Effects of Functional Mobility Skills Training for Young Students With Physical Disabilities

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ABSTRACT: The Mobility Opportunities Via Education (MOVE®) Curriculum is a functional mobility curriculum for individuals with severe disabilities. This study investigated the effects of the MOVE Curriculum on the functional walking skills of five elementary-aged students with severe, multiple disabilities. The MOVE Curriculum was implemented using a multiple-baseline across subjects design. Repeated measures were taken during baseline, intervention, and maintenance phases for each participant. All students demonstrated progress in taking reciprocal steps during either intervention or maintenance. Results for each participant are discussed as well as implications and future directions for research.

Since the passage of P.L. 94-142, students served in special education programs have had the right to related services (e.g., occupational therapy and physical therapy) as needed to benefit from their educational program (Beirne-Smith, Ittenbach, & Patton, 2002). Therapists in educational settings who are typically trained under the medical model of disability traditionally have provided therapy services separate from educational goals (Craig, Haggart, & Hull, 1999; Dunn, 1989; Rainforth & York-Barr, 1997). Treatment within this traditional approach is based on the developmental model in which therapists attempt to correct specific deficits and remediate underlying processes of movement to promote normalization (Campbell, McInerney, & Cooper, 1984; Fetters, 1991). As a result, these treatment programs typically do not focus on the development of functional motor skills in natural environments because students often are viewed as not ready to perform such high level skills (Rainforth & York-Barr). Until recently, this traditional approach to therapy was considered acceptable in school settings because educational programming for students with disabilities also relied on a developmental model. It has been only in the past...
15 to 20 years that educational programs for individuals with disabilities have begun to move away from instruction based on a developmental model to curriculum approaches emphasizing functional outcomes (Butterfield & Arthur, 1995).

Current educational practices promote the use of a support model that emphasizes an individual's future potential rather than an individual's limitations (Barnes, 1999). While earlier practices that focused on deficits often limited an individual's access to environments and activities (Brown et al., 1979), current practices employ a top-down approach to program planning designed to teach an individual to function more independently in his or her natural environments. Top-down program planning typically incorporates the concept of place then train, promoting instruction in the environments in which the skills will be used (Beirne-Smith et al., 2002). Individuals served under a support model are not excluded from activities because they lack prerequisite skills; rather they are supported to participate to their highest potential. A support model approach to programming provides a framework for identifying adult outcomes, determining current levels of functioning, and identifying supports needed to achieve the targeted outcomes.

As educational practices change, therapy approaches that stressed remediation of individual skills in isolated environments are being replaced by the practice of integrated therapy in which services are provided in natural settings where skills will be functional and performance meaningful for individual students (Rainforth & York-Barr, 1997). Integrated therapy breaks from the more traditional, multidisciplinary model where team members conduct assessments and set goals in relative isolation (Orelove & Sobsey, 1996). Parents, teachers, and therapists collaborate as a team to assess the student, write goals, and implement intervention. The team develops the IEP together by setting priorities and developing child-centered goals through consensus (Rainforth & York-Barr). In this way, all team members are aware of the IEP goals and can work cooperatively to embed them into the child's natural activities.

As the fields of physical therapy, occupational therapy, and education have begun to move away from a developmental approach toward a functional model that emphasizes potential and support, the link between special education and pediatric therapy has been strengthened (McEwen & Shelden, 1995). Recent research suggests that when therapy is integrated into the student's natural environments, treatment is just as effective as traditional therapy and that the integrated approach is more preferred by the school team (Giangreco, 1986; Harris, 1991). The benefits of providing therapy in integrated settings include (a) the availability of natural motivators (Atwater, 1991; Campbell et al., 1984), (b) repeated opportunities for practicing motor skills in meaningful situations (Campbell et al.; Fetters, 1991), and (c) increased generalization of skills across different environmental settings (Campbell et al.; Craig et al., 1999; Harris). "Although intervention has historically focused on deficient skills with the assumption that isolated skills must be learned and then eventually transferred to functional activities, we now know that for learners with severe disabilities, task-specific instruction must take place in the natural environment for retention to occur" (Shelden, 1998, p. 948).

