Training Paraeducators to Use Behavior Management Strategies: Implementation and Evaluation of a Brief Targeted Intervention

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TRAINING PARAEDUCATORS TO USE BEHAVIOR MANAGEMENT STRATEGIES: 
THE IMPLEMENTATION AND EVALUATION OF A BRIEF TARGETED INSERVICE 

By 
Aubrey Whiting 
A creative project submitted in partial fulfillment of the requirements for the degree 

Of 
MASTER OF EDUCATION 

In 
Special Education 

Approved: 

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____________________________  
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Committee Member 

UTAH STATE UNIVERSITY  
Logan, Utah  
2014
Training paraprofessionals to be highly qualified providers of services to students with disabilities is a requirement of the Individuals with Disabilities Education Improvement Act (IDEIA), although many special education paraprofessionals still lack the skills and knowledge to work with students with special education needs – particularly those who engage in disruptive behaviors. This project evaluated the use of one module of a 10-week online paraeducator inservice training (Morgan et al., 2004) that focused on behavioral interventions. Five paraprofessionals who currently work at a public school for students with significant behavior problems in a rural school district in the Western United States participated in the training. The live face-to-face training included direct instruction on the basic principles of applied behavior analysis. A single-case pretest-posttest design was used to evaluate the effectiveness of the face-to-face training for all five participants immediately after the training had ended, and the extent to which participants maintained the information one month after the training session. Data collected on participants’ acquisition and maintenance of knowledge of behavior
management strategies based on the principles of applied behavior analysis indicate that the training was successful.
Introduction

Paraprofessionals, when trained properly, are a key component to educating students with disabilities (Breton, 2010). During the past twenty years, paraeducators are being used with increasing frequency to provide direct services to students with disabilities, and as a result there is a greater recognition of the need for more trained individuals (Carter et al., 2009).

The Individuals with Disabilities Education Improvement Act (IDEIA) requires that paraprofessionals are highly qualified, but lack of expertise within districts to develop or select training programs, lack of funding for training, low salaries for paraprofessionals, and the time it takes for special educators to adequately supervise and train their paraprofessionals are factors that often preclude effective and sufficient training for paraprofessionals (Morgan, Forbush, & Nelson, 2004). In addition, there are no national standards for paraeducator licensure as there are for special education teachers (CEC, 2012; Katsiyannis et al., 2000). There is no way to make sure all paraprofessionals have gone through the same training, and that all individuals are expected to know the same things. This makes it difficult to hold all individuals to the same standard. This would suggest that local districts and schools need to take responsibility for ensuring that the paraprofessionals in their buildings have the skills and knowledge to work with their specific populations. Supervision and training typically starts and ends with the classroom teacher, but it is ultimately the administrator’s responsibility to supervise paraprofessionals (Ashbaker & Morgan, 2006).
Since the IDEIA requirement in 2004 that paraeducators be highly qualified, all states have standards for paraeducator knowledge and skill. In Utah, the Standards for Instructional Paraeducator (http://utahparas.org/standards4paras.pdf) emphasize instructional skills in academic areas, and specific behavior management skills are not included. And yet, a majority of paraprofessionals time is spent dealing with behaviors or implementing behavior plans (Carter et al., 2009). Due to the fact that behavior is dealt with often and that “challenging student behaviors are a prominent factor in the development of teacher stress and burnout” (Gebbie et al., 2011) behavior training appears to be an area that should be addressed “up front” for paraprofessionals who are hired to work with students with challenging behaviors.

What to Teach

While state and national standards for paraeducators include standards such as “Implement individualized reinforcement systems and environmental modifications at levels equal to the intensity of the behavior as determined by the instructional team” and “Use strategies as determined by the instructional team in a variety of settings to assist in the development of social skills” (CEC, 2012), paraeducators rarely receive training in the basic principles of applied behavior analysis that serve as the foundation for these standards. Paraprofessionals need to understand that behavior is learned, that is shaped by the consequences of that behavior, what reinforcement and punishment really are, and that behaviors have a function (Cooper, Heron, and Heward, 2007). Given the fact that several researchers have found that the least qualified paraprofessionals were the ones in charge of educating the most challenging students (Carter et al., 2009; Breton, 2010; Giangreco & Broer, 2007), and that most paraeducators receive only information about
students’ specific behavior intervention plans and not the underlying principles guiding them, there appears to be a need to include training in the principles of applied behavior analysis for paraeducators who work with students with challenging behaviors.

**Approaches for Training Paraprofessionals**

Most of the studies on paraeducator training describe one-day, and in some cases one week at the beginning of the school year (Dowey et al. 2007; Gore & Umizawa 2011; Hall et al. 2010; Sawka et al. 2002; Tierney et al. 2007). Two of the common limitations in these studies were: 1) too much content was covered leading to overload, and 2) the lack of follow-up coaching to promote the generalization and maintenance of the skills presented during training.

Morgan, Forbush & Nelson (2004) provided a web-based training for paraprofessionals that was delivered after school during one-hour sessions for 10 weeks. While this training was effective in teaching paraeducators about basic behavior management and instructional skills, it does not address the need to quickly prepare paraprofessionals who work with students with severe behavior problems to respond to those behaviors. Another drawback to this approach is the current lack of funding for compensating paraprofessionals to work additional hours.

Gebbie et al. 2011, provided face-to-face training via broadcast technology and included online discussion formats so that teachers located at different buildings within the district could communicate with one another. As with the Morgan, Forbush, and
Nelson (2004) study, this training covered a very broad range of knowledge and skills and although online follow up support was available, on site coaching was not provided.

**Purpose Statement/Evaluation Questions**

Paraprofessionals who work with students with significant behavior problems need specific, targeted training in the basic principles of applied behavior analysis prior to entering the classroom. Furthermore, paraeducators need on-site, follow-up coaching to support the generalization and maintenance of those skills once the in-service training has ended. The purpose of this project was to evaluate the efficacy of a brief targeted inservice training for paraeducators who work with students with significant behavior problems. The inservice used two of the ten modules created by Morgan, Forbush & Nelson (2004), namely: Module #1: Overview of Special Education, and Module #4: Principles of Behavior Management. The specific evaluation questions were:

1. Will participants’ knowledge of applied behavior analysis improve after participating in the in-service training?
2. Will participants’ knowledge of applied behavior analysis maintain one month after training has ended?

**Method**

**Setting**

Training took place at Con Amore School, a school for students ages 3 to 22 with severe cognitive disabilities. It took place in the conference room where there is a big table and a projector.
Participants

Five paraeducators participated in this project. All participants began their employment at the beginning of the 2014-2015 school year. One participant had taken an undergraduate special education course, one is a parent of a student with an IEP and had familiarity with behavior management terminology, one has had some prior training in behavior management from a previous employer, and two had no prior knowledge or experience with behavior management strategies or terminology. All of the participants work at Con Amore School - one in the preschool, one in the K-2nd grade classroom, one in the 3rd-5th grade classroom, one in the 6th-8th grade classroom, and one in the 9th grade-age 22 classroom. Before the first inservice training day, all participants signed a consent to participate in the project (Appendix A).

Preparation of Training Materials

Because the training for this project was conducted during a live training sessions, as opposed to online as in the Morgan et.al. (2004) study, the lessons and activities from the behavior strategies module were typed into a power point presentation, and hard copies of the end-of-module test that was used as the pretest/posttest measure were also produced. The school principal reviewed the original video modules and power point and print-based materials created for this training to ensure that the content was identical.

A Thursday afternoon was identified by the administration as a good day to conduct the training, and substitutes were arranged for the paraeducator participants.

Procedures

Training Day: The training session included all of the content and activities included in the fourth module in the Morgan et.al. (2004) 10-week training. This module
provides information and activities related to the principles of applied behavior analysis. The training began with a pretest, which consisted of 20 fill in the blank questions about the principles of applied behavior analysis (Appendix B). After the pretest, I went through the power point presentation (Appendix C) including the whole-group discussion during mini assignments, video examples and discussions and progress checks. Participants gave ideas and examples, and asked questions to clarify instruction or to tie content to their working environment. The participants ended the training by completing the post-test measure (Appendix B). A district administrator attended the training session and checked each section of the lesson as a fidelity of implementation measure. The lesson was implemented with 100% fidelity.

Maintenance Probe: The five participants in this project were observed once a week for four weeks following the training, and coaching on behavioral strategies was available if necessary. Three of the five participants implemented the behavioral strategies necessary for the students in their classrooms with 100% fidelity, and two of the participants required coaching to implement behavioral strategies such as delivering reinforcement for appropriate behaviors and delivering consequences for inappropriate behaviors. The focus of those weekly coaching sessions in included in Appendix D. Four weeks after the second training session was conducted, I administered the post-test again to the five participants.

