SELECTING AND IMPLEMENTING ACCOMMODATIONS FOR STUDENTS AT SECONDARY LEVEL

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Today

- Brief overview of CARS
- IEP review: preliminary findings
- Describe CARS accommodation guide
- Provide a case study example
- Discuss teacher and student perceptions of acceptability & feasibility
- Address questions

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Center for Adolescent Research in Schools (CARS)

- Center grant funded 2008-2013
- Focused on secondary age students with intensive social, emotional, and behavioral problems
- Main purpose: develop and evaluate an intervention package

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CARS Principal Investigators

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CARS Overview

- Years 1-2: Develop and refine assessments & intervention package with small sample of students (n=38, 3 states)
- Year 3: Evaluate and refine intervention package with larger sample of students (n= 60, 6 states)
- Years 4-5: Evaluate efficacy of intervention with large sample of students (n=647, 5 states)
  - Randomized control trial

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Overview of Intervention Components

Intervention Focus	Core Student Challenge	Specific Strategy
Enhancing School and Teacher Capacity	Academic Skills Emotional/Behavioral Problems	• Classroom Structure (Expectations & Routines) • Evidence-Based Academic Instruction (OTR, Accommodations) • Positive Teacher-Student Interactions
Building Youth Competence	Connectedness Social Skills Academic Skills Mental Health	• Mentoring • Organization and Study Skills • Interpersonal Skills • Securing Effective Therapy
Increasing Family and Community Supports	Behavior Academic Skills Social Skills Mental Health	• Parent Education • Securing Effective Therapy & Supports

Participant Characteristics

- 647 students, grades 9-11
- **Social, emotional, or behavioral problems** as indicated by parent/teacher reports on a broad band rating scale and/or student self-report on measures of anxiety and depression.
- Demonstrate **impairment at school** as indicated by <u>any one</u> of the following:
  - Absences
  - Office referrals / Behavioral infractions
  - In or out of school suspensions
  - Failing grades in core academic subjects
- Cognitive ability in the average range
- Both **special education and general education students**
  - Exclude PDD and Intellectual Disabilities

Students with EBD and Academic Performance

- Perform, on average, at least one year below grade level (Cullinan & Sabornie, 2004; Wagner et al., 2006).
- As a group receive more failing grades than any other disability category (Wagner et al., 2006).
- Continued academic failure may contribute to escape motivated problem behaviors, disengagement from school, and increased dropout rates (Landrum, Tankersley, & Kauffman, 2003; Wagner & Cameto, 2004).

Need for Appropriate Accommodations

- Approximately 85% of secondary students with EBD have at least one class in the general education setting.
- Help students:
  - access grade level materials
  - access instruction
  - improve classroom performance.
- Prevent students from falling farther behind academically and potentially dropping out.

Accommodations vs. Modifications

- Changes to <u>how</u> academic content is presented or assessed
  - Accommodations <u>do not change</u> what the student is expected to master
  - Modifications <u>change</u> what the student is expected to master

Accommodations Assumptions

- Allow the student to earn a valid score, not necessarily an optimal score
- Produce a differential boost
- A single accommodation is not valid or beneficial for all students
- A student may need more than one accommodation.
- Testing accommodations and instructional accommodations should be similar

Problems
(Fuchs & Fuchs)

- Special Education students need accommodations to succeed in general education classes
- Accommodations not routinely provided
- When they are provided, teachers do not know how to select accommodations
  - Most accommodations randomly selected
- Accommodations not matched to student need

Academic Services, Supports, and Modifications for Students with EBD (Wagner et al., 2006)

| Modification	Percentage of Students		
	Elementary	Middle	High
More time to take tests	*72.8*	*72.6*	**75.6**
Tests read to students	45.6	40.0	26.5
Modified tests	43.7	46.3	24.2
More time to complete assignments	*66.5*	*67.3*	**54.2**
Modified assignments	47.9	41,4	20.8
Modified grading standards	37.3	27.3	14.5
Slower-paced instruction	51.0	46.5	19.0
Peer tutoring	17.0	10.5	8.2
Adult tutoring	15.3	8.4	7.6
Learning strategies/study skills	33.0	36.5	27.5

