



# Template for Article Summary, Analysis, and Annotation

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10/27/2015

1. **Full citation** Chezan, Lauren C. Drasgow, Erik, Marshall, Kathleen J. (2012). A Report on Using General-Case Programming to Teach Collateral Academic Skills to a Student in a Postsecondary Setting. *Focus on Autism and Other Developmental Disabilities*, 27(1), 22-30.

**Doi: 10.1177/1088357611428334**

2. **Abstract** The authors' purpose in this report is to examine the application of general-case programming to teach collateral academic skills to a student with pervasive developmental disorder—not otherwise specified (PDD-NOS) and with a mild intellectual disability who was attending college. The authors use data drawn from their work with Tom to explain and illustrate how a general-case approach may be developed and implemented effectively. The authors' experience provides initial support for the utility of general-case programming for teaching acquisition and generalization of collateral academic skills. They make recommendations to guide researchers in future investigations of the application of the general-case programming to teach skills that enhance the successful integration of students with disabilities in postsecondary programs.

### 3. Summary

#### a. Purpose of study

(The purpose of this study is to examine the application of general-case programming to teach collateral academic skills to a student with PPD-NOS and with a mild intellectual disability in a postsecondary college environment.)

#### i. Students with intellectual disabilities need a set of “collateral skills”

##### 1. Effective Strategies

a. Meeting class requirements outside of course content

##### 2. Technology Skills

a. Successful integration into academic realm

3. Overall students with intellectual disabilities have a hard time learning and generalizing new skills. Systematic instruction and inclusion can help

#### ii. Many lack when they arrive on campus

#### iii. Difficulty learning and generalizing new skills

1. For example: accessing course information/requirements





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2. Approaches
3. Course Content
- b. Framework**
  - i. Skills:
    1. General Case Programming
      - a. Defining Instructional Universe
      - b. Defining range of relevant stimulus and response variation within that universe
      - c. Selecting and teaching probe examples
      - d. Sequencing teaching examples
      - e. Teaching the examples
      - f. Testing for Generalization
- c. Population and sample**
  - i. Tom, 21 year old man, with intellectual disability, pervasive development disorder—not otherwise specified (PDD-NOS) and a mild intellectual disability attending a postsecondary program.
    1. He had good conversation skills but rarely initiated conversation with peers or adults.
    2. He was able to follow a schedule but needed constant reminders.
    3. He reported constant difficulties when using technology services.
- d. Overview of methods**
  - i. Direct observation and struggles for four hours in different environments
    1. Interpretation struggles with handouts and technology
  - ii. Instructional Universe
  - iii. General Case Programming
    1. Generalization Probes
      - a. respond to requests related to
        - i. (a) locating information on syllabi,
        - ii. (b) accessing information using technology, and
        - iii. (c) attaching information using technology.
          1. Session performance was graphed and analyzed visually. P.24
    2. Acquisition Trials
      - a. We followed the Category 1 protocol to conduct acquisition trials and generalization probes for





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- b. Categories 2 (accessing materials using technology)
- c. and 3 (attaching materials using technology).

### e. Variables

- i. Control/Background variables:
  - 1. Trials and Probes
    - a. Various numbers of trials and various number of probes
    - b. Tom who has PDD-NOS
- ii. Independent/Predictor variable:
  - a. Tom's responses to the various trials and probes
- iii. Outcome/Criterion/Dependent variables:
  - 1. Instructional procedures: constant time delay, differential reinforcement, and error correction.
  - 2. Model prompts for training and verbal prompts for error correction.
  - 3. Each training session consisted of 20 trials, with 5 trials for each of the four acquisition examples included in Category 1.
- iv. No relationship between acquisition and intervention
  - 1. Successful inclusion of students with intellectual disabilities

### f. Findings/Results

- i. Amount of time in which Tom needed another generalization probe
- ii. Acquisition Trials framed the General Case Project/Process
- iii. Tom was able to acquire all three target responses during intervention which included constant time delay, error correction, differential reinforcement and appraisal.

### g. Implications (for research, policy, and/or practice)

- i. Does the general case approach work for students with intellectual disabilities? (The data in this research provide initial support for using a general-case approach to teaching skills necessary for successful inclusion of students with intellectual disabilities in postsecondary education.)
- ii. The authors suggest that researchers investigate what deems a relevant and sufficient number of teaching examples that sample a variety of stimulus-and-response mechanisms when teaching collateral academic skills to students with intellectual disabilities.





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- iii. They also suggest a more rigorous approach of general-case programming
- iv. Testing of subjects in natural environments

### 4. Critiques & Limitations (In your own words, that make sense when skimmed)

#### a. Conceptual

- i. Probes
- ii. Generalizations- The student going from finding specific information to general information.
- iii. The research design did not provide sufficient evidence to demonstrate a functional relation between our intervention and the acquisition and generalization of the target behaviors.

#### b. Data

- i. Relevant number of teaching examples
  - 1. Stimulus and response variation
- ii. Selection of design
  - 1. Intervention and target behavior
- iii. Implement in natural environments

#### c. Analysis

- i. "Within-participant multiple- baseline design with generalization probes across three generic response categories"

#### d. Interpretation

- i. More repetitive the probe was, the more Tom remembered the tasks required of him

#### e. Application

- i. Adopting this strategy for other students with intellectual disabilities

### 5. Follow-Up

#### a. Little Questions

- i. If we take the participant out of the structure of the study would they be able to retain the information taught to them in the study?
- ii. What is the purpose of appraisal during the intervention stage of the study?

#### b. Big Questions

- i. How do we get more participants for studies on topics like this?





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- ii. What teaching methods are most effective in helping a subject reach target responses?
- c. **Next Steps**
  - i. Extend times and probes for each category
- d. **Other Resources**

### 6. Summary/Utility

General case approach might be useful in identifying some attributes for students with intellectual disabilities. Study only used one participant. I would not recommend using this data and article for project, which is too broad in nature and not specific enough in results.

This article does not provide adequate support for our final project because the researchers in this article were not successful in reaching the goals of their own study.

Quote: In 2009, 14.9% of individuals with intellectual disabilities ages 18 to 34 years attended postsecondary programs (HEATH Resource Center, 2009).

