


Using On-Line Software for Professional Preparation and Consultation in PBIS


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The Purpose

The purpose of this project is to determine if on-line instruction and on-line consultation can improve the behavior of students with serious challenging behavior.



The Problem

- College level PBS courses are on-line
- Teachers require education, support, and consultation for PBS
- Teachers may be at various geographical distances
- Therefore, there is a need to evaluate on-line education, support, and consultation



The Participants

- I provided instruction on PBS and consultation for individual students
- Three special education teachers of students with severe disabilities enrolled in graduate course in PBS
- Three students with severe disabilities taught by the teachers (one was a child of one teacher)

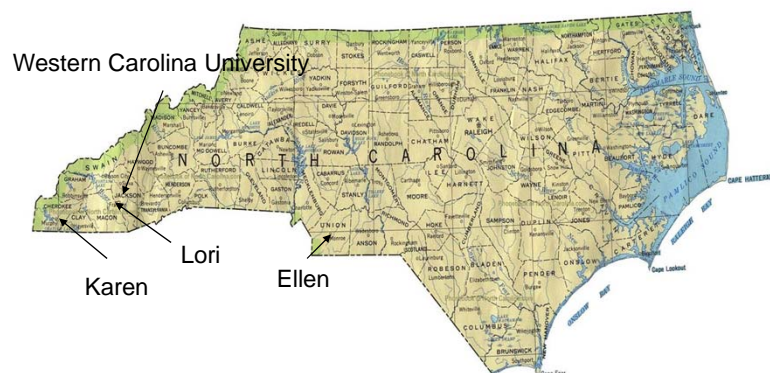


The Teachers

- Lori: taught elementary age students with severe disabilities in self-contained classroom and had 9 years of experience. Project student was *Isabella*.
- Ellen: taught secondary students with severe disabilities and had 7 years of experience. Project student was *Jeffrey*.
- Karen: a special education teacher for 2 years; but her project student was *Noah*, her son with autism.



The teachers were distributed around the state



The Targeted Students

- Isabella (Lori): 8 year old girl with multiple-disabilities and seizure disorder. Behaviors: hits, pushes, scratches, resists following instructions.
- Jeffrey (Ellen): 17 year old male with autism and severe intellectual disabilities. Behaviors: making disruptive noises, leaving seat.
- Noah (Karen): 6 year old boy with severe autism. Behaviors: Screaming or shrieking, hitting, kicking.



Procedures

- Contact between the professor/consultant and the teachers occurred across web-based programs and through telephone communication.
- The university instructional program WebCat (by Blackboard®) was used as the primary tool for instructional delivery and 1:1 consultation with teachers.
- The commercial web-based application BehaviorPlus® (by Public Consulting Group) was used as the on-line tool to collect data and develop the Behavior Intervention Plan (BIP)
- Interactions between the consultant and the teachers occurred during weekly course "chat" sessions and afterward through weekly individual discussion sessions by telephone.



Course Content



In-class content (delivered through WebCat®)

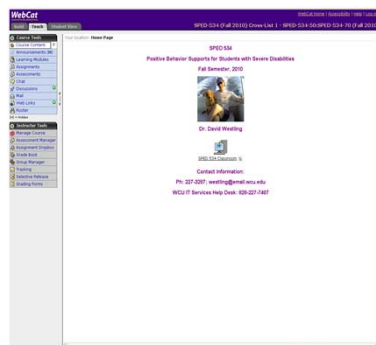
- Introduction to ABA and PBS
- Measuring, monitoring, and graphing behavior
- Single subject designs
- The origin and nature of challenging behavior
- Setting events and antecedents
- Increasing behavior through consequences
- Decreasing behavior through consequences
- Teaching replacement behaviors
- Functional communication training
- Creating effective Behavior Intervention Plans (BIPs)

Practicum requirements

(implemented using BehaviorPlus®)

- Complete Student Profile (student description and information)
- Create and implement monitoring plan for targeted behaviors
- Collect baseline data
- Complete Indirect FBA Form
- Complete Direct FBA Form
- Develop and implement Behavior Intervention Plan including:
 - Prevention tactics
 - Behavior replacement tactics
 - Consequence tactics
- Collect intervention data

WebCat® Features Used



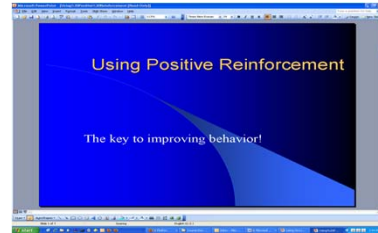
- Learning modules: contained articles, power points, documents
- Chats: allowed synchronous live chats with audio and video
- Discussion board: allowed asynchronous postings and responses
- Assessments: allowed on-line tests
- Mail: allowed email between instructor and students

