

**THE TEACHING RESEARCH  
CURRICULUM FOR MODERATELY  
AND SEVERELY HANDICAPPED**

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**GROSS AND FINE MOTOR**



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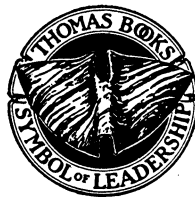
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## GROSS AND FINE MOTOR

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**GROSS AND FINE MOTOR**

In writing this book the authors have chosen to refer to all children as “he,” all teachers, aides, and volunteers as “she,” and all supervisors as “he.” This is done, not to be sexist, but to avoid awkward word formations such as he/she or (s)he. We hope that the reader will accept this style for the purpose for which it was intended — the reader’s comfort.

## THE CURRICULUM: ITS BACKGROUND AND USE

### THE HISTORY OF THE CURRICULUM

**T**HIS VOLUME is part of the second edition of the *Teaching Research Curriculum for the Moderately and Severely Handicapped*. The first edition, published in 1974, was developed from sequences that were written as individual prescriptions for students. The initial individual prescriptions were then field tested with others and were found to be effective with many of them. A prescribed format was developed, and all sequences were revised accordingly. Thus, the original curriculum consisted of a package of ready-made task analyses that teachers could use in a variety of instructional areas, thereby saving valuable time in the preparation of individual prescriptions.

The first edition of the *Teaching Research Curriculum for the Moderately and Severely Handicapped* was prepared primarily by Ms. Cheryl Riggs and Ms. Torry Furey (Piazza-Templeman). These two individuals did the majority of the work in writing task analyses or adapting sequences that other teachers had written.

The curriculum was used in the Data Based Classroom of the Teaching Research Infant and Child Center. Teachers from throughout the United States were trained in that model, had exposure to the curriculum, and used it in their classrooms. It became apparent as the curriculum was used by more teachers that additional revisions were necessary. Teachers found better ways to organize sequences; they found confusion in some of the sequences that were developed and published; they needed more sequences to be developed; they believed that some sequences could be deleted. Feedback from hundreds of teachers filtered into the Teaching Research Infant and Child Center, and together with the experience of the teachers in the Center, the need for revision of the curriculum became apparent. This is one volume of that revised edition.

### HOW THE CURRENT EDITION WAS DEVELOPED

As indicated, the former edition of the curriculum has been tried by many teachers in addition to the teachers in the Teaching Research Infant and Child Center. Moreover, the training staff of the Teaching Research Infant and Child Center who travel widely around the United States had the opportunity to observe the curriculum being used in classrooms in a variety of environments. As a result of the feedback obtained from the teachers who had been trained and due to the work of the staff of the

Infant and Child Center, many of the sequences were designated for revision. In addition, the frequent need for branching some sequences and for preparing additional sequences indicated areas for revision.

The current edition of the *Teaching Research Curriculum for Moderately and Severely Handicapped* was developed by the staff of the Teaching Research Infant and Child Center and Ms. Sue Hanks from the Crippled Children's Division of Oregon, who has been the consulting physical therapist to the Teaching Research Infant and Child Center for the past seven years. Each of the teachers who prepared sections of the curriculum consulted with other teachers, training staff, and consultants to the Teaching Research Infant and Child Center.

Most of the sequences appearing in this edition have been used frequently by teachers in the classrooms with moderately and severely handicapped students. However, it would be misleading to indicate that every sequence in its current form has been adequately field tested with the moderately and severely handicapped population. That has not occurred. In lieu of extensive field testing, which would require many years to complete, the best opinions of teachers and staff who are experienced with this population have been used.

Because our knowledge about the moderately and severely handicapped is continually expanding and because the educational techniques that we develop are ever changing and improving, this curriculum cannot be considered static. Instead, it must be considered dynamic. Those who use this curriculum are encouraged to communicate with the Teaching Research Infant and Child Center to make suggestions about modifications. We welcome those suggestions, and we shall consider them for incorporation in future editions of the curriculum.

#### **HOW THE CURRICULUM IS ORGANIZED**

The entire concept of task analysis is based on the premise that a complex skill can be best learned by a student when that skill is broken down into simple, individually taught steps. The curriculum published herein purports to provide that breakdown for skills appropriate to be taught to handicapped children. These are skills that the nonhandicapped child would normally acquire during the first six or seven years of his life but that the severely handicapped child may learn at a later age. Within each skill area, the skills are sequenced in developmental order.

