Intervention in a Flash

Training School Psychologists to be Experts in Evidence Based Practices for Tertiary Students with Serious Emotional Disturbance/Behavior Disorders

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Intervention in a Flash

Introduction

The focus of recent research and attention on the needs of children who do not gain adequate knowledge from whole-class instructional practices has opened educational discussion and reform that have produced the response to instruction, or intervention, model of service. This three tiered model, as illustrated in Figure 1, helps to identify the students who succeed with the universal strategies used in the classroom, those who require small group instruction and remedial skill development, as well as those tertiary students who fail to make progress and require more individualized supports in their educational program.

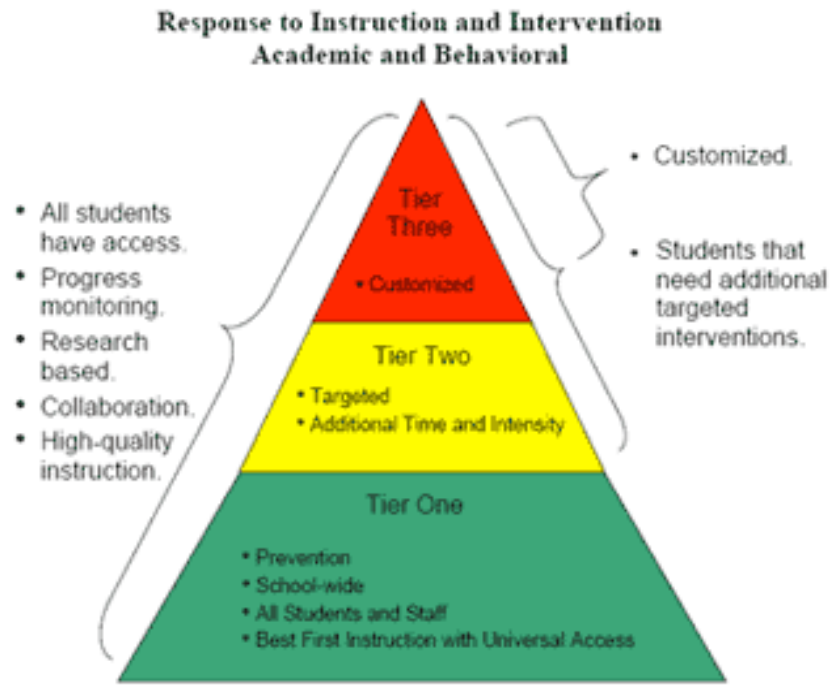

Figure 1 rcoe.k12.ca.us

Basic Skills:

Math – operational facts (addition, subtraction, multiplication, & division

Language Arts – phonemic awareness, sight words, & spelling basics

The Intervention in a Flash program is designed to address the Tier Two and Three students who need those targeted interventions in the basic, foundational skill level in order to move on to the more complex concepts and higher order thinking skills. Students who do not have automaticity in their basic skills struggle to stay "on grade level" and maintain interest. Failure to attain these basic skills negatively effects overall academic competency.

Definition

Intervention in a Flash is a flash card program used as a Tier Two or Three intervention with student's who struggle to maintain or acquire the basic skills needed to reach higher levels in the core curricula. It is a one-on-one formatted program and can be used with students from kindergarten to college level, regular and special education populations, with minimal preparation time and resources.

Reasons to use Intervention in a Flash

☆ To target specific skill deficits

☆ Students are given high opportunities to respond

☆ Skills are explicitly taught

☆ An appropriate level of instruction and challenge is delivered to the student

☆ Immediate feedback is given

Evidence Base

Research has shown that instructional interventions must attack targeted skills, be explicitly taught, be at an appropriate level, give students high opportunities to responds, and give students immediate feedback. Each of these points are addressed when using the Intervention in a Flash program. Using flash cards to increase student's automaticity has been shown effective in various forms with:

☆ Struggling readers to improve sight word fluency

☆ Basic math facts in multiple age groups

☆ General education and Special Education populations

Advantage to the Educator

☆ Inexpensive to use and can be developed quickly

☆ Tool for easy data keeping

☆ Limited materials needed

☆ 3 styles to choose from – Traditional, Interspersal, & Incremental

Materials Needed

☆ Index or note cards

☆ Folder

☆ Markers

☆ Checklist

Steps to Implement Intervention in a Flash

The first step in implementing the Intervention in a Flash program is to choose to style that best fits you and your student. See the chart below for a Quick Comparison Guide.