Dependent Measures

The dependent variable for this project was paraeducator knowledge of the principles of applied behavior analysis. The dependent measure was the pretest/posttest measure that was administered before and after the second training session, and one
month after the training. The pre-test/post-test consisted of twenty fill in the blank questions.

**Evaluation Design**

An AB single subject design was used to determine the extent to which the training was associated with improvements in and maintenance of participants’ knowledge of applied behavior analysis.

**Results**

The number of correct responses per item on the pre-test, post-test immediately after the training and the post-test that was administered one month after the training were graphed to allow for an item analysis. Figure 1 presents the results of that analysis. Questions 3, 6, 9, 10, 11, 14, 15, 16, 17, 18, and 20 were answered incorrectly on the pretest by all participants. The post-test that was administered immediately after the second training session resulted in improvements in responses to all of the questions included in the assessment, although maintenance of the information covered in the training on applied behavior analysis was highly variable one month after the second training. Only seven of the 20 questions included in the assessment showed either the same or increased rates of correct responding on the one month follow up. It is interesting to note that participants 1 and 5 (Figure 2) were the paraeducators who received coaching during the one month follow up based on classroom observations of their implementation of the behavior plans, but the coaching did not appear to be associated with improved responding relative to two of the three paraeducators who did not receive coaching.
Discussion

Participants 2 and 4 (Figure 2) had some prior knowledge of special education procedures – more so than the other three participants, and this may have affected their performance on the pre-and post-tests. Another variable that may have differentially affected the participant’s responses was the fact that each paraeducator was assigned to a different classroom, and some classrooms have more significant behavior problems and more structured behavior plans than others. The participant who scored higher on the immediate post-test and one month follow up posttest (participant 4) had more opportunities to practice the strategies included in the training and probably scored better because there were more practice opportunities.

Additionally, participant 3 was resistant to the training throughout the project and did not like the posttests, even though she had consented to participate in all aspects of the project. She refused to complete the immediate posttest because she reported feeling overwhelmed with too much information and took it at a later time. It may be beneficial in future inservice trainings for paraeducators to offer incentives for fully participating.

Finally, conducting live role plays beyond just discussing the examples included in the videos may have helped to reinforce learning and make the training more engaging.

Conclusion

Despite the limitations discussed above, all participants showed improvements in their overall knowledge of applied behavior analysis principles, indicating the use of individual modules in the 10-week training package can be used to improve
paraeducator’s knowledge of special education practices – specifically in this case the principles of applied behavior analysis. If I were going to conduct this training in the future, I would include additional practice activities for the items that resulted in low to no maintenance after one month, include live role play activities, use real examples from the paraeducator’s classrooms to make the training more meaningful, and include incentives for participation.
References


http://content.ebscohost.com.dist.lib.usu.edu/pdf25_26/pdf/hww/10515/1770h/9s.pdf?=&P=AN&K=507925076&S=R&D=eft&EbscoContent=dGJyMMTsTo50S


http://eric.ed.gov/?id=EJ890564


http://rse.sagepub.com/content/30/6/344


http://web.ebscohost.com.dist.lib.usu.edu/ehost/pdfviewer/pdfviewer?sid=c79c8d a3-6c0d 4e 12-97bb-d23ee3d7d c44%40sessionmgr4&vid=7&hid=24

Appendix A:

Consent Form
Consent Form for Participation in a Research Study

Utah State University

TRAINING AIDES WHO WORK WITH SEVERE BEHAVIORS TO RESPOND SAFELY AND EFFECTIVELY

Description of the research and your participation

You are invited to participate in a research study conducted by Aubrey Whiting. The purpose of this research is to ensure quality training on behavior for aides teaching students with severe behaviors.

Your participation will involve taking a pre and post-test, participating in an hour long in-service on behavior, and being observed a month after to see how the knowledge learned is being utilized in the classroom.

Protection of confidentiality

Confidentiality will be maintained with regards to your pre-test, post-test, and evaluation. No individual names will be used in any publication that has to do with this study, only scores and numbers will be utilized.

Voluntary participation

Your participation in this research study is voluntary. You may choose not to participate and you may withdraw your consent to participate at any time. You will not be penalized in any way should you decide not to participate or to withdraw from this study.

Contact information

If you have any questions or concerns about this study, or if any problems arise, please contact Aubrey Whiting at (801) 473-3613.

Consent

I have read this consent form and have been given the opportunity to ask questions. I give my consent to participate in this study.

Participant’s signature________________________________________ Date: _________________

A copy of this consent form should be given to you.
Appendix B:

Pretest Posttest Measure
Unit 4 Test

NOTE TO THE READER: Respond to each of the items below. Each test item appeared in a Lesson Progress Check.

1. Identify the antecedent, behavior, and consequence in the following examples.

   Mrs. Watson told Gabrielle, a second grade student, to clean the paint from her table after an art project. Gabrielle cleaned up all of the paint. Mrs. Watson praised her after she completed the task.
   A =
   B =
   C =

   The A-B-C sequence also applies to harmful or disruptive behavior. That is, harmful or disruptive behavior is surrounded by its own antecedents and consequences. For example, Alice and Melinda argue over whose turn it is to use the colored markers. Alice pushes Melinda to the floor. The teacher reprimands Alice. Identify the antecedent, behavior, and consequence in this example:
   A =
   B =
   C =

2. In the following example, identify the consequence. Is it a positive reinforcer, neutral consequence, or punisher? Explain your answer.

   David was slow to dress for P.E. class. Mr. Andrews, the P.E. instructor, found that David was on time for calisthenics (the first P.E. activity) in only 3 of 10 class periods. Mr. Andrews met with David. They agreed that he could lead the class in calisthenics if he were on time for at least 8 out of 10 P.E. classes. After that, David was on time in 3 of the next 10 class periods.
   C =
   Positive, neutral, or punishing consequence?
   How do you know?

3. Write a definition for each behavior below.

   Accepting correction from the instructor who assists on an assignment:

   Accurately completing homework assignments:
4. When a behavior is to be weakened, we should specify ____________.

5. Identify an appropriate, alternative behavior to the one listed below and write a definition for it.

Complaining to the instructor about assignments:
Alternative Behavior:
Definition:

6. Name three of the five reasons to assess behavior.

7. Describe the three ways to observe and record behavior presented in this lesson:

Frequency Counting:

Time Sampling:

Per Opportunity Recording:

8. Troy is an eleven-year-old student with behavioral problems. He is participating in an intervention to improve his responses to the instructor’s corrections. Using per opportunity recording, his instructor first collected baseline data for four sessions.

<table>
<thead>
<tr>
<th>Appropriate Responses</th>
<th>Opportunities</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session 1: 1</td>
<td>4</td>
<td>25%</td>
</tr>
<tr>
<td>Session 2: 0</td>
<td>2</td>
<td>0%</td>
</tr>
<tr>
<td>Session 3: 2</td>
<td>6</td>
<td>33%</td>
</tr>
<tr>
<td>Session 4: 0</td>
<td>1</td>
<td>0%</td>
</tr>
</tbody>
</table>
Then, Troy and his instructor started the intervention (social skills training and a daily certificate to send home to parents for accepting correction appropriately). The intervention has been used in 6 sessions so far (Sessions 6 through 10). See graph:

<table>
<thead>
<tr>
<th>Appropriate Responses</th>
<th>Opportunities</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session 5</td>
<td>3</td>
<td>33%</td>
</tr>
<tr>
<td>Session 6</td>
<td>6</td>
<td>67%</td>
</tr>
<tr>
<td>Session 7</td>
<td>4</td>
<td>75%</td>
</tr>
<tr>
<td>Session 8</td>
<td>5</td>
<td>80%</td>
</tr>
<tr>
<td>Session 9</td>
<td>6</td>
<td>50%</td>
</tr>
<tr>
<td>Session 10</td>
<td>8</td>
<td>87%</td>
</tr>
</tbody>
</table>

a) Given this information on Troy, graph the data below.

b) Is Troy’s intervention effective? How do you know?

9. Name the six components of effective praise.
10. Describe one limitation of activity reinforcers:

11. Describe one limitation of material reinforcers:

12. Describe two ways to select positive reinforcers:

13. In Lesson 3, we watched Derek, a high school aged student who was disruptive during independent seatwork. As Derek’s instructor, let’s say that you would like him to participate in an intervention to increase time spent working quietly. Derek reports that he enjoys computer games and listening to music. Describe how you would make these potential reinforcers contingent on Derek’s quiet work behavior, given the instructor’s permission. Your answers should include a description of praise and activity reinforcers that can be made contingent on Derek’s appropriate behavior, i.e., working quietly.

