

APPENDIX I

Paraeducator Training

Module 4:

Strengthening Behavior

July 1, 2000

Introduction

You are about to begin the fourth module of the training course for paraeducators who are working in educational settings in North Dakota schools. The primary emphasis in this module, *Strengthening Behavior*, is to provide a basic understanding of the principles of behavior and how behavior issues in the school setting can affect learning. Information about how to observe student behavior, collect data, and plan strategies to strengthen behavior is also included.

Module 4 is organized into five sections:

Section One – Definition

Section Two – Causes/Needs

Section Three – Observational Strategies

Section Four – Data Collection

Section Five – Reinforcement Techniques

Each section will be followed by a series of short self-assessment questions designed to reinforce content. Paraeducators are encouraged to complete the self-assessment questions for their own benefit.

Acknowledgement

Appreciation is extended to Utah State University. Permission to reproduce segments of Unit 4 “Enhancing Skills of Paraeducators”, 1994, is given by Utah State University, Department of Special Education and Rehabilitation, College of Education, 2865 Old Main Hill, Logan, UT, 84322-2865. The video-assisted training materials were developed under a grant funded by the US Department of Education, Office of Special Education and Rehabilitation Services (No. HO29K10031).

For the purposes of this training module, the word “instructor” was changed to “teacher and/or paraeducator” as appropriate to meet the training needs of paraeducators in North Dakota. This module is to be used exclusively by trainees in North Dakota and will not be distributed elsewhere or sold at any time. Material contained in this module will not be posted to the Internet.

Table of Contents

Section One	Definition.....1	1
	IDEA and Positive Behavioral Interventions	1
	Legal and Ethical Parameters	2
	Principles of Behavior	3
<hr/>		
Section Two	Causes/Needs.....6	6
	Reasons for Identifying Behavior	6
	Steps to Identifying Behavior.....	7
<hr/>		
Section Three	Observational Strategies	10
	Behavior Assessments.....	10
	Types of Observation Procedures	10
<hr/>		
Section Four	Data Collection	13
	Frequency Counting.....	13
	Time Sampling.....	14
	Per Opportunity Recording.....	15
<hr/>		
Section Five	Reinforcement Techniques	18
	Positive Reinforcers	18
	Applying Interventions to Strengthen Behavior.....	21
<hr/>		
	Resources	
	A. Frequency Count Tally Sheet	A-1
	B. Time Sample Tally Form	B-1
	C. Per Opportunity Tally Sheet	C-1
	D. Glossary of Terms and Acronyms	D-1
	Bibliography	

SECTION ONE**Definition****IDEA and
Positive
Behavioral
Interventions**

**All children can
learn and all
children shall be
educated.**

Behavioral challenges are the most significant barriers to successful integration of a child with a disability into the mainstream of either school or community. The research community, the courts, and Congress have asserted the value of inclusion, with more and more students now placed into regular classroom settings. However, as the overall population of children in public schools become more diverse, valid concerns for schools safety, along with law and order issues, are more prominent than ever.

From its beginning in 1975, the Individuals with Disabilities Education Act (IDEA) has mandated that its protections benefit all children with disabilities, a principle now known as Zero Reject. That “all” means “all” is the main principle of IDEA. All children can learn, and all children shall be educated. Zero Reject means no exclusion from educational opportunity.

IDEA seeks to balance the competing needs of school safety and individuals with disabilities who may have challenging behaviors by requiring appropriate supports for students with disabilities who may have behavioral needs, as well as their teachers. These positive behavior supports are intended to support children in the least restrictive environment, permit them to remain in that setting, be educated and participate with other children, be involved in the general curriculum, and participate in extracurricular and other nonacademic activities. For students who have challenging behaviors that impede learning, either their own or others, IDEA requires positive behavioral interventions and supports to address those specific needs.

Positive behavior interventions and supports are based upon functional behavioral assessments. Functional behavioral assessments provide information on why a student engages in a behavior, when the student is most likely to demonstrate the behavior and situations in which the behavior is least likely to occur. Strategies to address behavioral needs should be integrated throughout program planning to meet the needs of the student.

Positive behavior interventions and supports are non-aversive, in that they do not create pain or discomfort. They are used to increase skills or strengthen behavioral skills. Positive supports include environmental modification procedures that manipulate the variable within the child's environment.

As a paraeducator, you may be responsible for carrying out positive behavior interventions and supports as developed within a student's IEP team planning process. A clear understanding of the basic principles of behavior management, and the importance of a strong commitment to strengthening behaviors, will support you in your work with children with disabilities.

Legal and Ethical Parameters

There are four general rules of ethical conduct that should be followed when changing a student's behavior:

1. Respect the right of the student to be treated as an individual. Each student has unique learning characteristics, experiences, and interests. The teacher and paraeducator must be aware of these differences and not expect all students to respond the same way. This means understanding that students learn at different rates, require instruction at different paces, and require different incentives. It also means understanding that a student may not respond the same way from one time to the next.
2. Respect the right of the student to receive the least restrictive behavioral intervention. Restrictive interventions are those that limit freedom (Martin, 1979). The philosophy of least restriction states that we should try less restrictive interventions first. Then, if they are ineffective in changing behavior, more restrictive interventions may be considered if they are justified.
3. Respect the rights of parents and legal guardians to understand and consent to all behavioral interventions, particularly the more restrictive ones.
4. Know what is required by the school district, or state regarding behavioral interventions. Many school districts have developed specific regulations on the use of behavioral interventions. Ask the classroom teacher about state or school district regulations that may apply to you.