Style	Unknown to Known Content	Most Effective	Most Efficient	Teacher Preferred	Student Preferred
Traditional	100% to 0%		☆	☆	☆
Interspersal	30% to 70%				
Incremental	10% to 90%	☆			

Procedure for Traditional Flash Card Implementation

1. Develop a set of cards that are 100% unknown to the student. This can be based from benchmark curriculum based measurement tools.

2. Designate a time to meet with the student one-on-one for the intervention.

3. Show the set of cards to the student one at a time and give the correct answer. The student should repeat the fact/word and answer.

4. Show the set of cards again with the student providing the answer. If the response if correct, acknowledge and give positive feedback such as, "Perfect" or "That's correct". If the response is incorrect, provide overcorrect and immediate feedback with the correct answer.

5. Repeat the set of cards according to your time limit and student success rate. The typical trial is 8 repetitions.

Procedure for Interspersal (Drill Sandwich) Flash Card Implementation

1. Develop a set of cards that consist of 30% unknown to 70% to the student. This can be based from benchmark curriculum based measurement tools.

2. Designate a time to meet with the student one-on-one for the intervention.

3. Show the set of unknown cards to the student one at a time and give the correct answer. The student should repeat the fact/word and answer.

4. Intersperse the unknowns with the knowns in an order such as

U_1-K_1-K_2-K_3-U_2-K_4-K_5-K_6-U_3

If the response if correct, acknowledge and give positive feedback such as, “Perfect” or “That’s correct”. If the response is incorrect, provide overcorrect and immediate feedback with the correct answer.

5. Repeat the set of cards according to your time limit and student success rate. The typical trial is 8 repetitions.

Procedure for Incremental Rehearsal Flash Card Implementation

1. Develop a set of cards that consist of 10% unknown to 90% known to the student. This can be based from benchmark curriculum based measurement tools.

2. Designate a time to meet with the student one-on-one for the intervention.

3. Show the set of unknown cards to the student one at a time and give the correct answer. The student should repeat the fact/word and answer.

4. Rehearse the unknown with the known in a specific order.

5. Repeat the set with each targeted fact/word moving the 1st unknown to the 1st known position and removing the 9th known. See Figure 2 below.

If the response if correct, acknowledge and give positive feedback such as, “Perfect” or “That’s correct”. If the response is incorrect, provide overcorrect and immediate feedback with the correct answer.

5. Repeat the set of cards according to your time limit and student success rate. The typical trial is 8 repetitions.

Figure 2

☆1st Unknown – 1st Known
☆1st Unknown – 1st K – 2nd K
☆1st Unknown – 1st K – 2nd K – 3rd K
☆1st Unknown – 1st K – 2nd K – 3rd K – 4th K
☆1st Unknown – 1st K – 2nd K – 3rd K – 4th K – 5th K
☆1st Unknown – 1st K – 2nd K – 3rd K - 4th K – 5th K -6th K
☆1st Unknown – 1st K – 2nd K – 3rd K - 4th K – 5th K -6th K– 7th K
☆1st Unknown – 1st K – 2nd K – 3rd K - 4th K – 5th K -6th K – 7th K – 8th K
☆1st Unknown – 1st K– 2nd K– 3rd K- 4th K– 5th K-6th K– 7th K– 8th K– 9th K
☆Move 1st Unknown to 1st Known position – Remove 9th Known – add 2nd Unknown

Simple Set-Up scenario for a Traditional Flash Card Program

1. Teacher group-administers a curriculum based measurement fact probe (2 of the same type best, i.e. 2 Multiplication Facts probes)
2. Teacher identifies, with student help grading if desired, known and unknown facts for each student

    * If using 2 probes, facts/words incorrect on <u>both</u> are targets
3. Create flash card set for the traditional drill (10 unknowns) for each student using index cards
4. Train students to act as the "instructor"

Teacher Prep Needed

☆ Make folders for each student
☆ Copy & Grade probes if students are not
☆ Make flash card sets for students and place them in the folders

Class-wide Protocol -25 min.

☆ Get folders and peer "instructors"
☆ Review the previous day's set and pull out the facts that are not maintained (missed)
☆ Add unknown facts from folder until the set has 10
☆ "Instruct" each other using the flash card set of 10 unknowns
☆ Teacher administers a 2 minute fact probe
☆ Students switch papers with peer to grade and circle incorrects
☆ Students place the newly graded probes and cards back into the folders

Trouble Shooting Scenario #1

1. I don't have enough time to make flash cards for each individual student.

    * Make the flash cards for students as they hand in their folders rather than going through all folders after school.

2. How am I supposed to keep each students' known and unknown flash cards separate?

    *Color code the flash cards, either paper or ink.

3. What am I supposed to do with all of the flash cards after the students know them?

    *Keep a sealable envelope for each student with their "maintained" cards to pull out as re-test items or as proofs of success (i.e.data).

