

INSTRUCTIONAL STRATEGY:

CONSTANT TIME DELAY



WHAT IS CTD?

- Constant Time Delay is a prompting procedure, using flashcards or a computer-based prompting software, that uses explicit teaching of letters/numbers/sight words, vocabulary, spelling, or math facts to build fluency in content areas.
- Teacher uses a card with the number, letter, word, definition or fact written on it to prompt student response within a constant time frame of 0, 3, or 5 second delay (depending on the needs of the student).
- Uses an antecedent or stimulus, response, and feedback order of process.

The purpose of CTD:

- To build fluency in recognition of letters, numbers, common words, correct spelling, definition and meaning, or math sums and products of the numbers from 1 to 9 with mostly errorless learning and immediate feedback.



adamant insistent; unyielding	adept thoroughly proficient; expert	admonish to scold or reprimand
adumbrate to suggest; to foreshadow	adverse in an opposing direction	advocate one who pleads the cause of another

- Great for use with all students including those with mild disabilities (Mild Intellectual disability, Autism, Speech Impairment, ADHD, Other Health Impairment, Emotional/Behavioral disorders, Learning disability) and students learning English.
- Effective for all ages, individually, or with small groups.
- Can be incorporated in all content areas such as Math, ELA, Reading, Science, Social Studies, Fine Arts, FCS, and Physical Education.

Rationale:

- Provides for higher student engagement, many opportunities for student response and teacher feedback in order to master fluency in letters, numbers, sight words, vocabulary, spelling, and Math facts.
- Gives students confidence in learning essential content fluency before working collaboratively in group settings or in whole group discussions.

Computer or audio based programs:

- These can be used for independent CTD work of the student.
- Include recorded or visual cues for student response and include the constant time delay conditions for the duration of the total time.

Procedure for Letter/number/sight word example:

1. Teacher will decide to use CTD as an instructional activity for an individual or small group of students.
2. Teacher will decide on the appropriate way to use CTD. By creating flashcards, an audio tape, CD, MP3, or computer based program.
3. Teacher will begin the session by introducing the set of cards the teacher will use and instructing the student of the expectations of their response. Teacher will say "I am going to show you cards with [insert letter/number/word]. If you know the [letter/number/word], say it. If you don't know the [letter/number/word], say 'I don't know' or nothing."
4. Teacher uses a card with one word or fact written on it and will show it to student and prompt the student by saying "This letter/number/word is [insert letter/number/word]. What is this letter/number/word?"
5. *Note: there should be no delay in response during phase 1.
6. Student will respond with correct letter/number/word or with "I don't know" or no response.
7. If student answers correctly, the teacher will respond with "Right. The letter/number/word is [insert letter/number/word]. Good job!" The teacher will then move on to the next card.
8. If the student does not respond or has an incorrect response, the teacher will repeat step 4 prompt.
9. Once all cards have been introduced then the teacher will move on to the 3 or 5 second delay. (phase 2) *Time used will depend on the needs of the student.
10. Repeat steps 3 through 8 and insert a 3 or 5 second delay in response.
11. If student answers correctly within 3 or 5 seconds, the teacher will respond with "Right. The letter/number/word is [insert letter/number/word]. Good job!" The teacher will then move on to the next card.
12. If student takes longer than 3 or 5 seconds to respond or has no response, then the teacher will repeat step 4 prompt and again give 3 or 5 seconds for student to respond.

Examples of CTD:

Vocabulary:

- Use the same procedures above only with vocabulary words (term written on front of card and definition on back)
- Can start by introducing terms first for pronunciation
- Then move on to definition (with student reading the definition to practice initially)
- Finally term and definition practice (teacher will prompt by saying "What is this term and what does it mean?")

Math facts:

- Math fact written on front (without answer) and answer written on back.
- Use same procedures above and insert the math fact.
- example: "The fact is 3 plus 4. 3 plus 4 equals 7. What is 3 plus 4?"

Spelling:

- Use prompt: "I am going to give you a word to spell. If you know how to spell the word, write it on your paper.
- Start by first allowing student to practice with writing the correct spelling by showing the student the word on the card.
- Then, once all the words are introduced, the teacher will keep the card hidden and only read the word to the student to spell on their paper.

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