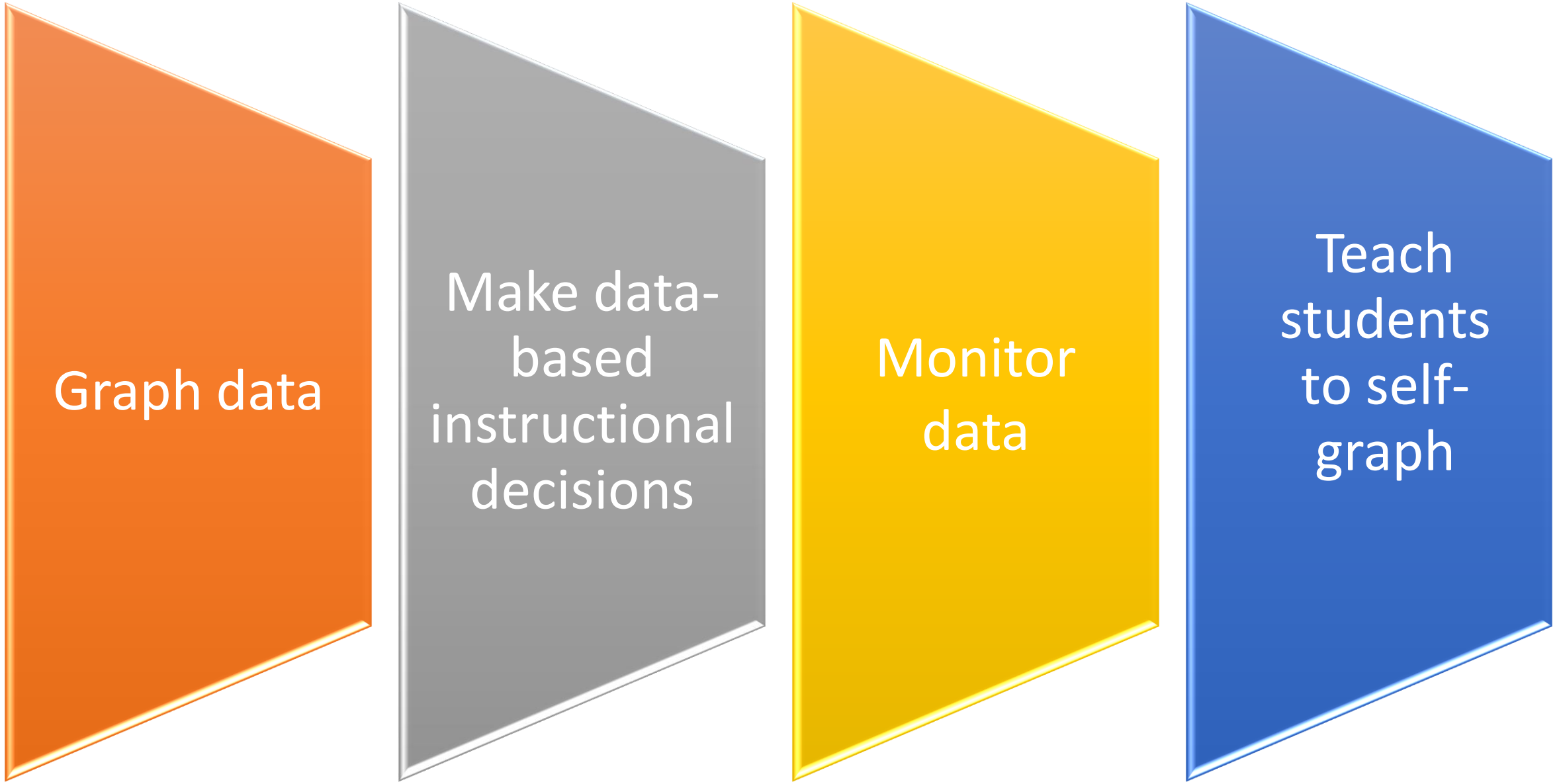
Action Research for Teachers of the Deaf Across Instructional Settings

Dr. Jennifer S. Beal, Ph.D.

Goals for this presentation



My Background

B.S., Special Education, VSU

M.Ed, Deaf Education, VSU

Teacher in Valdosta for 6 years

Ed.S., VSU

Ph.D., Georgia State University

Researcher at 2 schools for the deaf

5th year as VSU faculty

Currently research ASL development

Check-in

- Teacher of the Deaf?

Check-in

- Interpreter?

Check-in

- Administrator?

Check-in

- Other?

How do you know if you/teachers are effective?

How do you know if you/teachers are effective?

How do you measure student performance?

How do you know if you/teachers are effective?

How do you measure student performance?

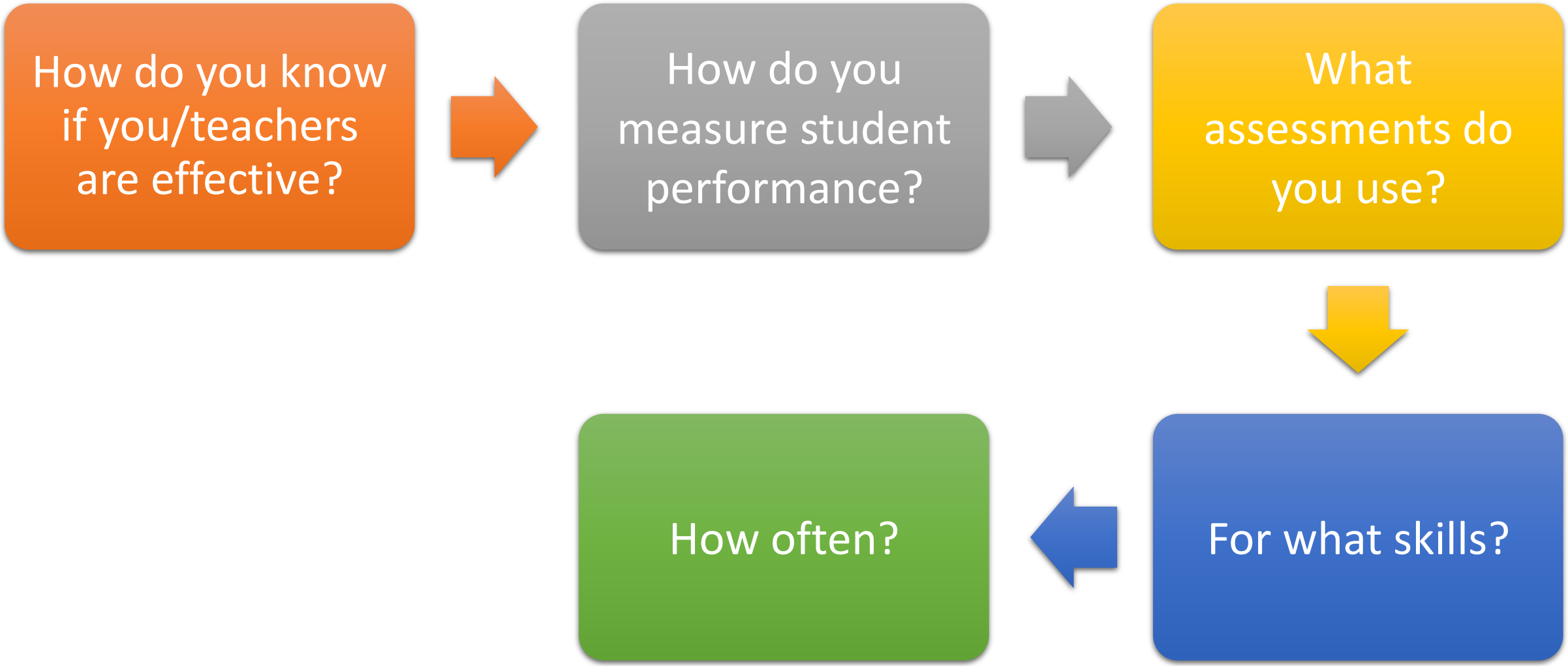
What assessments do you use?

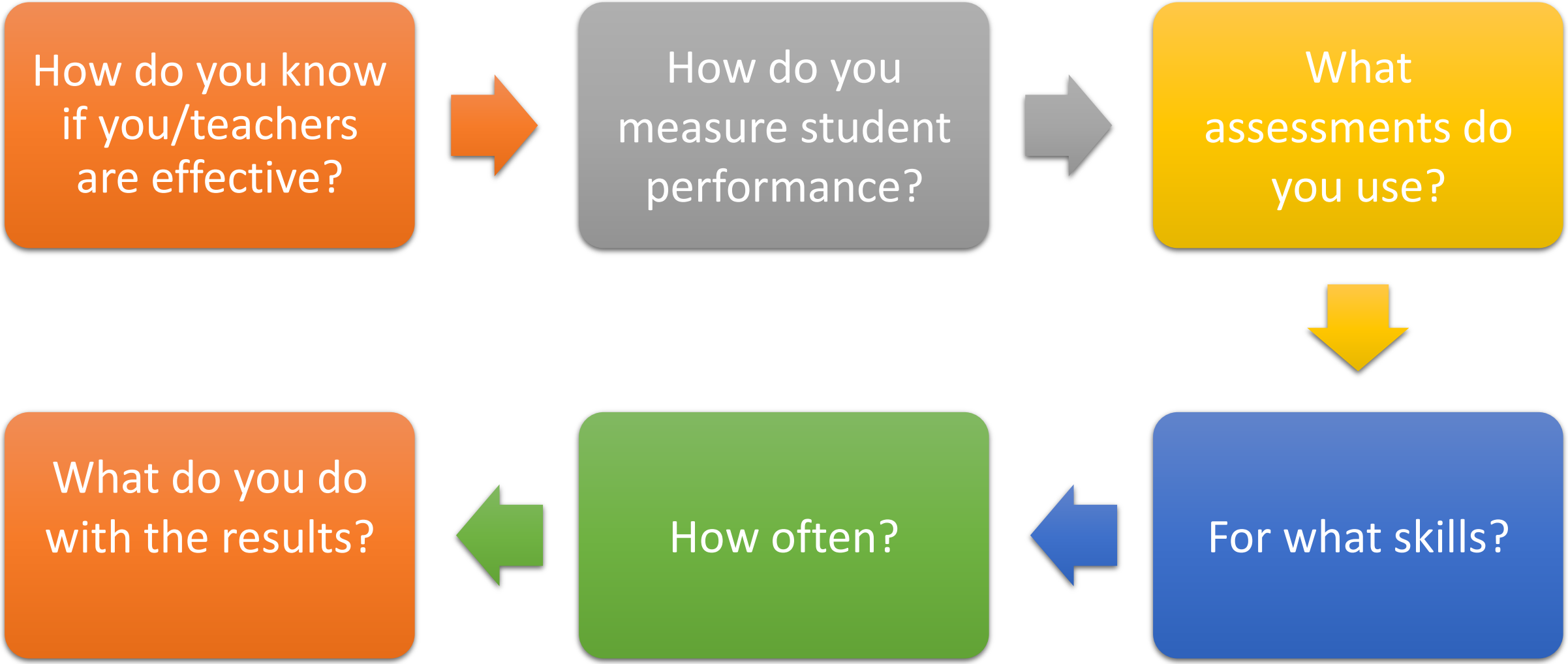
How do you know if you/teachers are effective?

How do you measure student performance?

What assessments do you use?

For what skills?


How do you know if you/teachers are effective?
How do you measure student performance?
What assessments do you use?
For what skills?
How often?


How do you know if you/teachers are effective?
How do you measure student performance?
What assessments do you use?
For what skills?
How often?
What do you do with the results?

Legislation

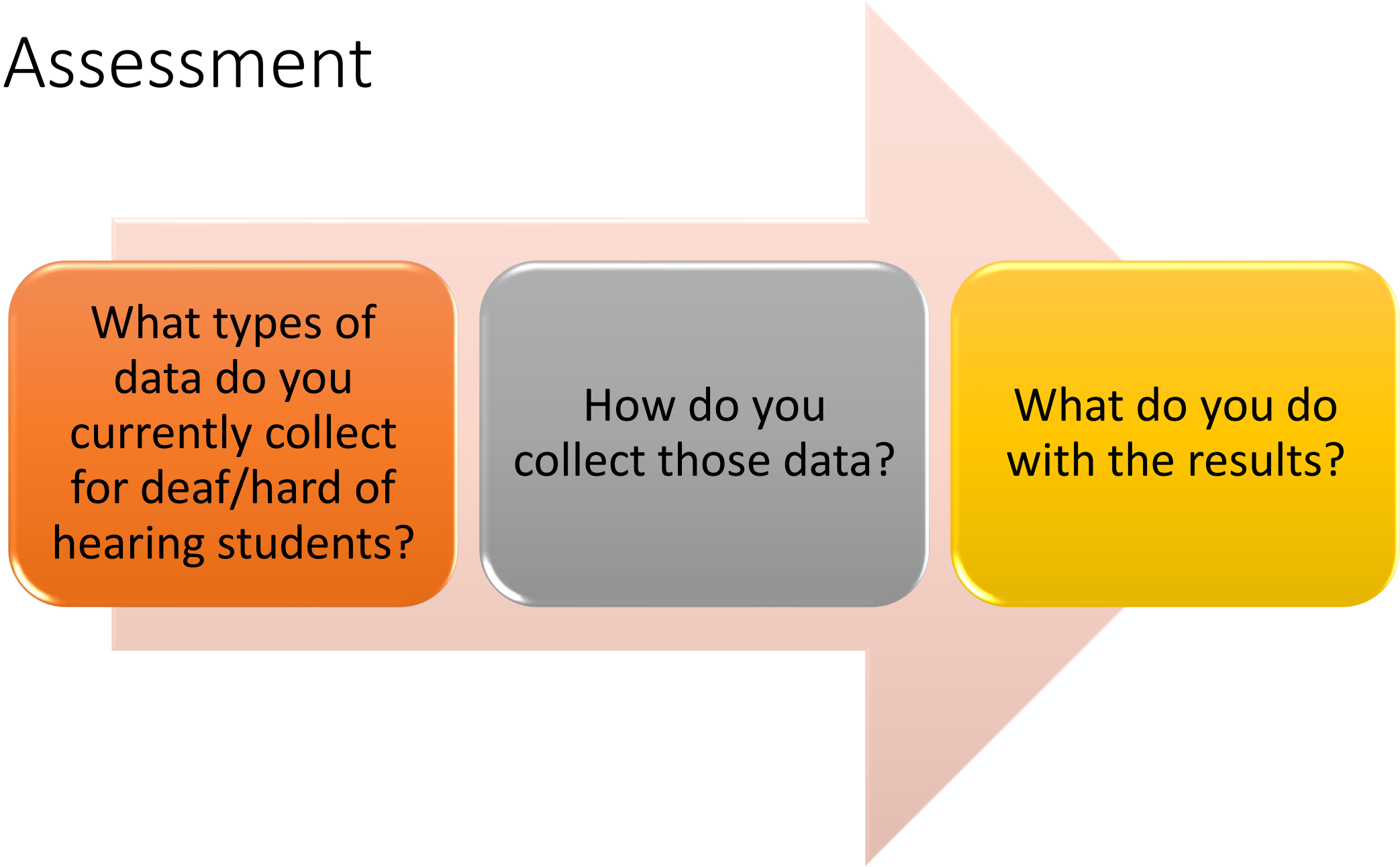
Individuals with Disabilities Education Improvement Act

