What is Systematic Instruction and Applied Behavior Analysis in the Classroom?

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Introductions

What’s your role in the group?

• Classroom Teachers
• Instructional assistant
• Ancillary Staff (SLP, OT, PT, Diag’s)
• Administrators
• Instructional Specialists
• Behavior Management Specialists

Who did I miss?
Why are you here?

You’re here because you are responsible for helping someone learn something!

• Systematic Instruction is about learning
  • Behavior is everything a living organism does – some behaviors are more appropriate and/or functional than others in a given setting
  • You are in the business of changing behavior – student behavior, teacher behavior, people behavior

“We teach by changing the way we interact”
There is no one size fits all – person or disability
(Stephanie Peterson, 2015)

That’s why you’re here!
Objectives

• Understand how Applied Behavior Analysis (ABA) can be applied to teaching
• Define Systematic Instruction and name essential components
  • Accurate, ongoing assessment
  • Instruction based on the principles of learning
  • Identifying individualized, socially valid/meaningful instructional objectives linked to assessment standards and IEP
  • Measurement of learning using data based decisions
What is Applied Behavior Analysis?

• Applied behavior analysis (ABA) uses methods based on scientific principles of learning and behavior to build **useful** repertoires of behavior and reduce problematic ones.

• In this approach the behavior(s) to be changed are clearly defined and recorded.

• Antecedents of the undesirable behavior(s) are analyzed, as are the reinforcers that might be maintaining the undesirable behavior(s) or that might be used to help develop adaptive behaviors.
Why is there no ABA in my classroom?

• I am a Teacher not a BCBA / Behavior Specialist, I can’t use ABA in my classroom!
• I was never taught how to use ABA in my classroom
• I don’t have time to sit with my student 1:1 and drill or train him on facts, I have 22 other students in my classroom
• I’m not going to give my student rewards for things they should already be doing in school.
• ABA is scary!
• ABA is complicated!
ABA Therapy vs ABA Principles

**ABA Therapy**

- Evidence based practices
- Clinic, school or home setting
- Must be supervised BCBA
- Can be implemented by a BCaBA or an RBT

**ABA Principles**

- Evidence based Practices
- Can be done in the school setting
- Used to teach a variety of skills
- Teachers, parents, brothers, sisters, aunts, uncles, friends and cousins are capable
ABA does not only benefit individuals with Autism

ABA is effective with a wide spectrum of behaviors and ability levels

- Traumatic Brain Injury (TBI)
- Developmental Delays (DD)
- Physical Aggression
- Self Injurious Behaviors
- Tantrums
- Noncompliant behaviors
ABA Principles that can be used within the classroom

- Discrete Trial Teaching
- Reinforcement
- Prompting
- Self Management
- Naturalist Teaching
- Modeling
- PECS
- Task Analysis
- Extinction
- Video Modeling
- Visual Supports
- Social Narratives
ABA in the Classroom for what?

• Following the school schedule
• Appropriately sitting in seat
• Appropriate social interaction with peers
• Increasing on-task behavior
• Increasing compliance behaviors
• Appropriate transition behaviors
Systematic Instruction: ABA applied to teaching

“The application of behavioral principles to teaching . . . is not another educational fad, and those who might stand around patiently waiting for it to pass will be disappointed. Since it is the end product of 50 [now more than 90] years of experimental research and theory construction, it is likely that with continued support of basic and applied research, it will become even more effective.”

Sidney Bijou, 1976
What is Systematic Instruction?

**Definition**
Systematic Instruction “consists of a well laid out plan of teaching that involves targeting and evaluating what students can learn given meaningful opportunities to practice their skills”

Instruction involves specific procedures for identifying, prompting and reinforcing targeted behaviors

*Stems from assessments that effectively assess student progress within natural environments and meaningful contexts*

Lauren Baker, Morgan Hopper, Andrew La Mura, Callie Parker, Jenna Watral, & James White
https://prezi.com/s2-5unpgkt2k/systematic-instruction-evidence-based-instruction-genera/tice their skills
Definition
Evidence-based instruction is an instructional program of practices that have been tested and shown to be successful.

