



Environmental Analysis and Behavior Intervention Plans

Martin Miramontes &
Margot Johnson
PENT Co-Directors

What have others said?



- Wallace and Larson (1978) described Ecological Assessment as *“referring to the analysis of an individual’s learning environment and his/her interactions within and across these settings. In stressing the importance of ecological assessment.”*
- Hardin (1978) said that *“Appropriate and effective intervention cannot occur without an adequate understanding of the child and his or her environment.”*

Purposeful Use of Environmental Analysis

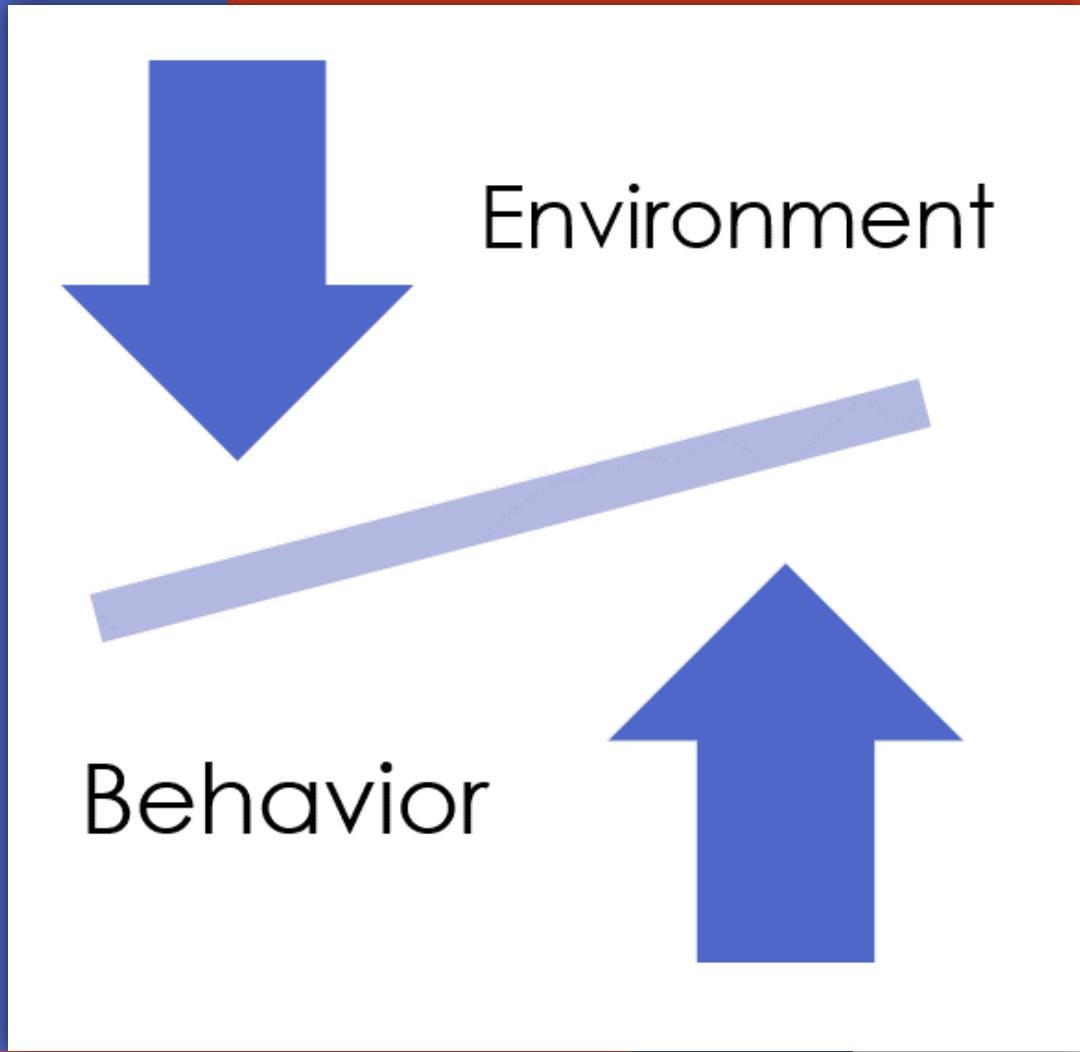
“Educators must strive to become keen discriminators of....situations in which an intervention, estimated to be effective if the target behavior is viewed in isolation, may be ineffective because other ecological variables come into play.”