WebCat® Features

Synchronous On-line Chats



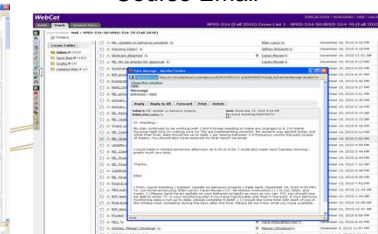
Learning Modules



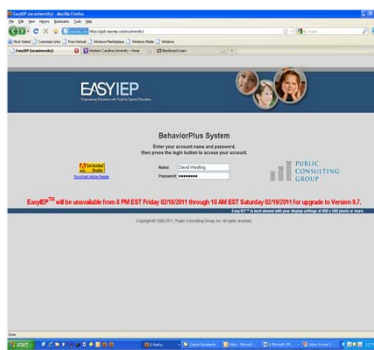
Asynchronous Discussions



Course Email



BehaviorPlus® Features Used

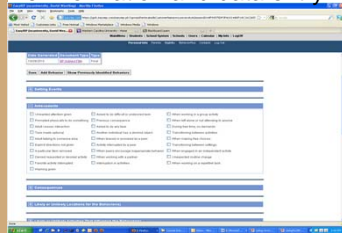


- Individual Profile
- Behavior Monitoring
- Indirect FBA
- Direct FBA
- Intervention Plans

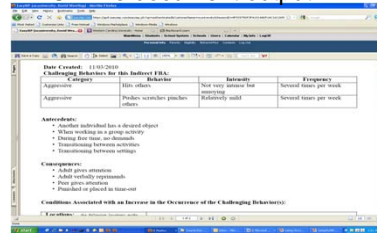


BehaviorPlus® Features

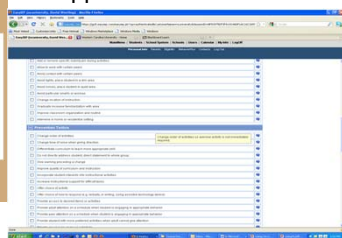
On-line information and data entry



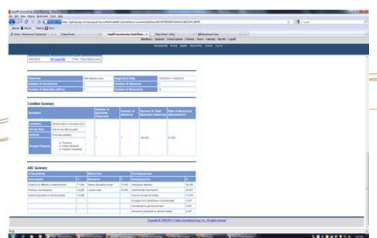
On-line document output



Support information



Data summary



Isabella: Key FBA Findings

Behaviors: hits, pushes, scratches, resists following instructions.

Antecedents:

- Another individual has a desired object
- When working in a group activity
- During free time, no demands
- Transitioning between activities
- Transitioning between settings

Consequences:

- Adult gives attention
- Adult verbally reprimands
- Peer gives attention
- Punished or placed in timeout

Conditions Associated with an Increase in Occurrence

- Cafeteria/lunch room
- Gym
- Special class or resource room

Conditions Associated with a Decrease in the Occurrence

- Art/Music activities room
- Bathroom
- Playground/sports area
- One to one with an adult
- Alone

Hypothesized function: Attention seeking



Isabella: BIP Components



Functional Hypothesis:

- Seek attention

Setting Event Modifications

- Improve classroom organization and routine

Prevention Tactics

- Give warning preceding a change
- Offer choice of activity
- Provide adult attention on a schedule when student is engaging in appropriate behavior
- Reinforce peers who are exhibiting appropriate behavior in front of student with challenging behavior
- Tell the student that first an undesired task must be completed then he can do a desired activity

Consequence Tactics

- Allow to engage in desired activity following less desired activity
- Reinforce appropriate behavior with adult attention
- Reinforce appropriate behavior with desired activity
- Reinforce specific alternative (replacement) behavior
- Prevent from engaging in desired activity following challenging behavior
- Withhold adult attention following challenging behavior

Replacement/Positive Behaviors

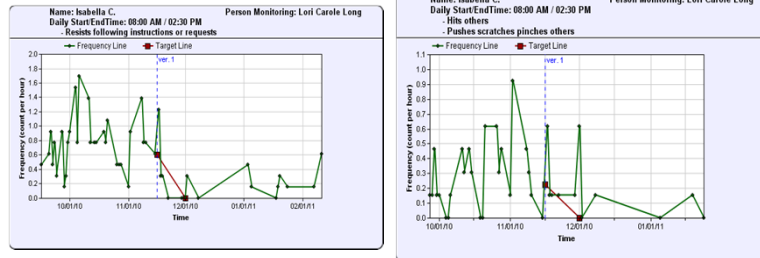
- Engages in appropriate social, communicative interactions with peers
- Responds appropriately to adult directions

Isabella: BIP Summary



- “The plan incorporated **setting event control** of improving classroom organization and routine. Thus, this reduced wait time at door during line-up and provided less “down time” overall during Isabella’s day. **Prevention tactics** essentially included providing adult attention for appropriate behavior, give warning preceding change in activities, praise others complying with directions given, and provide and if/then model of when a desired activity can be presented. **Consequence tactics** were to only stop hitting or pushing when needed and provide no other attention. **Appropriate behavior** was to be reinforced with lots of praise and attention and permission for a desired activity.”