Always respect the rights of students and parents.

Principles of Behavior

There are three basic principles of behavior that are drawn from a large body of scientific research called “behavior analysis” (Cooper, Heron, & Heward, 1987). Teachers, psychologists, and parents have successfully used these principles (Jenson, Sloane, & Young, 1988). The principles will help you understand how behaviors can be analyzed.

Principle 1 **Behavior is a function of the environmental events that surround it.**

In other words, behavior is influenced by events that occur before and after it. Events in the school environment may include books, assignments, verbal directions, and so on. It may also include behaviors of others, such as other students, teachers, parents, and so forth.

Behavior is influenced by events.

Two types of environmental events surround behaviors: events that occur **before** behaviors, which we call ANTECEDENTS, and events that occur **after** behavior, which we call CONSEQUENCES. One way to remember this relationship is “**A**” (antecedent), followed by “**B**” (behavior) followed by “**C**” (consequence). For example, “**A**” may be an assignment given by a teacher. “**B**” may be the behavior of a student who completes the assignment. “**C**” may be the grade delivered by the teacher to the student for the assignment. Analyzing behaviors in relation to antecedents and consequences allows us to pinpoint behaviors and decide why they occur.

Principle 2 **Behavior is affected by its consequences.**

Use of some consequences will strengthen, or increase, the behaviors that they follow. This is called REINFORCEMENT. When a behavior is consistently and immediately followed by reinforcement, it will occur more often. There are two kinds of reinforcers; positive and negative. POSITIVE REINFORCERS are consequences that a student will work to get. For example, receiving an “A” grade may be a positive reinforcer for completing an assignment.

Reinforcers will strengthen or increase behavior.

NEGATIVE REINFORCERS also increase behavior, but they are consequences that people work to avoid or escape. When people behave in a certain way to avoid/escape negative consequences, we say that their behavior is negatively reinforced. Examples of negative reinforcers include aggressive students whom their peers try to avoid, or difficult tests that students might try to escape by saying home “sick.” Both positive and negative reinforcers increase behavior.

A second type of consequence is called PUNISHMENT. Punishment decreases, or weakens behavior. Examples of punishers may include verbal reprimands, timeout from positive reinforcement (such as temporary withdrawal of attention coming from others), and response cost (e.g., taking away a privilege).

Negative reinforcement and/or punishment are often misused. Many school districts have policies that limit the use of these procedures. The remainder of this module will focus on positive reinforcement to strengthen student behaviors.

On a final note, some consequences have no effect on the behavior they follow. These NEUTRAL CONSEQUENCES neither increase nor decrease the chances that a behavior will occur in the future.

Principle 3

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

Create a positive school climate.

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

(Please cover the answers.)

Section One: Definition

Self-Assessment Questions

- | | |
|--|--|
| exclusion | 1. The main principle known as Zero Reject means no _____ from educational opportunity. |
| positive behavioral interventions | 2. IDEA requires _____ and supports to address the needs of students who have challenging behaviors. |
| antecedents | 3. Events that occur before behaviors are called _____. |
| consequences | 4. Events that occur after behaviors are called _____. |
| Positive reinforcers | 5. _____ are consequences that a student will work to get. |
| negative reinforcers | 6. Consequences that people work to avoid or escape are called _____. |
| neutral consequences | 7. Some consequences have no effect on the behaviors they follow and are called _____. |

SECTION TWO

Causes/Needs

Reasons for Identifying Behavior

When we want to change a behavior, we need to identify it in specific terms. There are three reasons why we specify behavior.

Specific language will lead to clear communication.

1. To pinpoint what actions are occurring. By using specific language, teachers can examine behaviors as precise actions. Pinpointing actions means that teachers ask, “what are the observable and measurable aspects of a behavior?” In doing so, teachers can avoid confusion that sometimes occurs when they describe students in ambiguous terms, such as “Becky is in a bad mood”, or “Kim daydreams most of the time.” Instead, teachers can specifically describe behaviors, such as “Becky threw her pencil on the floor twice while working on her math assignment” or “Kim was off task during 80% of the time during independent seat work in math.”
2. To set clear expectations. When we specify behaviors, we communicate our expectations to students in precise, unambiguous terms. Clearly communicating expectations may help teachers avoid problems with students. For example, Becky’s teacher may respond to her pencil-throwing by saying, “Please ask for help if you have a problem with the math assignment.” This is much clearer than saying, “Becky, don’t be in such a bad mood.” Becky may respond more appropriately if the expectations are more clearly communicated.
3. To assess progress and communicate with others. Using specific language allows teachers to assess behavior. When we used specific language in the examples above we gathered information that will be useful later to assess Becky and Kim’s progress. Assessment of behavior will be described later in this module.

When we assess a behavior before an intervention, and then continue to assess it after starting an intervention; we find out whether a behavior is changing, how much progress is being made, and how close we are to meeting the needs of the student.

Specific language also means that teachers clearly communicate what a student is doing in a school setting and what the expectations are. Parents and other IEP team members are more likely to understand what we mean when we use specific language in describing student behaviors.

Steps to Identifying Behavior

There are three main steps to identifying behavior.

Step 1 Specify the behavior.

Identify the behavior by giving it a specific name. Avoid ambiguous terms. For example, “argumentative statements” tells more about someone’s behavior than “bad attitude.”

Step 2 Define the behavior.

