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

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

Overview of Intervention Components

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

CARS Principal Investigators

- Lee Kern, Ph.D., Lehigh University
- Steve Evans, Ph.D., Ohio University
- Tim Lewis, Ph.D., University of Missouri
- Howard Wills, Ph.D. & Debra Kamps, Ph.D., University of Kansas
- Mark Weist, Ph.D., University of South Carolina
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 any one 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 & Carneto, 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 how academic content is presented or assessed
  - Accommodations do not change what the student is expected to master
  - Modifications change 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)

<table>
<thead>
<tr>
<th>Modification</th>
<th>Percentage of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Elementary</td>
</tr>
<tr>
<td>More time to take tests</td>
<td>72.8%</td>
</tr>
<tr>
<td>Tests read to students</td>
<td>45.6%</td>
</tr>
<tr>
<td>Modified tests</td>
<td>43.7%</td>
</tr>
<tr>
<td>More time to complete assignments</td>
<td>66.5%</td>
</tr>
<tr>
<td>Modified assignments</td>
<td>47.9%</td>
</tr>
<tr>
<td>Modified grading standards</td>
<td>37.3%</td>
</tr>
<tr>
<td>Slower-paced instruction</td>
<td>51.0%</td>
</tr>
<tr>
<td>Peer tutoring</td>
<td>17.0%</td>
</tr>
<tr>
<td>Adult tutoring</td>
<td>15.3%</td>
</tr>
<tr>
<td>Learning strategies/study skills</td>
<td>33.0%</td>
</tr>
</tbody>
</table>

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

Recommended Use

Recommended Setting

Specifications

Location of Accommodation

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

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

Accommodations Guide Model

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

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

<table>
<thead>
<tr>
<th>Academic</th>
<th>Attentional/Behavioral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>Following Directions</td>
</tr>
<tr>
<td>Math</td>
<td>Easily Distracted</td>
</tr>
<tr>
<td>Writing</td>
<td>Sustaining Attention</td>
</tr>
<tr>
<td></td>
<td>Attention to Detail</td>
</tr>
<tr>
<td></td>
<td>Planning &amp; Time</td>
</tr>
<tr>
<td></td>
<td>Management</td>
</tr>
<tr>
<td></td>
<td>Self-Anxiety</td>
</tr>
</tbody>
</table>

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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
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

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 (1½ weeks or as agreed upon w/ Teacher)

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.

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.

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?

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!
Acceptability & Feasibility: Pre-implementation

Teachers asked to rate interventions indicated by classroom assessment process

<table>
<thead>
<tr>
<th>% Indicated</th>
<th>% Feasible &amp; Acceptable</th>
<th>Top Reason Why Not Implemented</th>
</tr>
</thead>
<tbody>
<tr>
<td>25.10</td>
<td>51.79</td>
<td>Other</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Overall Acceptability Mean (Range)</th>
<th>Items with Highest Mean Acceptability</th>
<th>Items with Lowest Mean Acceptability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Mean</td>
<td>Mean</td>
</tr>
<tr>
<td>5.8 (5.3-6.4)</td>
<td>Cost (6.9)</td>
<td>Effectiveness (3.8)</td>
</tr>
<tr>
<td></td>
<td>Willingness to implement (6.7)</td>
<td>Likelihood of permanent improvement (3.7)</td>
</tr>
</tbody>
</table>

Student Relative Ratings

<table>
<thead>
<tr>
<th>Overall Acceptability Mean (Range)</th>
<th>Items with Highest Mean Acceptability</th>
<th>Items with Lowest Mean Acceptability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Mean</td>
<td>Mean</td>
</tr>
<tr>
<td>4.4 (2.0-7)</td>
<td>Easy (5.3)</td>
<td>Help Improve (4.2)</td>
</tr>
<tr>
<td></td>
<td>Comfortable (5.3)</td>
<td>Like Intervention (3.2)</td>
</tr>
<tr>
<td></td>
<td>Understanding (4.4)</td>
<td></td>
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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

Thank You!

Center for Adolescent Research in the Schools (CARS)

www.ies-cars.org