RESEARCH HIGHLIGHTS

Access to the General Curriculum

Agran, M., Alper, S., Cavin, M., Hughes, C., Sinclair, T., & Wehmeyer, M. (2005). Using self-monitoring to increase following-direction skills of students with moderate to severe disabilities in general education. *Education and Training in Developmental Disabilities, 40*(1), 3-13.

BOTTOM LINE

The authors investigated the effects of self-monitoring strategies on six middle school students with moderate to severe disabilities in general education. Students were instructed to acknowledge a given direction, complete the task and monitor their performance. Results suggest that all students learned the strategy and maintained their performance at mastery levels.

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KEY FINDINGS

- Those Student directed learning involves teaching students to use one or more self-directed instructional strategies to plan, perform and monitor a learning task.

- By using these strategies, dependence on external support is minimized, engagement and motivation are increased and learning is maximized.

- Critical to a student's success in learning and task performance is the ability to self-regulate his or her own performance. The students' needs to recognize the correct performance and record when he has performed it correctly.

- There is a mistaken perception, that individuals with moderate to severe disabilities are incapable of regulating their own behavior. This perception contributes to students with disabilities remaining dependent on others to direct their behavior.

Critical to a student's success in learning and task performance is the ability to self-regulate his or her own performance.

- A self-regulation strategy of great utility for students with severe disabilities is self-monitoring. Self-monitoring involves a student's self-observation of a target behavior, followed by an occurrence.

- The six participants began (before the self-regulation instruction) following the steps of directions correctly with means between 9% and 23%.

METHODS

- Six 7th and 8th grade students identified with moderate to severe mental retardation placed at least partially in general education classrooms participated in the study.

- These students were also identified by their teachers for improvement in following directions.

- The students were placed in an industrial technology, art, social studies or family consumer science classes where many specific directions and procedures were given to students.

- The primary dependent measure was the amount of change in each student's performance of following directions. Observers recorded daily the behaviors participants demonstrated in following directions. These behaviors included

acknowledging the person giving the direction, beginning the activity and completing the activity. Performance data was calculated as the percentage of successfully completed steps of the task sequence.

- A multiple-baseline design across subjects was used to assess effects of an instructional program designed to train students to follow directions. The experimental conditions included: baseline, intervention and maintenance.

- The intervention involved teaching students to complete assigned tasks and self-monitor their performance. This instruction involved recognizing a direction from other statements, explaining the purpose and steps of self-monitoring, including recording target behavior and then the explained different steps of following directions including demonstrating exemplar and non-exemplar behaviors.

RELATED PUBLICATIONS

Agran, M. (1997). *Student-directed learning: Teaching self-determination skills.* Pacific Grove, CA: Brooks/Cole.

Agran, M. (1998). Teaching self-monitoring, self-evaluation, self-reinforcement strategies. In M. Wehmeyer & D.J. Sands (Eds.) *Making it happen: Student involvement in educational planning, decision making, and instruction* (pp. 355-377). Baltimore: Paul H. Brookes.

Agran, M. & Alper, S. (2000). Curriculum and instruction in general education: Implication for service delivery and teacher preparation. *The Journal of the Association for Persons with Severe Handicaps, 25,* 167-274.

Baer, D.M. (1984). Does research on self-control need more control? *Analysis and Intervention in Disabilities, 4,* 211-218.

Copeland, S., Hughes, C., Agran, M.,Wehmeyer, M., & Fowlet, S. (2002). An intervention package to support high school students with mental retardation in general education classrooms. *American Journal on Mental Retardation, 107,* 32-45.

Watson, D.L.,& Tharp, R.G. (1989). *Self-directed behavior: Self-modification for personal adjustment.* Pacific Grove, CA: Brooks/Cole.

Wehmeyer, M.,Agran, M., & Hughes, C.(2000). A national survey of teacher's promotion of self-determination and student-directed learning. *The Journal of Special Education, 34,* 58-68.

Wehmeyer, M.,Sands, D.J., Knowles, H.E., & Kozleski, E.B. (2002). *Teaching students with mental retardation: Providing access to the general curriculum.* Baltimore: Paul H. Brookes.

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