2004

2015

- Data-based instructional decisions
- Evidence-based instructional strategies

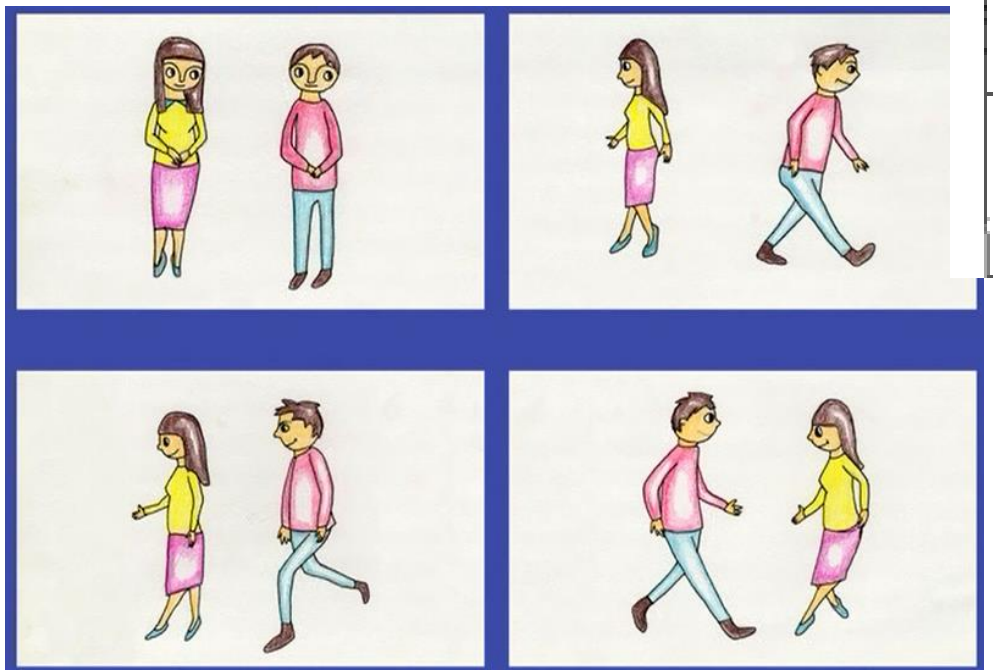
Assessment


What types of data do you currently collect for deaf/hard of hearing students?
How do you collect those data?
What do you do with the results?

How?

- Identify area of student need (academic or social behavior)
- Baseline assessment (where the student currently is)

Example Assessments



Pattern of pass/fail responses

	Pass	Fail	
Number/ Distribution			#14
			#16
			#18
			#23
			#27
			#35
			#41
Negation			#3
			#6
			#8
			#11
			#17
			#19
			#31
			#34
			#38
Noun-Verb			#12
			#15
			#22
			#32

ASL-Receptive Skills Test

http://www.northernsignsresearch.com/shop.php

Kendall Conversational Proficiency Level (P-Level) **Date:_____**

Observe and engage with the student in several conversational situations over a reasonable time and determine the student's conversational proficiency level. Check the chart below for summaries of each P- Levels. Indicate the proficiency level (P-Level) for each language being rated.

P-Level	0+	1	1+	2	2+	3	3+	4	4+	5	5+	6	6+	7
ASL														
Spoken English														

P-Level 0+ The child is able to determine what another person is talking about by looking in the same direction as the other person. The child communicates non-verbally about his own comfort, pleasure, and distress. The child responds attentively to turn-taking activities (such as peek-a-boo) but does not initiate the activity. The child points to things in the environment.

P-Level 1 The child refers to objects by holding, looking at, pointing to, and touching them. The child initiates peek-a-book and participates in other turn-taking activities. The child imitates the movement of others. The child uses non-verbal means to call attention to physical needs and to express personal reaction. The child imitates signs produced by others, although the sign production (handshape, movement, location and palm orientation) may be imperfect. The child may produce a few meaningful signs.

P-Level 2 The child produces single words or signs to talk about actions and things around him. He uses language to greet people, get their attention, asks for something and to protest (when things are present, not present and brought back). The child signs more but not as explicitly. The child does this by pointing, looking, and touching to identify what he is talking about. Mostly, the child leaves it up to others to figure what he left unsaid.

P-Level 3 The child manages to communicate more than what he signs/says, using phrases and short sentences. The child refers to non physical context more than at P-2. The child knows (understands) more signs/words than others can keep track of easily. The child talks more and can ask about different things. The child can identify many actions, things in pictures. The child talks about where things are, and where they are going. The child can use short phrases/sentences.

P-Level 4 The child talks about things that are present what he plans to do or has in mind. The child talks about other people that do not have anything to do with him. He uses language to create make-believe conditions. The child can understand familiar friends/adults and they can understand him, too. The child leaves a few things unsaid that need to be expressed.

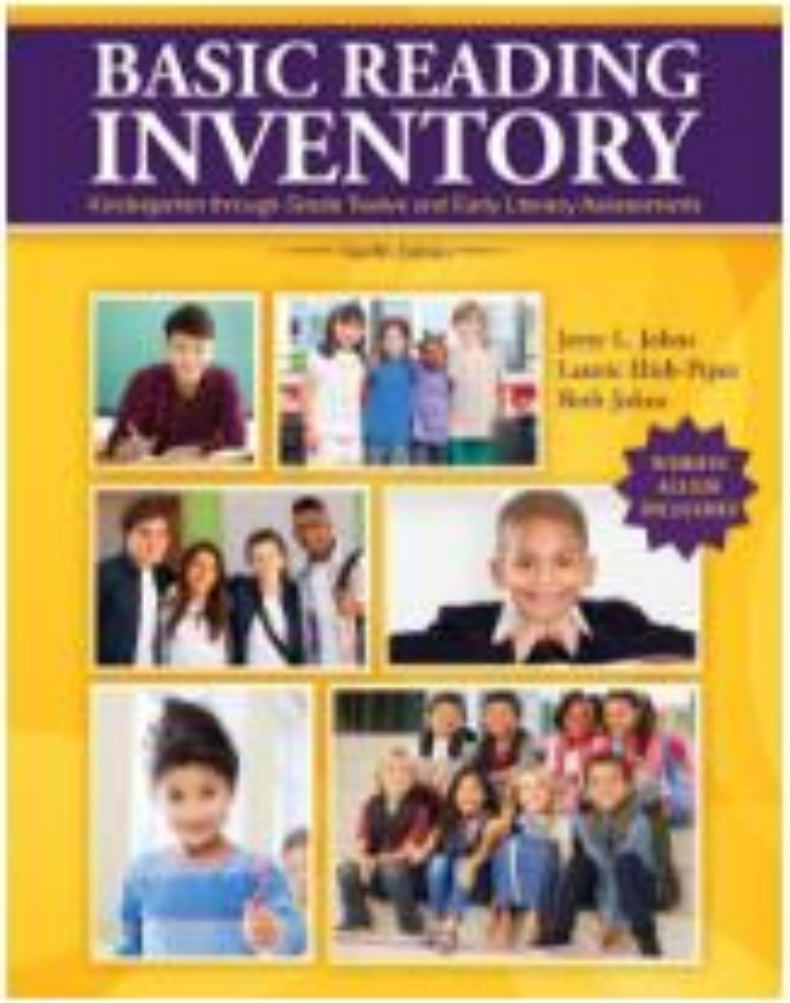
P-Level 5 The child tells complicated stories about things that happened in the past or may happen in the future. Even a stranger can understand the child easily and vice versa. The child can say about his own knowledge of things, can say about how things relate to each other, how things happen, how things contrast. The child uses language to find out what's happening, who is doing what, and why. The child can carry on conversation successfully, sticks to the point, and is able to retell what others say.

P-Level 6 The child communicates successfully with anybody about things done and experienced. He can carry long and complicated conversations with strangers. In group, the child can follow what others say and can keep up with the flow of conversation. The child uses language to influence thinking and opinions. The child can discuss what ifs.

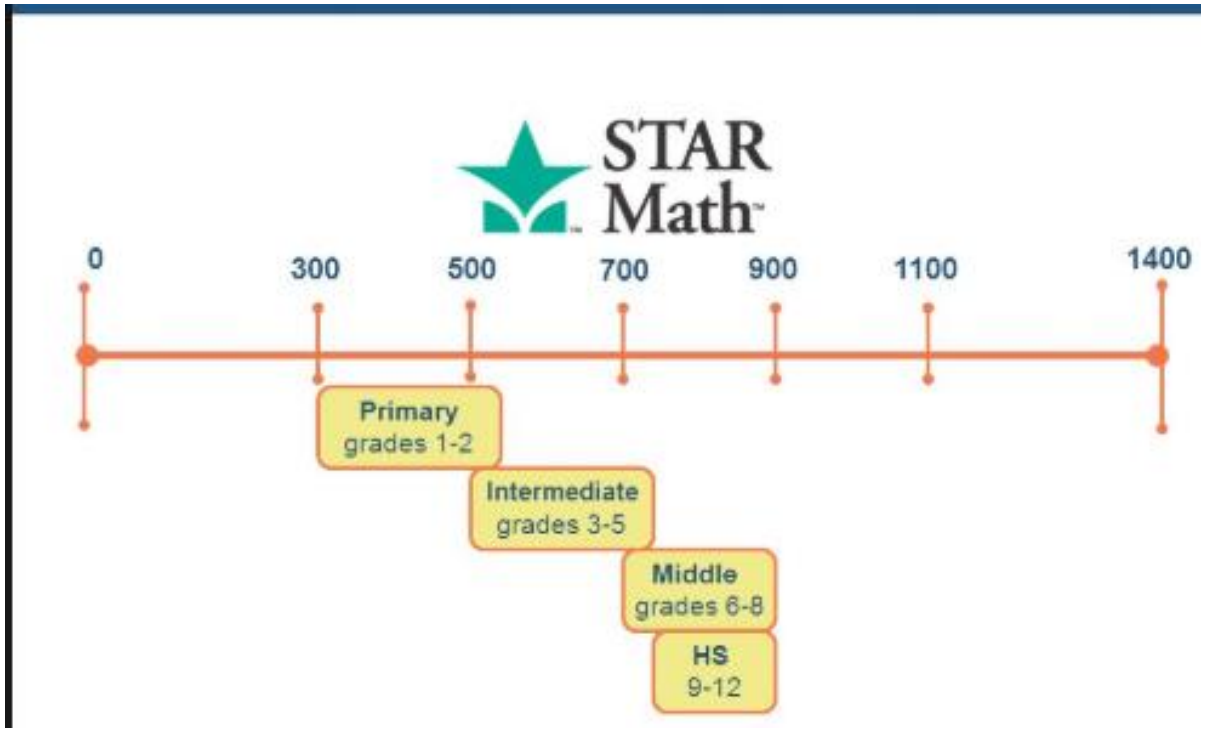
P-Level 7 The child can explain clearly what he has in mind. He can provide enough background so others won't get lost when talking about abstract things like the rules of games, how the gears of a 10-speed bicycle work. The child can follow group discussion and engage in debates successfully. He can use language to influence people and can rephrase to explain the same thing for others to understand. When unclear, the child can pinpoint the information he needs

- Expressive ASL
- Kendall Conversational Proficiency Levels (p-levels)
- French, 1999
- https://texasdeafed.org/uploads/files/general-files/Clerc_Center_Student_Language_and_Communication_Profile_Summary.pdf

Johns' Basic Reading Inventory



- Reading assessment
- Grade-level vocabulary lists
- Grade-level reading passages
- Miscue analysis
- Retell
- Comprehension questions
- Frustration, instructional and independent reading levels
- Triangulate with other assessments
- https://he.kendallhunt.com/product/basic-reading-inventory-kindergarten-through-grade-twelve-and-early-literacy-assessment-3



Renaissance Accelerated Reader 360®

Research-based, comprehensive K–12 reading practice program

- https://www.renaissance.com/products/assessment/star-360/star-math-skills/
- https://p.widencdn.net/t3rrwc/206004%20Accelerated%20Reader%20360%20Brochure.pdf

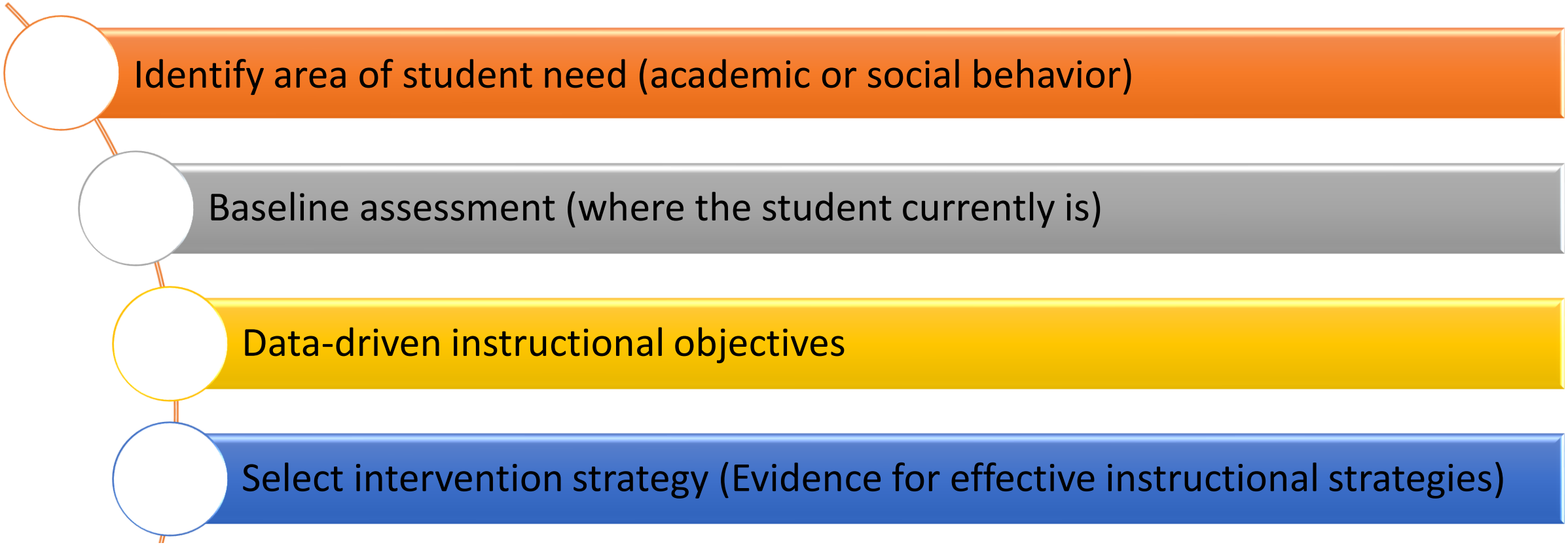
How?

