Recommendations:

The following recommendations for preservice training of occupational therapy students were identified from this study. First students need a better understanding of which classroom behaviors are considered desirable, which are critical, and the types of adaptations that can be made when a less than "perfect" pattern of behavior exists. This knowledge provides a basis for providing therapy in the schools, which includes using the collaborative consultative model with children who do not display appropriate classroom behaviors. The occupational therapy student's abilities to be sensitive to the educational personnel's expectations and goals in teaching these children will increase their own effectiveness.

Handouts are being developed and incorporated into the occupational therapy students' curriculum. These address intervention techniques, characteristics of specific diagnoses, classroom performance expectations, and adapting to a rural school system.

Occupational therapy continues to be a valued resource in public education. Identifying and addressing specific needs will better help to prepare new graduates to serve in rural educational systems. Not only will other professionals benefit from the outcomes but also those for whom the services are being delivered: the children with special needs and their families.
REFERENCES


Table I: Examples of SBS items grouped into content areas

**Cooperation with Teachers and Peers** (Cooperation N = 13)

Child takes his/her turn.

Child cooperates with peers in group activity or situations.

Child is flexible and can adjust to different instructional situations, e.g. changes in routine, teachers, setting, etc.

Child improves academic or social behavior in response to teacher feedback.

**Independent Work Skills** (Independence N = 15)

Child uses free time appropriately.

Child has independent study skills, e.g. can work adequately with minimal teacher support, attempts to solve a problem with school work before asking for help.

Child resolves peer conflicts or problems adequately on his/her own without requesting teacher assistance.

Child completes tasks within prescribed time limits.

**Effective Communication Skills** (Communication N = 18)

Child listens while other children are speaking, e.g. as in circle or sharing time.

Child answers or attempts to answer a question when called on by the teacher.

Child speaks to others in a tone of voice appropriate to the situation.

Child questions rules, directions, or instructions that are not clear to her/him.

**Ability to Attend** (Attention N = 6)

Child responds to requests and directions promptly.

Child complies with teacher commands.

Child attends consistently to assigned tasks.

Child ignores the distractions or interruptions of other students during academic activities.
Graph 1 - 4
SBS Inventory: Teacher Expectations
Percentage of Response

SBS - Cooperation

SBS Independence

SBS Communication

SBS Attention
Graph 5: Comparison among pre and post test occupational therapy students on selected items of the SBS Inventory of Teacher Social Behavior Standards and Expectations.

19. Child can work on projects in class with another student.
26. Child resolves peer conflicts or problem adequately on his/her own without requesting teacher assistance.
42. Child completes tasks within prescribed time limits.
47. Child initiates conversation with peers in informal situations.
51. Child sits up straight in seat during classroom instruction.

Pre = pretest  Post = post test.