(Heron, T., & Heward, W., 1988)

Environmental Analysis Background

- Human behavior is affected by events within the environment.
- An environmental analysis can explore those events and provide a great deal of information.
- However, it can be easy to go overboard and spend too much time investigating everything, which may or may not be connected to the problem behavior of concern.

(Cooper et al., 2007)



“Factors that can affect a person’s behavior”

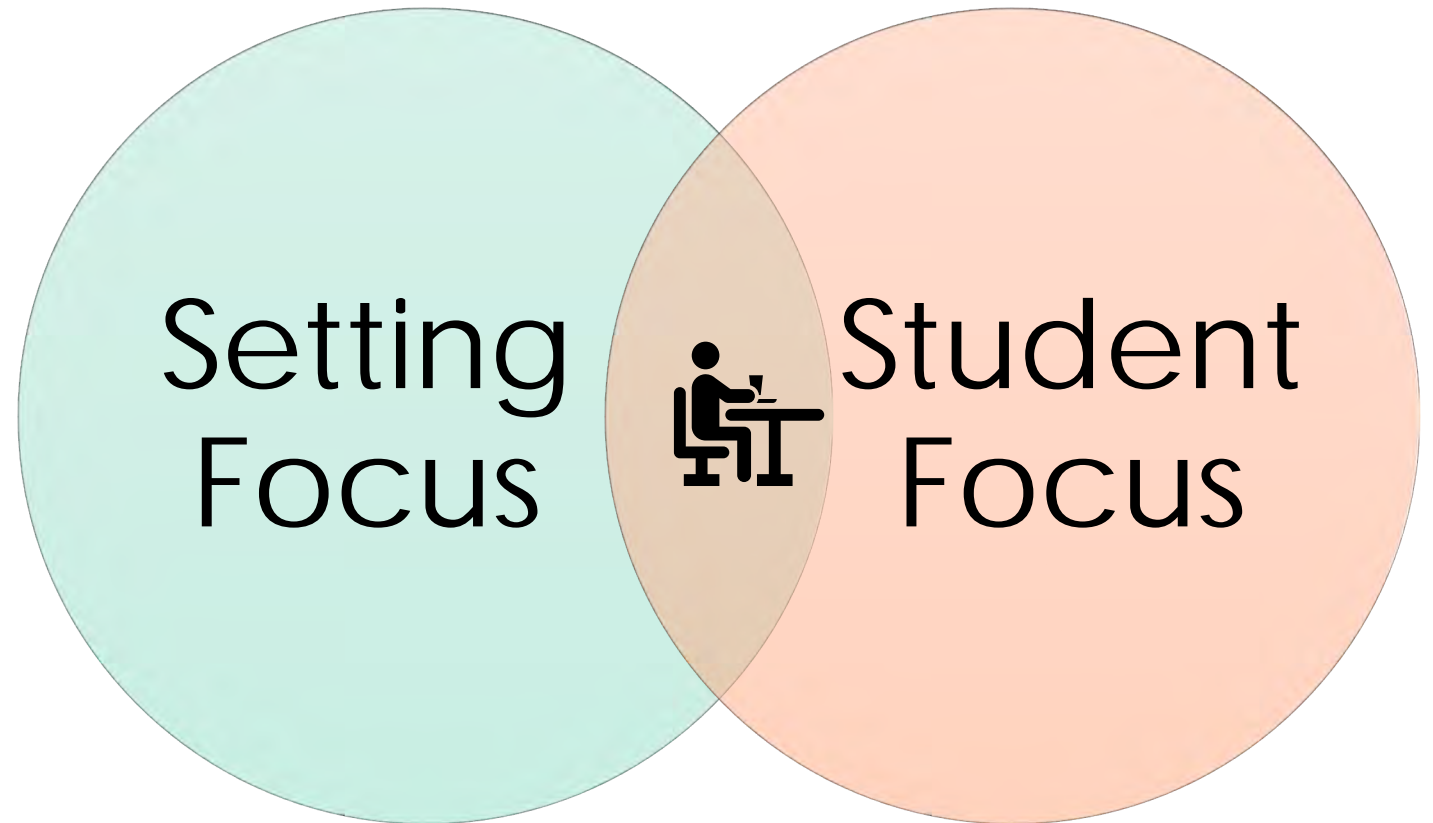
- Physiological conditions
- Physical Aspects of the environment
 - Lighting
 - Seating arrangements
 - Noise level
- Interactions with others
- Home environment
- Past reinforcement history

(Cooper et al., 2007)

“What does the student need to do to succeed?”