14. List and describe the 3 steps in preparing an intervention:

15. Describe four steps used to implement the intervention for increasing alternative communication.
16. Describe four steps used to implement the intervention for increasing alternative way to get attention.

17. Describe four steps used to implement the intervention for delivering positive consequences for the absence of disruptive behavior.

18. Describe four steps used to implement the intervention for mixing easy and hard tasks.

19. What types of behaviors should not be ignored?

20. Camillia frequently lost her temper. Her instructor counted her tantrums and found out that Camillia had averaged five tantrums per day. Camillia and her instructor met to discuss the problem. They decided that if Camillia had no tantrums for a week, she could earn the “student of the week” award. In the first week of the intervention, Camillia’s tantrums increased to 12 per week. Describe the guideline that was not followed?
Appendix C:

Power Point Presentation for Training
ENHANCING SKILLS OF PARAEDUCATORS  UNIT 4

Lesson 1: Principles of Behavior

Principles of Behavior:
Three principles described below are drawn from a large body of scientific research conducted in school environments [Kooistra, Haron, & Neward, 1937; Lason, Illinois, & Young, 1968]. These principles have provided considerable guidance to the researchers and instructors.

Principle 1: Behavior occurs because of events which surround it.
- That is, behavior is influenced by events that occur before and after it. Events in the school environment may include a teacher's verbal directions, book assignments, and so forth. They may also include behaviors of others, such as peers, instructors, parents, and so forth.

Principle 1: Behavior occurs because of events which surround it.
- Two types of environmental events surround behaviors: events that occur before behaviors, which we call ANTecedents (A), and events that occur after behaviors, which we call CONsequent (C). For example, the antecedent may be an assignment given by an instructor. The behavior may be completing the assignment. The consequences may be the grade awarded by the instructor to the student. One way to remember this relationship is A = C (antecedent, followed by C (consequence). Analyzing behaviors in relation to antecedents and consequences allows us to pinpoint behaviors and decide why they occur.

Practice:
- Mrs. Hodges, a 3rd grade teacher, asked Amy to lead the Pledge of Allegiance. Amy repeated the words along with her class, and Mrs. Hodges said “Thank you.”
- A =
- C =
Principle 1: Behavior occurs because of events which surround it.

Practice:
- Jamie, a 5-year-old kindergartener, was having difficulty adjusting to the new school environment. He screamed and threw toys on the floor for 50 minutes. His instructor noticed by withholding attention (other than observing him to ensure his safety) and waiting until he calmed down so they could reengage with him.

A =
B =
C =

Principle 2: Behavior is influenced by its antecedents and consequences.

Environmental events which serve as antecedents to student behavior may include an instructor’s directions, the final bell for being in class, an announcement of an assignment, or a smile from a child’s friend seated in the next row. These and other events may have little impact on a student’s behavior. An instructor who carefully and systematically changes antecedent events can influence student behavior in positive ways. Some authors refer to this as “environmental engineering” or “debugging” the classroom environment (Carr, Levin, McCord, Conlin, Kemp, & Smith, 1994; Mergan & Jarvis, 1998).
Principle 2: Behavior is influenced by its antecedents and consequences.

- Practice:
  - Justin was frequently disruptive during the reading period in Mrs. Brock's class. In one week, Mrs. Brock counted a total of 12 disruptive comments during 5 reading periods. Mrs. Brock met with Justin and they agreed that, for each time Justin was disruptive, he would have to remain after school for 30 minutes. Using this intervention for 1 week, Mrs. Brock counted 2 disruptions in a total of 6 reading periods.
- **Signs:**
  - positive, neutral, or punishing consequence?

Principle 3: All students can learn in a positive, carefully managed environment.

All students, regardless of their abilities or disabilities, can learn if instructors strive to establish and improve a positive school environment. This may include setting achievable goals, creating frequent opportunities for instruction and student response, improving the instructional process, and motivating students through positive consequences. As much as possible, instructors need to anticipate problems and prevent them before they occur. Also, they must continuously strive to create a positive school climate where students remain actively engaged as participants.

Principle 4: All students can learn in a positive, carefully managed environment.

- Respect the right of the student to receive the least restrictive behavioral intervention. Restrictive interventions are those that limit freedom (Martín, 1979). The philosophy of least restriction states that we should try less restrictive interventions first. Then, if they are ineffective in changing behavior, we may try more restrictive interventions if they are justified and if permission is received from relevant sources.
Principle 3: All students can learn in a positive, carefully managed environment.

- Respect the rights of parents and legal guardians to understand and consent to behavioral interventions, particularly the more restrictive ones.
- Parents/guardians should receive comprehensive information about plans for behavioral interventions. For some restrictive interventions, they should provide written, informed consent. Consent requirements vary from state to state. Instructors should keep parents/guardians informed of developments as behavioral interventions are implemented and changed over time.

Reasons for Specifying Behavior

1. When we want to change a behavior, we need to identify it in specific terms. There are three reasons why we specify behavior:
   - To record what others are assuming, by using specific language.
   - To engage in behavior modification.
   - To communicate information that interests us when there is a crisis.

Lesson 1 Progress Check

- 2. To set clear expectations. When we specify behavior, we communicate our expectations to students in precise, unambiguous terms. Clearly communicating expectations may help instructors avoid problems with students. For example, a teacher may respond to her throwing of a pencil by saying, "Please ask for help if you have a problem with the algebra assignment." This is much clearer than saying, "Be easier, don't do that." Teachers may respond more appropriately if their instructor communicates expectations clearly.

Reasons for Specifying Behavior

2. To assess progress and communicate with others. Using specific language allows instructors to pinpoint behavior and assess it with precision. Assessment of behavior will be described in Lesson 3. Specific language also means that instructors clearly communicate what a student is doing in a classroom and what the expectations are. Parents and other IEP team members are more likely to understand when we use specific language in describing student behaviors.
How to Specify Behavior

There are 5 steps that instructors should follow when specifying behavior:

- Step 1: Define the behavior.
- Step 2: When behavior is to be weakened, specify an appropriate, alternative behavior to strengthen.
- Step 3: Identify the antecedents and consequences of the behavior.
- Step 4: Consider other factors might be affecting the behavior.
- Step 5: Determine the behavior’s history.

Step 1: Define the behavior

- Poor Example: Rebecca will develop a better attitude.
- Poor Example: Rebecca will raise her hand to ask for help.
- Poor Example: Kim will work steadily.
- Poor Example: Kim will look at his workbook, hold his pencil, and write down all of the questions in his workbook.
- Poor Example: Kim will do his homework.
- Poor Example: Rebecca will raise her hand to ask for help in algebra class. Kim will look at his workbook, hold his pencil, and write down all of the questions in his social studies workbook during Mrs. Engleson’s class.

Practice:

<table>
<thead>
<tr>
<th>Poor</th>
<th>Better</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kim is always talking during class.</td>
<td>Jack is asking questions in class.</td>
</tr>
<tr>
<td>Rebecca is often late and absent from the classroom.</td>
<td>Jack is turning in homework on time.</td>
</tr>
<tr>
<td>Kim needs to remember to eat during lunch.</td>
<td>Jack is eating a healthy lunch.</td>
</tr>
<tr>
<td>Rebecca never turns in homework.</td>
<td>Jack is turning in his homework on time.</td>
</tr>
<tr>
<td>Kim needs to remember to eat during lunch.</td>
<td>Jack is eating a healthy lunch.</td>
</tr>
</tbody>
</table>

Step 2: When behavior is to be weakened, specify an appropriate, alternative behavior to strengthen.

- Many times, we want to eliminate students' behaviors. Behaviors we want to eliminate seem to stand out. We will refer them as harmful or disruptive behaviors. DISRUPTIVE BEHAVIORS include behaviors such as physical aggression against others, threatening to do harm, property destruction, etc. DISRUPTIVE BEHAVIORS are less destructive ones, but still jeopardize one's involvement in a school classroom, and include noncompliance with instructions, arguing, tantrums, complaining, etc.

- However, when we focus on weakening behaviors, we often find that students develop other behaviors that we also want to eliminate. This produces an endless cycle of “stop that,” “quit that,” and “Don’t do that either!” Why? Because many times students do not have a well-practiced alternative behavior which is acceptable. We need to teach an alternative behavior!
Step 2: When behavior is to be weakened, specify an appropriate, alternative behavior to strengthen.

- **ALTERNATIVE BEHAVIORS** are socially acceptable behavior that accomplish the same purpose, or “function,” for a student as the harmful/disruptive behavior. Always identify an alternative behavior to be strengthened, or increased, when the concern is about a behavior that must be weakened, or decreased.

