

Disclaimer

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Agenda

- Introduction
- Conceptual framework and research
- Descriptive Example
- Participant Activity
- Review
- Closing/Questions



Participants will be able to...

- Identify and define the steps of BEA
- Conduct, analyze, and interpret results from BEA



What is Brief Experimental Analysis (BEA)?

Brief experimental analysis (BEA) is behavior analytic approach to select interventions for struggling students. BEA should be-

- Efficient
- Data-driven

What is BEA? Cont.



Strong Effects for BEA on Reading Fluency

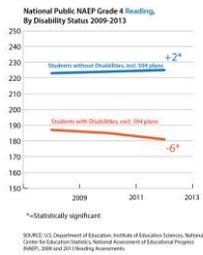
Average increase of 30 WRCPM
(Burns & Wagner, 2008)

Large increases in reading aloud from text related to improved comprehension
(Markell & Deno, 1997)

Why BEA?

National Crisis

Many students with disabilities don't possess basic reading skills
(Danielson & Zumeta, 2016)



Why Do We Need BEA?

More Support

3 to 5 percent students unresponsive to research-based
(Stecker et al. 2010)

More Repetition

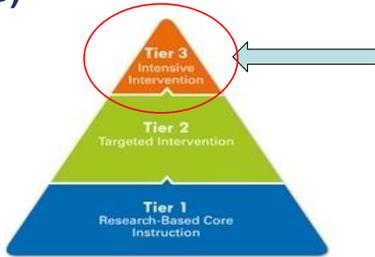
Students with persistent learning problems need 10 to 30 additional opportunities for practice
(Gersten et al. 2008)

Who needs BEA?

- SWDs **not making progress** in research-validated instructional programs provided with integrity
- Low academic performance



Multi-tier System of Supports (MTSS)



MTSS and BEA

- Interventions at the Tier 3 should be based on individual needs
- Data-driven hypotheses (“why”)
- Ongoing progress monitoring
- Adapt based on student data

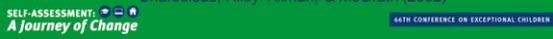
• Joseph et al., 2016



BEA Steps

1. Select and order interventions
2. Determine outcome measure
3. Conduct BEA
4. Data-based decision making

Chafouleas, Riley-Tillman, & McGrath (2002)



STEP 1a: SELECT STRATEGIES

- Select 2 or more interventions
- Research-validated
 - CHECK!!!
- Specific instructions



STEP 1a: SELECT STRATEGIES

- Where can I find strategies?
 - www.Interventioncentral.org
 - <http://ebi.missouri.edu/>



STEP 1b: ORDER STRATEGIES

• *Ease of Implementation* Order Example:

- Rewards
- Easier materials
- Repeated reading
- Repeated reading + Rewards



STEP 1b: ORDER STRATEGIES

• *More Support* Example:

- Repeated reading (RR)
- Error Correction (EC)
- RR + EC



STEP 2: OUTCOME MEASURE

• Guiding questions:

- What do you want to improve?
- Technical adequacy?
- Brief?

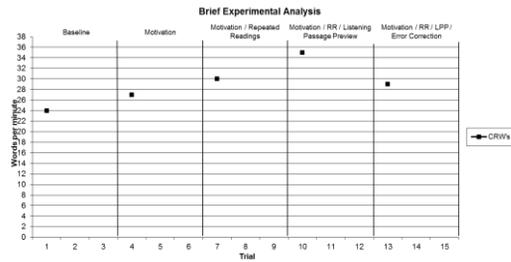


STEP 3: CONDUCT BEA

- Collect baseline
- Implement interventions
- Collect outcome data



STEP 3: CONDUCT BEA





STEP 3: CONDUCT BEA

University of Oswego - Customizable BEA Template

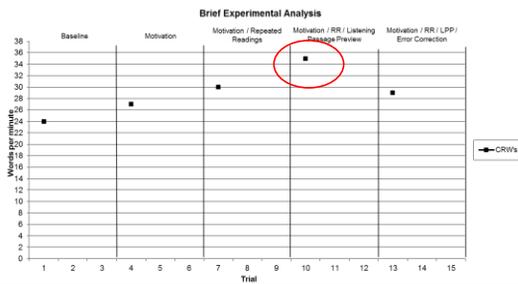
- http://www.oswego.edu/~mcdougal/web_site_4_11_2005/bea.htm



STEP 4: DATA-BASED DECISION MAKING

- Which intervention showed strongest results?
- Feasible?

STEP 4: DATA-BASED DECISION MAKING



Case Study



Case Study: Ellie

- Ellie is a fourth-grade with an IEP
- History of struggling with reading fluency



Review Existing Data

DIBELS Goals

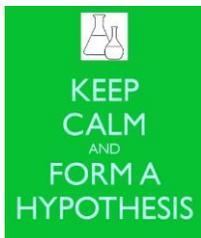
DORF	At or Above Benchmark	Likely to Need Core Support	70 +
Words	Below Benchmark	Likely to Need Strategic Support	55 - 69
Correct	Well Below Benchmark	Likely to Need Intensive Support	0 - 54

Ellie's DORF

- 40 words read correct/min
- 82% accuracy



Why is Ellie struggling?



- Hypothesis #1: Needs more practice?
- Hypothesis #2: Needs more help?
- Hypothesis #3: Needs more help and/or more practice?



Select Interventions & Order

- Repeated Reading (Hypothesis 1)
- Error Feedback (Hypothesis 2)
- Repeated Reading + Error Feedback (Hypothesis 3)

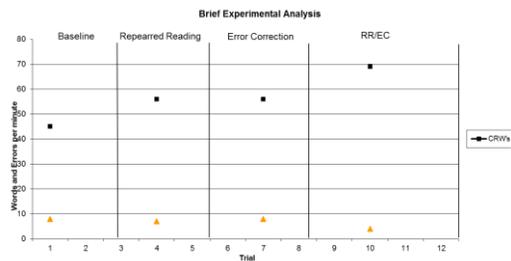


Select Outcome Measure

- Oral Reading Fluency
- Strong indicator of overall reading skills
– Shinn (1989)
- Reliability and validity
- Alternative forms



Conduct BEA





DATA-BASED DECISION MAKING



NEXT STEPS

- Implement most effective package (RR/EC)
- Progress monitor
- Evaluate
- Adjust

In Summary

- BEA is continuous process of assessment, intervention, evaluation and modification to enhance student performance

Participant Activity



SELF-ASSESSMENT: *A Journey of Change*

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Participant Activity

- Identify a student in your setting whom you think might benefit from BEA
- Identify the problem and possible reasons
- Set up steps needed to conduct (i.e., interventions and outcome measures)



SELF-ASSESSMENT: *A Journey of Change*

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Closing

- BEA is a framework for individualization
- Do more efficiently
- “Special” education



SELF-ASSESSMENT: *A Journey of Change*

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Questions?



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Additional Resources

- Path to Reading Excellence in School Sites (PRESS)-Sample Brief Experimental Analysis video
– <https://vimeo.com/129474295>