Describe the actions that make up the behavior. Describe them in observable terms. Avoid confusing or vague language. For example, “Becky will raise her hand to ask for help” is a much better description of an action than, “Becky will develop a better attitude.” Describe when and where the behavior should occur. For example, “Becky will raise her hand to ask the teacher for help during math class.” Provide examples of the behavior. Sometimes it is helpful to give specific examples of a student’s behavior or the instructor’s expectation. This helps an observer know exactly what the action looks like in comparison to what action is desired. For example, “Becky will raise her hand and ask for help during 3rd hour math class and when the teacher approaches, she will tell the teacher which problem/concept she needs help with.” This is much more descriptive than simply stating, “Becky will ask for help.”

Step 3 When behavior is to be weakened, specify an appropriate, alternative behavior to be strengthened.

Many times we want to eliminate students’ behaviors. Behaviors we want to weaken seem to stand out! However, when we focus on weakening a behavior, we often find that students develop other behaviors that we also want to eliminate. This may produce an endless cycle of “stop that,” “quit that,” and “don’t do that, either!” Always try to identify a behavior to be strengthened, or increased, even when the concern is about a different behavior that must be weakened, or decreased. If the primary objective is to eliminate a behavior

(such as aggression), we should identify an alternative behavior to be strengthened (such as appropriate social behavior). For example, if the behavior to be weakened is “verbally threatening another student”, then an alternative behavior to be strengthened might be, “talking appropriately with another student about school events.”

(Please cover the answers.)

Section Two: Causes/Needs

Self-Assessment Questions

three

1. There are _____ reasons why behavior must be described in specific terms.
2. By using specific language, teachers can examine behaviors as _____.

precise actions

3. Clearly communicating _____ may help teachers avoid problems with students.

expectations

**progress
communicate**

4. Using specific language allows teachers to assess _____ and _____ with others.

5. The three main steps to identifying behavior are:

**specify the
behavior**

a.

**define the
behavior**

b.

**identify
alternative
behavior**

c.

SECTION THREE**Observational Strategies****Behavior Assessments**

Be systematic when observing behavior.

After a behavior is identified, we use procedures to observe it. By systematically observing behavior, we can learn more about it and how to change it. For example, we can determine how often it occurs, what happens before (antecedents) and after (consequences) the behavior. Systematically observing behavior means that we conduct an assessment. Assessment is defined as procedures used to gather specific information about a student's behavior. Assessment is necessary before a behavioral intervention can be started.

There are four basic reasons to assess behavior:

1. Teachers can determine how much of a problem the behavior is, or if it is a problem at all.
2. Teachers can compare the level of the behavior before intervention and during intervention to find out whether the intervention works, how well it works, when it does and does not work, and what might be changed to make it work better.
3. Teachers can determine how the behavior is related to events that come before it and after it. That is, by examining behavior closely, we learn more about its antecedents and consequences.
4. Teachers can meet the standards for accountability (measuring progress) on a student's IEP.

Types of Observation Procedures

Formal assessments are structured tests requiring specific procedures. These types of assessments include IQ, aptitude, academic achievement, learning abilities, motor development, and vocational skills. Formal assessments are given by psychologists, teachers, and other trained personnel, and are used to determine eligibility for special education services.

Informal assessments are usually used to gather specific information about behavior or classroom performance. Four types of informal assessments are:

1. Behavioral rating scales and checklists include published lists of behaviors that teachers check according to whether the behavior occurs or not. Sometimes, teachers rate behaviors according to how often they occur or how severe they are. As a paraeducator, you may be instructed to fill out rating scales or checklists under the supervision of the classroom teacher or other staff.
2. Curriculum-based assessment refers to direct assessment of students' academic performance or other skills to monitor progress within a school curriculum. Teachers or school districts often develop their own assessment procedures. These procedures are sometimes called survey tests or probes. Trained paraeducators may sometimes give these assessments.
3. Task analysis means breaking down a task into a sequence of component steps, then assessing the student's performance on each step. For example, making a peanut butter sandwich can be broken down into several steps (going to the refrigerator, getting the peanut butter, etc.) Paraeducators observe whether the student independently performs each step of the task analysis.
4. Classroom observation refers to collecting information about student behavior according to one of several procedures. Three types of classroom observations are: frequency counting, time sampling, and per opportunity recording. Explanations and examples of these three types of classroom observations are given in the next section on Data Collection.

(Please cover the answers.)

Section Three: Observational Strategies

Self-Assessment Questions

systematically

1. By _____ observing behavior, we can learn more about it and how to change it.

assessments

2. Procedures used to gather specific information about a student's behavior are called _____.

**formal
assessments**

3. Structured tests requiring specific procedures are called _____.

**rating scales &
checklists**

4. Four types of informal assessments are:

a.

**curriculum-
based
assessments**

b.

task analysis

c.

**classroom
observations**

d.

SECTION FOUR**Data
Collection****Frequency
Counting****How to collect
accurate and
useful data.**

FREQUENCY COUNTING refers to a tally of the number of times a specific behavior occurs. To observe and record using frequency counting, the behavior:

- must be specified and defined.
- must be easily observable. The observer must see it, hear it, or both.
- must have a definite beginning and end. The observer must see the behavior “start and stop.” Each occurrence must last about the same length of time.

Examples of behaviors that may be recorded in frequencies include talking out during independent seatwork; raising a hand during group activities; incidents of physical aggression; and incidents of self-stimulatory behavior of a student with autism.

Frequency data collected in one session can be compared to data collected in another session only if the sessions are the same length, or if the data are converted to a RATE.

For example, let’s say we are observing physical aggression displayed by a student name Susan. If Susan was physically aggressive with her classmates 5 times during a 50-minute class period on Monday, then once during that same period on Tuesday, the frequencies of physical aggression can be compared, because the periods of time were the same. We can say that Susan was less aggressive on Tuesday.