Initial Summary of CARS IEP Review

- N = 228 students
- Categories:
  - Presentation mode- reading directions, questions or tests aloud, giving study guide
  - Response mode- allowing use of calculator, use of computer
  - Timing and Scheduling- extra time to complete tests/assignments, preferential seating in the classroom, breaks, large assignments broken down
  - Setting- alternative testing location, small group instruction or testing
  - Other-- various including providing prompts/cues to remain on-task, using point sheets, positive reinforcement
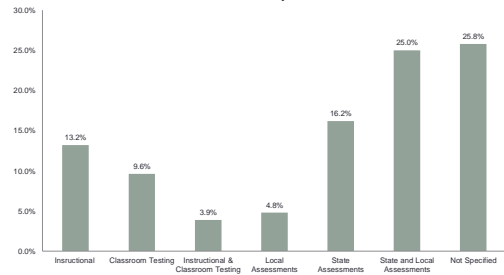
Most Frequently Recommended
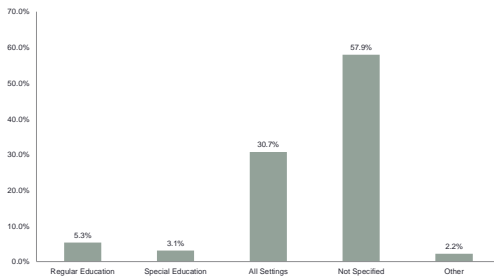
Accomodation Categories
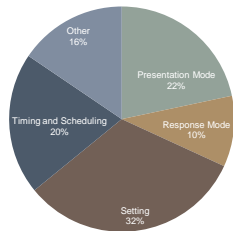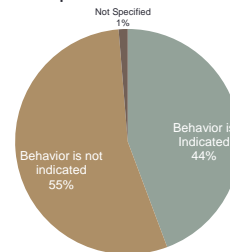

Recommended Use

Accommodation Specifications

Recommended Setting

Location of Accommodation

Specifications

Special Considerations

Initial Conclusions

- Most common accommodations
  - Setting
  - Presentation mode
  - Timing and scheduling
  - Other
  - Response mode
- Often determined by disability
  - Students with ADHD frequently receive extended time
- Accommodations seldom linked to student need
- Testing accommodations not matched to instructional accommodations

Purpose of Guide

- Facilitate selection of one or more accommodations that are matched to the student's specific academic or behavioral needs
  - Increase the match between a particular student's difficulty and an appropriate accommodation.
  - Match testing accommodations to instructional accommodations

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Implementation of Guide

- Provide teachers who rated accommodations as feasible and acceptable with model on how to choose accommodations
  - Identify student problem
  - Select related accommodation
- Have teachers implement the accommodation
- Assess student performance
- Gather teacher feedback and treatment acceptability data post implementation

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Accommodations Guide Model

Accommodations Guide Worksheet

1. Gather materials.
- ☐ Three samples of student work demonstrating frequent errors or low grades
- ☐ Student Individualized Education Program (IEP)

2. Identify Broad Problem Areas.
What are the general indicators of concern? Check all that apply.

Academic
- ☐ Reading
- ☐ Math
- ☐ Writing

Attentional/ Behavioral
- ☐ Following Directions
- ☐ Easily Distracted
- ☐ Sustaining Attention/Effort
- ☐ Attention to Detail
- ☐ Planning & Time Management
- ☐ Test Anxiety

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3. Identify accommodations matched to student need.
Based on the broad areas of student need identified in Step 1, choose at least one corresponding accommodation which you are willing and able to implement. A glossary of accommodations can be found on page 6.

Academic Concerns

Reading

Type of Problem	Suggested Accommodations
☐ Difficulty reading fluently	☐ Read materials aloud
☐ Difficulty with reading comprehension	☐ Read materials aloud / ☐ Use highlighted textbook
☐ Reads slowly	☐ Extended time

Math

Type of Problem	Suggested Accommodations
☐ Unable to rapidly access math facts	☐ Calculator / ☐ Fact table / ☐ Extended time
☐ Difficulty manipulating numbers / ☐ Transposes numbers	☐ Manipulative devices / ☐ Visual organizers (e.g., graph paper) / ☐ Self-monitoring list to double check work / ☐ Extended time
☐ Difficulty with converting word problems to mathematical expressions	☐ Graphic organizer / ☐ Provide math expressions or formulas
☐ Reading difficulties that impede understanding of word problems	☐ Minimize distracting information in word problems / ☐ Read word problems aloud / ☐ Use graphic organizer / ☐ Extended time