Examples:

<table>
<thead>
<tr>
<th>Behaviors to be weakened</th>
<th>Alternative behaviors to be strengthened</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not working on a task</td>
<td>Working on the task</td>
</tr>
<tr>
<td>Verbally threatening a student</td>
<td>Talking appropriately about school events</td>
</tr>
<tr>
<td>Screaming and flailing</td>
<td>Stating “I don’t like that because…”</td>
</tr>
<tr>
<td>Tantrums</td>
<td>Communicating frustration by asking for a break</td>
</tr>
</tbody>
</table>

Here is an example of a clearly defined disruptive behavior and an alternative behavior:

- **Disruptive behavior:** Yelling at the teacher. A student uses a loud tone of voice (above conversational volume) directed towards the teacher after the given an assignment.
- **Alternative behavior:** Communicating frustration in an appropriate way. The student uses a normal tone of voice to ask the teacher for help on the assignment.

Step 3: Identify the antecedents and consequences of the behavior

- **Antecedents and consequences** were defined earlier. Words for antecedents that seem to “trigger” the behavior. Note whether they occur in a consistent way. These events may “set the occasion” for a behavior. Let’s take a closer look at information that can be obtained by examining antecedents and consequences. For example, let’s meet Stephanie and Tara:

Step 3: Identify the antecedents and consequences of the behavior

- **Step 3:** Identify the antecedents and consequences of the behavior

- Often, antecedents do not precede each occurrence of a behavior. Therefore, several observations should be done to clearly identify antecedents and more “remote” factors that affect behavior. For example, let’s meet Jannal and Rachel:
Step 3: Identify the antecedents and consequences of the behavior

Jamil was a 15-year-old involved in an employment transition program. He and his tutor, Rashida, met three times per week. They worked on improving Jamil's social and communication skills to prepare him for the transition to adult life. After several sessions of identifying potential antecedents, Rashida noticed that Jamil was becoming increasingly unresponsive. He would refuse to participate in community reading activities, saying, “I don’t want to do it.” Rashida informed Jamil's teacher that he was not interested in reading, but Jamil would say, “I don’t want to do it,” and then he would read. Rashida noticed that Jamil read for several hours, then he would get up and go to bed. He remained unresponsive. After Rashida discussed the issue with Jamil's mother, she identified the antecedent to the behavior. Rashida learned that Jamil was tired by mid-afternoon because he stayed up too late at night.

Step 3: Identify the antecedents and consequences of the behavior

To identify antecedents, consider whether the behavior consistently occurs.
- at certain times of the day
- in certain settings
- with particular students present
- during certain academic or other activities, and
- during transitions from one activity to the next.

Identifying antecedents may provide clues for changing the environment to make the behavior less likely to occur.

Step 4: Consider other factors that may be affecting the behavior.

Here are a few of the many factors that instructors should consider:
- Time of day: Many behaviors consistently occur at about the same time of day due to schedules, presence of certain people, eating patterns, etc.
- Illness or health problems: Several behaviors are affected by illness, infections, and internal pain (e.g., headache, toothache, stomach ache, constipation, etc.).
- Medications: Students may take prescription medications for hyperactivity, behaviors, depression, pain, etc. It is important that specialists be aware of students' medications and their possible side effects.

Step 4: Consider other factors that may be affecting the behavior.

- Diet: Many health experts believe that diet has a profound effect on behaviors and therefore is one prime factor to consider when attempting to change it.
- Specific factors: Some behaviors are triggered by the presence of certain individuals with whom students are in contact.
- Level and type of stimulation: Many people are sensitive to light, noise, or environmental changes. Others may be bored and show harmful behaviors when no one is around. Careful observation will help determine what a student may be reacting to and provide the intervention with the information necessary to “debug” the environment.

Step 4: Consider other factors that may be affecting the behavior.

- Sleep patterns: As many of us know, sleep patterns affect our alertness and behaviors such as immobility and academic performance. Many students prone to problem behaviors have inconsistent sleep patterns or short sleep periods.
- Allergies: Some professionals believe that certain behaviors might be allergic reactions or side effects of allergies. Petcoff, R.K. (1999). Observe the eating habits of students and any behavioral or physical changes that follow. In addition to potential food allergies, be aware of other types of allergies as well. Hay fever, for example, may not only influence our affective state, but also affect other aspects.

Step 4: Consider other factors that may be affecting the behavior.

- Misjudgment of a behavior by the student: Sometimes, students behave in a certain way because they misjudge the effects of their behavior on others. They may believe their actions are “within the social rule” but misinterpret them. For example, keep an open mind.
Step 4: Consider other factors that may be affecting the behavior.

Janeen enjoyed social interaction with her peers and teachers at school. She carried on conversations, asked appropriate questions, and described her experiences to others. However, she always seemed to be right in others' faces when she talked. It was common for Janeen to stand no more than a few inches from others. Some of her friends took offense and tried to step away from Janeen, but she would keep moving toward them. Friends would ask Janeen to "Stand back" but she didn't understand.

Step 4: Consider other factors that may be affecting the behavior.

- In Janeen's case, the instructor had to describe and remind Janeen of the "social rule" about maintaining an arm's length distance from other people. Effective instructors identify the important social rules and review them with students on a regular basis. Sometimes students' behaviors may be acceptable in some settings, but not others. They misjudge their behavior in relation to the situation. For example, let's meet Amelia.

Step 4: Consider other factors that may be affecting the behavior.

Amelia was friendly and polite. However, her frequent picking of her nose was noticeable. Naturally, everyone found her behavior disgusting. Not only was this a hygiene problem, but it was also regarded as a disruptive behavior and one that prevented her from making and maintaining friends.

Effective instructors understand that "some behaviors have their place." In Amelia's case, the instructor directed her to the restroom, where she could tend to her hygiene needs. Then, she washed her hands thoroughly before returning to the classroom. Can you think of other examples?

Step 5: Determine the behavior's history

- When changing a harmful/disruptive behavior, it is important to understand how it developed (O'Neill et al., 1997). Try to find out answers to questions like:
  - How long has the behavior occurred?
  - Has the behavior increased or decreased in the past month?
  - What has been done to try to change this behavior?
  - What have others found successful to decrease/increase the behavior?

Answers to these questions are helpful in providing clues on what antecedents or consequences to consider in a behavioral intervention.

Video

Lesson 2 Progress Check
Assessing Behavior

After we specify a behavior, we use procedures to assess it. By systematically assessing behavior, we can learn more about it and how to change it (Amason, 2001). For example, we can determine how often it occurs, when it occurs, and what happens before and after it occurs (i.e., what the antecedents and consequences are). Assessment is necessary before we can start a behavioral intervention.

Why Assess Behavior?

Here are some reasons to assess behavior:

1. Teachers can compare one student’s behavior to other students’ behaviors to verify that it is a problem.
2. Teachers can determine how much of a problem the behavior is.
3. Teachers can determine if a behavioral intervention is helping.
4. Teachers can determine if the intervention using the data obtained from an intervention using the data obtained from an intervention to determine if the intervention is helping.
5. Teachers can determine if the intervention is effective.
6. Teachers can determine if the intervention is used to assess the data used to improve the intervention.
7. Teachers can determine if the intervention is used to assess the data used to improve the intervention.
8. Teachers can determine if the intervention is used to assess the data used to improve the intervention.

Formal Assessments

FORMAL ASSESSMENTS are structured tests requiring rigorous, “standardized” examination procedures (McLaughlin & Levis, 2001). These assessments include psychological or achievement tests that measure academic development, learning abilities, or motor or vocational skills. Formal assessments are often given by psychologists, teachers, and other trained personnel, and are used to determine diagnosis, classification, or eligibility for special education services. These types of assessment are typically not used to gather information about a student’s behavior.

Informal Assessment

We use INFORMAL ASSESSMENTS to gather specific information about a student’s behavior or classroom performance (McLaughlin & Levis, 2001). There are six types of informal assessment: Behavioral assessment, note taking, classroom observation, curriculum-based assessment, test analysis, and portfolio assessment. Behavioral note taking, and classroom observation are described below. Curriculum-based assessment, test analysis, and portfolio assessment will be described in Unit 8.

Informal Assessments

BEHAVIORAL ASSESSMENTS are used to identify harmful or disruptive behaviors. Behavioral assessment allows teachers to observe one student’s behavior to other students’ behaviors to verify that it is a problem (Zimpol & Harkavy, 2001). A trained paraeducator may conduct behavioral assessment in some school settings under the supervision of the classroom teacher or other professional. We will describe four types of behavioral assessment: checklists, rating scales, questionnaires, and functional assessment. Specific examples of published behavioral assessment will not be described here because there are many different ways to conduct these assessments. Informal information, talk to your facilitator or classroom teacher.