Isabella: Results



Isabella: Results Summary

- Before BIP refusals were on average 1 per hour and after BIP with the exception of a minor extinction burst average about .15 an hour and most days have none. Hitting and pushing others were on average .45 an hour and after BIP are averaging .3 an hour. Reports from home are that Isabella's attitude on coming to school has changed. She now wants to come to school and is excited to get there. Recently, Isabella was chosen to represent our class as the terrific kid for this grading period. Isabella thoroughly enjoyed the spotlight of being on stage and receiving her certificate (and her behavior was superb).



Jeffrey: Key FBA Findings

Behaviors: making disruptive noises, leaving seat.

Setting Events:

- Illness
- Tiredness/Fatigue

Antecedents:

- Denied requested or desired activity
- Asked to do difficult or undesired task
- When working in a group activity

Consequences:

- Adult gives attention
- Adult verbally reprimands
- Avoid or escape an activity
- Communicate need or desire

Conditions Associated with a Decrease in the Occurrence

No differences reported

Conditions Associated with a Decrease in the Occurrence

- Playground/sports area
- *Play/leisure/recreation time*
 - Transitions between class activities

Hypothesized Function:

- Avoid or escape an activity
- Communicate need or desire



Jeffrey: ABC Data Summary

The most frequent behaviors (occurring more than once per hour) were:

- Makes disruptive noises (21.2/hr.)
- Leaves seat (9.1/hr.)

The highest frequency of all behaviors occurred during:

- Work task activities

The most common antecedents for all behaviors were:

- Asked to do difficult or undesired task

The most common consequences for all behaviors were:

- Adult gives attention



Jeffrey: BIP Components



Functional Hypothesis:

- Avoid or escape an activity
- Communicate need or desire

Prevention Tactics

- Change order of activities
- Incorporate student interests into instructional activities
- Offer choice of activity
- Reduce the amount of work requested at one time
- Request student to engage in 2 to 3 desired task before engaging in undesired task
- Tell the student that first an undesired task must be completed then he can do a desired activity

Consequence Tactics

- Allow to engage in desired activity following less desired activity
- Reinforce appropriate behavior with adult attention
- Reinforce appropriate behavior with desired activity
- Prevent from escaping an activity following challenging behavior

Replacement/Positive Behaviors

- Works on appropriate academic tasks
- Uses functional communication to ask adult for a break or rest

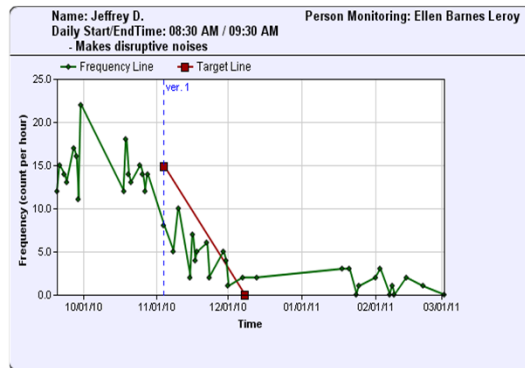
Jeffrey: BIP Summary



The behavior intervention plan consisted of:

- Changing the order of Jeffrey's tasks by allowing him to engage in desired tasks first (i.e. reading his favorite books) followed by the introduction of less desired academic tasks using visual and verbal cuing systems
- Incorporating more of Jeffrey's interests into academic tasks
- Giving Jeffrey choice of order of academic tasks
- Reducing the amount of work required at one time and slowly building upon this instruction time (one minute per week).
- Using a timer with a beeper to time work sessions and cue "all done"
- Allowing Jeffrey a choice of leisure activities as reinforcement for completing his academic tasks (i.e. free time to read books, use the computer, or take a 5 minute break on the playground)
- Reinforcing positive behavior through adult attention and verbal praise
- Preventing Jeffrey from escaping academic tasks if challenging behavior occurred

Jeffrey: Results



Jeffrey: Results Summary

Jeffrey continues to respond well to his behavior intervention plan. He is currently exhibiting 0-3 yelling behaviors during the one-hour data collection period...Jeffrey has also had some new interests that have been incorporated into his plan. The new interests have been used as part of the rewards system that is used following his completion of academic tasks. He now enjoys going into the occupational therapy room and looking at and pushing shopping buggies. He tends to select this reward more frequently than the outside breaks he was requesting before the weather became colder.