However, if daily sessions are different lengths, the data cannot be directly compared. What if school was dismissed on Tuesday after 20 minutes into the period due to a snowstorm? Can the frequencies from Monday and Tuesday still be compared? No, because the data were collected in sessions of different lengths.

When sessions are of different lengths, we should convert frequency data to rate so we can compare observations of different lengths of time.

Rate data 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. Usually, total time is expressed in minutes or hours.

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 25 minutes, the rate is $8/25=0.32$ disruptions per minute. By converting to rate, 0.50 and 0.32 can be compared. Jason was more disruptive when his rate was 0.50 per minute (during the first period) than he was when his rate was 0.32 per minute (during the second period).

[Suggestion: Use Utah State Video # 4 here. “Enhancing the Skills of Paraeducators – A Video-Assisted Program”. Locate Practice Scene 3.1, Frequency Counting: Disruptive Behavior. Use “Frequency Count Tally Sheet” found in Resource A. Locate Practice Scene 3.2, Frequency Counting: Asking for Help. Use “Frequency Count Tally Sheet” found in Resource A.]

Time Sampling

TIME SAMPLING is a record of whether a behavior occurs at sample points in time. To observe and record using time sampling, the behavior:

- must be specified and defined.
- may have no discrete beginning or ending. It may not “start and stop” like some behaviors, but instead appears more continuous.
- may occur at such a high frequency that it is easier to record as a time sample than as a frequency.

Examples of behaviors recorded in time samples include working on task; talking with friends in conversation; and continuous tantrums that have no clear beginning or ending.

Decide when to observe the behavior (for example during seatwork). Observe the behavior at selected points in time (for example, using a kitchen timer, observe the student during seatwork when the timer goes off). Record either a “+”

(meaning the behavior occurred) or a “-” (meaning the behavior did not occur). Do not record how many times the behavior occurs; but record only if the behavior occurred or did not occur at specific points in time.

If we observed how often Jacob, a child with emotional disturbance, played appropriately with classmates, we might observe during a play period by setting a kitchen timer for 1 minute, observing when the timer went off, and recording “+” if he was playing, or “-” if he was not. Then, we would reset the time several times and repeat the observation to gather more information.

Time sampling data can be converted to a percentage of the total observations. Divide the total number of “+’s” by the total number of observations, then multiply by 100, like this:

$$\text{Total “+’s”/Total observations} \times 100$$

Let’s say Jacob was playing appropriately with other students (+) in 6 out of 14 total observations. The percentage of total observations in which we observed him playing would be calculated as $6/14 = .43 \times 100 = 43\%$.

[Suggestion: Use Utah State Video # 4 here. “Enhancing the Skills of Paraeducators – A Video-Assisted Program”. Locate Practice Scene 3.3 & 3.4, Time Sampling: On-task. Use “Time Sample Tally Form” found in Resource B.]

Per Opportunity Recording

In PER OPPORTUNITY RECORDING, a teacher observes whether a behavior occurs when a student has the opportunity to respond. To observe and record, we must consider the following conditions:

- The behavior must be specified and defined.
- The teacher must set the opportunity for the student to respond. Opportunities are events such as a teacher’s questions, a verbal instruction, a turn in a game, or 20 math problems. There are “opportunities” for the student to respond.
- 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 “0.”

Examples of behaviors recorded per opportunity include responding to the teacher's correction; arriving to class on time; and catching a ball.

First, identify the opportunity. Record a correct or incorrect response. If applicable, record "0" for no response. Convert the data to percentage of correct responses, similar to time sampling. That is, divide total "+"/total opportunities x 100.

[Suggestion: Use Utah State Video # 4 here. "Enhancing the Skills of Paraeducators – A Video-Assisted Program". Locate Practice Scene 3.5, Identify the Opportunities; Practice Scene 3.6, Identify Opportunities and Record Student Responses; and Practice Scene 3.7, Identify Opportunities and Record Responses. Use "Per Opportunity Tally Sheet" found in Resource C.]

(Please cover the answers.)

Section Four: Data Collection

Self-Assessment Questions

- frequency counting**
1. Tallying the number of times a specific behavior occurs is called _____.
- rate**
2. Converting frequency data to _____ will allow teachers and paraeducators to compare observations of different lengths of time.
- rate per minute**
3. The total frequency of behavior in a session divided by the total time in the session is the _____.
- Time sampling**
4. _____ is a record of whether a behavior occurs at sample points in time.
- per opportunity recording**
5. In _____, a teacher or paraeducator observes whether a behavior occurs when a student has the opportunity to respond.

SECTION FIVE**Reinforcement
Techniques****Positive
Reinforcers**

After behaviors have been observed and assessed, it is time to consider consequences for behaviors. Positive behavior reinforcers are one type of consequence. There are four types of positive reinforcers: praise, activities, materials, and tokens.

1. 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 disturbance, or autism, may not initially respond to praise. For them, praise may not be a positive reinforcer. However, with these students, praise may still be used in conjunction with other identified reinforcers, such as materials and activities. When praise is combined with other reinforcers, it may eventually become a positive 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 behavior within a few seconds (usually 1-5 seconds). If delayed, the teacher or paraeducator should describe the behavior being praised.

**Praise must be
immediate,
frequent, and
sincere.**

Praise must be descriptive. The praise statement should describe the specific aspects of the behavior that you are trying to strengthen. NOTE: With younger students or those with severe disabilities, who may not be able to comprehend verbal language, teachers or paraeducators must still describe behaviors in understandable ways. This can be done by imitating behavior while praising it, using manual signs to describe and praise behavior, using communication boards or other assistive devices, and so on.