Behavior Checklists

BEHAVIOR CHECKLISTS are published lists of behaviors that require an observer to assess harmful actions or disruptions in classrooms or other settings. A trained observer identifies which specific behavior from the list represents the behavior by checking “yes” or “no.” For example:
Behavior Checklists

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student frequently engages in hitting at hand</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student frequently engages in hitting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student frequently engages in physical contact</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Behavior rating scales

BEHAVIOR RATING SCALES are published lists that require an observer to mark a scale according to a behavior's severity (how harmful or dangerous) or frequency (how often it occurs). The observer marks one point on a scale that ranges from mild to severe. For example:

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Security Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student frequently engages in hitting</td>
<td></td>
</tr>
<tr>
<td>Student frequently engages in physical contact</td>
<td></td>
</tr>
</tbody>
</table>

Behavior Rating Scales

<table>
<thead>
<tr>
<th>Behavior</th>
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<tbody>
<tr>
<td>Student frequently engages in hitting</td>
<td></td>
</tr>
<tr>
<td>Student frequently engages in physical contact</td>
<td></td>
</tr>
</tbody>
</table>

FUNCTIONAL ASSESSMENT

FUNCTIONAL ASSESSMENT is the process of identifying events in the environment that influence behavior (O'Neil et al., 1997). This type of assessment may involve checks, rating scales, interviews, and/or direct observation (described below). It is a comprehensive method designed to specify the antecedents and consequences that surround the behavior, and it is an adaptive tool to strengthen the functional analysis. The process describes the purpose of a behavior that trained experts provide from the functional assessment information as called FUNCTIONAL ANALYSIS. Functional assessment is essential for assessing instructors to implement effective intervention.

Note taking

Note taking involves gathering important information by writing notes about a student's performance or behavior. Notes are useful for summarizing observations and data. They may convey information about student progress, how students approach a task, observations that need to be made. The guidelines are critical:

- All notes must be dated and signed.
- Notes must be objective and should not include judgment, because notes may be read by (or to) the student, parent, guardian, teacher, or others. Describe what you see and hear. Don’t judge it.
Note Taking

To illustrate the importance of non-judgmental note-taking, decide which of the two statements below is objective and avoid judgment.

Raphael and I went to the supermarket today to work on loading grocery and put together items. We performed poorly on both programs, because he was constantly talking with customers and asking questions of the store.

Raphael and I went to the supermarket today to work on loading grocery and put together items. We performed poorly on both programs, because he was constantly talking with customers and asking questions of the store.

The second statement above is objective and avoid judgment.

Classroom Observations

CLASSROOM OBSERVATION: Involves systematically watching and analyzing information about behavior during a specific activity. In the United States, we define CLASSROOM observation as the level of behavior or skills before starting an intervention. We define an INTERVENTION as a systematic set of procedures to improve student behavior or skills. When we observe and record behavior during baseline, then continue to observe and record it after starting an intervention, we find out:

- Whether the behavior is changing
- How much progress is being made, and
- How close we are to meeting our goals or objectives.

Classroom Observations

Instructors often plot data on a graph to display a record of student behavior. For example, an instructor may graph how many times a student throws tantrums during the school day. Instructors can visually detect changes in students' performance over time. Locate the graph below. The vertical axis indicates the level or amount of the behavior. Then, the higher the point on the graph, the more the behavior occurred. The horizontal axis indicates the passage of time. For example, the graph shows behavior on Monday, Tuesday, and Wednesday.

Frequency Counting

FREQUENCY COUNTING involves tallying the number of times a specific behavior occurs. To obtain and record using frequency counting, the behavior:

- Must be specific and defined.
- Must be easily observable, a behavior must be easily noticeable, or both.
- Must have a specific beginning and ending. The behavior must start and end.
- Must occur more than twice.

Examples of behaviors recorded in the classroom:

- Number of times Suzanne leaves her desk
- Number of times Suzanne hits another student
- Number of times Suzanne hits an object
- Number of times Suzanne hits an object
- Number of times Suzanne hits an object
- Number of times Suzanne hits an object

Converting frequency data to rate

We can compare frequency data collected in one session to data collected in another session only if the sessions are the same length. However, sessions may vary in length.

Let's say we have one containing physical aggression displayed by a student named Suzanne. If Suzanne was physically aggressive with her classmates 5 times during a 20-minute class period on Monday, then was physically aggressive once during that same period on Tuesday, the frequency of physical aggression can be compared, because the period of time was the same. We can say that Suzanne was less aggressive on Tuesday.
Converting frequency data to rate

However, if daily sessions are of different lengths, the data cannot be directly compared. What if Jason was disruptive 15 times in 30 minutes, but John was disruptive 3 times in 20 minutes? Can the frequencies from Monday and Tuesday be compared? No, because the data were collected in sessions of different lengths. When sessions are of different lengths, we convert frequency data to rate so we can compare observations of different lengths of time. Rates are usually expressed as number of occurrences per minute or hour. RATE PER MINUTE is the total frequency of behavior in a session divided by the total time.

For example, if Jason is disruptive 15 times in 30 minutes, the rate of his behavior is 15 divided by 30 (15/30) minutes = 0.50 disruptions per minute. If during the next period, he is disruptive 8 times in 26 minutes, the rate is 8/26 = 0.31 disruptions per minute. By converting to rate, 0.50 and 0.31 can be compared. Jason was more disruptive when his rate was 0.50 per minute than when it was 0.31 per minute. We can plot the data on the same graph.

Mini Assignment

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Length of Time</th>
<th>Rate per minute</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>30 minutes</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>26 minutes</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>20 minutes</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>30 minutes</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>40 minutes</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>60 minutes</td>
<td></td>
</tr>
</tbody>
</table>

Time Sampling

Time Sampling is a method of measuring a behavior at specific points in time. It's done and scored using time sampling, the behavior:

- May be identified and defined.
- May have to decline beginning or ending (i.e., it may not start and end like some behaviors, but appear more continuous, and)
- May occur at such a high frequency that it's easier to record only a few times per hour or a total time sample for the frequency.

Behavioral assessments include:

- Working on a task
- Sitting with peers during recess
- Reading with friends in conversation
- Continuous movement that has no clear beginning or ending.

Time Sampling

This example in conducting time sampling include the following:

1. Decide when to observe the behavior (example: during math work).
2. Observe the behavior at selected points in time. Many instructors observe behaviors such as a kitchen timer or escorted trips with recorded tones to signal when to observe and when to stop observing behavior (example: observations in a classroom where a student was observed during math work while the timer goes off).
3. Record either "+" (meaning the behavior occurred) or "-" (meaning the behavior did not occur). The most common basis for timing the behavior occurs; record only if it occurred at any specific point in time.

Time Sampling

If we observe how often Lindsey played appropriately with peers, we might observe during a play period by setting a kitchen timer for 1 minute, observing when the timer went off, and recording a "+" if she was playing at "-" if she wasn't. Then, we would make the timer several times and repeat the observations to gather more information.

Converting time sampling data to a percentage of the total observations: Dividing the total of "+"'s of the total number of observations, then multiply by 100. Like this Total "+"/Total observations x 100
**Time Sampling**

Let's say Lindsey played appropriately with other students (✓) in 6 out of 14 total observations. What is the percentage of total observations in which we observed her playing? 6/14 = .43 \times 100 = .43%

**Per Opportunity**

In PER OPPORTUNITY RECORDING, an observer determines whether a behavior occurs when a student has the opportunity to respond. Opportunities are events such as an instructor's question, a verbal instruction, a turn in a game, or 20 math problems. To observe and record, you must consider the following conditions:

1. The behavior occurs specified and defined.
2. The instructor must set the opportunity for the student to respond, and
3. When the opportunity is set the observer determines whether the student's response was correct (✓) or incorrect (✗).

Sometimes, no response may occur at all. When this happens, record a "✗".

**PER OPPORTUNITY RECORDING**

Examples of behaviors recorded per opportunity:

- Following instructions
- Responding to the instructor's question
- Responding to math problems
-Opening a door

The steps in per opportunity recording include the following:

1. Identify the opportunity:
   - Record a correct/inappropriate response (✓/✗) appropriate/appropriate response, if applicable, record "O" for no response.
2. Count the number of opportunities and the number of correct responses similar to time spending ratios, divide the ✓/total opportunities \times 100.

**Video:**

**Types of Positive Reinforcers**

Now that we have described ways to observe and record behaviors, it is time to consider positively reinforcing consequences (✓) for behaviors. We will describe four types of positive reinforcers: praise, activities, materials, and tokens.