- Identify area of student need (academic or social behavior)
- Baseline assessment (where the student currently is)
- Data-driven instructional objectives

Objectives

- Observable
- Measurable
- Audience (“The student will…”)
- Behavior (“…expressively identify 10 first grade Dolch words…”)
- Criteria (“with 100% accuracy”)
- Degree (“…2 out of 3 opportunities”)

How?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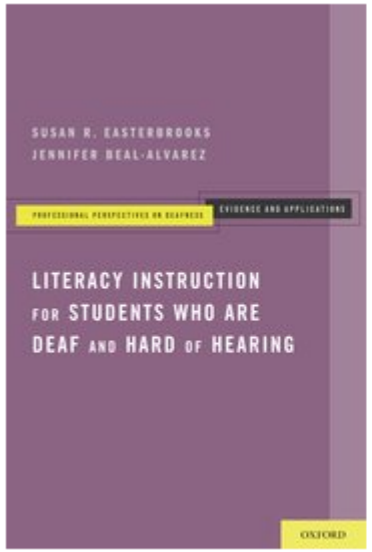
Data-driven instructional objectives
Select intervention strategy (Evidence for effective instructional strategies)

Theory and Theorist	Definition	Evidence-based practices	References
Theory of Cognitive Development (Piaget)	Learning through active exploration; learners construct their understanding; basis for language development	Visual support: pictures, visual organizers, videos, sign models, etc. Active learning	Bell, 2007; Bos & Anders, 1990; Egan, 1999; Hauser, Lukomski, & Hillman, 2008; Horton, Lovitt, & Bergerund, 1990; Smith, 2002; Stoner & Easterbrooks, 2006
Model of Working Memory (Baddeley)	Interaction of three memory components (phonological loop, visuospatial sketchpad, and episodic buffer) to describe short-term memory performance	Explicit/direct instruction, incremental rehearsal	Andrews, 1988; Banks, Gray, & Fyfe, 1990; Brabham & Villaume, 2001; Burns, 2002; Burns, Dean, & Foley, 2004; Cain, Oakhill, & Lemmon, 2004; Calvert, 1981; Hall, 2002; MacGregor & Thomas, 1988; Mercer, Campbell, Miller, Mercer, & Lane, 2000; Paatsch, Blamey, Sarant, & Bow, 2006; Tucker, 1989; Walker, Munro, & Richards, 1998a, 1998b
Constructivist Theory (Bruner)	Learning occurs in an organized progression from enactive to symbolic representation based on existing knowledge	Active learning	Brabham & Villaume, 2001; Bruner, 1973; Bruner, Goodnow, & Austin, 1956; Harmon, Wood, Hedrick, Vintinner, & Willeford, 2009; Lederberg, Presbindowski, & Spencer, 2000

Structural Cognitive Modifiability and Mediated Learning Experience (Feuerstein)	Learners can adapt to demands of a learning situation via direct and mediated interactive learning experiences	Explicit/Direct Instruction Scaffolding (i.e., teacher modeling, mediation, student imitation, teacher scaffolding, and feedback)	Andrews, 1988; Banks, Gray, & Fyfe, 1990; Brabham & Villaume, 2001; Bruner, Goodnow, & Austin, 1956; Cain, Oakhill, & Lemmon, 2004; Calvert, 1981; Feuerstein, Hoffman, & Miller, 1980; Hall, 2002; Kozulin & Presseisen, 1995; MacGregor & Thomas, 1988; Mercer, Campbell, Miller, Mercer, & Lane, 2000; Paatsch, Blamey, Sarant, & Bow, 2006; Strassman, 1997; Vygotsky, 1978; Walker, Munro, & Richards, 1998a, 1998b; Wertsch & Sohmer, 1995
Dual Coding Theory (Paivio)	Connections between verbal associations and visual images facilitate more efficient memory storage and retrieval	Visual support Print support Communication match Listening technology monitoring	Bell, 2007; Bos & Anders, 1990; Egan, 1999; Hauser, Lukomski, & Hillman, 2008; Horton, Lovitt, & Bergerund, 1990; Paivio, 1991, 2008; Sadoski & Paivio, 2004; Smith, 2002; Stoner & Easterbrooks, 2006
Linguistic Interdependence Hypothesis (Cummins; see also Mayer & Akamatsu relative to deaf education)	One's first language (L1) knowledge facilitates second language (L2) acquisition; Basic Interpersonal Communication Skills (BICS) and Cognitive Academic Language Proficiency (CALP) levels of language	Bilingual instruction (i.e., ASL and printed English) Conversation Mediation and scaffolding	Bruner, Goodnow, & Austin, 1956; Easterbrooks & Baker, 2002; Easterbrooks & Beal-Alvarez, 2013; Feuerstein, Hoffman, & Miller, 1980; Kozulin & Presseisen, 1995; Lederberg, Schick, & Spencer, 2013; Hermans, Knoors, Ormel, & Verhoeven, 2008a, 2008b; Huttenlocher et al., 1991; Lederberg & Everhart, 1998; Levy, Rodriguez, & Wubbels, 1993; Paul, 1996; Paul & Gustafson, 1991; Prinz & Strong, 1998; Reese & Newcombe, 2007; Reeves, Newell, Holcomb, & Stinson, 2000; Saffran, Newport, Aslin, Tunick, & Barrueco, 1997; Spencer, 1993; Strassman, 1997; Vygotsky, 1978; Wertsch & Sohmer, 1995

Generative Grammar and Universal Grammar (Chomsky)	Learners genetically inherit language (syntactic) rules; language knowledge is innate and universal	Bilingual instruction (i.e., ASL and printed English) Explicit Instruction	Andrews, 1988; Bailes, 2001; Banks, Gray, & Fyfe, 1990; Berke, 2013; Brabham & Villaume, 2001; Cain, Oakhill, & Lemmon, 2004; Calvert, 1981; Crume, 2013; Hall, 2002; Lange, Lane-Outlaw, Lange, & Sherwood, 2013; MacGregor & Thomas, 1988; Mashie, 1995; Mercer, Campbell, Miller, Mercer, & Lane, 2000; Paatsch, Blamey, Sarant, & Bow, 2006; Padden & Ramsey, 1998, 2000; Prinz & Strong, 1998; Strong, 1995; Walker, Munro, & Richards, 1998a, 1998b
Critical Period Hypothesis (Lenneberg)	Particular developmental skills are acquired within particular time frames or specialized brain areas adapt for other purposes and are unavailable for initial skills	Early intervention Repeated viewings of ASL models Communication match	Beal-Alvarez & Easterbrooks, 2013; Cannon, Fredrick, & Easterbrooks, 2010; Easterbrooks & Beal-Alvarez, 2013; Golos, 2010; Golos & Moses, 2011; Guardino, Cannon, & Eberst, 2014; Mueller & Hurtig, 2010
Social Development Theory (Vygotsky)	Learners' social interactions precede their development and produce consciousness and cognition; Zone of Proximal Development; More Knowledgeable Other (MKO);	Modeling (e.g., 'think-aloud', demonstrating) Mediation and scaffolding Conversation Communication Match	Bruner, Goodnow, & Austin, 1956; Easterbrooks & Beal-Alvarez, 2013; Feuerstein, Hoffman, & Miller, 1980; Huttenlocher et al., 1991; Kozulin & Presseisen, 1995; Lederberg & Everhart, 1998; Lederberg, Schick, & Spencer, 2013; Levy, Rodriguez, & Wubbels, 1993; Reeves, Newell, Holcomb, & Stinson, 2000; Spencer, 1993; Strassman, 1997; Vygotsky, 1978; Wertsch & Sohmer, 1995;

https://global.oup.com/academic/product/literacy-instruction-for-students-who-are-deaf-and-hard-of-hearing-9780199838554?cc=us&lang=en&



Literacy Instruction for Students who are Deaf and Hard of Hearing

Susan R. Easterbrooks, PhD and Jennifer Beal-Alvarez, MA

Professional Perspectives on Deafness: Evidence and Applications

- Compiles the best information on the issues and challenges surrounding reading and deaf and hard-of-hearing children
- Features case vignettes that illuminate how educators can overcome these challenges

Case Studies in Deaf Education

Inquiry, Application, and Resources

Caroline Guardino, Jennifer S. Beal, Joanna E. Cannon, Jenna Voss, and Jessica P. Bergeron

View the table of contents.
Read an excerpt.

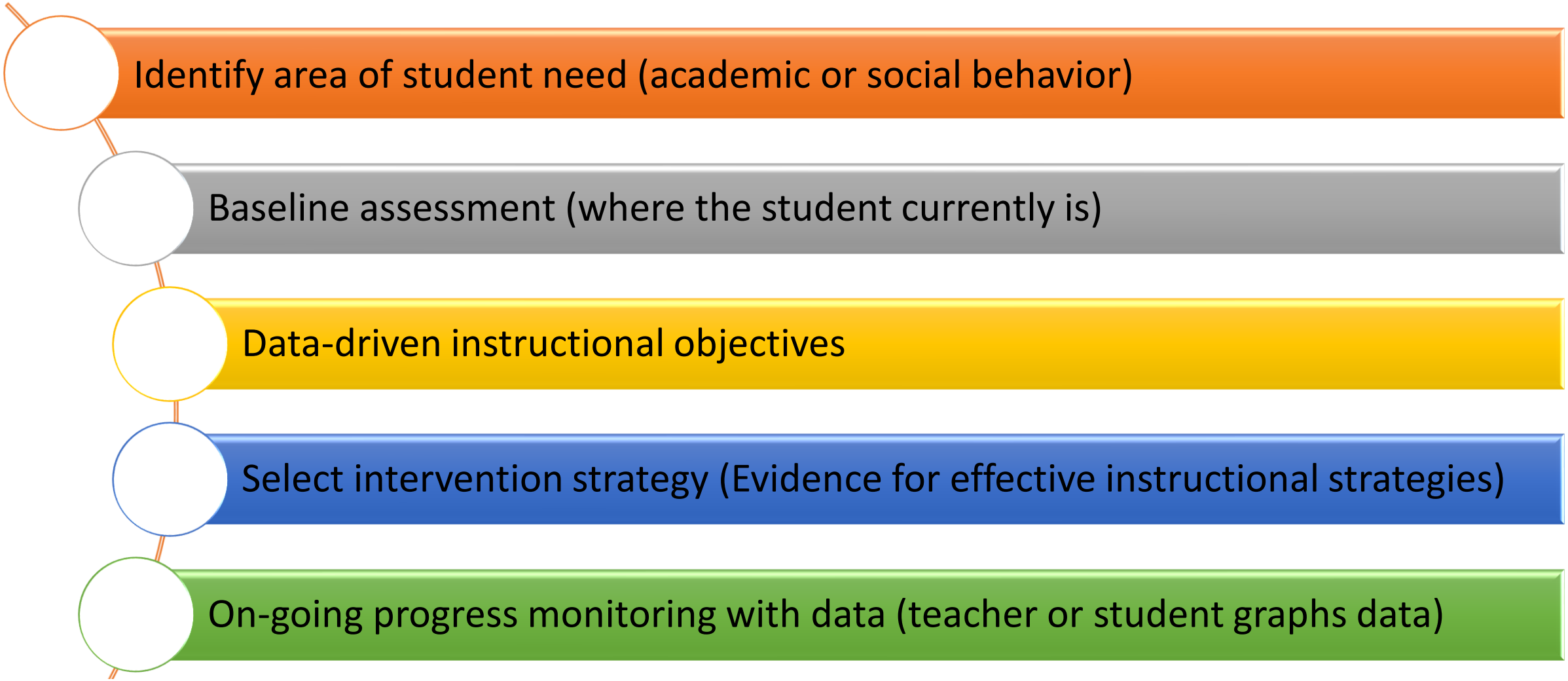
$80.00s print edition
$80.00 e-book

ADD TO CART

Case Studies in Deaf Education provides comprehensive materials that will prepare prospective teachers to work with the diverse spectrum of students who are d/Deaf and hard of hearing (d/Dhh) and empower them to better understand these complex and unique learners. The text presents an extensive series of case studies that are balanced and unbiased in both language and instructional approaches and that encourage readers to use background details, academic data, and evidence-based practices to make informed educational decisions.

http://gupress.gallaudet.edu/CSDE.html

How?


Identify area of student need (academic or social behavior)
Baseline assessment (where the student currently is)
Data-driven instructional objectives
Select intervention strategy (Evidence for effective instructional strategies)
On-going progress monitoring with data (teacher or student graphs data)

Check-in

- Do you currently graph any data?