In response to the shortcomings of traditional motor treatment approaches, the MOVE (Mobility Opportunities Via Education) Curriculum was developed to teach functional mobility skills to students with severe disabilities (Kern County Superintendent of Schools, 1999). MOVE is a top-down, activity-based curriculum designed to link educational programs and therapy by providing functional mobility practice within typical daily activities in the natural context. Individuals using the MOVE Curriculum follow a top-down approach to program planning, rather than selecting skills from a developmental hierarchy. A transdisciplinary team that includes parents, educators, and therapists works collaboratively to assess the student's skills, design an individualized program, and teach targeted skills while the student participates in school and community activities (for additional information on the MOVE Curriculum see Bidabe, Barnes, & Whinnery, 2001.)

Since the inception of the MOVE Curriculum in 1986, this seemingly successful approach has spread to a great number of classrooms, rehabilitation facilities, and homes for students with
disabilities across the United States as well as throughout Europe and Asia. Although testimony from practitioners and families as well as informal studies have praised the effectiveness of MOVE, there has been no systematic research related to the effectiveness of this approach to teaching functional mobility skills. While the great number of anecdotal reports of student successes in the MOVE Curriculum should not be disregarded, there is a critical need for demonstrable data to support the efficacy of the program. Therefore, this study asked the following question: Do functional mobility skills in students with physical disabilities improve as a result of direct training using the MOVE Curriculum and will these skills be maintained over time?

**Method**

**Participants**

Five children with severe, multiple disabilities between the ages of 3 and 9 were selected to participate in this study. All of the children attended a public elementary school located in an urban, southeastern school district, were served in special education classes, and received occupational and physical therapy as related services. Four of the participants were served in a preschool classroom for students with severe, multiple disabilities. The remaining participant was served in a varying exceptionalities classroom for students with moderate to severe disabilities.

The following criteria were used to select participants for the study: (a) diagnosis of a severe, multiple disability including a physical impairment, (b) parental consent, (c) medical eligibility, (d) willingness of the school team to participate and to be trained in MOVE, and (e) no prior implementation of the MOVE Curriculum. Five of the 17 students served in the two classes met all the selection criteria.

The primary means of mobility for all participants was either being pushed in a wheelchair or being carried. Participant 1, Kim, was a 7-year-old female diagnosed with Down syndrome, severe mental retardation, general hypotonia in all extremities, and a seizure disorder for which she took anticonvulsant medication. Kim was able to bear her own weight in standing while holding a stationary object and could move her feet reciprocally while being supported for weight shifting and balance. Although she demonstrated these skills on rare occasions in physical therapy, she typically refused to use them.

Participant 2, Melissa, was a 4-year-old female diagnosed with a developmental delay and cerebral palsy with hypotonia. Melissa was able to bear weight in standing while holding a stationary object and move her legs reciprocally while being supported for balance and weight shifting in physical therapy, but she also refused to use these skills.

Participant 3, Kevin, was a 3-year-old male diagnosed with cerebral palsy with hypotonia, right hemiparesis, cortical blindness, and a seizure disorder for which he took medication. Kevin was unable to bear weight in standing unless his knees, hips, and trunk were held in alignment by a standing device.

Participant 4, David, was a 9-year-old male diagnosed with spastic quadriplegic cerebral palsy and asthma for which he took medication. David had the ability to maintain hip and knee extension when supported by an adult and to tolerate fully prompted reciprocal steps when supported in a walker.

Participant 5, Caleb, was a 4-year-old male diagnosed with global developmental delays, spastic quadriplegic cerebral palsy, chronic lung disorder, and a seizure disorder for which he took medication. Additionally, Caleb had a tracheostomy that required frequent suctioning, a gastrostomy tube, and occasionally had breathing distress. He required a one-on-one nurse in attendance at all times, and his medical complications sometimes resulted in extended absences. Caleb had the ability to maintain hip and knee extension when supported by an adult and to tolerate fully prompted reciprocal steps when supported in a walker.

**Research Methodology**

A single-subject, multiple-baseline across subjects study was employed. The independent variable was the MOVE Curriculum that consists of six steps: (1) Testing, (2) Setting Goals, (3) Task Analysis, (4) Measuring Prompts, (5) Reducing Prompts, and (6) Teaching the Skills. The dependent variable was the number of reciprocal steps.
A reciprocal step was defined as a step within a time interval of not more than 10 seconds between initial contact of one foot and initial contact of the opposite foot in a forward motion.

Setting

Mobility practice was conducted in the natural context in accordance with the principles of the MOVE Curriculum. Meaningful and relevant activities that naturally occur during the school day were selected for each participant. These activities occurred throughout the school campus.

