

Deconstructing the Positive Behavioral Support Model and replacing it With the Neo-Montessori Constructivist Intervention Model Or How Montessori Changed my Cold Data Driven Heart

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Abstract

Positive behavioral supports (PBS) and the development of behaviorally oriented planning has become a ubiquitous paradigm in American schools. It is the preferred model for addressing behavioral issues with children as a means of preventing special education identification and placement. The effectiveness of this model has been well documented in peer-reviewed journals and shows an ability to change behaviors and improve academic achievement as measured by empirically designed assessments. However, the measurement of intellectual, moral and behavioral autonomy is seldom measured. Also, researchers from one perspective (Applied Behavioral Analysis) preclude other theoretical perspectives, to create the bulk of the evidence proving the usefulness of PBS as a viable model. It is the purpose of this paper to describe and support the contention that it is the concept of autonomy that is essential in measuring the success of behaviorally related interventions. This goal will be attained by deconstructing the PBS model. Further, it is an additional contention addressed in this paper that various Montessori methods and the theory's fundamental theoretical concepts do a better job of addressing authentic change and the development of autonomy. This will result in internalized behaviors that behaviorally oriented methods can never demonstrate. A new theoretical model will be presented to illustrate the incorporation of autonomy into the rubric of successful behaviorally related interventions.

Deconstructing The Positive Behavioral Support Model

Explanation of PBS and Methods Within this Model

The history and conceptual foundations of the PBS model are rooted in behaviorism and more specifically in the applied version commonly known as Applied Behavior Analysis (ABA). ABA is the process of systematically applying interventions based upon the principles of learning theory to improve socially significant behaviors to a meaningful degree.¹ More specifically, PBS refers to a process of assisting individuals to acquire adaptive, socially meaningful behaviors to overcome patterns of destructive, maladaptive and stigmatizing behaviors through collaboratively designed interventions.² A stated primary goal of PBS is to also to teach replacement behaviors that are seen by the designers as more desirable and socially appropriate. Historically, these interventions are primarily designed and implemented by the school psychologist and implemented by those professionals having daily contact with the student.

The interventions are based on models that have been well researched and have been shown to be effective in decreasing the targeted behaviors. The competing behaviors model is typically used as the basis of the formation of behavioral interventions that target and decrease undesirable behaviors but also increase identified replacement behaviors that are seen by the designers as socially beneficial.³ Response

covariation is also a commonly used model that is incorporated into the design process of behavioral interventions.⁴ This involves the design of an intervention that simultaneously contains the teaching of a pro-social behavior that functions as equivalent to the target behavior and eliminating contingencies that support the problem behavior.⁵

There are several universal components of the model. Functional Behavioral Assessment (FBA) is the most ubiquitous of these concepts. Functional Assessment is the broad set of strategies used to analyze the variables that support or encourage the problem behavior. It also is said to assess the variables that will support the new pro-social behaviors to be taught. FBA is used prior to the development of the intervention to determine the variables to be manipulated and after the intervention has been developed as a means of assessing the intervention.⁶ Antecedent manipulation, differential reinforcement and intricate forms of positive and negative reinforcement schedules are seen as central to the design of behavioral intervention plans. The emphasis of the scientific method in hypothesizing variables and antecedents, the design and measurement of the success of the intervention and then the redesign of the next iteration of the intervention based upon the data collected in the FBA, is the fundamental design of the PBS derived behavior plan.⁷

Fundamentally, the PBS model is based upon the principles of behavior, as they are understood from a behaviorist perspective. This model is based upon research that is also exclusively from a behavioral perspective. Typically based in two methods. The first is antecedent manipulation and the second is behavioral skills training.⁸ The concepts of intellectual and moral autonomy are never part of this behaviorally oriented discourse and are not noted as targets in any of the PBS literature. Likewise, an often-stated goal of this approach is to improve the quality of life of the individual.⁹ However, the way in which this quality of life improvement will happen is always determined by the designer and not the individual being intervened upon, making the PBS model inherently heteronomous.