Writing

Type of Problem	Suggested Accommodations
☐ Motor skill deficits	☐ Provide pen/pencil grip / ☐ Use word processor for drafts and final copy / ☐ Dictate work into audio recording device / ☐ Use dictation program / ☐ Extended time
☐ Difficulty with spelling	☐ Use spelling and grammar assistive devices (e.g., Spell Check) / ☐ Teacher or peer proofreading / ☐ Allow for re-submission of work after feedback / ☐ Extended time
☐ Difficulty organizing writing	☐ Use graphic organizers / ☐ Chunk large assignments into smaller tasks / ☐ Provide model of completed writing task

Behavioral Concerns

Following Directions

Suggested Accommodations
- ☐ Read directions aloud
- ☐ Have student repeat directions back
- ☐ Simplify number of instructions on page
- ☐ Reword instructions using simpler language
- ☐ Highlight or bold font key directions

Easily Distracted/ Sustaining Effort/Attention to Detail

Suggested Accommodations
- ☐ Give short and simple directions
- ☐ Highlight key words in directions and text
- ☐ Use highlighted textbook
- ☐ Check in frequently with the student
- ☐ Assign a peer partner
- ☐ Use graphic organizers
- ☐ Provide guided notes
- ☐ Plan hands-on activities
- ☐ Frequent breaks (use private signal)
- ☐ Cue with a device (e.g., sports watch, timer) to stay on task
- ☐ Self-monitoring sheet for on-task behavior
- ☐ Self-monitoring sheet/rubric for task completion
- ☐ Limit length of sustained effort (e.g., reading, reasoning) by providing breaks or assistance
- ☐ Chunk large assignments into smaller tasks
- ☐ Change seat to reduce distractions

Planning and Time Management

Suggested Accommodations
- ☐ Provide start-up assistance and frequent feedback
- ☐ Chunk large assignments into smaller tasks
- ☐ Use graphic organizers
- ☐ Use self-monitoring sheet/ rubric for task completion
- ☐ Use self-monitoring sheets for organization

Test Anxiety

Suggested Accommodations
- ☐ Chunk similar test items together (e.g., chunk all multiple choice together, all true/false together)
- ☐ Divide test into smaller segments (e.g., fewer problems per page)
- ☐ Allow student to choose seat where he/she feels most comfortable
- ☐ Allow student to choose preferred way to respond to test questions

Slide: Coordinate accommodations

4. Coordinate accommodations.

List the accommodations selected from pages 2 and 3.
Next, review the accommodations listed in the student's IEP. List accommodations from the IEP. Circle any overlap.

Accommodations Suggested by the Guide	Accommodations on IEP

5. Meet with the student for input and preferences. Write any notes in the box below.

- Meet with the student to discuss the academic or behavioral concerns. Examine the permanent products during the discussion, if helpful.
- Describe the accommodations that were recommended by the Accommodations Guide and those currently indentified in the IEP.
- Ask the student for his/her input regarding accommodations he/she thinks may be helpful.
- Discuss specific assignments, conditions (e.g., independent work), and frequency of the accommodations. Some accommodations may not be necessary for all circumstances.
- Encourage the student to share his/her thoughts about the accommodation.

Slide: List accommodations to be implemented and evaluated

6. List accommodations to be implemented and evaluated.

- Create a single list of accommodations to be evaluated for effectiveness. Prioritize based on student input and teacher preference. List in the order accommodations will be tested.*
- Determine if the accommodation will be used during instruction for classroom teaching activities and assignments or for testing. It is possible to use an accommodation for both purposes.
- Define and describe the conditions under which the accommodation will be provided for the student (see below).

	Accommodation	Instruction or Testing	Activity	Description
EX.	Extended Time	☒ Instruction	Independent seat work	Time and a half
		☒ Testing	Unit tests / Quizzes requiring written responses	Time and a half
EX.	Graphic Organizer	☒ Instruction	Group, pair, or Independent writing tasks	Teacher-created or pre-made organizers (e.g., story maps, writing scaffolds)
		☐ Testing		
1		☐ Instruction		
		☐ Testing		
2		☐ Instruction		
		☐ Testing		
3		☐ Instruction		
		☐ Testing		
4		☐ Instruction		
		☐ Testing		
5		☐ Instruction		
		☐ Testing		
6		☐ Instruction		
		☐ Testing		
7		☐ Instruction		
		☐ Testing		

*Plan to evaluate the effectiveness of each accommodation one at a time to determine the most beneficial accommodations for the student. If specific accommodations are already in place and effective, continue providing the accommodation as usual and test additional accommodations one at a time to determine if student outcomes are enhanced.