The study was conducted over the course of one school year beginning in the third week of the fall term and lasting until the 27th week in spring. Maintenance data was collected over a 2-week period 2 years following the intervention year.

Staff Training

Two special education teachers, a physical therapist, and an occupational therapist from the selected school participated in a 2-day MOVE International Basic Provider training on the MOVE Curriculum. Basic Provider training incorporates 16 hrs of instruction on the six steps of the MOVE Curriculum including hands-on instruction in assessment, goal setting, and adaptive prompts and equipment with families and individuals with disabilities.

Materials and Equipment

The Rifton Gait Trainer (Community Playthings, 1999) was used during intervention. The Gait Trainer, also known as the Front Leaning Walker, provides support for an individual to learn to take reciprocal steps. The Gait Trainer is designed to provide total support (if needed) for individuals who are just beginning to bear weight in standing. The prompts can be removed as an individual requires less support with the long-term goal of independent walking.

Procedures

Baseline

During the baseline phase, repeated measures of the number of reciprocal steps were taken twice a week until a pattern of stable performance was established. Baseline measures began by the fifth week of the school year. Due to the multiple baseline design, baseline was collected for 1 1/2 weeks for the first participant, Kim, and continued for 12 weeks for the last participant, Caleb. Each participant was given the least amount of adult assistance (i.e., one or two hands held or support at trunk) necessary for weight bearing in standing and verbal directions to walk. No assistance was provided for taking reciprocal steps. Baseline measures of reciprocal stepping were taken with adult support for all participants. Additional measurements without assistance were taken for Kim and Melissa because they had demonstrated the ability to bear weight in standing while holding a stationary object. Baseline measures occurred within the participants' normal school environments; however, no measures were taken using the Gait Trainer or within functional activities because these were considered to be part of the intervention.

Data Collection

Although practice of walking skills occurred throughout the day, measurement of the number of reciprocal steps was taken twice a week during specifically targeted activities to provide consistency of measurement. Measurement was taken at the first walking opportunity during each activity.

For the purpose of data collection, three general levels of support were used for participants according to their abilities and needs. Support was defined as (a) no outside assistance or independent, (b) adult assistance for postural control with independent weight bearing (e.g., one or two hands held or support at trunk), and (c) use of the Gait Trainer to provide postural control and partial weight bearing support when necessary. As students' reciprocal stepping skills increased, the level of support decreased progressively from the use of the Gait Trainer to adult assistance to no assistance as appropriate. Therefore, measurements were taken in multiple ways for each participant because it was not possible to predict changing levels of necessary support during intervention or the eventual level of independent mobility after intervention. For all participants, data were collected concurrently at the level of support required at the beginning of int-
tervention and at the next more independent level. In addition, measurements were taken for Melissa at all three levels of support. Although Melissa required the use of the Gait Trainer, measurements were taken for independent walking because she had previously demonstrated the ability to bear her own weight and occasionally take one or two reciprocal steps with both hands held. Because Kim began to take reciprocal steps independently during the second trial of intervention, data collection with "adult assistance" was discontinued.

**Interobserver Agreement**

Although the intervention was implemented by all team members, measurements were taken by the first author to increase reliability. In addition, interobserver agreement checks were made by the second author to ensure accurate measurement. For each participant, a minimum of two checks was conducted for each targeted behavior. Percentage of agreement was calculated by dividing the total number of agreements by the sum of agreements and disagreements and multiplying that number by 100 (White & Haring, 1980). Agreement for the number of reciprocal steps taken equaled 100%.

**Intervention Phase**

The intervention consisted of the implementation of the six steps of the MOVE Curriculum for each participant. Using the information obtained during Step 1, Testing, the team was able to identify each participant's consistent use of mobility skills and to select functional activities during Step 2. These activities were task analyzed in Step 3 in order to identify the critical mobility skills to be addressed in each activity.

Once meaningful daily activities were identified for mobility practice, the level and type of physical support needed to accomplish the activity were determined in Step 4, Measuring Prompts. A critical component of the MOVE program is to provide the necessary but minimal prompts (physical support) needed for functional mobility within an activity. This level was determined for each individual based upon assessment data collected in Step 1. Therefore, not all participants required assistance and all three levels of support.

As is advocated in Step 5 of MOVE, physical support was faded as soon as the students demonstrated an increase in skill level as indicated by the data. The reduction of prompts differed for participants according to their individual rate of progress.

