Using Constant Time Delay to Teach Recreation and Leisure Skills

What is the evidence base?

A potential level of evidence based on two acceptable quality single subject studies

With who was it implemented?

- Students with
  - Severe to profound intellectual disability (2 studies, n= 7)
  - Autism (1 study, n=1)
- Ages ranged from 16-21
- Males (n=7), females (n=1)
- Ethnicity
  - None reported (n= 4)

What is the practice?

Constant time delay is a variation of time delay, a prompting procedure that uses variations in the time intervals between presentation of the natural stimulus and the response prompt. Time delay transfers stimulus control from a prompt to the natural stimulus by delaying the presentation of the prompt following the presentation of the natural stimulus. Constant time delay is implemented by presenting several trials using a 0-second delay between the presentation of the natural stimulus and the response prompt. The trials that follow the simultaneous prompt condition apply a fixed time delay (e.g., 3 seconds or 5 seconds; Cooper, Heron, & Heward, 2007).

In the studies used to establish the evidence base for using CTD to teach recreation and leisure skills, CTD included using:

- Four second constant time delay (Wall, Gast, & Royston, 1999; Zhang, Gast, Horvat, & Dattilo, 1995)

How has the practice been implemented?

- Four second constant time delay paired with total task chaining was used to teach
  - Beanbag toss, indoor putting, checkers, Jenga™, UNO™, using a walkman, and playing croquet (Wall, Gast, & Royston, 1999)
- Four second constant time delay in combination with verbal description and physical assistance was used to teach
Bowling, throwing a baseball, and putting a golf ball (Zhang, Gast, Horvat, & Dattilo, 1995)

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

- Using CTD to teach leisure skills

**Where has it been implemented?**

- Classroom (1 study)
- Gymnasium (1 study)

**How does this practice relate to Indicator 13?**

- Indicator 13 Checklist Item #3: Teaching leisure skills may reflect results of transition assessment information
- Indicator 13 Checklist Item #4: Participating in leisure activities may be a transition service designated in an IEP that will enable a student to meet his or her postsecondary independent living goal(s)
- Indicator 13 Checklist Item #6: Teaching leisure skills may be part of an IEP goal that supports a student’s postsecondary independent living goal(s)

**How does this practice relate to Common Core Standards?**

- Comprehension and Collaboration (Anchor Standards for Speaking and Listening, Grades 9-12)
  - Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others’ ideas and expressing their own clearly and persuasively
- Knowledge of Language (Language, Grade 8)
  - Use knowledge of language and its conventions when writing, speaking, reading, or listening

**How does this practice relate to the State’s Career Cluster Initiative: Essential Knowledge and Skills?**

- Demonstrate language arts knowledge and skills required to pursue the full range of post-secondary education and career opportunities (Academic Foundations)
  - Model behaviors that demonstrate active listening
  - Comprehend key elements of oral and written information such as: cause/effect, comparisons/contrasts, conclusions, context, purpose, charts/tables/graphs,
- 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 the concepts, strategies, and systems for obtaining and conveying ideas and information to enhance communication in the workplace (Academic Foundations)
  - Employ verbal skills when obtaining and conveying information

**References used to establish this evidence base:**