**Lesson 3 Progress Check**
Praise

Praise is a naturally reinforcing consequence for most students. It is commonly used as a reinforcer in and out of the school setting. Occasionally, some students, especially those with behavior disorders, emotional, or social challenges, may not respond to praise. For them, praise may not be a positive reinforcer, praise may eventually become a negative reinforcer.

Components of effective praise:

Praise must be contingent, that is, it must immediately follow and be dependent upon, the occurrence of the behavior. If we delay praise, it may have no effect. Note: with younger students or those with severe disabilities such as severe mental retardation or autism, praise must follow the behavior within a few seconds (usually 1-5 seconds). If delayed, the instructor should describe the behavior being praised.

Components of effective praise:

Praise must be descriptive. The praise statement should describe the specific aspects of the behavior that you are trying to strengthen. For example, with younger students or those with severe disabilities who may not be able to comprehend verbal language, instructors must still describe behaviors in understandable ways. We may do this by imitating behavior while praising it, using manual signs to describe and praise behavior, using communication boards or other assistive devices etc.

Components of effective praise:

Praise must vary in content and style. Avoid repetitive and mechanical praise statements; they may not be reinforcing at all! Praise must be delivered frequently. At first, we should praise each occurrence of a behavior, later, if the behavior has increased, we should praise less frequently, for example, praise 2 out of 3 occurrences, than 1 out of 3, than 1 out of 5, and so forth. Eventually, the student's behavior will continue without only occasional praise.

Components of effective praise:

Praise must be sincere and enthusiastic. Many students with disabilities experience frequent failure. They may not recognize when they are successful. Sincere, enthusiastic praise communicates to them that they can be successful and motivates them to keep trying! Praise must fit age, culture, and gender. That is, we should tailor our praise to a student's chronological age and cultural membership. For example, many younger students respond best to public, boisterous praise, while older students or those representing other cultures may prefer private or individualized praise.

Mini-Assignment

List 10 alternative ways to say (or communicate in nonverbal ways) “good work.” Ensure that your messages are consistent with the components of effective praise.
Activities

Activity reinforcers are opportunities for students to participate in preferred events if they meet some behavioral requirement. To be effective as reinforcers, activities must be appropriate to the age, gender, culture, and personal interests of the student. Examples of activity reinforcers include free time use at a computer or cd player, time in the gym to play basketball, opportunity to be messenger, times in the library, etc.

How to identify activity reinforcers:
- Watch to see what students do during free time.
- If possible, allow students to communicate what they like to do. Ask them, “What activity would you like to work for?”
- If possible, ask parents/guardians or other what the child likes to do.

Limitations of activity reinforcers:
- Not all activities, such as field trips, can be conducted immediately after appropriate behavior. Therefore, because they are delayed, these activities may not be contingent reinforcers.
- Token, discussed later, can help “bridge the gap” between a behavior and a delayed reinforcer.
- Some group activities may not be reinforcing to all students.
- That is, group activities may be reinforcing to some students but not others. Offer students choices between activities.
- Talk about your classroom teacher.

Materials

Materials are items delivered contingently upon the occurrence of appropriate behavior. They must be appropriate to the age, gender, culture, and personal interests of the student.
- Examples of materials that instructors might use as reinforcers include stickers, toys, magazines, books, cassette tapes, etc.
- Instructors may lend many of these materials to students for brief periods.

Materials

How to identify material reinforcers:
- Identify material reinforcers by asking students what they like.
- If possible, ask parents/guardians or other what children likes.
- Place several items in front of students and notice which one(s) they take.

Limitations of material reinforcers:
- Some materials may not be acceptable or appropriate in certain classrooms. Talk with your classroom teacher.
- Some materials may cost too much or may be freely available. If freely available, materials cannot be used as contingent reinforcers. Instructors should limit materials and deliver them only after the occurrence of appropriate behavior.

Tokens

Tokens represent other positive reinforcers delivered at a later point in time. They are items that students can accumulate and exchange for valued activities or materials. Tokens may be points, stickers, play money, chips, etc.
Features of a Token System:

- Tokens must be exchanged for backup reinforcers, such as activity or materials.
- Tokens will lose value over time as they are frequently exchanged for backup reinforcers.
- The relationship between token value and the exchange rate must be carefully evaluated. A token must be worth enough, but not too much, to ensure the student will work for it.
- Tokens must be distributed fairly to students based on their work performance. Instructors and students should decide how many tokens will be distributed for various behaviors, and these systems can be shared and modified according to the students.
- Once in place, there should be time and attention paid to the value of the tokens. The tokens should set an absolute standard, not a relative number, so that the student works for them.

Limitations of token systems:

- Since tokens become valuable items, theft or counterfeiting may occur. Guard against it by using your initials or another method to authorize tokens.
- Backup reinforcers sometimes become boring and predictable. If students lose motivation, vary the backup reinforcers to keep interest levels high.

Mini-assignment:

- Describe potential reinforcers and how you would make them contingent on Kim's behavior (from lesson 2).
- In lesson 2, we described "Kim," a student who was on-task during a low percentage of independent seat work observations. We want to increase Kim's time on-task. Kim enjoys praise, races, and drawing pictures.
- Describe potential reinforcers that you would discuss with your supervisor and how you would make them contingent on Kim's behavior during and after independent seat work.

Video:

Five Guidelines for Behavioral Interventions:

- There are five important guidelines for applying behavioral interventions.
  1. All interventions should include positive consequences for appropriate behaviors. Always focus on applying positive consequences to alternative, appropriate behaviors when you are trying to decrease harmful or disruptive behaviors.
  2. Once an intervention has been applied, all instructors who work with the student should be aware of it and should use the same intervention procedures. Communication among instructors is critical to the success of an intervention.
Steps to preparing for an intervention

1. Graph data before intervention (baseline) and during the intervention. When an intervention starts, compare the level of the behavior to the level in baseline and ask:
   • Is the appropriate behavior strengthening (increasing)?
   • Is the harmful/disruptive behavior escalating (decreasing)?

2. Should we change the intervention? For example, the appropriate behavior shown in the graph below (left) is increasing, the intervention is working, and no changes are necessary. However, the appropriate behavior in the graph below (right) is not increasing, if occurring at about the same level as the baseline, an instructor would want to change the intervention.

Five Guidelines for Behavioral Interventions

1. Students should play a part in developing interventions. By allowing students to participate in their interventions, they have ownership and responsibility. When students feel their ideas and suggestions are important, they are more likely to carry through with the conditions of the intervention. Students can become involved in developing an intervention by:
   • Selecting reinforcers
   • Setting the level of performance required to receive the reinforcer
   • Identifying other behaviors that might be strengthened, and
   • Monitoring their own behavior.

2. The student’s expectation must be achievable. If the expectations are too high, the student may become frustrated and stop trying. If the expectations are too low, the reinforcement may be insufficient, and the student may lose interest in obtaining it. Carefully monitor the student’s progress at the beginning of the intervention to determine if the expectations are being met. If the expectations are too high or too low, talk with the classroom teacher about adjusting it. This is important because one critical factor is that students must experience success soon after the intervention starts!

Five Guidelines for Behavioral Interventions

3. All interventions must be applied to specific and well-defined behaviors. Recall from Lesson 2, that specifying and defining behaviors are important to observe and measure behavior. When behaviors are specific and well defined, we know exactly when and if to apply an intervention. We can also observe and assess behavior with greater accuracy.

Steps in Preparing for an Intervention

We will describe three steps to prepare for starting an intervention:

1. Select the most appropriate scoring procedure for the identified behavior. In Lesson 3, we discussed three ways to assess and measure behavior (frequency counting, time sampling, per opportunity recording). When we start an intervention, the recordings will tell us whether the intervention is effective.

2. Observe and record the behaviors. Make sure you have established ways to observe and record behavior before starting an intervention. For more information on this, return to Lesson 4.

Formal and Informal Interventions

We will describe behavioral interventions as formal or informal. FORMAL INTERVENTIONS are those that include participation procedures. Usually, they must be written and approved according to school district and/or state regulations. After a formal intervention is developed with a student, it is presented to appropriate persons for approval. Paraeducators using informal interventions must have extensive training. These interventions will not be discussed here because they are dependent on each state’s or agency’s regulations on completion of training (Morgan, Add, & Smith, 1977). Consult your instructor or supervisor for more information.
Formal and Informal Interventions

Informal interventions are those that usually do not require approval based on school district or state requirements (Morgan, Lockl, & Strisula, 1997). However, informal interventions must be approved by the classroom teacher. These interventions may be simple agreements between the instructor and student about changing behavior. They take the form of “If you behave this way, then you can (get some type of reinforcement).” Paraeducators using informal interventions must have approval from the classroom teacher.