During Teaching the Skills, Step 6 of MOVE, instruction of skills was embedded into typical daily activities in order to provide meaningful, intensive, and consistent practice of reciprocal stepping. An important component of this step is the identification of practice activities that are relevant and motivating to the individual to encourage active participation. From these practice opportunities, one activity per participant was selected for data collection. Data were collected twice a week.

**Maintenance Phase**

After a period of 2 years, maintenance measures were taken on dependent variables for 4 of the 5 participants. David had moved from the area and was unavailable. Data were collected during the participants' natural activities at the time. Some students had moved into new classrooms and many were participating in different activities than those used during the initial intervention phase.

Measurements were taken for participants at their current level of support necessary for functional walking (e.g., independent walking for Kim and Melissa, walking with adult assistance for Caleb, and walking with the use of the Gait Trainer for Kevin).

**Results**

**Data Analysis**

Data were analyzed using visual inspection of the graphs including changes in means, levels, and trends as well as percentage of overlap across phases (Kazdin, 1982). Performance data for intervention and maintenance are presented in Figures 1-3.

Kim. A stable baseline with a mean and range of 0 steps was observed for walking forward independently (see Figure 1). The mean for intervention phase was 5.25 steps with a range from 0...
FIGURE 1
Independent Walking for Kim and Melissa Across Baseline, Intervention, and Maintenance Phases

Kim
Melissa

to 14 steps. There was only a 9% overlap of data points (4 of 45 data points) from baseline with a 5.25-point increase in the mean. There was an upward trend in reciprocal steps observed in intervention phase with one notable decrease coinciding with an increase in seizure episodes.

During the maintenance phase, there was a sizable increase in the number of independent reciprocal steps recorded. All measurements during maintenance revealed that Kim was able to walk over 500 ft independently. This resulted in a 494.74-point increase in the mean number of steps taken with a 0% overlap of data points from intervention phase to the maintenance phase.

Melissa. A stable baseline with a mean and range of 0 steps was observed for walking (see Figure 1). Intervention included the use of the Gait Trainer (see Figure 3) and adult support (see Figure 2). As Melissa required less support, the Gait Trainer was discontinued (after the 37th trial).

For adult support, there was a general increase in the number of steps with a mean of 30.16 with a range from 0 to 100 steps. A 38% overlap of data points (10 of 26 data points) was noted from baseline to intervention.

During the maintenance phase, measurements were taken on independent reciprocal steps since Melissa no longer required the use of the Gait Trainer or adult support. All measurements during maintenance showed that Melissa was able to walk over 500 ft independently. A 500-point increase in the mean with a 0% overlap of data points from intervention to maintenance was observed.

Kevin. For walking forward with adult support, Kevin was unable to bear weight or to take any steps during baseline or intervention (see Figure 2). Additionally, he would not accept being placed into the Gait Trainer during intervention (see Figure 3). During maintenance, however, Kevin was taking reciprocal steps both with adult support and while using the Gait Trainer. The mean for walking forward with adult support during maintenance was 3.33 steps with a range from 2 to 4 steps. This showed a slight upward trend and a mean of 3.33 steps. There was also a
FIGURE 2
Walking with Adult Support for Melissa (2-Hand Assistance), Kevin (Support From Behind at Trunk), David (2-Hand Assistance), and Caleb (Support From Behind at Trunk) Across Baseline, Intervention, and Maintenance Phases.
0% overlap of data points (0 of 3 points) between intervention and maintenance. While using the Gait Trainer, Kevin consistently was able to take independent reciprocal steps for a minimum of 100 steps.

**David.** For walking forward with adult support, there was a stable baseline with a mean of 1.64 steps and a range from 1 to 3 steps (see Figure 2). An upward trend was noted during the intervention phase with a mean of 6.91 steps and a range from 0 to 26 steps. A 55% overlap of data points (12 of 22 data points) from baseline to intervention with a 5.27-point increase in the mean was observed.

Initially, measurements of reciprocal steps while walking in the Gait Trainer were taken since David was unable to walk the 70-ft distance from the bathroom to the classroom (see Figure 3).
However, once David was able to consistently walk the entire distance, the measurement of distance was discontinued and the measurement of time was added (after the 30th trial). For the duration of the study, measurements of time indicated a steady decrease from 9 min 20 s to 4 min 54 s by the 53rd trial. David was unavailable during the maintenance phase due to a family move.