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, then 1 out of 2 occurrences, then 1 out of 3 occurrences, and so forth. Eventually, the student's behavior will continue with only occasional praise.

Praise must be sincere and enthusiastic. Many students with disabilities experience frequent failure. They may not even 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 of other cultures may prefer private or individualized praise.

2. Activities. Activity reinforcers are opportunities for students to engage in preferred events if they meet behavioral requirements for participation. To be effective as reinforcers, activities must be appropriate to the age, gender, culture, and personal interests of the student.

Activities must be appropriate and motivating to the student.

Examples of activity reinforcers include free time, use of a computer or cassette player, time in the gym to play basketball, opportunity to be a messenger, time in the library, etc.

How to identify 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 others what the child likes to do.

When deciding on an activity, the following limitations should be considered:

- 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. Tokens (which will be described later in this section) 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 whenever possible.
3. 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 teachers or paraeducators might use as reinforcers include stickers, toys, magazines, books, cassette tapes, etc. These items may either be given, or lent to the students for brief periods of time.

Materials must be appropriate and motivating to the student.

How to identify material reinforcers:

- Identify material reinforcers by asking students what they like.
- If possible, ask parents/guardians or other teachers what students like.
- Place several items in front of students and record which one(s) they take.

NOTE: When deciding on a material reinforcer, consider two limitations. First, some materials may not be acceptable or appropriate in certain classrooms. Second, some materials may cost too much or may be freely available. If freely available, materials cannot be used as contingent reinforcers. Teachers and paraeducators should restrict materials and deliver them only after the occurrence of appropriate behaviors.

4. **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. The tokens may be points, stickers, play money, chips, etc.

Features of a Token System

A token system must be clearly understood by the student.

- Tokens must be exchanged for back-up reinforcers, such as activities or materials.
- Tokens will lose value unless they are frequently exchanged for back-up reinforcers.
- The relationship between a token's value and the exchange rate must be carefully adjusted. That is, a token must be worth just enough, but not too much or too little, so that the student will work for it.
- Tokens must be fairly distributed to students based on their work/performance. Teachers and students should decide how many tokens will be distributed for certain behaviors so that expectations are clear and misunderstandings are avoided.
- Once in place, there should be no negotiations concerning the value of the tokens. Emphasis should be on students' performance, not on the number of tokens received. Describe the behavior that earned the token.

Limitations of Token Systems

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

Applying Interventions to Strengthen Behavior

An INTERVENTION is a systematic set of procedures designed to improve student behavior or increase skills. This section will describe three interventions that apply positive reinforcement procedures to strengthen behaviors. These interventions can be used in several classroom situations. ANTECEDENTS (events that occur before a behavior) and CONSEQUENCES (events that occur after a behavior) are used in interventions to change student behavior.

CAUTION: Before you apply any behavioral intervention, make sure you have the teacher's approval and consent. Behavioral interventions must comply with school, district, and state regulations or policies.

There are five important guidelines for applying behavioral interventions:

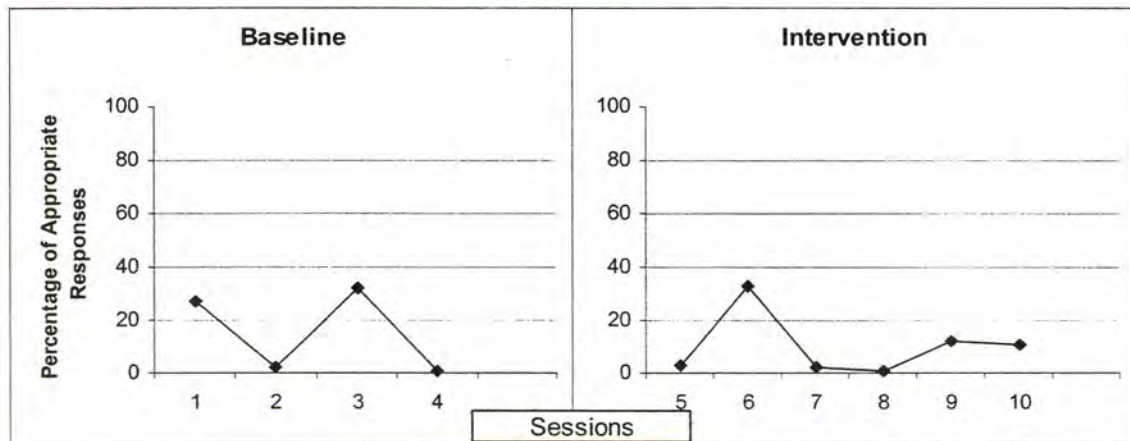
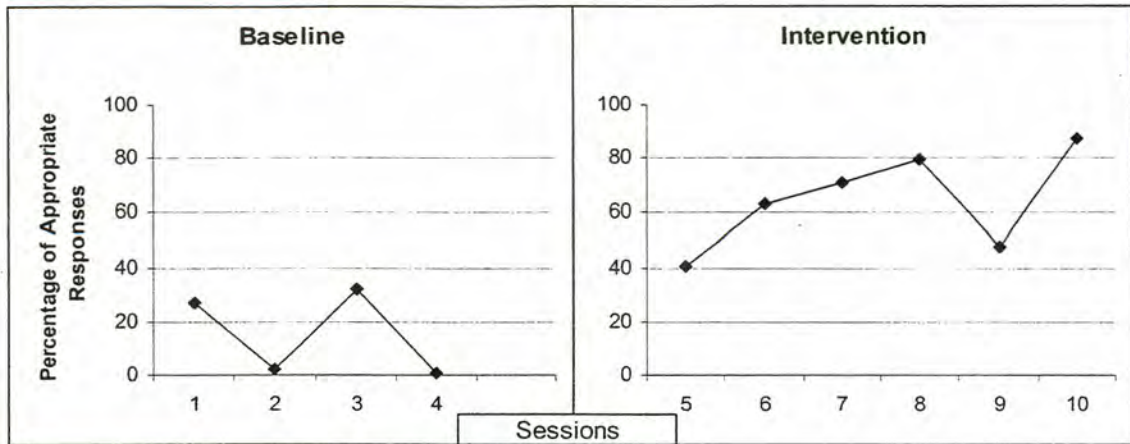
Behavioral interventions are designed to improve student behavior or increase skills.