Applying Informal Interventions

Let’s examine five informal interventions that may be useful or students with whom you work:

1. Debugging the environment to promote appropriate behavior
2. Increasing alternative communication
3. Increasing alternative ways to get attention
4. Delivering positive reinforcement for the absence of disruptive behavior
5. Mixing “easy” and “hard” expectations

Intervention 1: Debugging the environment to promote appropriate behavior

Occasionally, students behave in harmful or disruptive ways because of factors in the environment. For example, busy, noisy environments may increase harmful/disruptive behaviors. Also, interacting with a disliked person, participating in activities in hot/cold settings, or learning boring tasks may increase harmful/disruptive behaviors. Effective instructors watch for these factors and “debug” environments to promote appropriate behaviors.

Example of Intervention 1: Michael was a youth with autism. His paraeducator (Shelley) was delivering instruction to Michael on how to make a purchase at a supermarket. When Michael and Shelley entered the supermarket, Michael engaged in squating, jumping, and hitting the vending machines being placed in front of the store. When Shelley asked Michael if he was excited about having a snack, he signed “Yes, I want a drink.” Shelley debugged the environment by arranging for Michael and Shelley to enter the supermarket through another entrance. Also, she set up a point system so that Michael could earn a snack after the instructional session if he did not equal/point, bite his hand, or cause a scene.

Intervention 2: Increasing Alternative Communication

Many of our behaviors function to communicate information. Verbal statements, facial expressions, and gestures tell others what we want. Communicating information is a critical skill. Unfortunately, it is a skill with which many students have little experience. When some students try to communicate, frustration or anger results. If not controlled, this behavior can be harmful and disruptive because it appears aggressive, impulsive, or antagonistic. If we concentrate on decreasing these harmful/disruptive behaviors without increasing alternative communication, we may leave students with no way to communicate. This intervention focuses on increasing positive, alternative ways to communicate (O’Neill & Reichle, 1993). To implement this intervention, follow these steps:

- Meet with the student to find out what messages the student is trying to communicate. The student may be trying to say “I need a break!” “This task is too hard!” “I have a leaky shoe” “It’s cold,” “I need a pencil,” “It’s hot,” etc.
- With the student’s assistance, agree on a message (a verbal statement, manual sign, or other communication) that you and others will accept as a positive, alternative form of communication. Agree that, when the student uses this form of communication, you and others will act upon it by either granting the request or offering an alternative.
<table>
<thead>
<tr>
<th>Intervention 2: Increasing Alternative Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. When the student uses this message, respond by</td>
</tr>
<tr>
<td>granting the request (example: &quot;Ok, let’s work on</td>
</tr>
<tr>
<td>an easier task for awhile.&quot;). Try offering an</td>
</tr>
<tr>
<td>alternative (example: &quot;thanks for asking nicely.</td>
</tr>
<tr>
<td>Let’s work on an easier task.&quot;).</td>
</tr>
<tr>
<td>4. If the student uses harmful/disruptive behaviors</td>
</tr>
<tr>
<td>to communicate (such as a loud voice, obscenities,</td>
</tr>
<tr>
<td>tantrums, etc.) try to redirect the student. That is,</td>
</tr>
<tr>
<td>direct the student to return to the task until she is</td>
</tr>
<tr>
<td>ready to use the agreed-upon message. Be careful not</td>
</tr>
<tr>
<td>to give too much attention while the student is still</td>
</tr>
<tr>
<td>behaving in a harmful or disruptive way.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intervention 2: Increasing Alternative Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example of Intervention 2: every time Tari became</td>
</tr>
<tr>
<td>frustrated with a difficult task (such as reading</td>
</tr>
<tr>
<td>her history assignment), she complained and</td>
</tr>
<tr>
<td>shouted loudly. Tari and her teacher, Shauna,</td>
</tr>
<tr>
<td>decided that the appropriate message Tari should use</td>
</tr>
<tr>
<td>was, &quot;I need help please.&quot; Tari agreed to seek out</td>
</tr>
<tr>
<td>Shauna to ask for assistance using this message. On</td>
</tr>
<tr>
<td>the first day of the intervention, Shauna reminded</td>
</tr>
<tr>
<td>Tari of the message. However, Tari became</td>
</tr>
<tr>
<td>frustrated and forgot the message. Shauna told Tari</td>
</tr>
<tr>
<td>to &quot;please reference your assignment until you are</td>
</tr>
<tr>
<td>ready in your help place.&quot; Tari immediately asked</td>
</tr>
<tr>
<td>&quot;I need help please,&quot; using a loud and angry tone.</td>
</tr>
<tr>
<td>Shauna responded by saying &quot;Ok, Tari, I can see you</td>
</tr>
<tr>
<td>are frustrated. Taryed again in your normal voice.&quot;</td>
</tr>
<tr>
<td>Tari took a deep breath, paused, and repeated, &quot;I</td>
</tr>
<tr>
<td>need help please.&quot; Shauna immediately provided</td>
</tr>
<tr>
<td>assistance. Over time, Tari used the message more</td>
</tr>
<tr>
<td>consistently with Shauna and others.</td>
</tr>
</tbody>
</table>

<p>| Intervention 3: Increasing alternative ways to get |</p>
<table>
<thead>
<tr>
<th>attention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some students may get attention from others by</td>
</tr>
<tr>
<td>behaving in disruptive ways. Intervention 3</td>
</tr>
<tr>
<td>involves decreasing these attention-seeking</td>
</tr>
<tr>
<td>behaviors while increasing more appropriate ways</td>
</tr>
<tr>
<td>to get attention. This involves reinforcing</td>
</tr>
<tr>
<td>appropriate behaviors while ignoring the</td>
</tr>
<tr>
<td>disruptive, attention-seeking behaviors.</td>
</tr>
<tr>
<td>Note: ignoring disruptive behavior may initially</td>
</tr>
<tr>
<td>cause it to increase. Therefore, ignoring should</td>
</tr>
<tr>
<td>only be used when the behavior is not harmful.</td>
</tr>
<tr>
<td>To carry out this intervention, follow these steps:</td>
</tr>
</tbody>
</table>

<p>| Intervention 3: Increasing alternative ways to get |</p>
<table>
<thead>
<tr>
<th>attention</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Meet with the student to find out why attention is</td>
</tr>
<tr>
<td>needed. Does the student want to work with</td>
</tr>
<tr>
<td>someone else? Does he want an opportunity to talk</td>
</tr>
<tr>
<td>about something?</td>
</tr>
<tr>
<td>2. Agree on a way that the student could seek out</td>
</tr>
<tr>
<td>attention that everyone will accept as an</td>
</tr>
<tr>
<td>appropriate alternative (e.g., saying &quot;Can I talk</td>
</tr>
<tr>
<td>with you now?&quot;); agree that, when the student uses</td>
</tr>
<tr>
<td>this form of attention-seeking, everyone will try to</td>
</tr>
<tr>
<td>provide attention or offer an alternative.</td>
</tr>
</tbody>
</table>

<p>| Intervention 3: Increasing alternative ways to get |</p>
<table>
<thead>
<tr>
<th>attention</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. When the student uses the appropriate form of</td>
</tr>
<tr>
<td>attention-seeking, provide attention or offer some</td>
</tr>
<tr>
<td>alternative (e.g., &quot;Thanks for asking nicely. I’m</td>
</tr>
<tr>
<td>busy right now, but I can talk with you in five</td>
</tr>
<tr>
<td>minutes.&quot;).</td>
</tr>
<tr>
<td>4. If the student uses disruptive behavior to get</td>
</tr>
<tr>
<td>attention, try to ignore it. However, if the</td>
</tr>
<tr>
<td>behavior becomes dangerous or harmful, redirect the</td>
</tr>
<tr>
<td>student to another task until he is ready to use the</td>
</tr>
<tr>
<td>agreed-upon message. Be careful not to deliver too</td>
</tr>
<tr>
<td>much attention while the student is still behaving</td>
</tr>
<tr>
<td>in a disruptive way.</td>
</tr>
</tbody>
</table>

<p>| Intervention 3: Increasing alternative ways to get |</p>
<table>
<thead>
<tr>
<th>attention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example of Intervention 3: Gary interrupted a</td>
</tr>
<tr>
<td>paraprofessional (Carla) by hugging her leg to</td>
</tr>
<tr>
<td>gain her attention. Gary, Carla, and the teacher</td>
</tr>
<tr>
<td>decided that Gary should wait for Carla to finish</td>
</tr>
<tr>
<td>her conversation, then say something like, Carla,</td>
</tr>
<tr>
<td>may I talk with you?&quot; with the hand on her side.</td>
</tr>
<tr>
<td>When this didn’t work, Gary and Carla practiced</td>
</tr>
<tr>
<td>these behaviors as the teacher watched. If he</td>
</tr>
<tr>
<td>interrupted or touched Carla, she would walk away</td>
</tr>
<tr>
<td>gently but consistently ignoring his pleading and</td>
</tr>
<tr>
<td>touching. On the first day, Gary</td>
</tr>
<tr>
<td>ignored and interrupted Carla twice. On the second</td>
</tr>
<tr>
<td>day, he asked appropriately, but interrupted her</td>
</tr>
<tr>
<td>three times. After this, he needed occasional</td>
</tr>
<tr>
<td>reminders, but generally treated Carla appropriately.</td>
</tr>
</tbody>
</table>
Intervention 3: Increasing alternative ways to get attention

Communicate Intervention 3 to all instructors. Someone who does not understand the intervention may inadvertently pay attention to this behavior. This makes the behavior harder than ever to decrease.