Check-in

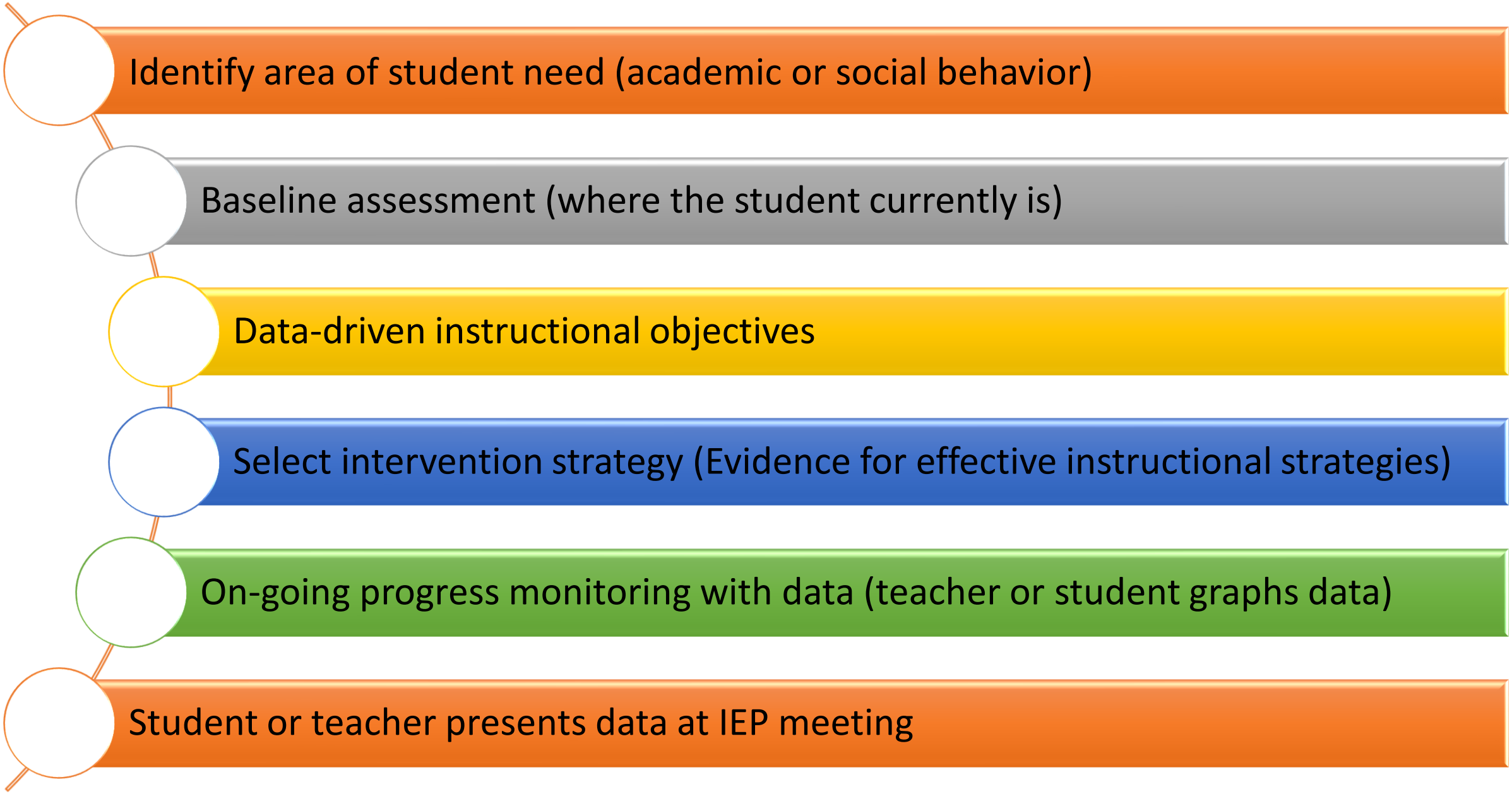
- What program do you use?

Check-in

- Do your students graph their own data?
- What programs and devices do they use?

- Examples of action research
- Graphs

How?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Baseline assessment (where the student currently is)
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Select intervention strategy (Evidence for effective instructional strategies)
On-going progress monitoring with data (teacher or student graphs data)
Student or teacher presents data at IEP meeting

Rules, Manuals & Forms

Special Education Rules

Implementation Manual

Frequently Asked Questions

Sample Forms

Eligibility Categories

Autism

Deafblind

Deaf/Hard of Hearing (D/HH)

Emotional & Behavioral Disorder

Intellectual Disabilities

ASPIRE (Active Student Participation Inspires Real Engagement) Parent Training Videos

The ASPIRE training videos are a series of modules to provide parents with information about their student's participation in the ASPIRE program. They are designed to be used when on-site parent training is not possible or the parent cannot attend the parent training. Each module focuses on different aspects of ASPIRE that a parent may need to know in order to partner with the school to provide their student with the best experience in the program. ASPIRE is a student-led IEP initiative that provides the student with the opportunity to develop self-determination skills. Self-determination skills are a combination of attitudes and abilities that lead students to set goals for themselves, take the initiative to reach these goals and make their own choices.

SPDG Videos

- To All SPDG Videos

Example 1

Pre-school small group or 1:1

4;5 male

Bilingual school for the deaf

Student will answer 5 out of 6 *who, what,* and *do* questions after repeated readings of a story

	A	B	C	D
2				
3	Baseline 1	Intervention 1	Baseline 2	Intervention 2
4	5			
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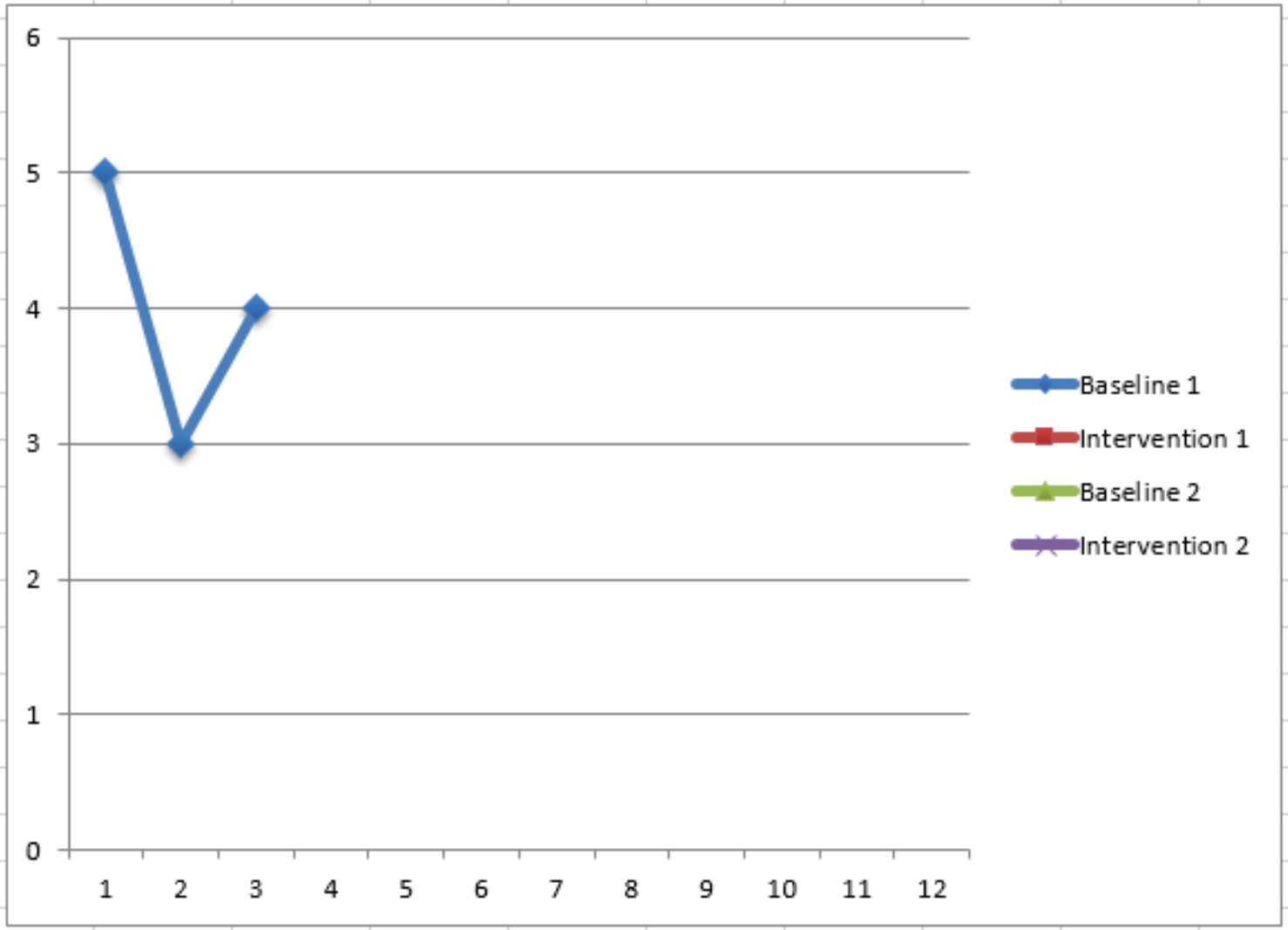

Baseline 1	Intervention 1	Baseline 2	Intervention 2
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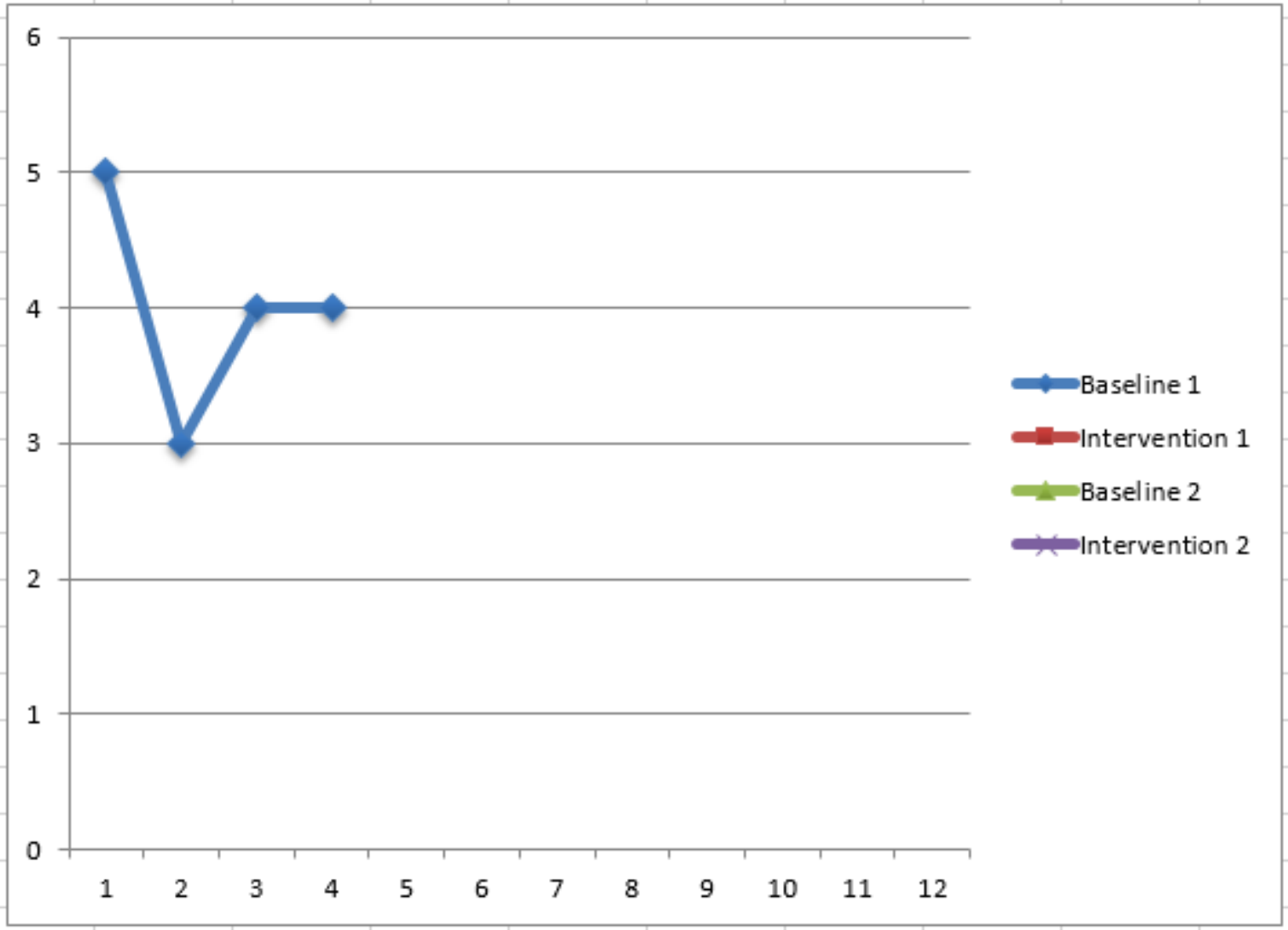

Baseline 1	Intervention 1	Baseline 2	Intervention 2
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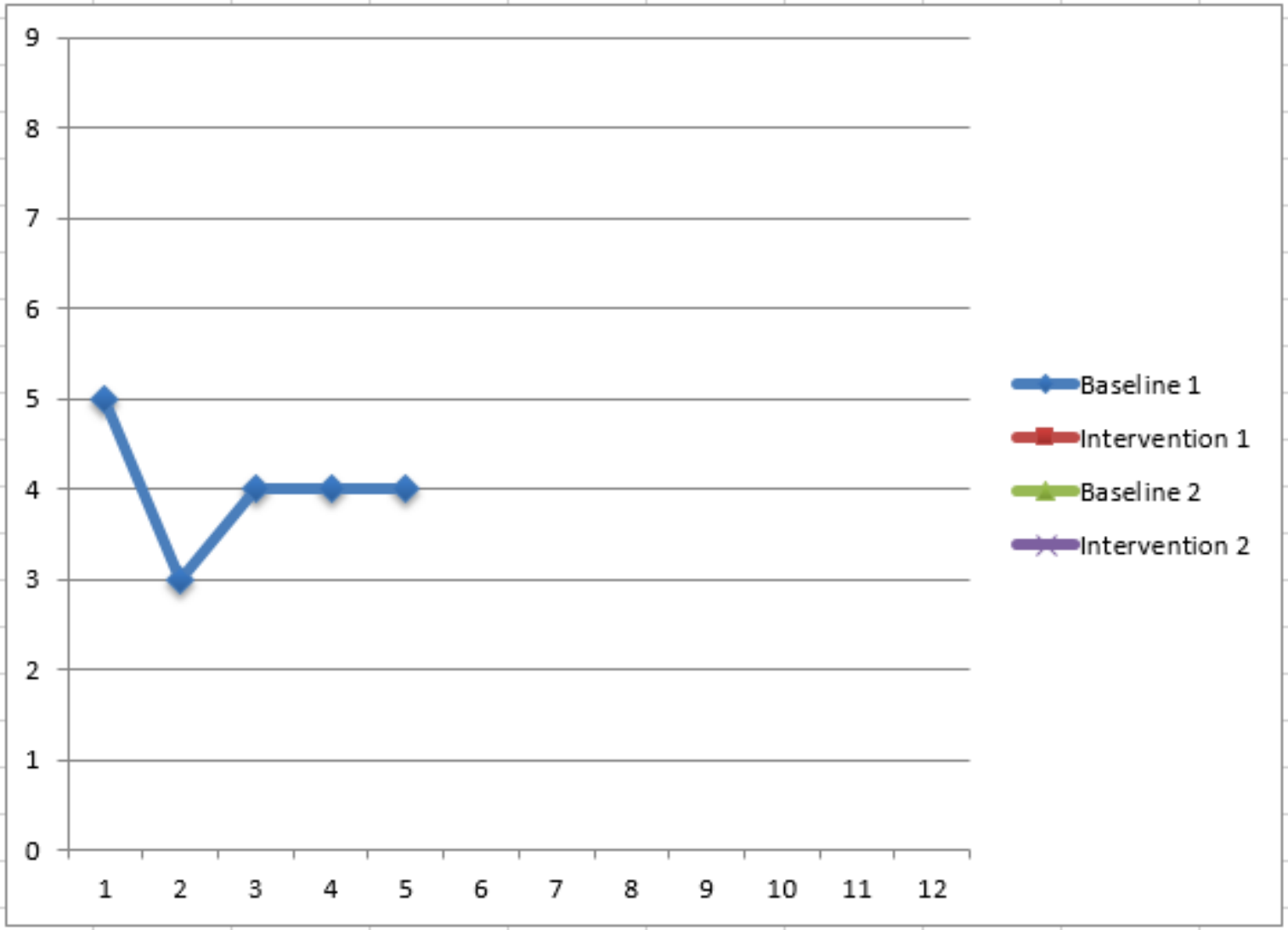