Slide: Teach the accommodation(s)

7. Teach the accommodation(s).

- Teach the student how to access and use the accommodation using curricular materials and in authentic settings, if possible. Ensure the student understands how to use the accommodation correctly.
- Be sure the student has a clear understanding of how to request the accommodation if it is not provided. Model and role-play how to appropriately request the accommodation.
- Multiple opportunities for practice may be necessary.

8. Examine at least three samples of student work/tests to determine if there is change in performance trend:
- after the student can use the accommodation independently, or
- within 4 – 6 weeks of implementation

(Assignments should be comparable in quantity, level of difficulty, and type as the initial assignments in Step 1.)

Determine improvement in any of the following (circle all that apply):
- Grades
- Quality of work
- Work completion
- Academic engagement

Yes →
1. Continue using the accommodation.
2. Determine whether additional indicated accommodations would further improve performance (Step 6). Repeat steps 7-8.

No →
- ☐ 1. Select another accommodation from within the problem area (Step 3) and repeat Steps 7-8.
- ☐ 2. Determine if problem area was misidentified. Select an accommodation from another problem area (Step 2). For example, a student who was thought to have difficulty with math calculation may actually be struggling with sustaining attention. Repeat Steps 3-8.
- ☐ 3. Determine if alternative interventions are needed (e.g., Missing Assignment Tracking, Organizational Skills).
- ☐ 4. Suggest the IEP team consider modifications to the general education curriculum.

Slide: Glossary

Glossary

Source: Thompson, S., Morse, A., Sharpe, M., & Hall, S. (2005). *Accommodations manual: How to select, administer, and evaluate use of accommodations for instruction and assessment of students with disabilities* (2nd ed.) Washington, D.C.: Council of Chief State School Officers.

Accommodation	Definition
Calculator	Calculation devices (e.g., calculators) may be appropriate to compensate for a student's disability in calculation. It is important to know the goal of instruction and assessment before making decisions about the use of calculation devices. For example, if students are learning subtraction with regrouping, using a calculator would not give a student an opportunity to show regrouping. If students are learning problem solving skills (e.g., bargain shopping for items of a better value), then the use of a calculator may remove the calculation barrier and allow the student to demonstrate his or her reasoning skills.
Extended time	Extended time is a specific, pre-determined amount of extra time to complete assignments, projects, and assessments with no grading penalty. For timed tests, a standard extension may be time and one half. This means that a student is allowed 90 minutes to take a test that normally has a 60-minute limit. Double time may also be allowed. The amount of extended time may be determined on a case-by-case basis by a student's IEP team. Usually, "unlimited" time is not appropriate or feasible. Students who have too much time may lose interest and motivation to do their best work.
Fact table	Multiplication fact grid or other tool to help students readily access basic computation facts.
Graphic organizers	Graphic organizers help students arrange information in order to organize their work, stay focused on the content, and recognize connections and patterns. Venn diagrams, story maps, and time lines are examples of graphic organizers. A wide variety of organizers are available for free download from the internet at http://freeology.com/graphicorgs/. Teachers can make their own organizers to meet specific instructional needs. Students should be encouraged to create their own graphic organizers or re-create organizers they find helpful.
Guided notes	Handout that outlines the lecture with blanks for important ideas (e.g., key concepts, definitions, facts). Student fills in the blanks as the lecture is presented. See CARS Opportunities to Respond Teacher Handout.
Highlighted Textbook	Textbook with key words and information pre-highlighted by a teacher or student with good study skills. Highlighted texts can be provided to the student for use during class or at home.
Manipulative Devices	Physical objects (e.g., counters, blocks, paper chips, buttons, play money) students can arrange to better understand 1:1 correspondence, ratios, or other relationships.
Multiple or Frequent breaks	Breaks given at pre-determined intervals or after completion of assignment, tests, or activities. Sometimes a student may be allowed to take breaks when individually needed. For example, the student becomes angry or frustrated and asks to leave the classroom, or the teacher recognizes cues in the student's behavior that signals a need for time away from the assignment or classroom.
Read materials aloud	Teacher or other qualified person reads text word-for-word orally to students. This may also include the use of books on tape and audio versions of written materials. During testing, readers should use an even inflection so that the student does not receive any clues by the way information is read. Furthermore, readers may not clarify, elaborate, or provide assistance to students during testing situations. A student should have the option of asking a reader to slow down or repeat text; therefore, readers should orally present text to one student at a time rather than in a group format.
Self-monitoring checklist	Student follows a sequential checklist to complete a task or follow a strategy. The checklist may also be paired with a rubric for self-evaluation at task completion against teacher expectations. RubiStar is a free tool to create rubrics, http://rubistar.4teachers.org/.
Spelling and grammar assistive devices	Pocket spell checkers or word processor spelling and grammar check programs may be an appropriate accommodation to help students communicate more effectively during writing assignments.
Visual organizers	Graph paper, highlighters, place markers, scratch paper, and templates.