- Behaviors required to be successful
- Circumstances required for this to occur
- Compare requirements to the experiences and needs of the student

(Fovel, 2018)





Big Picture

A BIP/behavior plan will not be effective unless it addresses the environmental factors which are contributing to the problem behavior.

*PENT Behavior Desk Reference
Diana Browning Wright*



Case Study:

Student: Iwatta Tension
Pre School Age

Before we begin on this Journey..

1. Warning Signs/Common Errors of Environmental Analysis in BIPs
2. Road Map: Steps to an Effective EA in BIPs
3. Discuss your road map



Warning Signs!

Common Errors of the
Environmental Analysis
of BIPs



Error #1: Everything but the kitchen sink approach



"We had everything but the kitchen sink in here, and now we've got that too."



Error 1: Everything but the kitchen sink approach

- Multiple strategies listed for the purpose of addressing environmental factors
- May or may not be antecedent-based strategies
- May or may not be evidence-based
- May be a repetition of student accommodations, and/or best practice teaching or instructional strategies

Everything But the Kitchen Sink (EXAMPLE)

- Sensory Input
- Functional Communication Training
- Positive interactions
- Increase Processing Time
- Redirection
- Use of Preferred Topics
- Success Level Tasks
- First/Then
- Provide Choices and Skip Card
- Planned Ignoring
- *And the list goes on.....*



Error #2:

“New BIP/Same Plan, Who Dis? Approach”



Error #2: “New BIP/same plan, who this? approach”

- Strategies are the same, only names have been changed.
- May have different behaviors, or same/similar behavior(s) with different function but the strategies remain the same

Groundhog Day... (EXAMPLE)

BIP #1:

- Visual Schedule
- Increased Choice
- Seated near teacher

BIP #2:

- Visual Schedule
- Increased Choice
- Seated near teacher

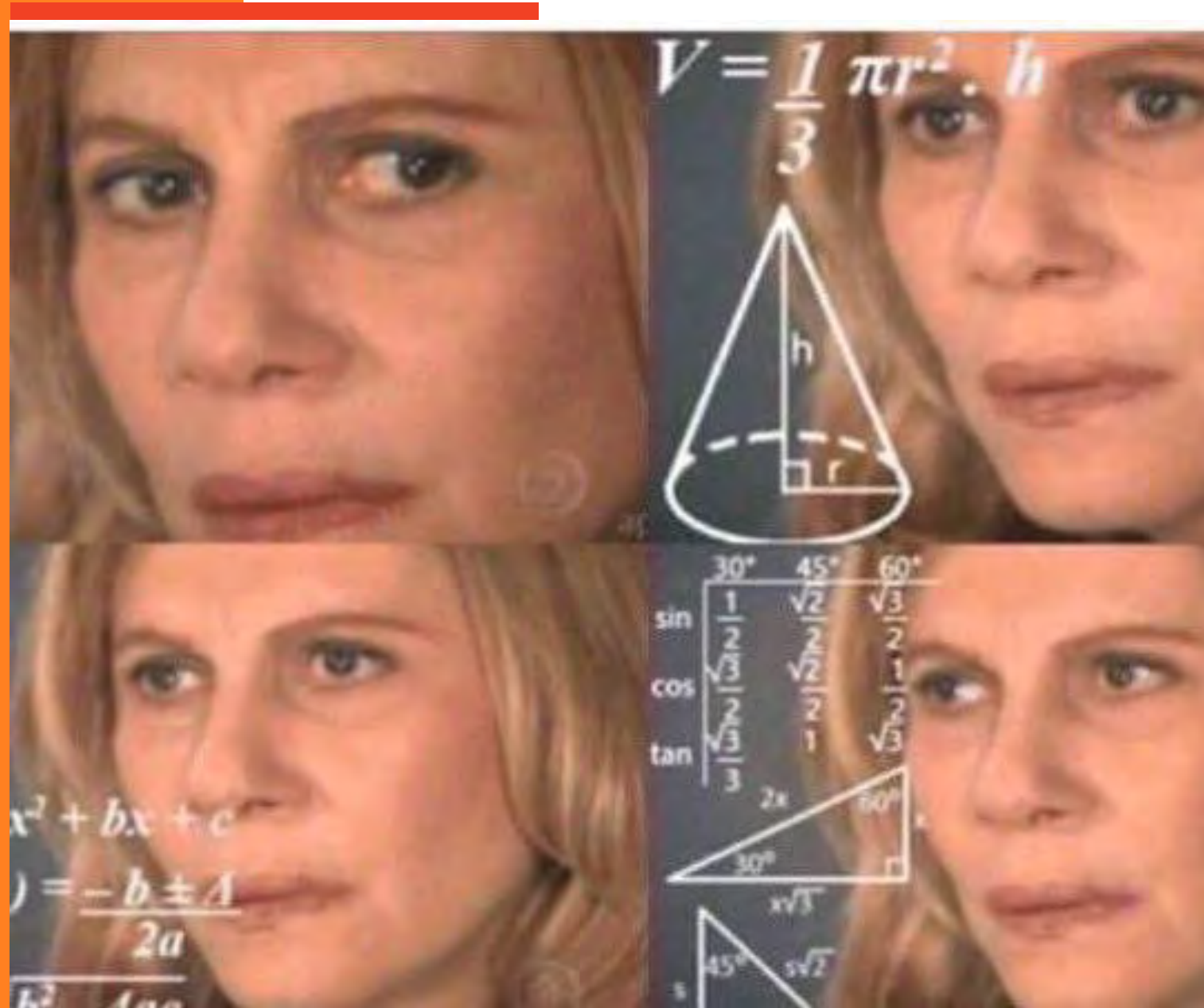
BIP #3:

- Visual Schedule
- Increased Choice
- Seated near teacher



Error #3:

It sounds nice..
But what does it
mean?



But...what does it mean? (EXAMPLE #2)

- Behavior: Licking peers and adults
- Antecedents: Presentation of work and/or task demands.
- Function: Escape (task demands)

- Environmental Supports: Premack principle should always be used along with redirection during the identified specific times, always following structured choices and the bin work system. Do not give manipulatives that can be put in the mouth, except for tokens which can be given with hand-over-hand support, within least to most prompting hierarchy, ensure student cannot access to the token board. Finally, reinforcement should be increased from the current variable ratio to a fixed ratio that is appropriate to the student's quantity of work completed.

Error #4:

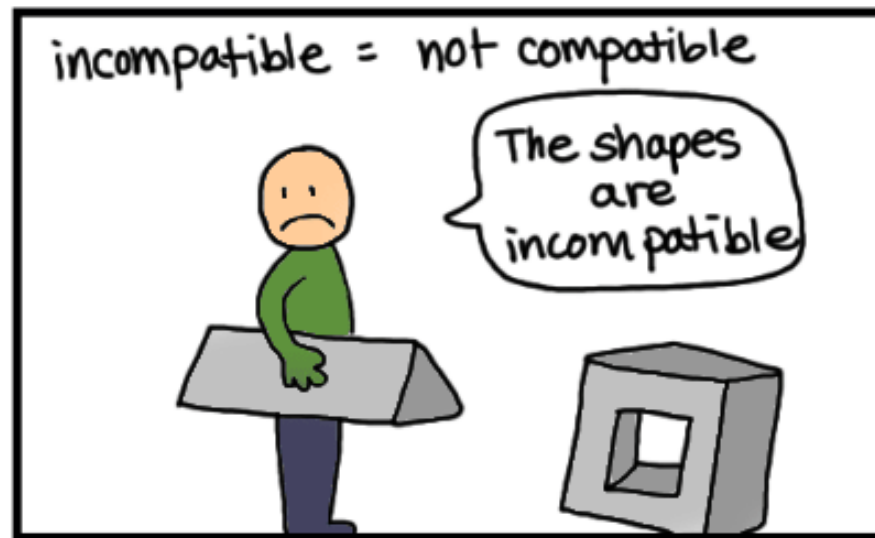
“I Swiped left, but the plan swiped right”

A mismatch of strategy
with function of behavior



Mismatch between Environmental Supports and Function

- *Function*: Attention, specifically access adult attention
- *Environmental Support*: Provide sensory materials to allow student to calm when they begin to demonstrate hitting behavior.



incompatible (adj.) opposed in nature,
not able to work together, conflicting

Reasons why EA might be Challenging: Barriers



- Not your classroom/push back/"buy in" concerns
- "It's the kid, it's not ME!"
- May reflect a weakness/lack of good Tier 1 supports
- Supports do NOT consider the individual needs of the students
- Focus of plan on PB Behavior/reactive strategies. Env. Analysis glossed over

Ever encountered this?