	Baseline 1	Intervention 1	Baseline 2	Intervention 2
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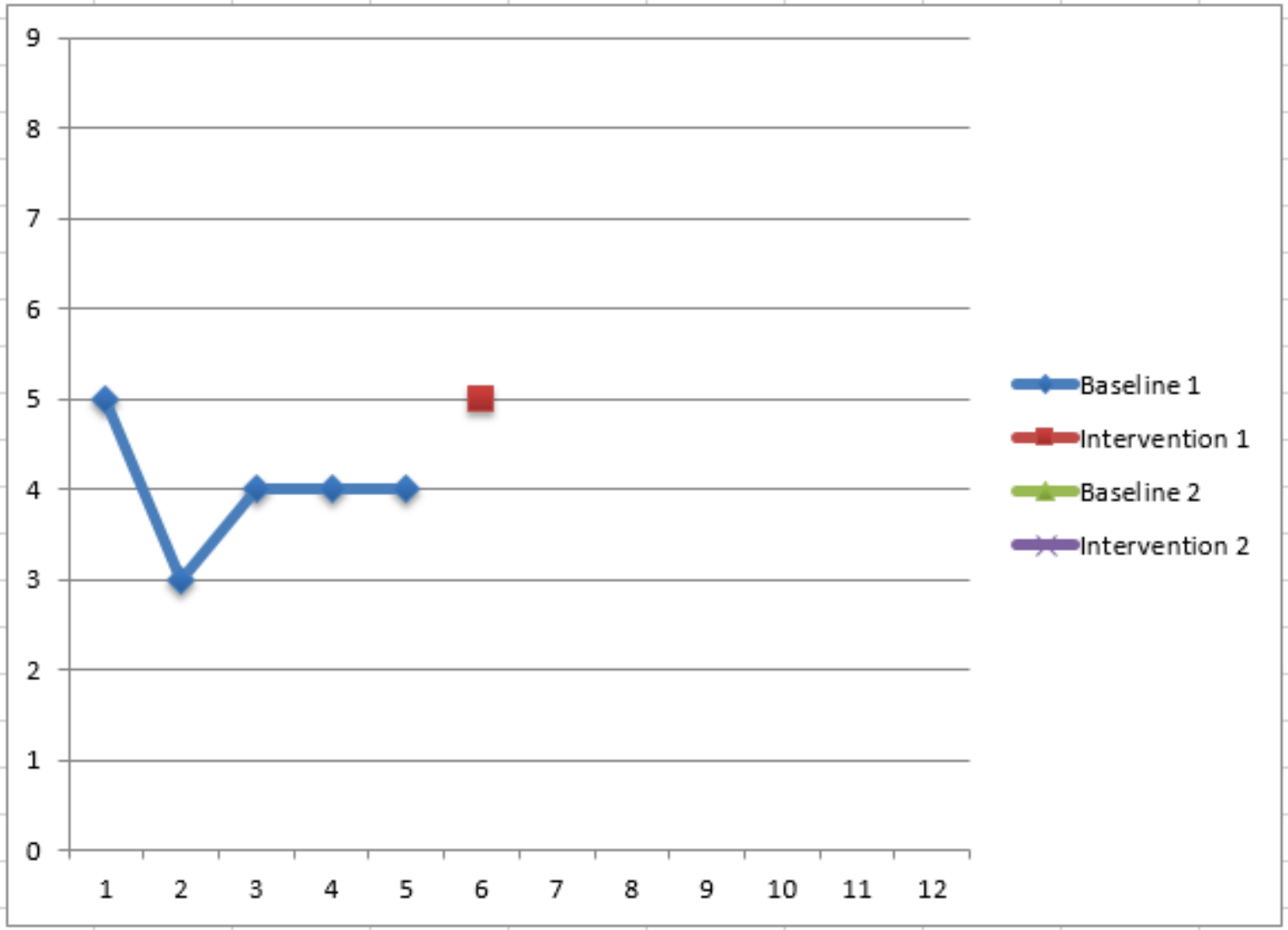

Baseline 1	Intervention 1	Baseline 2	Intervention 2
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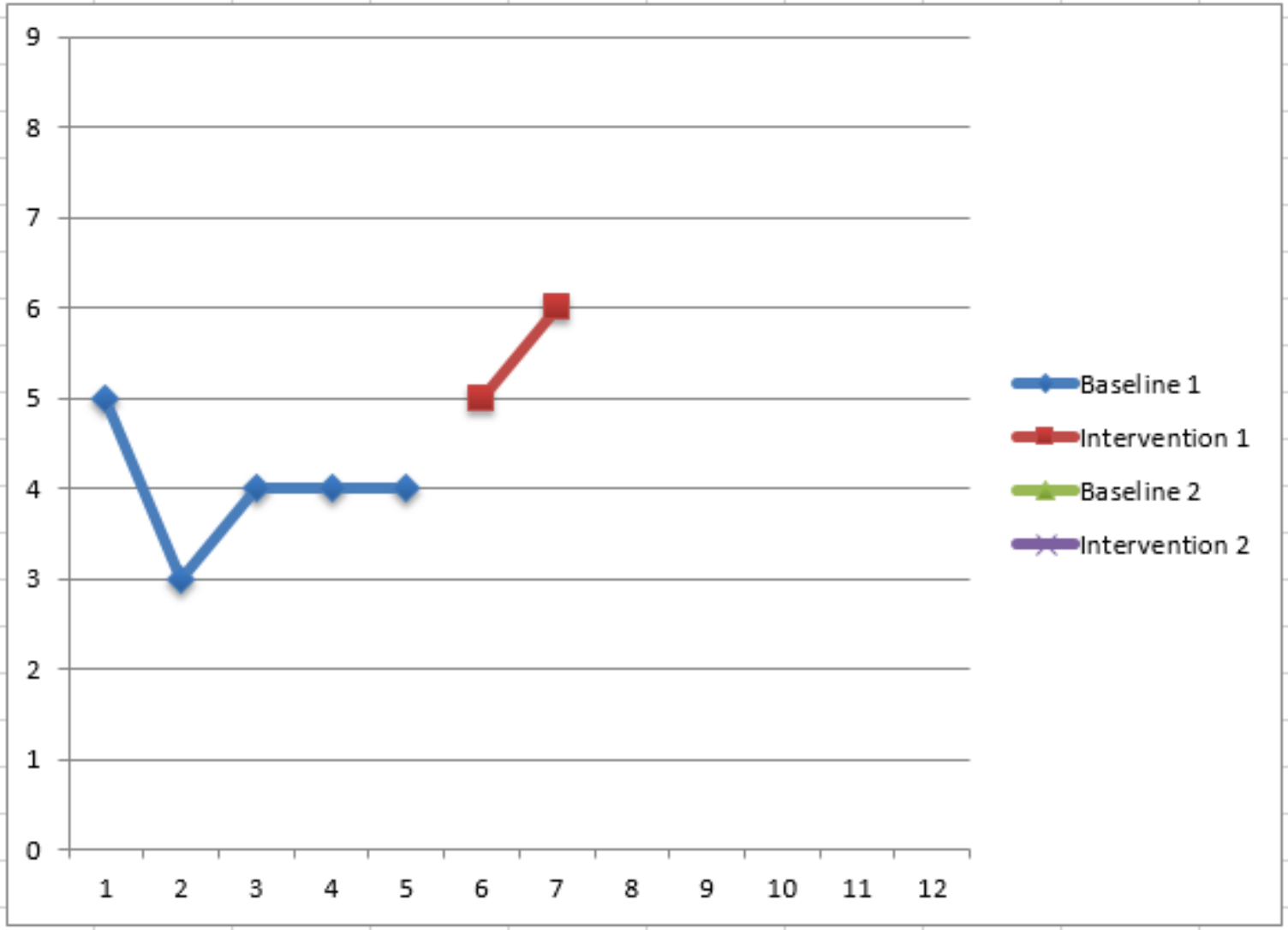

	A	B	C	D
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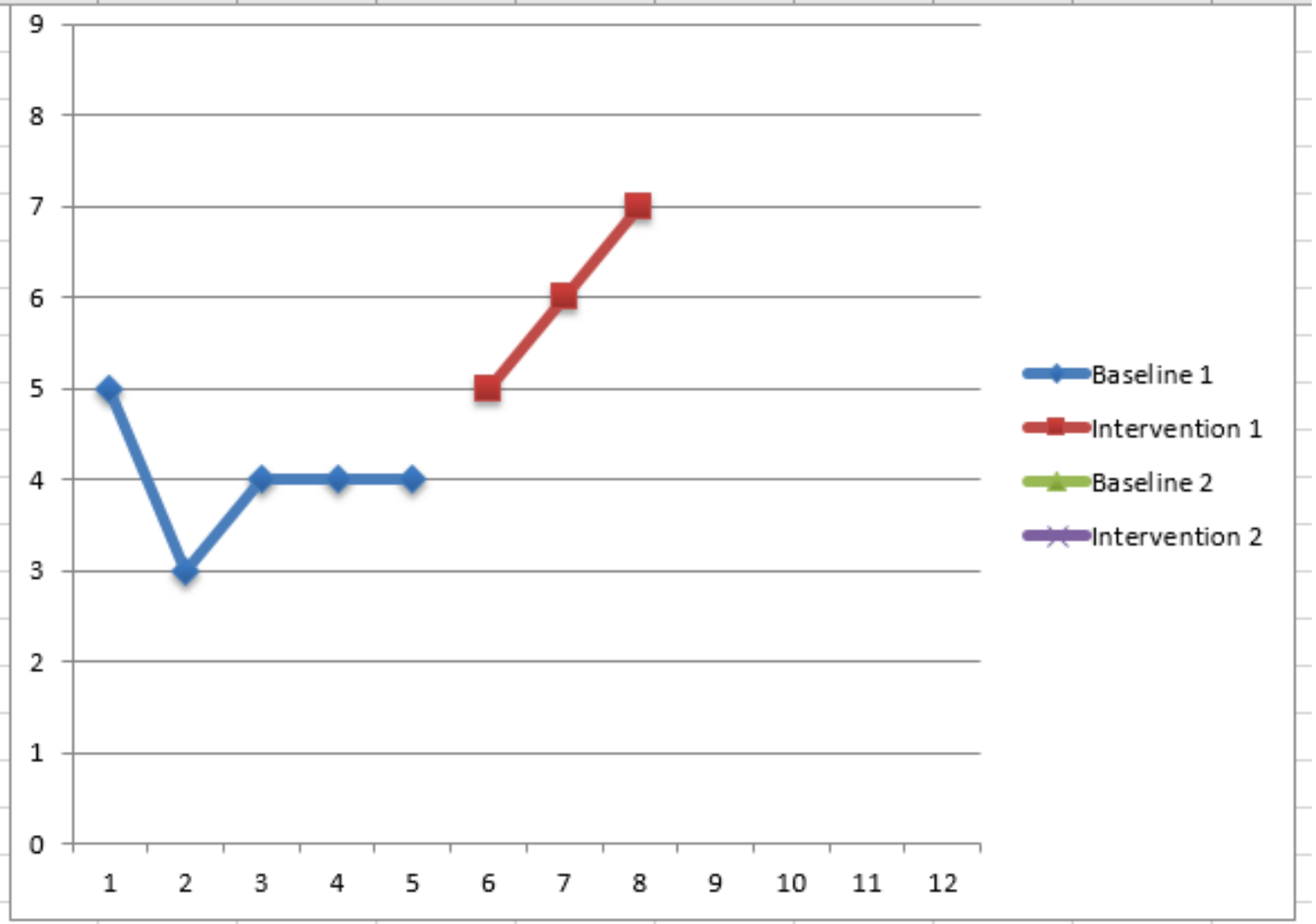