The curriculum is designed to be used in an educational program that designates individual objectives for each student. (A procedure for student placement within the curriculum is recommended in Chapter 2 of this volume.) A student should be placed in the curriculum according to priorities established by the parent and the teacher. The curriculum is designed so that student progress through the various steps of the cur-

riculum can be tracked using a continuous data system. For a complete description of how the curriculum has been utilized in the Data Based Classrooms at the Teaching Research Infant and Child Center, the reader is referred to Fredericks et al., 1979.

The curriculum is organized into curricular areas that include the following: (1) gross motor movements, (2) fine motor movements, (3) receptive language, (4) expressive language, (5) self-feeding, (6) dressing, (7) personal hygiene, (8) table skills, (9) personal information, (10) reading, (11) writing, and (12) number skills. This volume contains gross motor and fine motor skills. Within each of these curricular areas, there are three possible subcomponents called (1) skills, (2) phases, and (3) steps. A skill is a complex behavior requiring the acquisition of a number of subordinate behaviors in order for the learner to achieve mastery. A phase is a further breakdown of a skill. A step is a minute breakdown of the phase.

An example may illustrate how curricular areas, skills, phases, and steps are organized. The following is a task-analyzed sequence within the *curricular area* of gross motor. The *skill* is "Sits with Support." In this instance, the *phases* gradually allow for the removal of teacher support. The *steps* designate the length of time that the student must perform the task.

**GROSS MOTOR**

**R. Sits with Support**

Approximate Age for  
Skill Acquisition  
4-6 months

TERMINAL OBJECTIVE:	Student sits upright, hands free, perpendicular to floor when given support at hips by teacher.
PREREQUISITE SKILLS:	Lifts head prone, bears weight on elbows.
Phase I	Student sits upright, teacher supporting entire trunk, hips and thighs in perpendicular position.
Phase II	Student sits upright, teacher supporting entire trunk and hips in position.
Phase III	Student sits upright, teacher supporting entire trunk, waist to shoulders.
Phase IV	Student sits upright, teacher supporting trunk around ribs.
Phase V	Student sits upright, teacher supporting waist.





TABLE I-I  
MOTOR

Developmental Age For Skill Emergence	Gross Motor	Fine Motor
1 month	<ul style="list-style-type: none"> <li>A. Lifts Head from Teacher's Shoulder</li> <li>B. Looks at Light</li> <li>C. Attends to Face</li> <li>D. Head Extension on Ball - Phases I &amp; II</li> <li>E. Lifts Head while Prone over Bolster</li> <li>F. Maintains Head Control when Lifted - Phases I &amp; II</li> </ul>	
2 months	<ul style="list-style-type: none"> <li>D. Head Extension on Ball - Phase III</li> <li>F. Maintains Head Control when Lifted - Phase III</li> <li>G. Holds Head in Supported Sitting - Phases I &amp; II</li> </ul>	<ul style="list-style-type: none"> <li>A. Maintains Grasp on Object - Supine</li> </ul>
2½ months		<ul style="list-style-type: none"> <li>B. Brings Hands Together - Supine</li> </ul>
3 months	<ul style="list-style-type: none"> <li>D. Head Extension on Ball - Phase IV</li> <li>F. Maintains Head Control when Lifted - Phases IV-VII</li> <li>G. Holds Head in Supported Sitting - Phase III</li> <li>H. Maintains Head in Midline - Supine</li> <li>I. Turns Head - Various Positions</li> <li>J. Bears Weight on Elbows when Placed</li> <li>K. Rolls Side to Back</li> <li>L. Head Righting on Ball - Prone</li> <li>M. Attains and Maintains Weight Bearing on Elbows - Prone</li> <li>N. Follows Moving Objects with Eyes - Phase I</li> </ul>	<ul style="list-style-type: none"> <li>C. Reaches for Suspended Swinging Object - Supine</li> </ul>

TABLE 1-1 (continued)