Caleb. For walking forward with adult support, a stable baseline with a mean of .60 steps and a range from 0 to 1 was observed (see Figure 2). The mean for the intervention phase was 4.47 steps with a range from 0 to 12 steps. However, after the 33rd trial, all walking was discontinued for 3 weeks due to medical complications. This resulted in a substantial decrease in walking skills following this period. A reintroduction of the intervention was followed by another upward trend. There was a 3.87-point increase in the mean from baseline to intervention with a 21% overlap of data points (4 of 19 data points). There was a significant decrease in skill level in the maintenance phase demonstrated by a mean of 0 steps. This represented a 4.47-point decrease from the intervention phase with a 0% overlap of data points.

**DISCUSSION**

The current study investigated the effects of the MOVE Curriculum on functional mobility skills (e.g., walking forward) with 5 students with severe, multiple disabilities. The results of this study provide support for the use of the MOVE Curriculum to increase functional mobility skills for students with severe disabilities. A clear functional relationship between the target behaviors and the intervention procedures was demonstrated. Four of the 5 participants showed increases in walking skills from baseline to intervention. Although the fifth participant, Kevin, did not make any gains during intervention, he did show a dramatic increase in walking during the maintenance phase.

In general, prior to intervention none of the participants was able to demonstrate functional walking skills either independently or with support. David and Caleb did demonstrate the ability to take a few steps with support during baseline, but these minimal levels did not increase their functional participation in daily activities. By the end of intervention, however, Kim was able to walk short distances independently. Melissa, David, and Caleb were able to walk with adult support to participate more fully in their selected activities. As the students gained functional walking skills, they were able to participate in other school and community activities without the use of their wheelchairs.

Although Kim demonstrated very little interest in her environment and would not attempt to take any independent steps during baseline, the addition of a motivating activity appeared to have a positive impact. Initially, Melissa resisted all attempts at walking and required the use of the Gait Trainer as well as full physical prompting to move her legs reciprocally. By the end of the intervention phase, however, she no longer required the use of the Gait Trainer and did not need to use her wheelchair during the school day. Despite Kevin's inability to take reciprocal steps during the intervention phase, the transdisciplinary team continued to practice supported weight bearing in standing and transfers from sitting to standing with the expectation that reciprocal stepping would develop. This was found to be true when measurements were taken during maintenance.

Although David was able to take a few steps with adult support during baseline, he used the Gait Trainer to practice walking for longer distances during intervention. David's ability to walk forward with adult support also improved significantly during intervention. This new skill allowed David to walk short distances without the use of his wheelchair, allowing increased participation in crowded environments.

Caleb showed a fairly steady increase in reciprocal steps with adult support during intervention. There was a 3-week period when Caleb's nurse restricted all walking due to medical complications. After this break, Caleb experienced a temporary regression in walking skills followed by progress beyond earlier achievements.

During the maintenance phase, only 4 of the 5 participants were available. Three of the 4 participants not only maintained the gains made in walking skills, but they also continued to make improvements beyond the intervention year. The remaining participant, Caleb, experienced a significant setback in walking skills.
Kim was consistently walking over 500 ft on a variety of surfaces (e.g., sand, grass) and no longer used her wheelchair at school. Melissa was able to walk independently over 500 ft on a variety of surfaces, and her mother reported that she had greater access to the community. Kevin was consistently walking over 100 ft in the Gait Trainer and was bearing his own weight to take some steps with adult support. This was in sharp contrast to his performance during intervention when he was unable to bear his own weight. Caleb experienced numerous medical complications during the time period between intervention and maintenance. Walking skill practice was not a regular component of Caleb's education program resulting in regression in reciprocal stepping. During maintenance data collection, Caleb could bear his own weight for short periods of time, but he was not strong enough to independently take reciprocal steps.

This study has limitations including a small sample size, variability of data, and difficulty in establishing a cause and effect relationship. The first issue of small sample size is characteristic of single-subject designs. The limitations of this design were reduced by the use of repeated measurements over time and multiple baselines. Additionally, the dramatic effects required of single-subject designs may be more generalizable across individuals than are larger group designs that meet relatively weaker statistical standards (Gall, Borg, & Gall, 1996; Kazdin, 1982).