- Consultant/BIP developer
- Make recommendations
- Agreements are made, strategies are developed
- Return to find out nothing or little has been changed
- Remember Action Planning/Coping Planning?
- Possible teacher pushback/buy in concerns
- Principles + DBDM + consultation skills = effective services

Goal of Environmental Analysis:

- Identify pivotal environmental variables contributing to the problem behavior
- You may be tempted to note ALL areas that are wrong in the environment.. DON'T DO IT!
- Remember, aim is to keep your eyes on the student and the behavior of concern.

A Bit More Information...

- Hypothesized function: Attention, specifically adult attention
- Antecedents: prolonged downtime (5+ minutes), adult attention focused on peer or otherwise diverted from student.

Given this new information, how many of you would have changed your recommendations?

Steps to an Effective, Appropriate Environmental Analysis

Within the FBA and BIP Process



Global, Tier 1:

Big picture, whole
class needs, general
best practice

BIP

Development:

Specific problem
behavior, Student-
Centered

Step One:

Consider the problem behavior

1. Re-focus on the challenging behavior
2. Consider known antecedents
3. Consider hypothesized function

Behavior of Concern:	
Known Antecedents:	
Hypothesized Function:	

Step Two: Consider the environment *as it relates* to the identified problem behavior



1. What is PRESENT that may lead to the demonstration of problem behavior?
2. What is MISSING that may lead to the demonstration of problem behavior?

Consider Key Areas

- Structure and Predictability
- Active Engagement
- Degree of Independence

(Simonsen et al., 2008)

Step Three: Consider what modifications need to be made in those areas

Specifically consider recommendations to *reduce* likelihood of problem behavior and *increase* likelihood of positive behavior.





Step Four

Collaborate with the implementor(s) about what they can commit to doing to support these areas of need.

Recommendations for Supports, Strategies, Modifications

After completing the Environment Analysis Form, it is recommended that top areas of need are identified and for the team to collaborate to identify solutions, supports, and recommendations to support the student's positive behavior in those key areas. Such collaboration, along with action planning on how to implement the recommendations, is likely to increase successful implementation and follow-through of the recommendations.

Identification of Top Areas of Need

Identify the top areas that are believed to have the most impact on supporting the student's positive behavior. These areas can be targeted with interventions and supports and/or included in the student's BIP.

Area One:

Area Two:

Area Three:

Collaboration with Implementor(s) to Identify Solutions

Utilize this form to collaborate with the BIP plan implementors (e.g., classroom teacher(s), school staff, etc.) Discuss the top areas of need for the student, explaining why these areas are recommended to target for change. Ask what they think they could do to support the student differently, to reduce the likelihood the student would need to use the challenging behavior and increase the likelihood that they would use more desirable behavior.

Area One:

Area Two:

Area Three:

Some Potential Examples

1. Provide scheduled adult attention.
2. Increase frequency of brief, positive adult interactions with Iwatta, ensuring that he has opportunity to engage with the adult during these interactions (e.g., choice making, conversation about activity, etc.)
3. Provide activities for Iwatta to do during known periods of downtime. He particularly likes coloring, puzzles, and play-dough.
4. Active adult supervision during periods of known downtime (e.g., snack, free play), as having an adult close by decreases likelihood of problem behavior.

Benefits of the Environmental Analysis Form

- Flexibility
- Completing an FBA
- Collaborative Tool for BIP development
- Tier One Coaching Tool/Class-wide Recommendations
 - Return to Brick and Mortar
- Self-Assessment
- Analysis of the Remote Learning Environment

References

- Cooper, J. O., Heron, T. E., & Heward, W. L. (2007). *Applied Behavior Analysis (2nd Edition)* (2nd ed.). Pearson.
- Heron, T., & Heward, W. (1988). Ecological Assessment: Implications for Teachers of Learning Disabled Students. *Learning Disability Quarterly*, 11(3), 224-232.
- Simonsen, B., Fairbanks, S., Briesch, A., Myers, D., & Sugai, G. (2008). Evidence-based Practices in Classroom Management: Considerations for Research to Practice. *Education & Treatment of Children (ETC)*, 31(3), 351–380
- Fovel, J. (2018, October 12). Ecological Assessment For Successful School Inclusion Settings. Retrieved January 19, 2021, from <https://blog.difflern.com/2016/11/03/ecological-assessment-successful-school-inclusion-settings/>