Developmental Age For Skill Emergence	Gross Motor	Fine Motor
4 months	<p>D. Head Extension on Ball – Phase V</p> <p>F. Maintains Head Control when Lifted – Phase VIII</p> <p>N. Follows Moving Objects with Eyes – Phase II</p> <p>O. Rolls from Stomach to Side</p> <p>P. Bears Weight on One Elbow and Reaches – Prone</p> <p>Q. Rolls from Stomach to Back</p> <p>R. Sits with Support</p>	D. Reaches for Objects – Prone
5 months	<p>F. Maintains Head Control when Lifted – Phase IX</p> <p>S. Bears Weight on Extended Arms – Sitting</p> <p>T. Lifts Head – Supine</p> <p>U. Rolls from Back to Side</p> <p>V. Bears Weight on Extended Arms – Prone</p>	<p>E. Reaches For and Picks Up, Using Whole Hand Grasp</p> <p>F. Grasps Object with Both Hands</p> <p>G. Intentionally Releases Object from Grasp</p> <p>H. Transfers Objects from One Hand to the Other</p>
6 months	<p>W. Pulls to Sit without Head Lag</p> <p>X. Lifts Head and Shoulders – Supine</p> <p>Y. Pushes Up on Extended Arms – Prone</p> <p>Z. Protective Extension Forward on Ball or Bolster</p> <p>AA. Protective Extension – Forward</p>	
7 months	<p>BB. Rolls from Side Lying to Stomach</p> <p>CC. Rolls from Back to Stomach</p> <p>DD. Weight Bearing with Ball</p> <p>EE. Sits without Support</p> <p>FF. Sits with Support</p> <p>GG. Pivots on Stomach</p>	<p>I. Grasps Two Objects, One in Each Hand</p> <p>J. Reaches For and Picks Up Object, Using Thumb/Fingertips Grasp</p> <p>K. Picks Up and Grasps Object, Using Neat Pincer Grasp (Thumb and Index Finger)</p>

TABLE 1-1 (continued)

Developmental Age For Skill Emergence	Gross Motor	Fine Motor
8 months	HH. Lifts Abdomen in Prone Position II. Bears Weight on Hands and Knees when Placed JJ. Bears Weight on One Extended Arm and Reaches – Hands and Knees	
9 months	KK. Moves toward an Object LL. Moves Forward Down Ramp MM. Crawls Forward on Floor NN. Leans and Regains Balance, Sitting Position OO. Protective Extension Lateral PP. Gets to Sitting from Prone QQ. Gets to Hands and Knees RR. Gets to Sitting from Hands and Knees SS. Pulls to Kneel Stand TT. Independent Weight Bearing – Grasp – Phase I UU. Standing – No Grasp Ability – Phases I-IV VV. Lifts Trunk with Hands and Arms	
10 months	TT. Independent Weight Bearing – Grasp – Phases II-III UU. Standing – No Grasp Ability – Phases V and VI WW. Creeps on Hands and Knees XX. Turns Trunk in Sitting Position YY. Gets to Standing from Hands and Knees AAA. Creeps on Hands and Knees, Negotiating Environment BBB. Cruises	L. Puts Two Objects in Small-Mouthed Container

TABLE 1-I (continued)

Developmental Age For Skill Emergence	Gross Motor	Fine Motor
11 months	TT. Independent Weight Bearing – Grasp – Phases IV-VII UU. Standing – No Grasp Ability – Phase VII ZZ. Gets to Sitting from Supine CCC. Independent Movement – Grasp – Phases I and II DDD. Walking – No Grasp Ability – Phases I-IV	
12 months	TT. Independent Weight Bearing – Grasp – Phases VIII-XI UU. Standing – No Grasp Ability – Phase VIII CCC. Independent Movement – Grasp – Phases III-VIII DDD. Walking – No Grasp Ability – Phase V EEE. Gets to Sitting from Standing FFF. Sits in Chair GGG. Gets Up from a Chair	
13 months	HHH. Falls Forward III. Gets into a Chair	
14 months	JJJ. Walks Up Incline KKK. Kneels LLL. Bears Weight on One Knee – Half-Kneeling Position	
15 months	MMM. Creeps Up Steps NNN. Rides on Ride-On Toy	N. Puts Rings on a Peg O. Builds a Tower – Phases I-III
16 months	OOO. Walks Backward PPP. Walks Down Incline	M. Moves Object from One Container to Another O. Builds a Tower – Phases IV-VI
18 months	QQQ. Creeps Down Stairs RRR. Walks Up Stairs – Phase I	Q. Turns Knob