4. What is the rest of my class supposed to do while I am one-on-one with a student?

*Train students to drill each other. A cross-age tutoring program can achieve this task as well. Once organization is developed, begin differentiating probes or cards between students.

5. This whole class scenario takes up too much of my instructional time!

*Break it up. See Figure 3 for a recommended time schedule.

Figure 3

- Monday: peer instruct entire set of flash cards
- Tuesday: review previous day's set removing the missed facts – give 2 minute probe
- Wednesday: peer instruct entire set of flashcards using the non-maintained cards from Monday and new unknowns from Tuesday probe
- Thursday: review Wednesday's set removing the missed facts – give 2 minute probe
- Friday: administer to the class the weekly grade level Progress Monitor probe

Simple Set-Up scenario for an Incremental Flash Card Program

1. Teacher or aide administers a list of high frequency words (Fry's, Dolch, etc.) in segments of 10
    - Provide immediate feedback to students
    - Many list of these types of lists on www.literacyconnections.com/content/high-frequency-sight-words
2. Teacher identifies known and unknown words for student
3. Create flash card set for the incremental rehearsal (9 knowns and one unknown at a time) for student using index cards
4. Follow the protocol for the incremental rehearsal format

Teacher Prep Needed

☆ Copy high-frequency word list
☆ Create folder for student(s) needing intervention

Class-wide Protocol -25 min.

☆ Get folder with high-frequency word list and flash cards
☆ Review the previous day's unknown set and pull out the words that are not maintained (missed)
☆ Student reads the high-frequency word list in increments of 10 words until they have a total of 5 unknowns (including non-maintained from previous day)
☆ Make new flash cards for those unknown words
☆ Incremental Rehearsal protocol

Trouble Shooting Scenario #2

1. I do not have the resources at my school to make many copies.

    * Keep one laminated version of the high-frequency list for student to read off of each time

2. How am I supposed to keep each student's data?

    * Keep a table with the high-frequency words for instructor use – check off with dates the words missed

3. How am I supposed to keep each students' known and unknown flash cards separate?

*Color code the flash cards, either paper or ink.

4. What am I supposed to do with all of the flash cards after the students know them?

*Keep a sealable envelope for each student with their "maintained" cards to pull out as re-test items or as proofs of success (i.e.data).

5. What words I am supposed to use?

* Use word lists such as The Reading Teacher's Book of Lists, 5th ed with students that struggle reading content related words

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Class-wide Math Fact Intervention Procedure

_____Get folders and partner

_____Review Partner 1's flash card set from yesterday and keep the incorrects in a pile

_____Review Partner 2's flash card set from yesterday and keep the incorrects in a pile

_____Use Partner 1's incorrects from the review and add new unknowns until their set equals 10 total

_____"Instruct" Partner 1 through their set of flash cards making sure they say the fact, then the answer and giving them immediate feedback if they are incorrect.

_____Use Partner 2's incorrects from the review and add new unknowns until their set equals 10 total

_____"Instruct" Partner 2 through their set of flash cards making sure they say the fact, then the answer and giving them immediate feedback if they are incorrect.

_____Repeat flash card set as many times as possible before the teacher stops you

1:1 Reading Fluency Intervention

_____Get folder

_____Review flash card set from yesterday and keep the incorrects in a pile

_____Mark student's incorrect words read aloud from the high-frequency list (student starts at the beginning of the list each day) – reading sets of 10 words at a time

_____Make flash cards for the new unknown words

_____Use incorrects, starting with yesterday's, as U in the incremental rehearsal procedure (5 total)

1st Unknown – 1st Known

1st Unknown – 1st K – 2nd K

1st Unknown – 1st K – 2nd K – 3rd K

1st Unknown – 1st K – 2nd K – 3rd K – 4th K

1st Unknown – 1st K – 2nd K – 3rd K – 4th K – 5th K

1st Unknown – 1st K – 2nd K – 3rd K - 4th K – 5th K -6th K

1st Unknown – 1st K – 2nd K – 3rd K - 4th K – 5th K -6th K– 7th K

1st Unknown – 1st K – 2nd K – 3rd K - 4th K – 5th K -6th K – 7th K – 8th K

1st Unknown – 1st K– 2nd K– 3rd K- 4th K– 5th K-6th K– 7th K– 8th K– 9th K

Move 1st Unknown to 1st Known position – Remove 9th Known – add 2nd Unknown

_____CONTINUE ADDING UNKNOWNS, UP TO 5, UNTIL STUDENT BEGINS MISSING THEM

Flash Card Facts for ________________________________

	Week								
Fact									