Slide: CASE STUDY

CASE STUDY

Slide: Participant Description

Participant Description

- Externalizing behaviors

- Low academic abilities
  - 3rd Grade academic functioning

- General education co-taught History class

- Teacher selected interventions (based on feasibility)
  - Accommodations
  - Positive Teacher/Student Interactions

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Model Implementation
Step #1:

- Collect three samples of student work demonstrating frequent errors or low grades.

- Identify accommodations provided in IEP
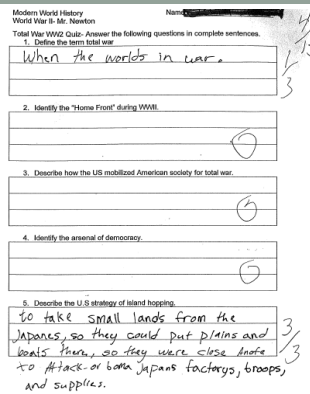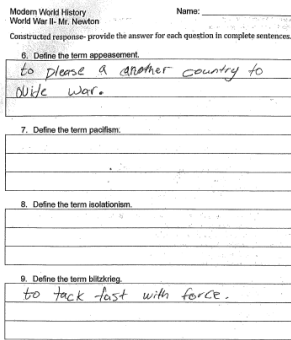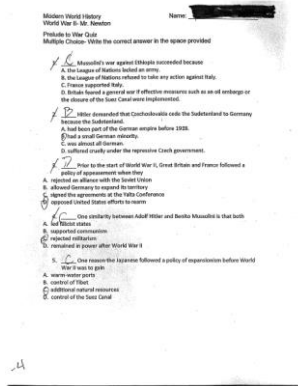
Student IEP Accommodations

- Testing:
  - Alternative setting
  - Extended time for completion
  - Read test to student (if requested)
- Assignments and Instruction:
  - Lower difficulty level-shorten assignments
  - Provided structured time to organize materials
  - Frequent reminders of rules
  - Check often for understanding/review
  - Extended time for oral responses
  - Extended time for written responses
  - Maintain assignment notebook
  - Bathroom break first 5 mins. of class, unless emergency
  - Use lined paper for written assignments
  - Assist or provide notes and study guides
  - Extended to create assignments (1 ½ weeks or as agreed upon w/ teacher)

Step #2:

- Identify general indicators of concern

  - Writing, specifically difficulty organizing writing
    - "Couldn't complete short answer"

  - Attention to detail
    - "Chose wrong answers on multiple choice and selected obviously wrong answers"

  - Planning and time management
    - "Ran out of time to complete the test even when given multiple class periods"

Step # 3

- Identify accommodations matched to student's needs

  - Writing: Difficulty Organizing Writing
    - **Graphic Organizers**
  - Attention to Detail
    - **Assign a Peer Partner**
    - **Use Graphic Organizers**
    - **Chunk Large Assignments into Smaller Tasks**
  - Planning and Time Management
    - **Chunk Large Assignments into Smaller Tasks**
    - **Graphic Organizers**

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Step # 4: Coordinate accommodations

Model Accommodations

Writing: Difficulty Organizing Writing
- Graphic Organizers

Attention to Detail
- Assign a Peer Partner
- Use Graphic Organizers
- Chunk Large Assignments into Smaller Tasks

Planning and Time Management
- Chunk Large Assignments into Smaller Tasks
- Graphic Organizers

IEP Accommodations
- Testing-
  - Alternative Setting
  - Extended time for completion
  - Read test to student (if requested)
- Assignments and Instruction-
  - Lower Difficulty Level-Shorten Assignments
  - Provided Structured Time to Organize Materials
  - Frequent Reminders of Rules
  - Check often for understanding/review
  - Extended time for Oral Responses
  - Extended time for Written Responses
  - Maintain Assignment Notebook
  - Bathroom Break first 5 mins. Of class, unless emergency
  - Use lined paper for written assignments
  - Assist or Provide Notes and Study Guides
  - Extended to create assignments (1 ½ weeks or as agreed upon w/ Teacher)

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Step #5:

- Meet with the student for input and preferences

  - Student agreed with teachers concerns.