	A	B	C	D
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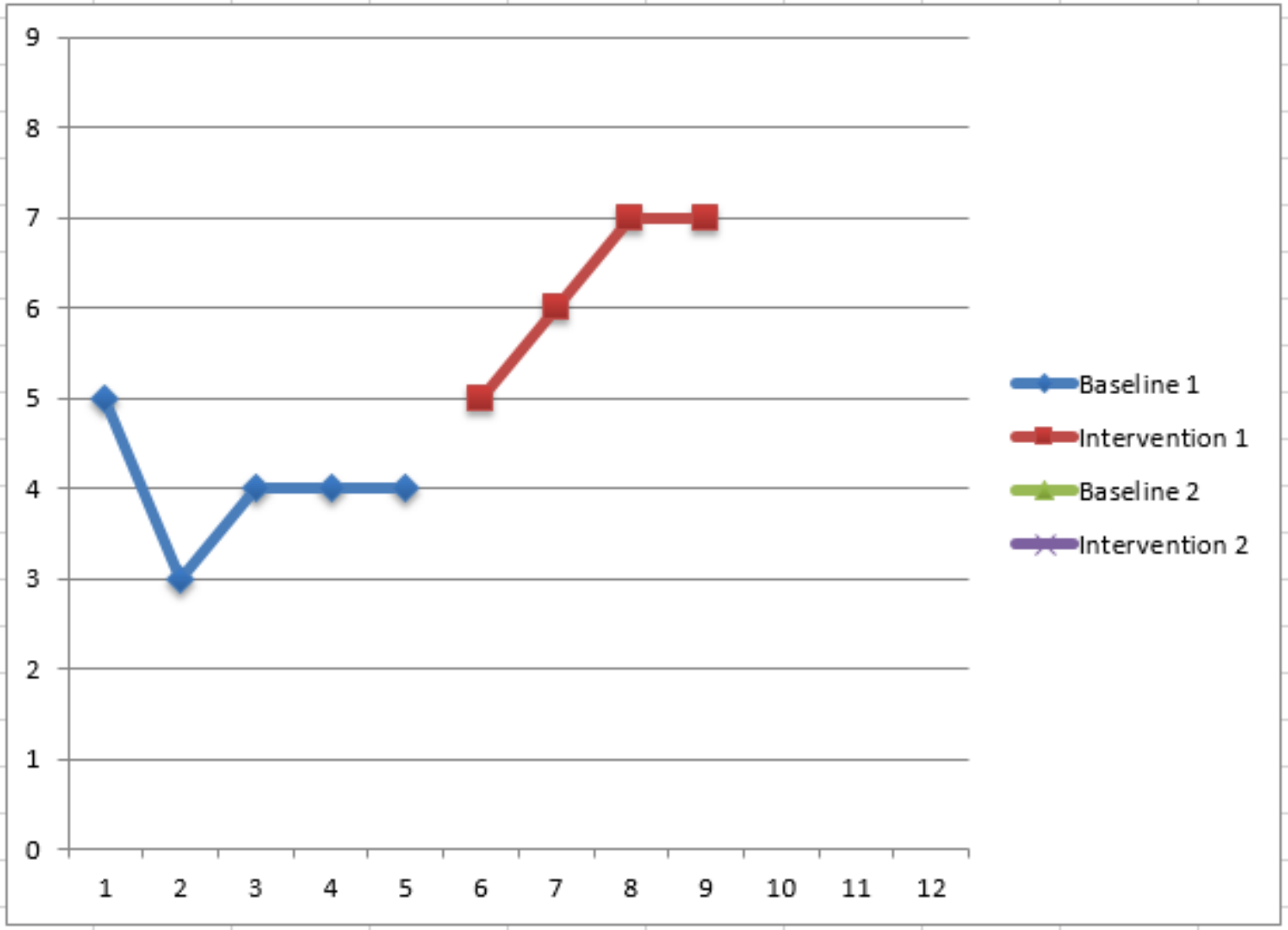

	Baseline 1	Intervention 1	Baseline 2	Intervention 2
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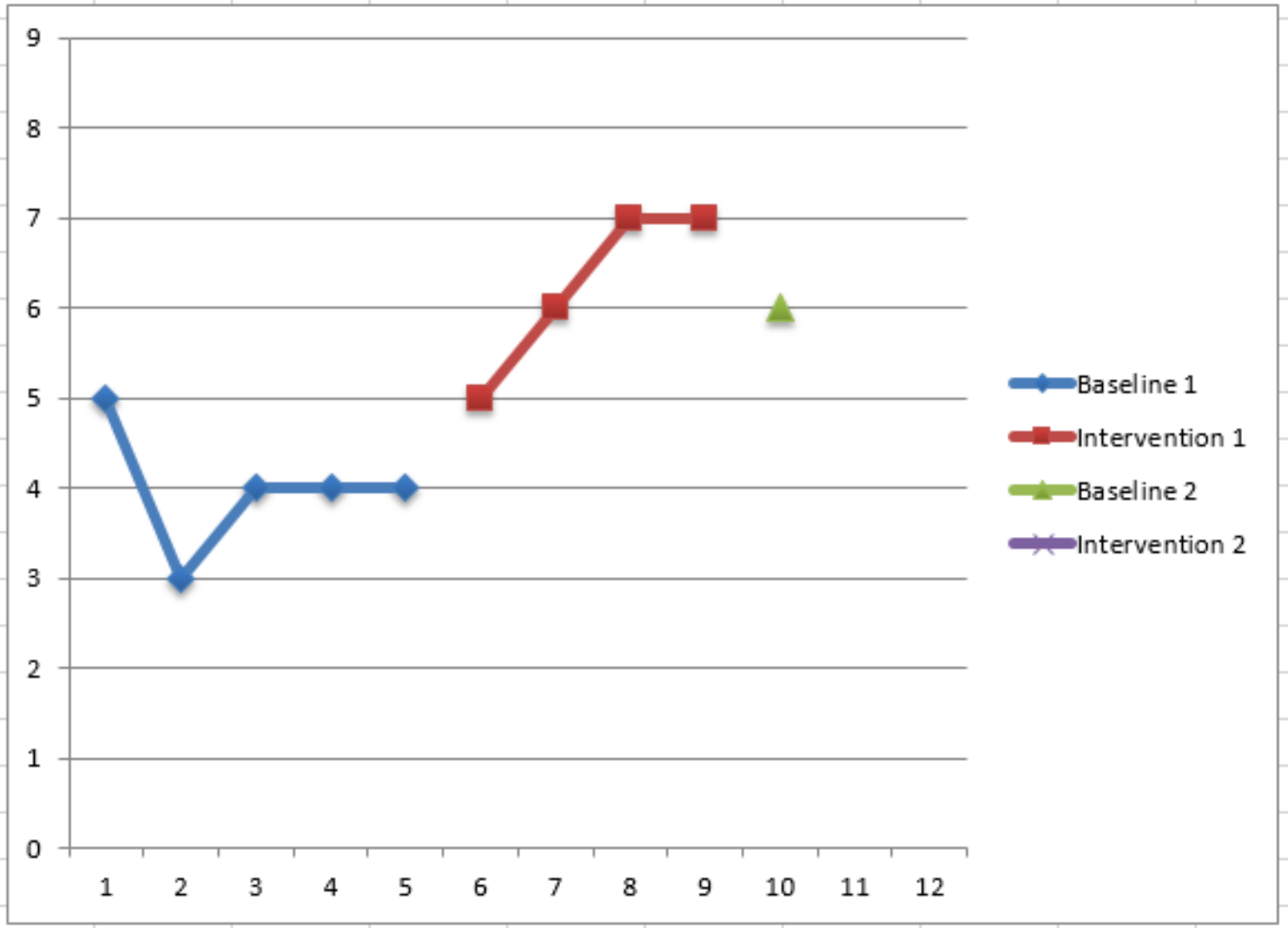

Baseline 1	Intervention 1	Baseline 2	Intervention 2
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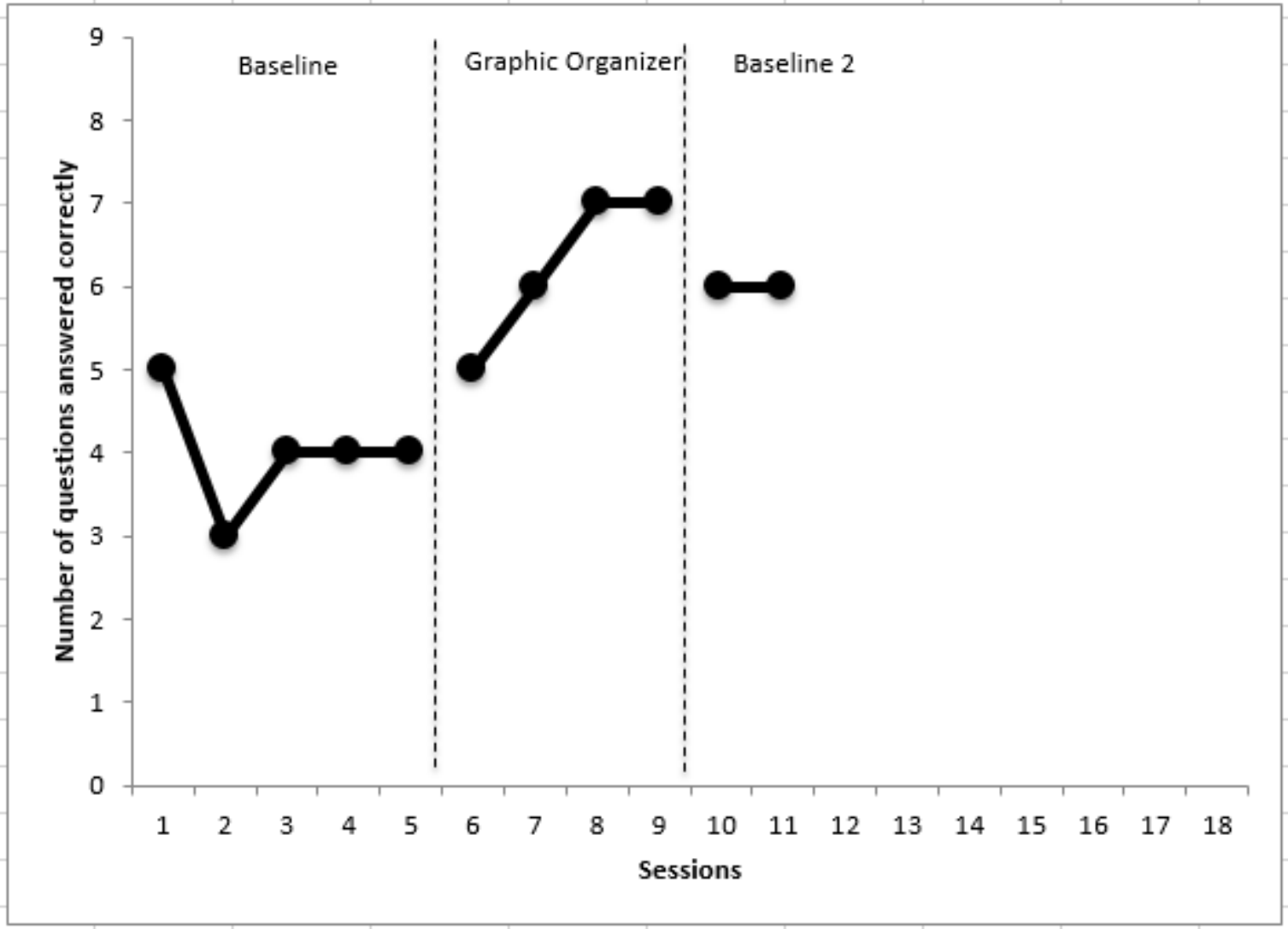

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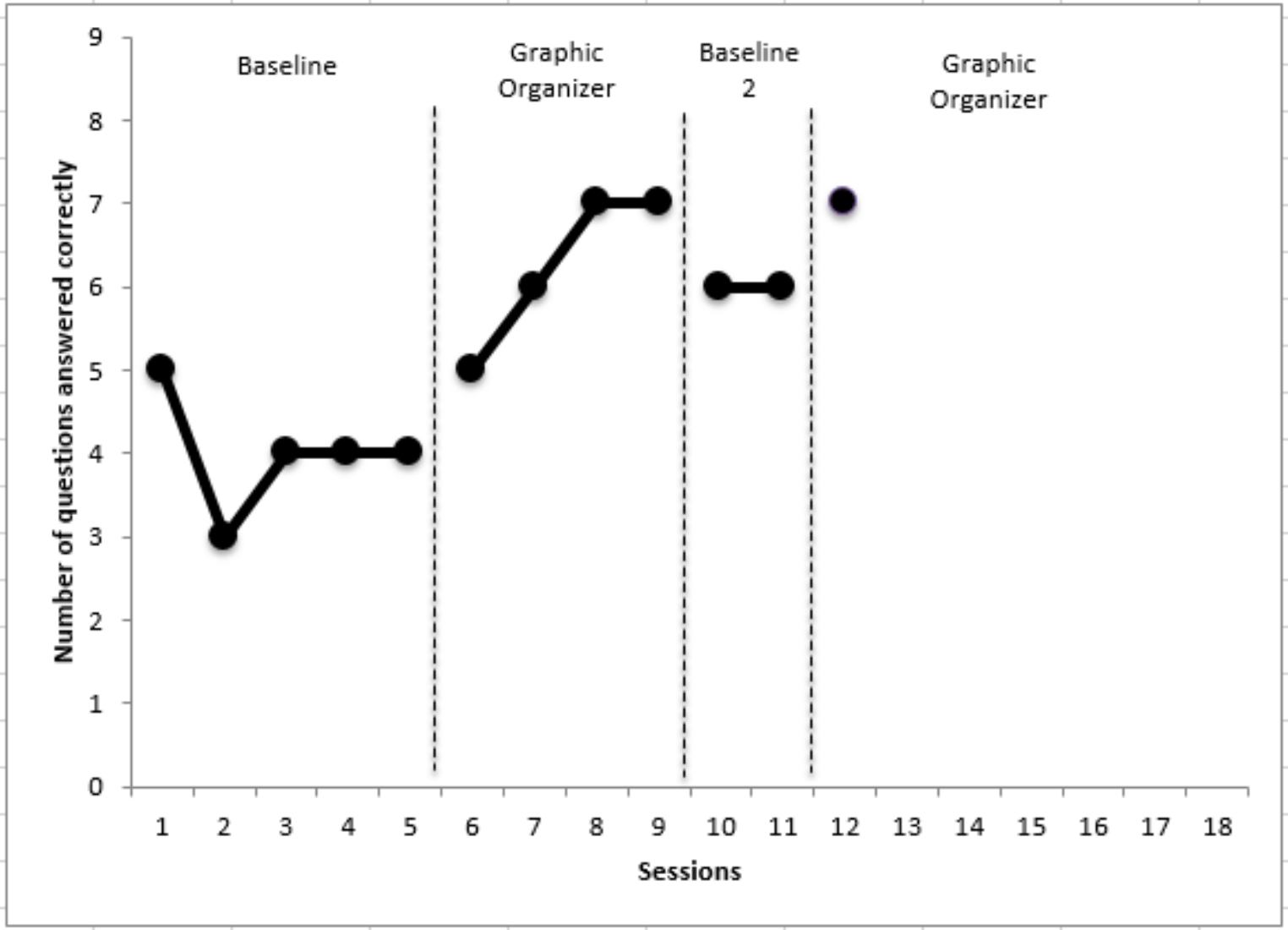

