Behavioral Strategies to Support Academic Success
Dana Reinecke, PhD, BCBA-D
Room to Grow

Educational Goals
• Academic instruction is the primary purpose in any school-based program
• Not always consistent with the needs of students with autism and other severe disabilities

Learning can be hard!
• Language deficits
• Social challenges
• Learning differences
• Cognitive differences
• Skill deficits
• Motivation
• Executive functioning

Particular Challenges in ASD
• Difficulty with abstract reasoning, concepts, symbols
• Reluctance to repeat or review learned material
• Reduced or impaired social reinforcers for academic achievement
• Tendency towards perfectionism
• Difficulty finding high-interest or relatable topics
• Deficient executive functioning skills

ABA for academics???
• Global perspective
• Combine social, language, and other goals with academics
• Motivation for participation
• Adaptations for easier learning
• Strategies to promote success

Goals!

Academics: reading, writing, math, science, social studies
Life skills: learn from others, learn from the environment, generalization skills
Plan Ahead

- Student’s and family’s goals should be clarified
- If a student is planning to go to college, this must be a consideration from early on
- Academics might not initially be a big priority, but can become more important as language, social, and behavioral goals are met

Curriculum Choices

- Modification of existing grade-level curriculum
- Special curriculum specifically designed for special education students

Differentiation

Curriculum should be individualized to meet specific student needs
Consider age and level of functioning

Levels of Supports in Schools

- Self-contained classes
- Co-teaching/collaborative classes
- General education classes with supports
- Accommodations and modifications
- Home services

1:1 Aides

- Can be helpful in managing supports
- Should NOT replace or repeat the teacher
- Should be able to move in and out of the student’s experience
- Should not be obvious exactly who the 1:1 is there for
- Hopefully will be faded

Kinds of Support

Institutional supports
- Modifications
  - Alterations to curriculum
  - Alterations to assessments
- Accommodations
  - Extended time
  - Copy of class notes
  - Tests/directions read
  - Scribe or keyboarding
- Behavioral supports
  - Antecedent and setting event interventions
  - Teaching strategies
  - Consequence interventions

Consequence Interventions

- Rewards and incentives
- Response cost and punishment
- Difficulty finding and maintaining motivators
- Distraction to student and/or peers
- Frustration if not available or taken away
- May distract from natural and social reinforcers
Antecedent Interventions

- Adjust physical environment
- Visual/auditory cues
- Incorporate preferences
- Pre-teaching/priming

Adjust Requirements

- Thoughtfully define goals and desired outcomes
- Match assessments to those goals and outcomes

Choice

Programmed choice opportunities can improve outcomes and reduce problem behavior

How to incorporate choice

- Reinforcers
- Materials
- Partners (or partner vs. solo work)
- Type of assessment
- Order of tasks/subjects
- Type of task
Critical questions about choice

- Should we separate choice from preference?
- Do you make choices of things you don’t prefer?
- Is there something about choice that is meaningful separate and apart from accessing what you want in the moment?
- Is choice always a good thing?

From Riviere et al., 2011

Momentum/Task Interspersal

Starting to earn reinforcement increases responding in that same context

Factors affecting momentum

- Quality of reinforcers
- Inter-trial intervals
- Similarity of high-p and low-p responses
- Ratio of high-p to low-p
- Presence of low-p stimuli

From Belfiore et al., 1997

3 × 5 =

327 × 542 =

From Allday et al., 2011
Self-Management

Transferring control of the behavior to the individual by teaching operant strategies
- Self-monitoring
- Self-prompting
- Self-reinforcement

“I was surprised to find myself so much fuller of fault than I had imagined, but I had the satisfaction of seeing them diminish.”
Benjamin Franklin

Some early examples

On-task and socially appropriate behavior
- Adolescents in self-contained class
  - Ninness et al., 1991
- 8th graders in general education
  - Olympia et al., 1994

Homework
- Teens with ASD
  - Newman et al., 1995

Appropriate conversation
- Children with ASD
  - Newman et al., 1997

Reduce problem behavior
- Teens with ASD
  - Newman et al., 1996

Vocational tasks
- Adults with DD
  - Christian & Poling, 1997

Specific strategies

- Auditory prompts
  - Study behavior (McDougall & Brady, 1995)
  - DRO (Newman et al., 1997)
  - Work completion (Christian & Poling, 1997)
- Visual cues
  - Job independence (Sowers, Verdi, Bourbeau, & Sheehan, 1985)

Self-management of a DRO using audible kitchen timer (1997)
- Three students with autism
- Disruptive behavior
- Yes/no self-assessment and token delivery every 1 minute
- Cued by kitchen timer (5-second ring)
- Reinforcers at end of 10-minute session based on number of tokens

Self-management of a DRO using covert electronic prompting (2013)
- Three students with autism
- Disruptive behavior
- Yes/no self-assessment and check delivery every 3 minutes
- Cued by MotivAider©
- Reinforcers at end of 30-minute session based on number of “yes” checks

“Students learn what you teach them, not what you want to teach them.”

- Christopher Breitinger
References