  - Student agreed to all suggested accommodations.

  - Student requested:
    - A different seat with less distractions during independent work.
    - Materials if he forgot to bring them.

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Step #6:

- List accommodations to be implemented and evaluated.
- Prioritize
- Determine instruction or testing
- Define and describe conditions:
  - 1) Use graphic organizers (I/T) All in class work, Teacher-created or pre-made organizers.
  - 1) Change seat to reduce distractions (I/T) Student and teacher will meet to discuss alternative seat, can be changed if student does demonstrate classroom expectations.
  - 1) Materials be given to student if forgotten (e.g. pencil) (I/T) Student must request material at the start of the class and give teacher collateral for the return of material at the end of the class period.
  - 2) Assign a peer partner (I) All in-class work with a teacher chosen partner.
  - 3) Chunk large assignments into smaller tasks (I) All in class assignments spanning multiple class periods with a teacher-created checklist of completed tasks.

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Step #7:

- Teach the accommodations
  - Assign a peer partner
    - What are the appropriate behaviors of working with a peer?
    - What noise level can you work with a peer?
    - What does helping vs. doing look like?
  - Use graphic organizers
    - How do I use graphic organizers (5 paragraph outline, flow chart, venn diagram, checklist, etc.)?
  - Chunk large assignments into smaller tasks
    - How do I use a checklist?
    - How do I manage my time?
  - Change seat to reduce distractions
    - How do I transition?
    - When is it appropriate to move?
  - Materials given to student if forgotten (e.g. pencil)
    - How do I know what materials I need?
    - What is appropriate collateral?

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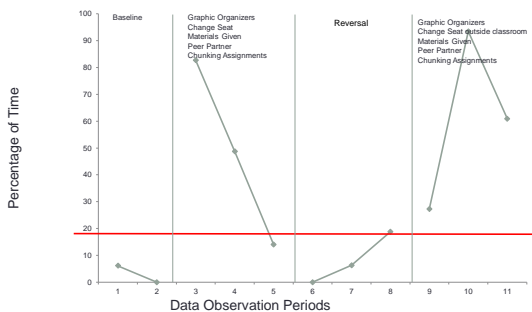RESEARCH IN SCHOOLS

Step #8:

- Examine at least three samples of student work/tests to determine if there is a change in the performance trend

  - Class Grade Increased from a 24% to a 77%

  - Highest class grade he had received since beginning high school!

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Active Engagement

ACCEPTABILITY & FEASIBILITY RATINGS

Acceptability & Feasibility: Pre-implementation

Teachers asked to rate interventions indicated by classroom assessment process

% Indicated	% Feasible & Acceptable	Top Reason Why Not Implemented
25.10	51.79	Other

Social Validity Measure: Description

- School Intervention Rating Form (SIRF)
  - Adapted from the Treatment Acceptability Rating Form-Revised (Reimers & Wacker, 1988)

  - Items assess an intervention's perceived costs, effectiveness, disruptiveness, and acceptability

  - Rated on a 7-point Likert scale (range 1-7)

  - 2 versions:
    - Teacher: 18 acceptability items
    - Student : 6 acceptability items

Acceptability & Feasibility: Post-implementation

Teacher Relative Ratings

Overall Acceptability	Items with Highest Mean Acceptability	Items with Lowest Mean Acceptability
Mean (Range)	Mean	Mean
5.8 (5.3-6.4)	Cost (6.9) Willingness to Implement (6.7) Not Disruptive (6.7)	Effectiveness (3.8) Likelihood of permanent improvement (3.7)

Acceptability & Feasibility: Post-implementation

Student Relative Ratings

Overall Acceptability	Items with Highest Mean Acceptability	Items with Lowest Mean Acceptability
Mean (Range)	Mean	Mean
4.4 (2.0-7)	Easy (5.3) Comfortable (5.3) Understanding (4.4)	Help Improve (4.2) Like Intervention (3.2)

Implications for Research and Practice

• Implementation at secondary level difficult

• Many accommodations indicated, but teachers did not always report them as feasible and acceptable

• Overall, teachers and students rated accommodations as acceptable post-implementation

• Accommodations were rated at-least somewhat effective 1 month post-implementation

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Thank You!

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