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 inappropriate behavior.
2. Once an intervention has been applied, all teachers who work with the student should be aware of the intervention and should use the same intervention procedures in their own classroom. Communication between staff members is critical to the success of an intervention.
3. 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 at which the reinforcer will be given,
 - Identifying other behaviors that might be strengthened or considered,
 - Assisting in the development of the monitoring system used to keep track of behavior, and
 - monitoring their own behavior.

4. The students' expectations must be achievable. If the expectations are too high, the student may become frustrated and stop trying. If the expectations are too low, the reinforcer may lessen in value 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 expectation is too high or too low, talk with the teachers about adjusting it. This is important because one critical factor is that students must experience success soon after the intervention starts.
5. All interventions must be applied to specific and well-defined behaviors. Specifying and defining behavior are important when observing 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.

There are three steps to prepare for starting an intervention:

1. Select the most acceptable recording procedure for the identified behavior. Earlier in this module, three ways to assess and measure behaviors were described. They are frequency counting, time sampling, and per opportunity recording. When we start an intervention, the recording procedure will tell us whether the intervention is effective.
2. Observe and record the behavior. Make sure you have established ways to observe and record behaviors before starting an intervention.
3. Graph data before intervention (BASELINE) and during intervention. When an intervention starts, we compare the level of the behavior to the level in baseline and ask:
 - Is the appropriate behavior strengthening (increasing)?
 - Is the inappropriate behavior weakening (decreasing)?
 - Should we change the intervention?



The appropriate behavior shown in the first graph is increasing. The intervention is working and no changes are necessary. However, the appropriate behavior in the second graph shown is not increasing. It is about same as the baseline. A teacher would want to change the intervention.

Intervention 1: Applying positive reinforcement to a specific behavior

Using this intervention, we apply positive reinforcement when a specific behavior occurs. At the beginning of this intervention, we deliver the reinforcer each time the behavior occurs. Once the behavior is strengthened and occurs frequently, we deliver the positive reinforcer to some, but not all, occurrences of the behavior. Eventually, we may deliver the reinforcer infrequently.

Examples of ways to apply positive reinforcement to a specific behavior:

Deliver positive reinforcement each time an overly dependent student finishes an assignment on his/her own without asking for help.

Deliver positive reinforcement each time an “acting out” student greets his teachers or school principal appropriately.

Deliver positive reinforcement when a student completed a vocational assembly task without getting frustrated and angry.

[Suggestion: Use Utah State Video # 4 here. “Enhancing the Skills of Paraeducators – A Video-Assisted Program”. Locate Practice Scene 5.1, Applying Positive Reinforcement – Behaviors to be Strengthened: Types of Positive Reinforcement.]

Intervention 2: **Applying reinforcement for appropriate behavior while ignoring inappropriate behavior**

The second intervention involves strengthening an appropriate behavior while ignoring an inappropriate behavior. The purpose of this intervention is to “replace” an inappropriate behavior with an appropriate one. It is a useful intervention when we have identified an appropriate behavior (to strengthen) as a means of replacing the inappropriate behavior (to weaken). It works best for students who behave inappropriately to get an instructor’s attention.

One example might be a student who repeatedly disrupts a class during independent seatwork in order to get the teacher’s attention. Using this intervention, the teacher frequently delivers attention to other students while ignoring the disruption. When the disruptive student starts working quietly on the assignment, the teacher would deliver attention to the student.

CAUTION: Some inappropriate behaviors, including dangerous or highly disruptive ones, cannot be ignored. This intervention may be ill advised for those types of behaviors. Make sure that you talk with the classroom teachers about what to do when faced with dangerous or highly disruptive behaviors. Following are examples of some behaviors that may be weakened and alternative behaviors that can be strengthened using this intervention:

Inappropriate Behavior: Doodling during seat work.
Alternative Behavior: Working on the assigned task.

Inappropriate Behavior: Daydreaming.
Alternative Behavior: Working on the assigned task.

Inappropriate Behavior: Working sloppily and haphazardly.
Alternative Behavior: Working neatly with attention to detail.

Inappropriate Behavior: Complaining about assignment.
Alternative Behavior: Getting to work on the assignment or asking appropriate questions about it.

Guidelines for applying reinforcement for alternative behavior include frequently reinforcing appropriate behavior and consistently ignoring inappropriate behavior. These guidelines sound simple enough, but they can be very difficult to follow consistently. However, if they are not followed consistently, the inappropriate behavior may increase. Consider the following example:

A teacher encourages John to stay on-task, but John has a habit of daydreaming. The teacher praises John when he is working and tries to ignore daydreaming, but sometimes the teacher attends to his daydreaming by saying, "Earth to John, come in please." John and other students laugh at the instructor's comment, and the attention reinforces John's daydreaming. Also, if the other students find the situation amusing, they too may start daydreaming. This is one reason it is very important to ignore inappropriate behavior consistently.