Intervention 4: Delivering positive reinforcement for the absence of disruptive behavior

Sometimes students develop habits that are difficult to break. For example, students with autism may engage in “self-stimulatory” behaviors, such as waving their arms or rocking back and forth. These and other behaviors may be considered disruptive because they serve no useful purpose. One effective way to change these disruptive behaviors is for instructors and others to deliver positive reinforcement when the disruptive behaviors do not occur. That is, provide reinforcement according to a time schedule as long as the disruptive behavior does not occur, or X minutes after the last occurrence. To carry out this intervention, follow these steps.

Intervention 4: Delivering positive reinforcement for the absence of disruptive behavior

1. Meet with the student to describe the behavior you want to decrease.
2. With the student’s help, identify positive reinforcers of the disruptive behavior.
3. Decide how you will deliver the positive reinforcers of the disruptive behavior.
4. Deliver the reinforcer when a specified amount of time passes after the last disruptive behavior no longer occurs.
5. Deliver the reinforcer according to time intervals if the behavior occurs again.
6. If the student engages in the disruptive behavior, try to ignore it. However, if the behavior becomes frequent, restrict the student’s access to the task. Be careful to deliver too much attention when the student is still behaving in a disruptive way.

Example of Intervention 4: Celia had been diagnosed with autism. She sometimes rubbed the back of her head rapidly. Rubbing her head did not appear to communicate a message, nor did Celia do it for attention. However, it interrupted her activity and drew the attention of classmates, so it was considered disruptive. Her teacher, Doug, noted that Celia enjoyed listening to music during free time. When Doug put on music, Celia agreed that if she could listen to her favorite music as long as she did not rub her head. If she rubbed her head, Celia agreed that she would give up five minutes of music during free time. After the first five minutes of free time, the music remained off for another five minutes.

Intervention 5: Mixing “easy” and “hard” tasks.

Most of our daily routines involve both easy and hard tasks, or preferred and nonpreferred activities. If we do all the easy tasks first, we lose motivation to do the hard ones. Few of us do the hard ones first and the easy ones last. Many of us naturally mix the easy and the hard ones to maintain motivation and avoid a long series of hard tasks. Instructors can help students do the same thing. To carry out this intervention, follow these steps.

Intervention 5: Mixing “easy” and “hard” tasks.

1. Meet with the student to identify the easy and hard tasks (or easy and hard instructions) to follow.
2. With the student’s assistance, identify a positive reinforcer.
3. Decide how you will deliver the positive reinforcer after the hard task. Note: If you do not deliver the positive reinforcer after the hard task, you will continue to deliver the positive reinforcer after the easy task (e.g., if you do not deliver the positive reinforcer, the student should remain with the easy task).
4. If the student makes progress, change the schedule of reinforcement, that is, often success on one easy task, followed by a hard task (after reinforcement delivered, the student should remain with the easy task).
5. Change the schedule of reinforcement, that is, often success on one easy task, followed by a hard task (after reinforcement delivered, the student should remain with the easy task).
6. If the student continues to make progress, change the schedule of reinforcement, that is, often success on one easy task, followed by a hard task (after reinforcement delivered, the student should remain with the easy task).
7. Change the schedule of reinforcement, that is, often success on one easy task, followed by a hard task (after reinforcement delivered, the student should remain with the easy task).
8. Change the schedule of reinforcement, that is, often success on one easy task, followed by a hard task (after reinforcement delivered, the student should remain with the easy task).
Intervention 5: Mixing “easy” and “hard” tasks.

Example of Intervention 5: Dallas was a student with social redirection. He enjoyed drawing pictures and was considered “the second grade artist.” However, he disliked reading. He would often start a reading activity with the paraeducator (Amanda) read a few sentences aloud, mispronounce a few words, and show his frustration by yelling, screaming, and throwing the books. Amanda arranged for Dallas to read one sentence, then draw a picture about the sentence. After one minute of drawing, Dallas would read the next sentence, then draw another picture or add to the first one. Dallas continued to alternate drawing and reading activities. After three daily sessions, Amanda asked Dallas to read two sentences before he drew a picture. Eventually, Dallas was reading an entire story, then drawing a picture to describe it.
Appendix D:

Coaching Session Topics
<table>
<thead>
<tr>
<th>Antecedent:</th>
<th>Before</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavior:</td>
<td>Behavior</td>
</tr>
<tr>
<td>Consequence:</td>
<td>After</td>
</tr>
</tbody>
</table>

**CONSEQUENCES:**
Positive: Behavior Increases
Punishing: Behavior Decreases
Neutral: Behavior doesn’t change

**LEAST RESTRICTIVE:**
Try least restrictive and if it is ineffective then try more restrictive.

**SPECIFYING BEHAVIORS:**
1-Pinpoint behavior
2-Have clear expectations with students
3-Assess progress and communicate with teachers and parents

**SPECIFY:** Define exactly what is going on (be specific)

**DEFINE:** What do you want the student to do instead?
Be specific: What (behavior), How much (percentage), When (what time), Where (which class period)

**OTHER FACTORS:**
T-Time of day
I-Illness
M-Medication
E-Environment (stimuli)
Assessing: reasons to assess behavior

1. Compare behavior to verify problem
2. Determine how much of a problem it is
3. Compare baseline to intervention to see if it is working
4. Determine how behavior is related to events before and after
5. Meet accountability for IEP

Frequency Counting:

1. Specified & Defined
2. Easily observable
3. Start & Stop
4. Same length of time

Time Sampling:

1. Specified & Defined
2. No beginning or end
3. High frequency

Per Opportunity:

1. Specified & Defined
2. Instructor sets the opportunity
3. Observer determines whether the response is correct or incorrect
Activity Reinforcers:

1. Ask parents what student likes to do
2. See what they do in free time

*Limitations: Activities that are too far away

Material Reinforcers:

1. Ask parents what like
2. See what student likes

*Limitations: some materials not acceptable for all classrooms

Token Reinforcers:

1. Frequently exchanged
2. Emphasis on the performance not on tokens

*Limitations: Have back-up reinforcers to keep motivation

6 Components to Effective Praise:

1. Contingent
2. Descriptive
3. Varied
4. Frequent
5. Sincere
6. Age Appropriate
Interventions:

- All interventions need to include positive consequences
- All instructors need to be aware of procedure
- Student helps with intervention
- Must be achievable
- Specific & well defined

Prepare an Intervention:

1. Select recording procedure
2. Observe & record
3. Graph

Intervention 1: Debugging

-Look @ environment & change as needed

Intervention 2: Increase Communication

1. Find out what trying to communicate
2. Agree on appropriate message
3. Respond with request if appropriately asked
4. Redirect with inappropriate request

Intervention 3: Increase Attention

1. Find out why need attention
2. Agree on appropriate response
3. Respond with request if appropriately asked
4. Ignore with inappropriately request

Intervention 4: Positive Reinforcement for Absence of Behavior

1. Describe behavior to decrease
2. Identify reinforcer
3. Decide how to deliver reinforcer
4. Ignore disruptive behavior

Intervention 5: Hard & Easy Tasks

1. Identify hard & easy tasks
2. Identify reinforcer
3. Describe how will deliver reinforcer
4. If making progress, change reinforcement schedule

4 ways for student to participate in intervention:

1. Select reinforcer
2. Set level of performance
3. Identify other areas to work on
4. Monitor own behavior
Figures
Figure 1: Number of participants who answered each question correctly on the pre-test, post-test, and one month follow up test.
Figure 2: Number of questions answered correctly per participant on the pre-test, post-test, on one month follow-up test.