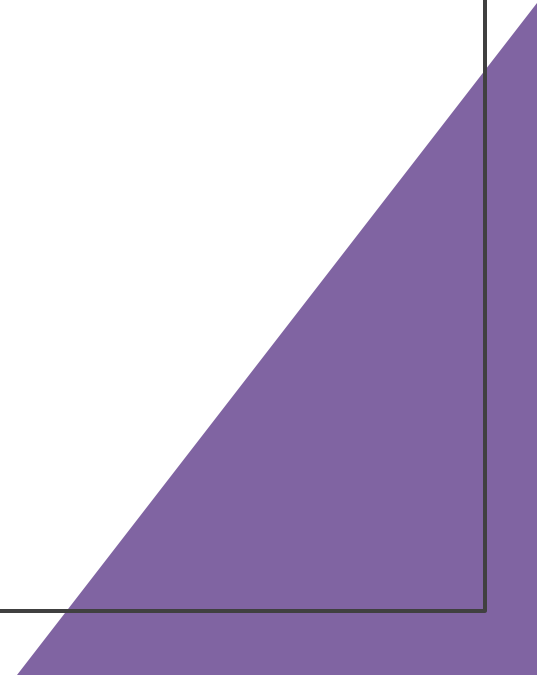


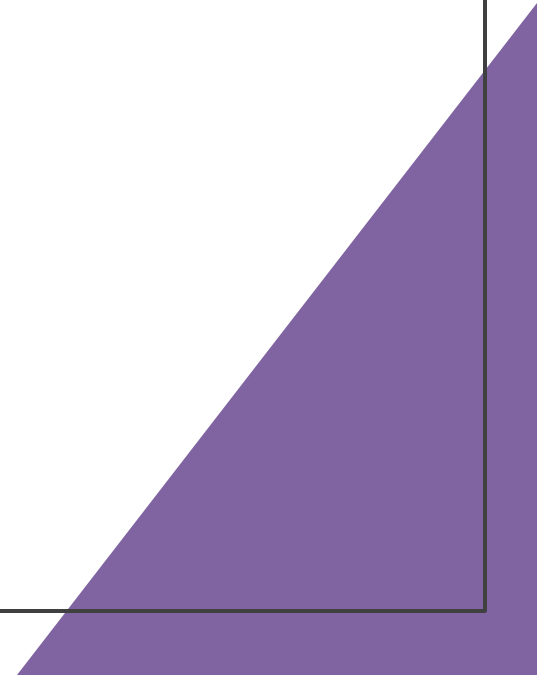
Session 4: Maintenance Stage

Training on Data-Based Decision
Making Using the Stages of Learning



Overview

Focus on identifying students in the maintenance stage and selecting appropriate strategies.



What is the Maintenance Stage?

Definition: Skill maintenance occurs when individuals can **perform a learned skill over time without reteaching** (Alberto & Troutman, 2009).

Key Benchmarks for Maintenance:

- **Independence:** No support is required.
 - **Accuracy:** The skill is consistently performed correctly at above 90%.
 - **Consistency:** Performance is **predictable** but not yet flexible to other settings/with other materials.
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Key Concepts



ACCURACY ABOVE 90% WITH NONE-MODERATE SUPPORT.



INSTRUCTIONAL STRATEGIES INCLUDE THINNING REINFORCEMENT, SUPPORT FADING, AND DISTRIBUTED TRIALS.



ENCOURAGING FLEXIBILITY TO OTHER SETTINGS AND WITH OTHER MATERIALS.

Stage-Specific Information

Percentage of Accuracy	Support Level	Settings/Materials
Above 90% accuracy.	None	Performance in other settings/with other materials is being assessed . Moderate ability to perform skill in other settings/materials



Example

The student's three most recent data points in multiplication facts (1-12) are 90%, 94%, and 91%. Support level is None. Ability to perform skill in other settings or with other materials is moderate.

Example

The student's three most recent data points in Identifying place values are **97%, 100%, and 95%**. Support level is **None**. Ability to complete the skills across settings or with different materials **is moderate**.

