

Common Reason for Academic Failure: They do not want to do it
Intervention Name: Interspersing Easier Problems in Drill Practices

Brief Description:

Research indicates that problem completion within an activity is in itself a reinforcing event. Interspersing easier problems during drill activities increases completion rates and enjoyment of activity.

What “common problems” does this address?

Many students become frustrated when they begin to learn a new task. They are in the acquisition and fluency building stages of learning a new task and thus a slower pace and more thought need to be used. This frustration may lead to “giving up” on the part of the student. This happens during independent seatwork, homework, and in a variety of tasks. Teachers may use recently mastered skill problems interspersed throughout an assignment in order to promote more confidence and motivation to finish the activity. While the original research on this intervention involved math, interspersed reinforcement is done in a variety of settings across multiple contexts. The success behind reinforcement is well-documented in research.

Procedures:

1. Construct drill worksheet with problems aimed at the current skill needing practice.
2. Intersperse already mastered items in a 1:3 ratio between more difficult problems.
3. Slowly fade mastered items by decreasing the amount.
 - a. For example: Begin with a 1:3 easy to hard ratio and move to 1:8 easy to hard ratio the next time.
4. Eventually dissipate the already mastered problems

Critical Components that must be implemented for intervention to be successful:

- Reinforcement problems must be acquired at the mastery level before they can be assumed to be reinforcing.
- Intersperse problems should occur between every 3 or 4 problems in the beginning.
- Careful attention should be made to a slow removal of the prompt.

Critical Assumptions/Problem-Solving Questions to be Asked:

Problems assigned in this type of task need to be in the acquisition and fluency stages, whereas problems selected as reinforcers need to be skills acquired at the mastery level so they can be done quickly and efficiently. If problems are not carefully selected, students may become even more frustrated with the assignment. Assumptions should not be made about mastery level until the student has proven that the particular skill is mastered.

Materials:

- Activity sheets

References

There is a large body of evidence on the use of reinforcement to motivate students' academic progress. This type of intervention is universal and should generalize in many situations.

Logan, P., & Skinner, C. H. (2003). Improving students' perceptions of a mathematics assignment by increasing problem completion rates: Is problem completion a reinforcing event? *School Psychology Quarterly*, 13(4), 322-331.