Noah: Key FBA Findings



Behaviors: Screaming or shrieking

Antecedents:

- Adult ceases interaction
- Adult talking to someone else
- Denied requested or desired activity
- When left alone or not attending to anyone
- During free time, no demands
- When engaged in an independent activity

Consequences:

- Adult gives attention
- Planned ignoring by adult
- Adult verbally reprimands
- Physical intervention
- Allowed to get desired item
- Not allowed to get desired item
- Gets sensory stimulation
- Allowed to participate in desired activity

Hypotheses:

- Seek attention
- Communicate need or desire
- Gain sensory stimulation
- Seek social reinforcement

Behaviors: Hits, kicks, strikes, chokes others

Setting Events:

- Bright lights
- Discomfort
- Pain
- Tiredness/fatigue

Antecedents:

- Adult talking to someone else
- A particular item removed
- Denied requested or desired activity
- Favorite activity interrupted
- Warning given
- Asked to do difficult or undesired task
- Another individual has a desired object
- Interruption in activities
- Unexpected routine change

Consequences:

- Adult gives attention
- Planned ignoring by adult
- Adult becomes upset
- Adult verbally reprimands
- Physical intervention
- Punished or placed in timeout

Hypotheses:

- Seek attention
- Communicate need or desire
- Seek social reinforcement

Noah: BIP Components (1)



Prevention Tactics

- Provide adult attention on a schedule when student is engaging in appropriate behavior
- Provide student with more preferred activities when adult cannot give attention
- Tell student you will return soon to provide assistance or give more attention
- Tell the student that first an undesired task must be completed then he can do a desired activity
- Use signs or gestures to direct student what to do, avoid physical contact

Consequence Tactics

- Allow to engage in desired activity following less desired activity
- Reinforce any other behavior besides the challenging behavior
- Reinforce appropriate behavior with adult attention
- Ignore challenging behavior
- Prevent from engaging in desired activity following challenging behavior
- Prevent from getting desired tangible item following challenging behavior
- Withhold adult attention following challenging behavior

Replacement/Positive Behaviors

- Uses appropriate verbal statements
- Uses functional communication to request attention
- Uses functional communication to request an object
- Uses functional communication to request an activity

Noah: BIP Components (2)



Setting Event Modifications

- Improve adult student personal relations
- Improve classroom organization and routine

Prevention Tactics

- Give warning preceding a change
- Provide adult attention on a schedule when student is engaging in appropriate behavior
- Provide visual cues or visual schedule

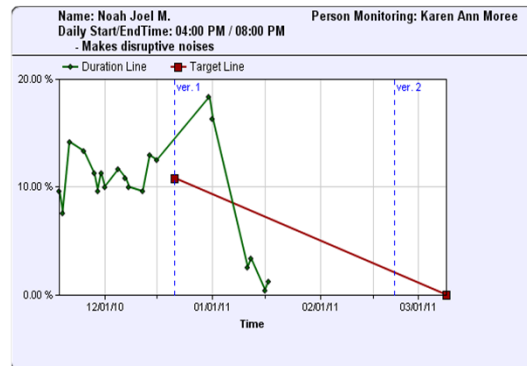
Consequence Tactics

- Reinforce appropriate behavior with adult attention
- Ignore challenging behavior
- Prevent from engaging in desired activity following challenging behavior
- Prevent from getting desired tangible item following challenging behavior
- Withhold adult attention following challenging behavior

Replacement/Positive Behaviors

- Uses functional communication to ask adult for help or assistance
- Uses functional communication to ask adult for a break or rest
- Uses functional communication to request attention
- Uses functional comm. to request a change in conditions (e.g. work with another student)
- Uses functional communication to request an object
- Uses functional communication to request an activity

Noah's Screaming/Shrieking



Noah's Hitting and Kicking

- This behavior continues.
- Noah appears to need to learn to use communicative behavior more frequently.
- Parents need in house support to develop more structured routine, use of a schedule, and an effective communication system.



Conclusions

- On-line instruction and consulting were effective for 2/3 of participants and students.
- In these cases, teachers were able to work with the consultant to develop and implement effective interventions.
- Noah, the student who with whom we have limited success (reduced screaming) had relatively more challenging behavior (aggression), requires functional communication training, and the parent was providing the intervention.



Limitations

- The lack of an experimental design, multiple component interventions, and the use of different interveners does not allow a conclusion to be drawn about what caused behavioral improvement when it occurred.
- The lack of independent observers does not allow for the data to be judged as reliable.



Discussion

- Future of on-line instruction and on-line consultation appears viable
- Research requires independent data collection and reliability assessment
- Instructor/consultant quality, teacher quality, and student behavior and characteristics may be factors



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