In many cases, when attention-seeking behavior is first ignored, it increases. It is as if the student “tries harder” to get the teacher’s attention. Remember, consistently ignore each occurrence of the behavior. Turn your attention to praising other students who are using appropriate behavior.

[Suggestion: Use Utah State Video # 4 here. “Enhancing the Skills of Paraeducators – A Video-Assisted Program”. Locate Practice Scene 5.3, Applying Positive Reinforcement for Alternative Behavior. Would you ignore? Would you praise?]

Intervention 3: **Applying positive reinforcement to stepwise changes in behavior**

Using this intervention, we change behavior in small, achievable increases, called **STEPWISE CHANGES**. We use this intervention with behaviors that can be broken down into small steps leading to a goal.

The stepwise intervention is particularly useful in three situations:

1. When academic or social skills can be divided into steps,
2. When behaviors would be expected to change gradually over time, and
3. When the problem is due to low motivation.

Before starting this type of intervention, there are several questions to answer. These questions are related to the antecedents and consequences of the behavior.

- Does the student fail to understand the material? If “yes,” then teach the skill directly. This intervention may not help.
- Does the student attempt only those problems that he/she can answer correctly, or display only those behaviors with which he/she is familiar? If “yes,” then this intervention may help, but some direct teaching may be necessary.
- Is the student working too fast, trying to get the assignment finished, and therefore does not go back to check the answers? If “yes,” then this intervention may help.

- Is the student capable but unmotivated? If “yes,” then this intervention may help.

The following are examples of skills that can be addressed by this intervention:

- Math skills involving several steps or increased production, such as long division, working with decimals or fractions, multiplication by 2, 3, 4, etc.
- Vocational skills that require increased production rates, such as producing increased number or rate of assembled objects.
- Social skills, such as conversation with a peer.
- Skills that build from simple to complex, such as learning computer operations or banking activities.

The following is an example of using positive reinforcement for stepwise changes:

A student usually finishes a very low number of legible (readable) spelling words in a written assignment. The problem seems to be low motivation. The teacher first determines the baseline number of legible spelling words. Let's say the baseline is 10 out of 20 words written legibly. The teacher meets with the student. They decide on a positive reinforcer (5 minutes of extra free time) if each step is achieved. Then, the intervention starts by requiring a specific number of legible spelling words to earn a positive reinforcer; let's say 12 words. This requirement is not too high, and success is almost ensured. After the student successfully meets this requirement for two spelling sessions in a row, 14 legible words are required. After the student successfully meets this requirement for two days in a row, the step changes to 16 words, then 17 words, then 18 words. The level of difficulty may also change as the steps change. **CAUTION:** The teacher only changes a step when the student is successful on the previous one.

Guidelines to follow in designing stepwise interventions.

- Set the first step near the baseline average.
- Set later steps so that small changes in behavior are required.
- Change steps only after the student is successful in meeting previous step requirements.
- Adjust steps if the behavior is above or below the step requirement.

[Suggestion: Use Utah State Video # 4 here. “Enhancing the Skills of Paraeducators – A Video-Assisted Program”. Locate description of Applying Positive Reinforcement for Stepwise Changes in Behavior, near the end of videotape #4.]

(Please cover the answers.)

Section Five: Reinforcement Techniques

Self-Assessment Questions

1. Name the four types of positive behavior reinforcers:

**praise, activities,
materials, tokens**

- a. _____ b. _____
c. _____ d. _____

sincere

2. Praise must be immediate, frequent, and _____.

**personal
interests**

3. Activities must be appropriate to the age, gender, culture, and _____ of the student.

4. List several examples of materials that might be used as reinforcers:

magazines, toys

stickers, books

cassette tapes

Tokens

5. _____ represent positive reinforcers delivered at a later point in time.

intervention

6. A systematic set of procedures designed to improve student behavior or increase skills is called an _____.

positive

7. All interventions should include _____ consequences for appropriate behaviors.

teachers

8. Once it's been applied, all _____ should use the same intervention procedures in their own classroom.

Students

9. _____ should play a part in developing interventions.

expectations

10. The student's _____ must be achievable.

behaviors

11. All interventions must be applied to specific and well-defined _____.

RESOURCE A

Frequency Count Tally Sheet

RESOURCE A

Frequency Count Tally Sheet

Frequency Count Tally Sheet																				
Pupil: _____										Behavior: _____										
Definition of Behavior: _____																				

Date: _____							Time Interval: _____							Total Time: _____						
Frequency (slash one number for each occurrence):																				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	

Frequency Count Tally Sheet																				
Pupil: _____										Behavior: _____										
Definition of Behavior: _____																				

Date: _____							Time Interval: _____							Total Time: _____						
Frequency (slash one number for each occurrence):																				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	

RESOURCE B

Time Sample Tally Form

RESOURCE B

Time Sample Tally Form

Time Sample Tally Form

Student: _____ Date: _____

Target Behavior: _____ Time: _____

Definition of Behavior: _____

[Circle + (plus) if the behavior occurred;
circle - (minus) if the behavior did not occur.]

1	2	3	4	5	6	7	8	9	10	11	12
+ -	+ -	+ -	+ -	+ -	+ -	+ -	+ -	+ -	+ -	+ -	+ -

Time Sample Tally Form

Student: _____ Date: _____

Target Behavior: _____ Time: _____

Definition of Behavior: _____

[Circle + (plus) if the behavior occurred;
circle - (minus) if the behavior did not occur.]