Instructional Strategies for Maintenance

Strategy	Definition
Thinning reinforcement	Moving from a system of predictable and immediate reinforcement of task performance to one focused on variability of delivery.
Support Fading	Gradual replacement of teacher led supports and prompts to student led or no supports through systematic manipulation of instruction
Overlearning	Repeated practice over time past the point of initial independent performance
Distributed Trials (hi, again)	Instructional trials are interspersed across varied points in time during a lesson, session, or across the day



Thinning Reinforcement

EXAMPLE FOR TEACHING MATH:

A STUDENT INITIALLY EARNS A STICKER FOR EVERY CORRECT MULTIPLICATION FACT. OVER TIME, THE REINFORCEMENT IS FADED TO RECEIVING A STICKER EVERY FIVE CORRECT ANSWERS, AND THEN ONLY ONE AT THE END OF EACH LESSON.

Distributed Trials

Example for Teaching Math:

Instead of doing all fraction comparison problems in one session, the teacher integrates fraction comparisons into different activities throughout the week.

Support Fading

Example for Teaching Math:

A student solving long division problems first relies on a visual example of a completed problem but gradually moves to solving them independently with no visual or prompts.

Overlearning

Math example



A student who has mastered addition facts continues to practice them periodically with different counting materials or in different settings.

Example 1

The student's three most recent data points in number identification are 90%, 90%, and 90%. Support level is none. Performance in other settings and with other materials is only moderate.

1. Select the stage of learning:

- a) Acquisition
- b) Fluency
- c) Maintenance
- d) Generalization

2. Select the instructional strategy:

- a) Discrete-trial training
- b) Massed trials
- c) Overlearning
- d) Simulations

Example 1

The student's three most recent data points in number identification are 90%, 90%, and 90%. Support level is none. Performance in other settings and with other materials is moderate.

1. Select the stage of learning:

- a) Acquisition
- b) Fluency
- c) Maintenance
- d) Generalization

2. Select the instructional strategy:

- a) Discrete-trial training
- b) Massed trials
- c) Overlearning
- d) Simulations

Example 1

The student's three most recent data points in number identification are 90%, 90%, and 90%. Support level is none. Performance in other settings and with other materials is moderate.

1. Select the stage of learning:

- a) Acquisition
- b) Fluency
- c) Maintenance
- d) Generalization

2. Select the instructional strategy:

- a) Discrete-trial training
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- c) Overlearning
- d) Simulations

Example 1

The student's three most recent data points in number identification are 90%, 90%, and 90%. Support level is none. Performance in other settings and with other materials is moderate.

1. Select the stage of learning:

- a) Acquisition
- b) Fluency
- c) Maintenance
- d) Generalization

2. Select the instructional strategy:

- a) Discrete-trial training
- b) Massed trials
- c) Overlearning
- d) Simulations

Example 2

The student's three most recent data points in calculating a 20% tip on a check are 100%, 100%, and 100%. Support level is none. Performance in other settings and with other materials is moderate.

1. Select the stage of learning:

- a) Acquisition
- b) Fluency
- c) Maintenance
- d) Generalization

2. Select the instructional strategy:

- a) Problem solving for adaptations
- b) Continuous reinforcement
- c) Distributed trials
- d) Contingent reinforcement

Example 2

The student's three most recent data points in calculating a 20% tip on a check are **100%, 100%, and 100%**. Support level is **none**. Performance in other settings and with other materials **is moderate**.

1. Select the stage of learning:

- a) Acquisition
- b) Fluency
- c) Maintenance
- d) Generalization

2. Select the instructional strategy:

- a) Problem solving for adaptations
- b) Continuous reinforcement
- c) Distributed trials
- d) Contingent reinforcement

Example 2

The student's three most recent data points in calculating a 20% tip on a check are **100%, 100%, and 100%**. Support level is **none**. Performance in other settings and with other materials **is moderate**.

1. Select the stage of learning:

- a) Acquisition
- b) Fluency
- c) **Maintenance**
- d) Generalization

2. Select the instructional strategy:

- a) Problem solving for adaptations
- b) Continuous reinforcement
- c) Distributed trials
- d) Contingent reinforcement

Example 2

The student's three most recent data points in calculating a 20% tip on a check are **100%, 100%, and 100%**. Support level is **none**. Performance in other settings and with other materials **is moderate**.

1. Select the stage of learning:

- a) Acquisition
- b) Fluency
- c) **Maintenance**
- d) Generalization

2. Select the instructional strategy:

- a) Problem-solving for adaptations
- b) Continuous reinforcement
- c) **Distributed trials**
- d) Contingent reinforcement

Independent Practice

- Complete the probe on Microsoft Forms to apply today's learning.
- Make sure to analyze each case carefully
- Do not access google or AI 😊
- Let me know once your form as been submitted