Practices need to be:
- Valid
- Reliable
- Systematic

Data should yield the same results no matter who the instructor is.

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https://prezi.com/s2-sunpgkt2k/systematic-instruction-evidence-based-instruction-genera/tice/their/skills
You are not “just the teacher!”

“. . . the teacher mediates between the skills of his or her students – be it behavioral, emotional or academic – and the application of the scientific knowledge associated with learning and teaching. The teacher represents the pivotal decision point at which evidence-based practice achieves its intended outcome.” (Gravois, 2012)
You are all “the teacher!”

• Classroom teacher
• Instructional Assistant
• Instructional Specialists
• Ancillary Staff
• Administrators
• The entire TEAM
Components of Systematic Instruction

**Accurate, ongoing assessment**

- Consistent measurement of behavior (academic, social, adaptive, communicative)

**Measurement of learning using data based decisions**

- Analysis of performance data to evaluate the effect of instructional programming
Components of Systematic Instruction

Identifying individualized, socially valid/meaningful instructional objectives linked to assessment standards and IEP

- Curriculum considerations
  - Intensity
  - Match to student’s needs
  - Relevance to student’s future

Before you ask your learner to do something, ask yourself, “Why should he?”
Components of Systematic Instruction

**Instruction based on the principles of learning**
- Antecedent strategies
  - Provided by the teacher, peers and the environment
- Instruction
- Materials
- Prompts

**Consequences that influence future behaviors**
- Reinforcement
- Extinction
- Punishment
If it's not systematic, it might be activity based

**Systematic**
- Application of behavioral principles to systematically develop important skills
- Instruction targets individualized, specific skills
- Data informs instruction

**Activity Based**
- Activities that may teach some skills
- Instruction is general, not targeted on individualized skill development
- Designed to keep students busy

"a good activity based program is a good summer camp"

Ilene Schwartz
The Learner is always right!

What does that mean?

• It doesn’t mean that our learners don’t make mistakes
• It does mean that the learner lets us know how effective our instruction is
  • When learners make mistakes (or don’t change behaviors) it is a signal to us that we need to change something (antecedents/consequences) so that the learner will respond differently

When things don’t go well, we might blame the learner/teacher/school staff member - they don’t work hard enough or they’re not experienced enough

*If that’s the case, where do we go as instructors/consultants?
. . . Another way to say it

“. . . the student is always right. The student is not asleep, not unmotivated, not sick, and can learn a great deal if we provide the right contingencies of reinforcement.”


“. . . the rat don’t lie.”
Systematic Instruction- Why?

No time to waste!

• Effective, efficient, informed intervention makes the best possible use of valuable instructional time.
Systematic Instruction – Why?

Communication

• Objective, efficient way to let parents know what (as well as why & how) their students are learning and that you know what you are doing!
Systematic Instruction – Why?

Accountability

- “Accountability is the assignment of responsibility for conducting activities in a certain way or producing specific results” (education.com, 2003)

Legal defensibility – “assess, plan for and implement research-based strategies of intervention.” Schillinger, 2010

“School districts must be prepared . . . to show that the methodology it uses (or proposes to use) to implement the IEP is reasonably calculated to provide ‘educational benefit’” Council of School Attorneys, 2016
Systematic Instruction – Why?

“Learning about, and implementing systematic instruction in my classroom enabled me to know that I really was doing my best for the students assigned to me and was a means of positive reinforcement for me as their teacher. The power of seeing a ‘learning line’ traveling in the desired direction is hard to describe. It was both exhilarating and humbling to know that my students (many of whom had no voice) could teach me how to teach them.”
Questions
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CDD Library:
http://cdd.unm.edu/infonet/library.html

Autism Webinar Archive:
http://www.cdd.unm.edu/autism/programs/autismwebinar.html
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