	Baseline 1	Intervention 1	Baseline 2	Intervention 2
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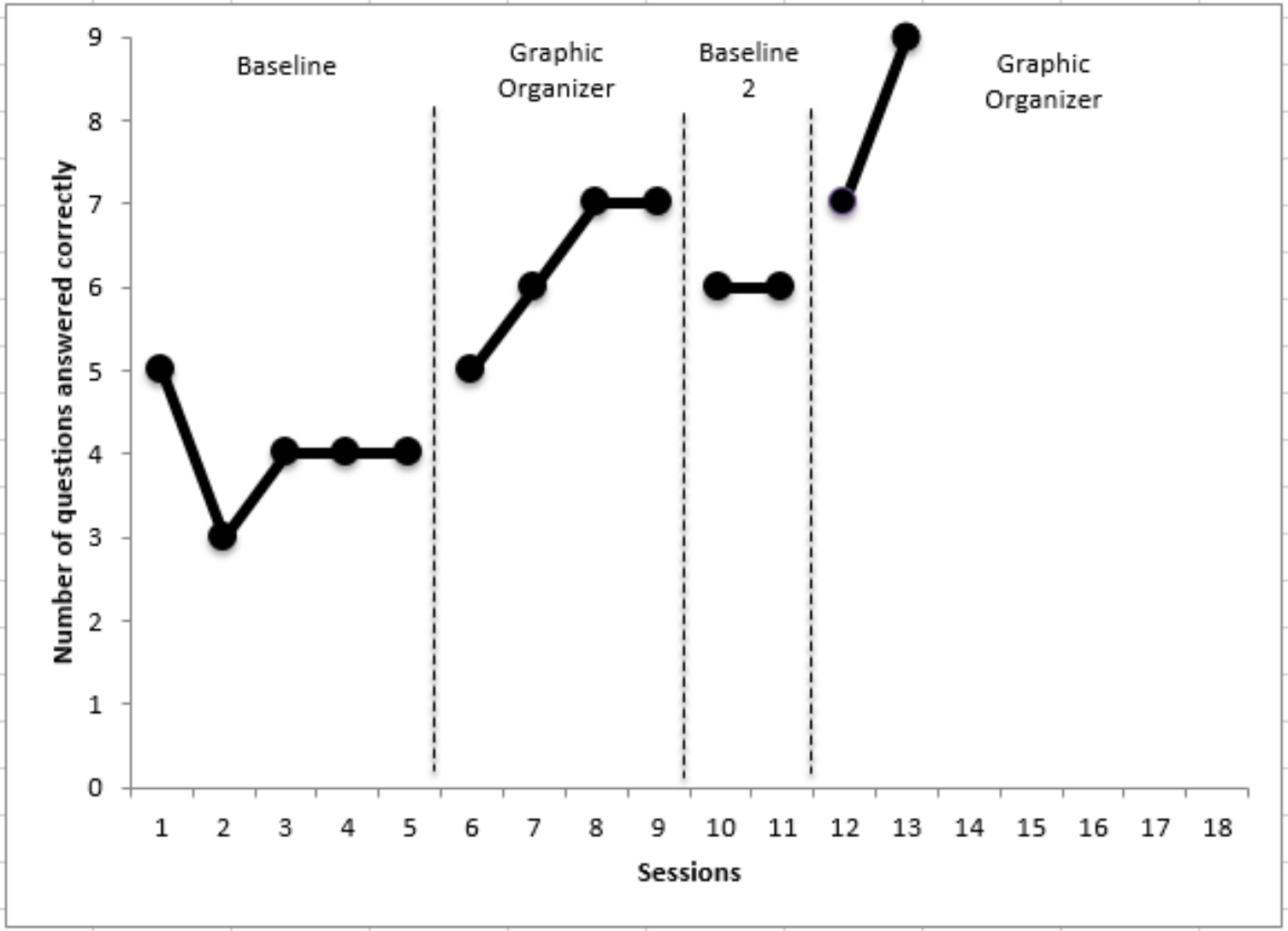

	Baseline 1	Intervention 1	Baseline 2	Intervention 2	Maintanence
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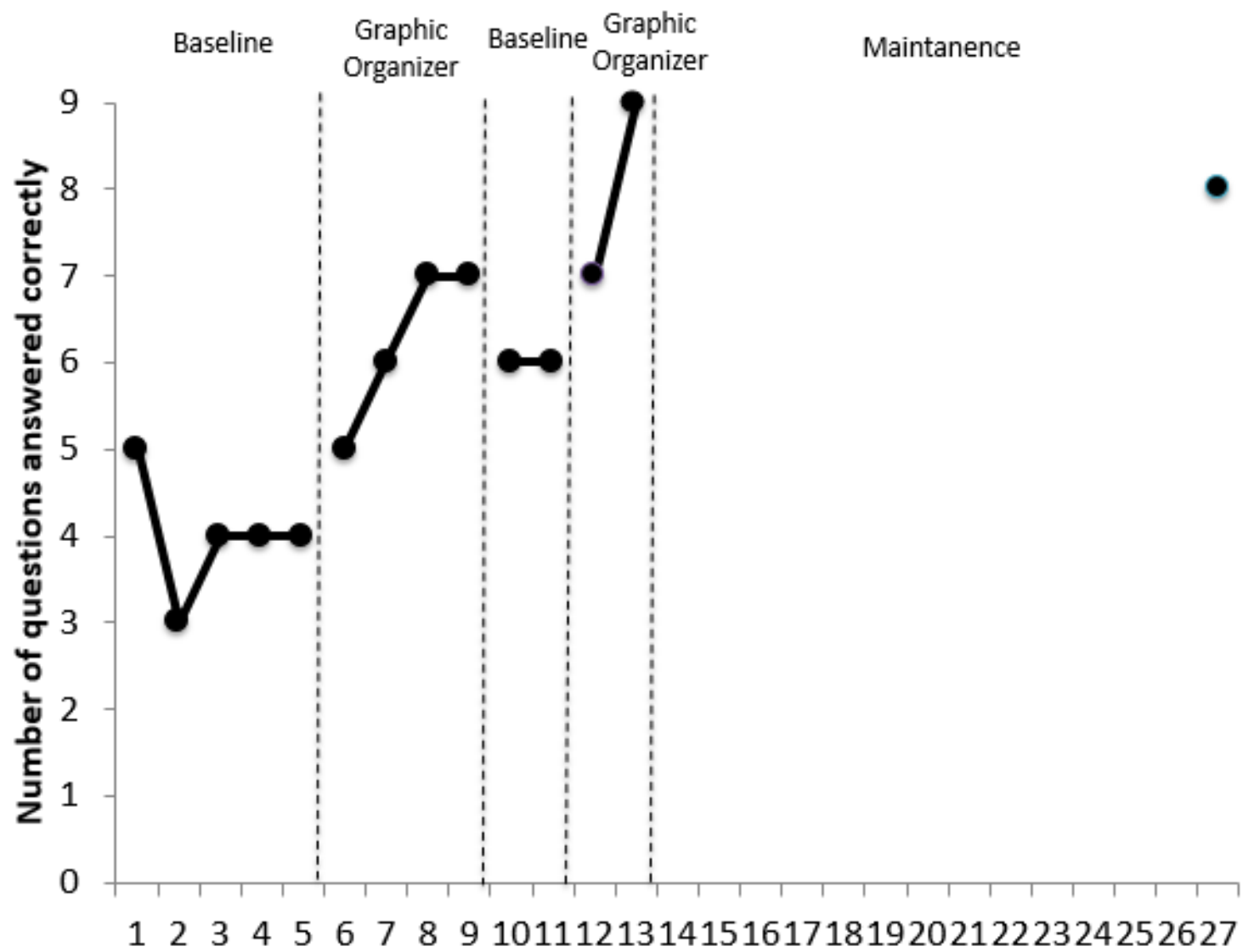

- Teach how to graph in Excel
- Set up self-graphing for students
- Empowerment
- Data-driven decisions

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Guidelines for Graphing Data With Microsoft® Office 2007™, Office 2010™, and Office for Mac™ 2008 and 2011

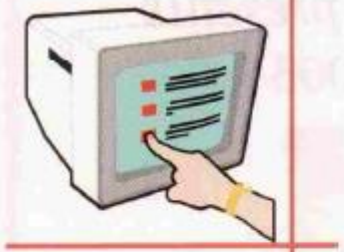
Erin E. Barton
University of Colorado Denver
Brian Reichow
Yale Child Study Center, New Haven, CT

The interpretation of single-case data requires systematic visual analysis across and within conditions. Graphs are a vital component for analyzing and communicating single-case design data and a necessary tool for applied researchers and practitioners. Several articles have been published with task analyses for graphing data with the new versions of Microsoft Excel and versions of Microsoft Office software prior to Microsoft Office 2007. This article extends the previous literature on the construction of single-case graphs by providing task analyses for using Microsoft® PowerPoint 2007 and 2010, Microsoft® PowerPoint for Mac™ 2008 and 2011, Microsoft® Word 2007 and 2010, and Microsoft® Word for Mac™ 2008 and 2011. This article is a revision and update of guidelines published earlier in the *Journal of Early Intervention*. The current article provides updated guidelines for current software programs. Some of the narrative is similar to that of the original version.

Keywords: *technology; single-case methods; quantitative methods*

http://journals.sagepub.com/doi/abs/10.1177/1053815112456601

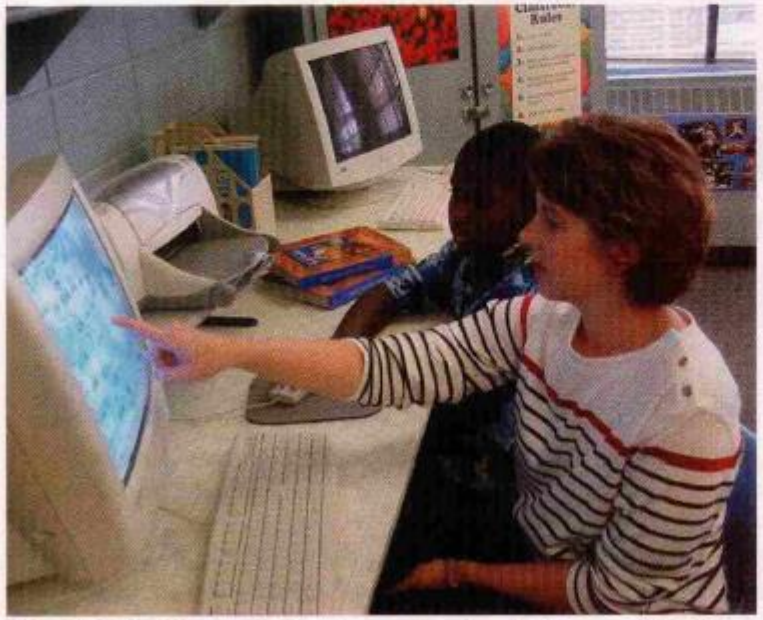
TECHNOLOGY



Self-Graphing to Success

Computerized Data Management

Philip L. Gunter • Kerrie A. Miller • Martha L. Venn
Kelly Thomas • Sandi House



This student is being taught how to record and graph data regarding his own academic behavior.

Preparing Technology

Begin the self-graphing process by identifying (a) the student behavior (e.g., academic or social), (b) the data-collection procedure, and (c) the extent to which the student can contribute to the data-collection process. The first consideration is relatively straightforward: At a minimum, you should gather data regarding student progress on each objective written on the student's individualized education program (IEP).

Students can participate in the data-collection process in several ways. For example, students can grade math worksheets either independently or cooperatively. Sometimes you or a paraprofessional—or even a student from a higher grade—will do the data collection. For instance, it would be difficult for a student to gather data on the num-

TEACHING Exceptional Children, 2002

Preventing School Failure, 2003

A Case Study of the Effects of Self-Graphing Reading Performance Data for a Girl Identified With Emotional/ Behavioral Disorders

PHILIP L. GUNTER, KERRIE A. MILLER, AND MARTHA L. VENN

ABSTRACT: Effects of a student with severe emotional/behavioral disorders (SEBD) graphing her own performance data on rate of correct words read per minute were evaluated using a withdrawal of treatment case study design. The student recorded her daily performance using a desktop computer and standard spreadsheet software that automatically graphed each data point when the numeric value representing the daily reading rate was entered. Results indicate that the student's reading rate increased concurrent with the implementation of the self-graphing intervention to the point that the student's reading rate was commensurate with that recommended for her grade level. The discussion of this article centers on the ease of implementation and the potential of this intervention to enhance the use of data for decision making in classrooms for students with emotional/behavioral disorders.

Key words: data-based instruction, formative evaluation, reading fluency, self-evaluated

Teachers often voice concerns regarding their inability to record and analyze data regarding student performance in their classrooms and, at the same time, perform their teaching responsibilities. (Alberto & Troutman, 1999; Gunter, 2001; Jensen, 1988; Scott & Goetz, 1980). There may be some truth to this. But, it is difficult to ignore the positive effects of data collection on student performance, followed by analysis and display of that data (Fuchs & Fuchs, 1986).

