



Supporting and Assessing Implementation of High School Programs for Students with Autism Spectrum Disorder



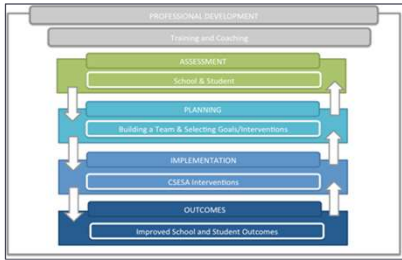
Samuel L. Odom¹, Kara Hume¹, Leann Smith², Kate Szidon², Laura Hall³, Bonnie Kraemer³

¹ Frank Porter Graham Child Development Institute, University of North Carolina, Chapel Hill

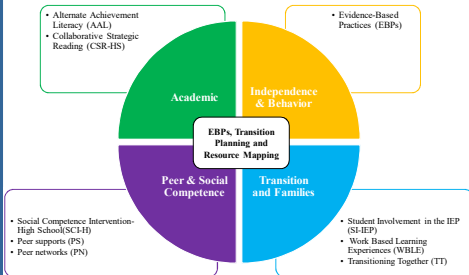
² Waisman Center, University of Wisconsin, Madison, ³ San Diego State University, San Diego, CA

About CSESA

The Center on Secondary Education for Students with Autism Spectrum Disorder (CSESA) is a 5-year research and development project that focuses on developing, adapting, and studying a comprehensive school- and community-based education program for high school students on the autism spectrum. The CSESA Model consists of the 5-phase CSESA process (see diagram below) that addresses 4 CSESA domain areas using 11 CSESA interventions.



CSESA Domain Areas



Participants

- 60 schools across 3 different states (NC, WI, CA)
- School staff (n=539)
 - Autism team of special education teachers, general education teachers, administrators
- Students (n=546)
 - 5-12 per school
 - Educational label of autism

CSESA Implementation

Autism team members at schools received the following RESOURCES across a 1 year period:

- TRAINING
 - Introduction to CSESA training
 - Goal Attainment Scale training
 - CSESA Intervention trainings
- COACHING
 - Goal Attainment Scale
 - CSESA Interventions
- MATERIALS
 - Intervention manuals
 - On-line resources

Study Design CSESA Model

CSESA is a complex social intervention and requires thorough measurement of implementation, including an assessment of project resources (e.g. training and coaching), project activities (e.g. implementation of CSESA interventions), and project outcomes (e.g. student performance on standardized measures).

With consultation from Dr. Dave Cordray, the CSESA team developed an implementation index that includes:

- Individual fidelity measures per component designed to:
 - Measure adherence, dosage, and quality of delivery for each component
 - Differentiate between CSESA and non-CSESA interventions (counterfactual)
- Process fidelity measure designed to:
 - Capture the larger CSESA process including professional development, assessment, planning, implementation, and outcomes

Implementation Index

Level and Questions	Data Source	Process
School Is the CSESA process being implemented at the school? Is the school receiving the model?	1. Coaching Log 2. Coaching Fidelity	1. Hours per week and activity 2. Fidelity Rating
Staff Is the staff implementing the CSESA interventions as designed? (fidelity data) Is the staff following the CSESA Process?	1. Professional Development (PD) Training Log 2. Fidelity checklists for each component	1. Number of Hours of PD 2. PD Evaluation by Participants 1. Three fidelity observations at each school.
Students Is the CSESA Process being implemented at the student level? Is the student receiving the interventions as designed?	1. School Planning Form 2. APERS Teaming Subtext 1. Secondary School Success Checklist 2. Student intervention matrix 1. Student planning menu 2. Fidelity measures	1. SSSC used to identify needs. 2. Documentation across school of intervention for all students 1. Individual student specification of interventions 2. Mean fidelity rating for intervention student received.

Implementation Measures

Key Features

AVOID BIAS: Determine all students who receive a given intervention and randomly select one student accessing state-wide and alternate assessments **Same we didn't do the random selection because it was not feasible - not sure if there is another key feature to highlight. Maybe measuring in control and intervention schools?**

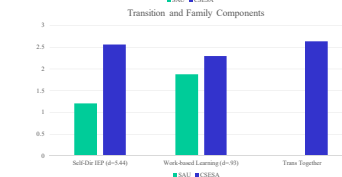
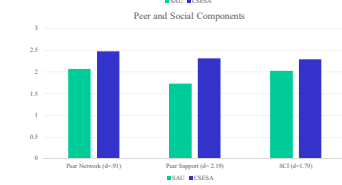
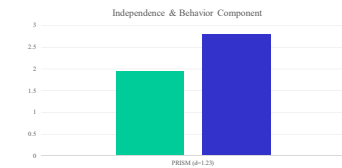
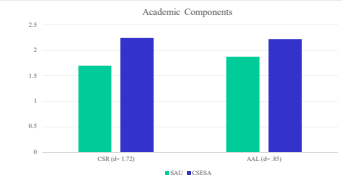
Implementation Measure	Yes	No
Intervention Program		
Teacher and Student Program		
Peer and Social Program		
Transition and Family Program		

ASSESS PROGRAM AND INDIVIDUAL: Measures school-level (e.g., training, coaching) and student-level implementation (individual fidelity observations)

Measure	Scale	Frequency	Notes
Coaching Log	0-10	Weekly	...
Coaching Fidelity	0-10	Weekly	...
Professional Development (PD) Training Log	0-10	Weekly	...
Fidelity checklists for each component	0-10	Weekly	...
School Planning Form	0-10	Weekly	...
APERS Teaming Subtext	0-10	Weekly	...
Secondary School Success Checklist	0-10	Weekly	...
Student intervention matrix	0-10	Weekly	...
Student planning menu	0-10	Weekly	...
Fidelity measures	0-10	Weekly	...

CONSISTENCY OF MEASURES: Observation measures for individual interventions designed on a consistent scale (0 – 3) examining similar categories of features (e.g., dosage, preparation & structure, process, strategies)

Fidelity Findings



References

- Cordray, D. (2008). Assessing intervention and control conditions in RCTs: Concepts and methods. Presentation for the IES/NCER Summer Research Training Institute: Cluster-Randomized Trials
- Nelson, M. C., Cordray, D. S., Hulleman, C. S., Darrow, C. L., & Sommer, E. C. (2012). A procedure for assessing intervention fidelity in experiments testing educational and behavioral interventions. *The Journal of behavioral health services & research*, 39(4), 374-396.

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