A second limitation of this study is the variability of the data, which makes interpretation of treatment effects difficult. The variety of influences in the natural environment and the characteristics of individuals with severe disabilities (i.e., frequent illnesses and absences, medical complexities, etc.) typically result in variations in the data. While traditional research methods consider variability to be a weakness, researchers studying the multiple factors affecting skill development advocate for the preservation of variability because it provides valuable information about behavior changes (Kamm, Thelen, & Jensen, 1990; Kratochwill & Williams, 1988).

A third limitation of this study is the difficulty in establishing a causal relationship between MOVE and increases in reciprocal stepping. In single-subject multiple-baseline designs, causal relationships can be inferred when performance changes at each point that intervention is introduced (Kazdin, 1982; Tawney & Gast, 1984). In this study some participants did not demonstrate immediate increases in skill with the introduction of the intervention. The slow rate of change of some participants also resulted in introduction of the curriculum for some students prior to significant increases of the previous participant. Although this violation of multiple-baseline design lessens the degree of experimental control, the decision was made to expose all participants to the intervention within the school year. However, a slow rate of behavior change is characteristic for the population studied (Beirne-Smith et al., 2002; Shelden, 1998). Additionally, a visual inspection of the data indicates that participants made dramatic changes in reciprocal stepping skills in either intervention or maintenance. Such dramatic changes in behavior provide more support for a causal relationship between the intervention and an increase in behavior (Kazdin; Tawney & Gast).

A second consideration related to the inference of causal relationships is the effect of external variables in relation to the intervention. In this study stable and staggered baselines helped to reduce the influence of competing variables such as maturation and historical events. Further, there were no gains in functional mobility skills for any participant until after the intervention was introduced for that individual.

The results of this preliminary study suggest that systematic mobility training programs, such as MOVE, can lead to an increase in functional mobility skills. Additional research investigating the effects of the MOVE Curriculum is warranted. Systematic direct replication should be conducted to help establish reliability and generalizability and could be replicated across at least five dimensions (e.g., subjects, behaviors, settings, procedures, and processes). In addition to replication of initial outcomes of this study, future research should investigate the criticality of specific components of the MOVE Curriculum (e.g., levels of family involvement, student-selected versus adult-selected activities, and systematic prompt reduction).
IMPLICATIONS FOR PRACTICE

This study emphasizes the importance of environmental support in the development of new skills. The importance of supports was obvious with David who was unable to walk independently, but could walk short distances with adult support and even greater distances with the use of the Gait Trainer. This discrepancy would suggest that without assistance, David would not have had the opportunity to practice walking skills. Kevin not only required postural support, but he also needed to develop weight-bearing skills before he experienced gains in walking. As muscle strength and proprioceptive awareness developed, he eventually was able to walk proficiently in the Gait Trainer. The implications of this study are significant for individuals with severe disabilities who may not have opportunities to participate in meaningful life activities without environmental support.

A second implication of this study was related to motivation. In addition to a lack of postural balance and strength, some of the participants appeared to have no interest in walking. This seemed to be the case with Melissa who showed no signs of progress for over 2 months before making rather rapid and dramatic gains in her walking skills. The use of the Gait Trainer as well as full physical prompting allowed the school team to provide Melissa with the experience of walking to many different environments until she became actively engaged in walking. Thus, it appeared that once Melissa was motivated to walk within meaningful activities, she made dramatic increases in her functional walking abilities. Motivation was a factor with Kim's program, also. Once Kim developed walking skills, she would walk only to the table to eat or when returning to the "safety" of her classroom. As she became more excited about the freedom walking gave her, she began to generalize this skill across many environments and activities. The natural motivation associated with activity-based instruction is a key component of the MOVE Curriculum, and this study supports the importance of practice during motivating activities.

A third implication relates to the need for increased opportunities to practice new skills. For many individuals with severe disabilities, these opportunities do not always naturally occur. The results from this study support the use of practice opportunities that are both meaningful and continuous. Melissa appeared to have the potential to walk, but not the motivation. The continuous opportunities for practice seemed to be related to her increased desire to walk. With Caleb and Kevin who appeared to lack both the skill and the will to walk, increased mobility opportunities provided the consistent practice necessary for the acquisition of walking skills. When progress is not immediately apparent, as with Melissa and Kevin, educational teams must be committed to continuous meaningful practice. In both cases, the participants initially appeared to be unaffected by the intervention, but eventually made significant gains in functional walking. Regardless of whether lack of progress is due to limited skills or low motivation, continuous opportunities for practice should be a critical component of mobility training.

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Manuscript received April 2001; accepted September 2001.

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