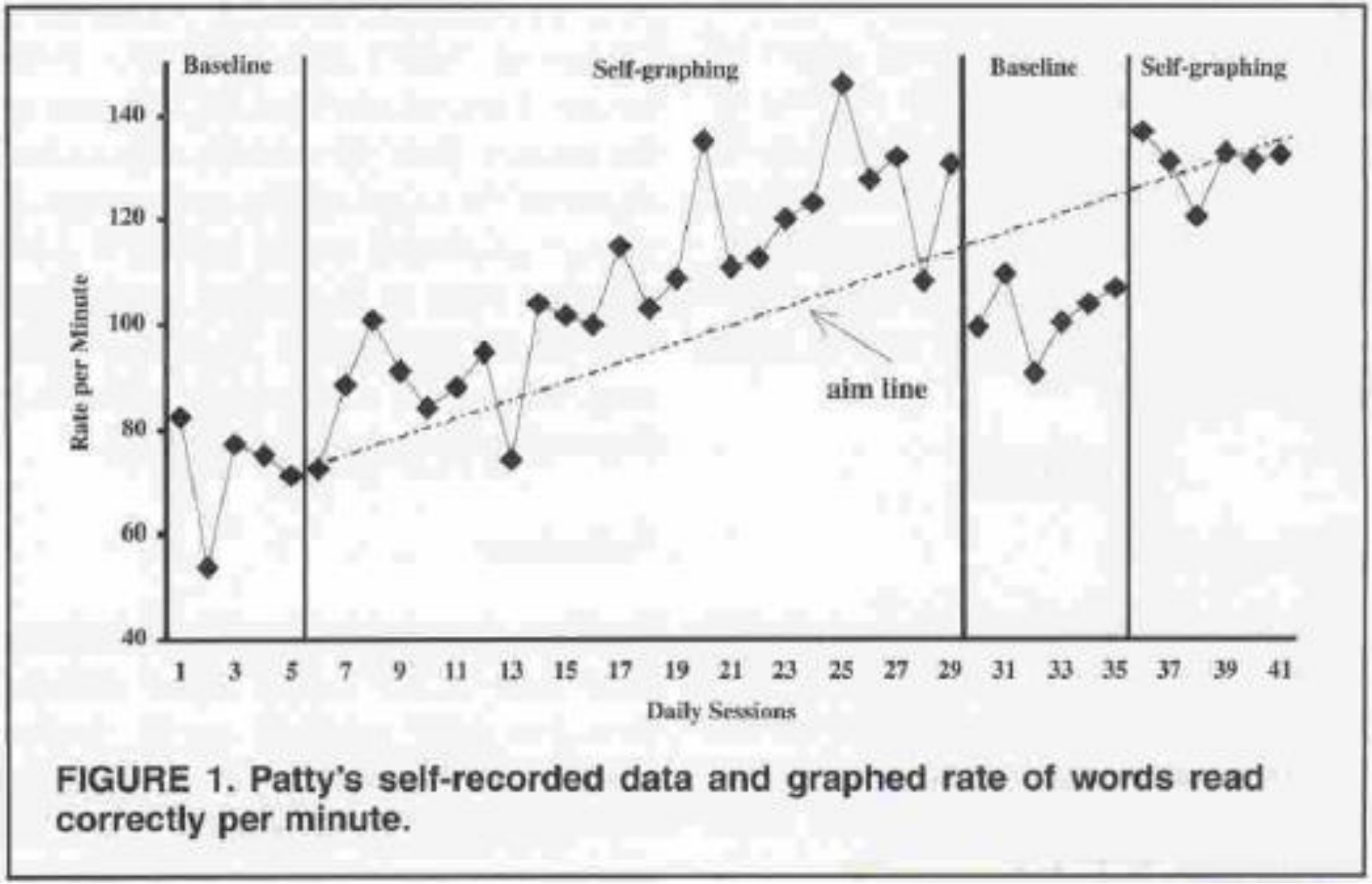
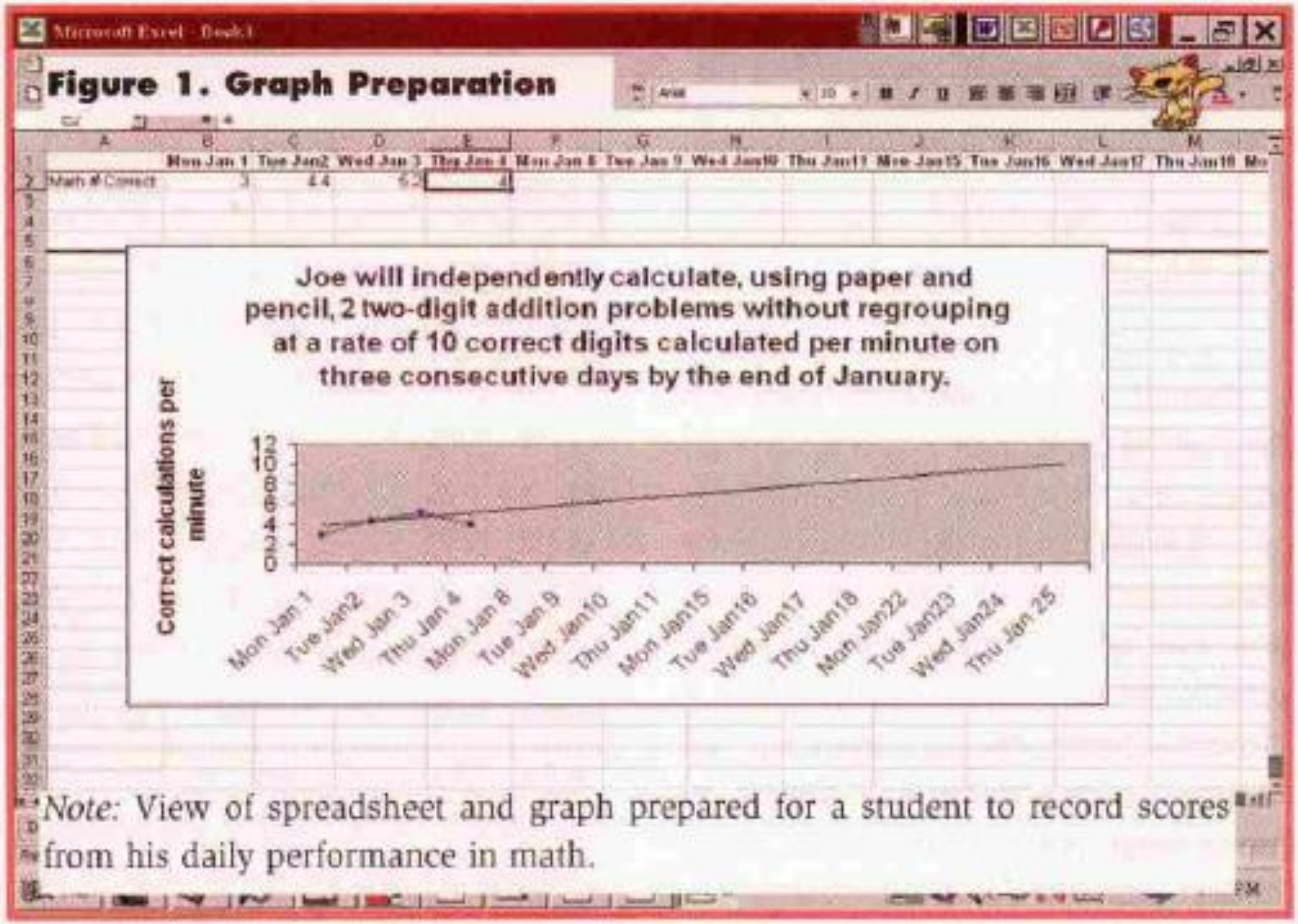
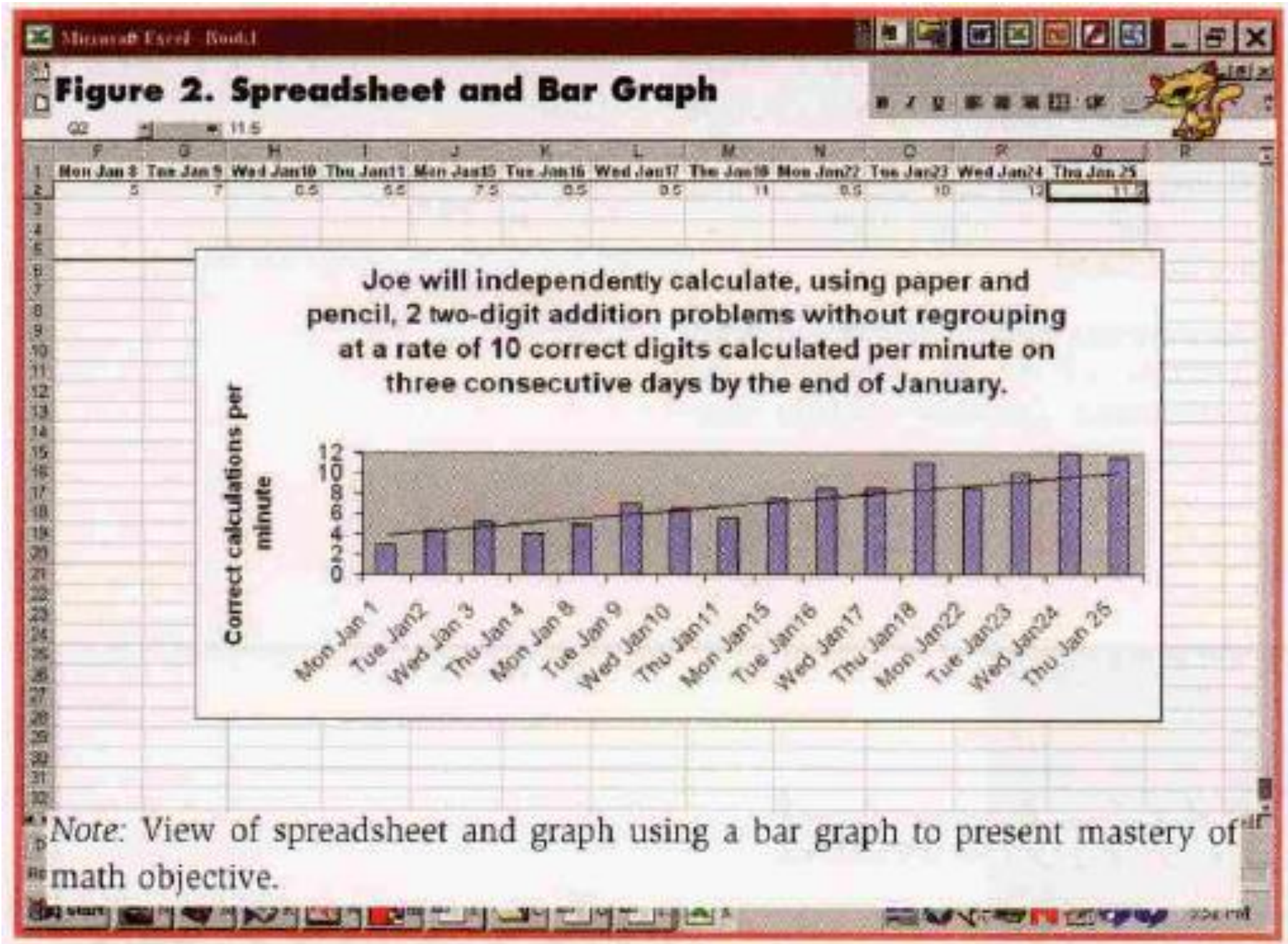


FIGURE 1. Patty's self-recorded data and graphed rate of words read correctly per minute.



Note: View of spreadsheet and graph prepared for a student to record scores from his daily performance in math.

Figure 2. Spreadsheet and Bar Graph



Note: View of spreadsheet and graph using a bar graph to present mastery of math objective.

Set up graph on laptop or iPad

Have student open it

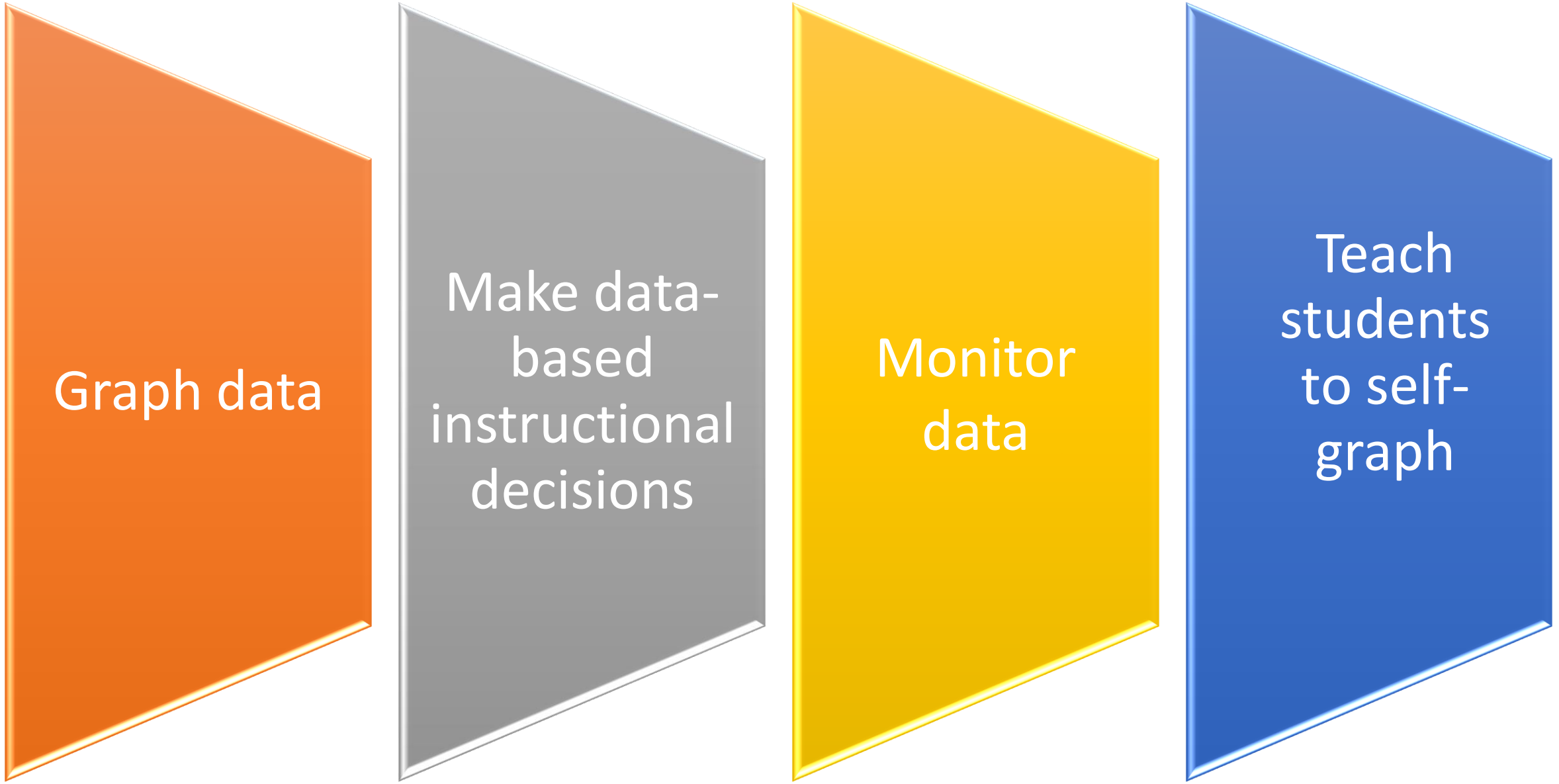
Identify correct day

Add data point for target behavior

Discuss performance v. goal (aim line)

- How do you envision implementing student self-graphing within resource or itinerant settings?

Goals for this presentation



Future Directions

- I am available to present in greater detail on ASL assessments, use of data to guide instruction, and evidence-based practices

Questions?

- Thank you!
- jsbeal@Valdosta.edu