1	2	3	4	5	6	7	8	9	10	11	12
+ -	+ -	+ -	+ -	+ -	+ -	+ -	+ -	+ -	+ -	+ -	+ -

RESOURCE C

Per Opportunity Tally Sheet

RESOURCE C

Per Opportunity Tally Sheet

Per Opportunity Tally Sheet

Pupil: _____

Date: _____

Target Behavior: _____

Time: _____

When an opportunity to respond occurs, check the top box. When the response occurs, mark + if correct, - if incorrect, or 0 if no response.

	1	2	3	4	5	6	7	8	9	10
Opportunities (✓)										
Responses (+, -, or 0)										

	1	2	3	4	5	6	7	8	9	10
Opportunities (✓)										
Responses (+, -, or 0)										

	1	2	3	4	5	6	7	8	9	10
Opportunities (✓)										
Responses (+, -, or 0)										

RESOURCE D

Glossary of Terms and Acronyms

RESOURCE D

Glossary of Terms

Related services consist of transportation and any developmental, corrective, or other supportive services that are required to assist a student with disabilities to benefit from the educational experience. Related services consist of the support services not traditionally included in educational programs but which are necessary for some students in order to make the educational services accessible or meaningful.

Evaluation services in specialized settings may be necessary. Although the special education teachers are trained to provide educational assessment services, some children may require medical, psychiatric, vision, hearing or other specialized evaluation services which are not provided by the schools. When such evaluation services are necessary for the determination of a disability, they are considered related educational services.

Counseling services must be provided if it is determined that the student requires counseling in order to benefit from the educational services being offered. Depending on the nature of the need, the school counselor may be utilized or a referral made to a human service center for specialized counseling.

Speech and Language Therapy is provided in the schools. Although Speech and Language teachers are considered special education teachers when they serve as casemanagers for children with a primary disability in the speech and language area, children with other disabilities, such as mental retardation or specific learning disability, may also need speech therapy. The speech therapist is considered a related service when it is provided as a supplemental service to a child receiving special education services in another categorical area.

Occupational Therapy is provided to students who have documented needs in the area of motor development that are impacting on the ability to engage in meaningful fine motor tasks and performing functional academic and daily living tasks.

Physical Therapy is provided to students with motor limitations who have a need to learn gross motor movements such as crawling, walking, skipping, and other forms of functional ambulation.

Assistive Technology services are provided to students who need specialized equipment to enhance their ability to be more efficient and successful in the academic area. A common type of assistive technology is using augmentative communication devices for students who are nonvocal. Other forms of technology consist of specialized computers, wheelchairs, and dressing and feeding devices. The assistive technology services consist of both the technological device or application as well as a consultant knowledgeable about the application and training necessary in order to utilize the technique.

Adaptive Physical Education involves modifications or accommodation to the regular physical education class. Supplemental instruction may take place in a separate class based on individual needs of the student. The goal is to allow students with special needs to remain in the regular physical education class whenever possible.

Behavior Modification consists of techniques for changing the behavior of students who demonstrate atypical behavioral responsiveness. An emphasis is usually placed on utilizing positive techniques to increase behaviors that are incompatible with targeted inappropriate behaviors.

Transition Services are provided for students when they turn age 14. Transition services are considered a basic part of the students educational program, rather than a related service, but many of the referrals needed during transition planning fall in the category of related services. The transitional outcomes addressed by the team are designed to prepare the student to succeed in the post-school setting selected as appropriate for that student.

Audiological Services are provided to students with suspected hearing difficulties. Although the speech and language therapists may screen for hearing difficulty, an audiologist is the professional who is trained to assess and detect hearing loss and deafness. The audiologist also provides information about hearing aids, training programs, and makes referrals for medical treatment when indicated.

Psychological Services involve obtaining, integrating and interpreting information about child behavior and conditions relating to learning; consulting with other staff members; and planning and managing a program of psychological services; including psychological counseling for children and parents.

School Psychologists provide evaluation services by utilizing standardized psychological tests for determining intelligence, aptitude, and interests.

Clinical Psychologists are specialists in diagnosing emotional disturbances through the review of case-history information, the administration of standardized assessment measures and observation and consultation.

Vision services are provided to students with low vision or who are blind or partially sighted. There is an entire continuum of vision services available from medical and allied medical diagnosticians to educational specialists trained to conduct functional evaluations of visual ability.

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RESOURCE D

Acronyms

ADA – American With Disabilities Act

ADD – Attention Deficit Disorder

ADHD – Attention Deficit Hyperactivity Disorder

BLST – Building Level Support Team

CP – Cerebral Palsy

D – Deaf

DB – Deaf-Blind

ED – Emotionally Disturbed

FAPE – Free Appropriate Public Education

FERPA – Family Educational Rights and Privacy Act

HI – Hearing Impairment

IDEA – Individuals with Disabilities Education Act

IEP – Individualized Education Program

IFSP – Individualized Family Service Plan

LRE – Least Restrictive Environment

MDT – Multidisciplinary Team

MR – Mental Retardation

OHI – Other Health Impairment

OI – Orthopedic Impairment

PLEP – Present Levels of Educational Performance

SLD – Specific Learning Disability

STO – Short Term Objective

TBI – Traumatic Brain Injury

TTY – Telecommunication device for the deaf (Teletypewriter)

VI – Visual Impairment

504 – Section 504 of the Rehabilitation Act

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