



Using Simulation to Teach Purchasing Skills

What is the evidence base?

- This is an evidence-based practice for **students with disabilities** based on six methodologically sound single subject studies across 22 participants with disabilities.
- This is an evidence-base practice for **students with intellectual disability** based on six methodologically sound single subject studies across 21 participants with intellectual disability.

Where is the best place to find out how to do this practice?

The best place to find out how to implement stimulation to teach purchasing skills is through the following research to practice lesson plan starters:

- Simulation to teach purchasing skills
 - [ATM withdraw \(Cihak, Alberto, Kessler, & Taber, 2004\)](#)
 - [Grocery Shopping \(Mechling, Gast, & Langone, 1992\)](#)

With who was it implemented?

- Students with
 - Mild intellectual disability (1 study, n=2)
 - Mild to moderate intellectual disability (1 study, n=3)
 - Moderate intellectual disability (1 study, n=4)
 - Moderate to severe intellectual disability (3 studies, n=8)
 - Severe intellectual disability (1 study, n=4)
 - Learning disability (1 study, n=1)
- Ages ranged from 9 - 20
- Males (n=5), females (n=8), not specified (n=9)
- Ethnicity
 - None reported (n=22)

What is the practice?

Simulation is defined as using materials and situations in the classroom that approximate the natural stimulus conditions and response topographies associated with the performance of functional skills in community settings (Bates et al., 2001).

In the studies used to establish the evidence base for using simulation to teach purchasing skills, simulation included using:

- Mnemonics, verbal instruction, role-play, and in vivo training (Aeschleman & Schladenhauffen, 1984)
- A system of least-to-most prompts (Cihak, Alberto, Kessler, & Taber 2004)
- Role play, modeling, and constant time delay (DiPipi-Hoy & Jitendra 2004)
- Computer assisted instruction and constant time delay (Mechling, 2004)
- A computer-based video program and a system of least prompts procedure (Mechling, Gast, & Langone, 2002; Wissick, Lloyd, & Kinzie, 1992)

Where has it been implemented?

- Classroom (2 studies)
- Grocery store (4 studies)
- Community (2 studies)
- Home (1 study)

How does this practice relate to Common Core Standards?

- Understand ratio concepts and use ratio reasoning to solve problems (Ratios and Proportional Relationships, Grade 6)
 - Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations

How does this practice relate to the Common Career Technical Core?

- Demonstrate mathematics knowledge and skills required to pursue the full range of post-secondary education and career opportunities (Academic Foundations)
 - Identify whole numbers, decimals, and fractions
 - Demonstrate use of relational expressions such as: equal to, not equal, greater than, less than, etc.
 - Demonstrate knowledge of basic arithmetic operations such as: addition, subtraction, multiplication, and division

References used to establish this evidence base:

Aeschleman, S.R., & Schladenhauffen, J. (1984). Acquisition, generalization and maintenance of grocery shopping skills by severely mentally retarded adolescents. *Applied Research in Mental Retardation*, 5, 245-258.

Cihak, D. F., Alberto, P.A., Kessler, K., & Taber, T.A. (2004). An investigation of instructional scheduling arrangements for community based instruction. *Research in Developmental Disabilities, 25*, 67-88.

Dipipi-Hoy, C., & Jitendra, A. (2004). A parent-delivered intervention to teach purchasing skills to young adults. *Journal of Special Education, 38*, 144-157.

Mechling, L.C. (2003). Effects of multimedia, computer-based instruction on grocery shopping fluncey. *Journal of Special Education Technology, 19*, 23-34.

Mechling, L., Gast, D., & Langone, J. (2002). Computer-based video instruction to teach persons with moderate intellectual disabilities to read grocery aisle signs and locate items. *The Journal of Special Education, 35*, 224-240.

Wissick, C.A., Lloyd, J.W., & Kinzie, M.B. (1992). The effects of community training using a videodisc-based simulation. *Journal of Special Education Technology, 11*, 207-222.

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