IDEA and Systemic Indoctrination

In 1997 the Individuals with Disabilities Education Act reauthorization specifically called for the use of PBS as a strategy to address problem behaviors in children.¹⁰ As a result schools around the country have formed systems within districts designed to foster the use of this model and facilitate these intervention strategies. Intervention Assistance Teams (IAT) have been developed as standing committees in schools formed for the express purpose of helping teachers design and implement PBS oriented intervention plans. This call for a specific theoretical framework has dictated a specific perspective on student behaviors for schools. It has also prescribed a specific method of addressing these behaviors. Likewise, it has required schools to form structures within their buildings to support this perspective at the exclusion of other ways of thinking about behavior and intervention. It has also tied schools to a framework that is labor intensive, time consuming, expensive and almost impossible to implement effectively.¹¹

The school psychologist typically leads this model. The school psychologist professional organization is called the National Association for School Psychologists (NASP) advocates for a building wide and systemic approach to intervening on behaviors. The traditional three tiered approach. System wide supports for all students, Tertiary supports for identified behavior issues and targeted, individualized interventions for those students in need of a more restrictive model. Likewise, a positive behavioral support program (PBS) should:

Instead of using a piecemeal approach of individual behavioral management plans, a continuum of positive behavior support for all students within a school is implemented in areas including the classroom and non-classroom settings (such as hallways, buses, and restrooms). Positive behavior support is an application of a behaviorally based systems approach to enhance the

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capacity of schools, families, and communities to design effective environments that improve the link between research-validated practices and the environments in which teaching and learning occurs. Attention is focused on creating and sustaining primary (school-wide), secondary (classroom), and tertiary (individual) systems of support that improve lifestyle results (personal, health, social, family, work, recreation) for all children and youth by making targeted behaviors less effective, efficient, and relevant, and desired behavior more functional.¹²

This systemic approach dictates a specific model and theoretical framework. It is ecological in nature and permeates every ecosystem within a school district and is the dominant perspective in schools today. ABA considers itself a natural science on par with biology, or chemistry.¹³ This perspective also considers itself the only valid way to modify behavior in human beings. However, ABA and behaviorism is not without it's critics.¹⁴

How Behavioral Outcomes are Measured

While the stated objective of the PBS model states nothing specific about the theoretical framework to be used there are terms within the (NASP) statement that have become code words for a behavioral approach. "Evidence based", "proven effectiveness", objective and validated methods". With practice what this has translated to in practice is almost an entirely behaviorally based ethic in schools. Ultimately this perspective instills the practice of looking at students and their behavior as apart from the larger concept of their life. Their behavior is a function of the environment they are in when they are misbehaving. Also, that it is required that 'others' manipulate these environmental variables in an effort to extinguish and discourage the behaviors. It is an external model. In essence teachers are trained to see behavior as part of the here and now. The student behavior is seen as a 'maladaptation' that somehow rewards the student thus encouraging the behaviors. So, remove the reward, create a system that rewards the new behaviors being taught, and the behaviors will change.

The majority of this research measures frequency of misbehavior or office referrals for behavior. So the data collected to 'prove' the effectiveness of these strategies measure frequency of behaviors and frequency office referrals. This research mentions nothing about autonomy or change of behavior as measured by discussion, observation or the internalized new behaviors independent of rewards and punishments.

Sugai stated that "although teaching and learning processes are complex and continuous and some behavior is not learned (bio-behavioral), key messages from this science are that much of human behavior is learned, comes under the control of environmental factors, and can be changed.¹⁵ Furthermore it is the manipulation of antecedents and rewards that are at the heart of intervention designs.¹⁶ Most school professionals are a product of this school of thought. It is the only model taught in American graduate schools. As long as the external controls were present the children chose, or were coerced, into appropriate behavior. The behaviorist framework is more about control than autonomy.¹⁷

The PBS process is seen as separate from teaching; external to the classroom. It is seen as separate from teaching in the everyday sense of the word. Intervention is by its very nature should be an embedded process theoretically but it is almost never seen as this way in practice. We have separate support teams separate ways of thinking about behavior and learning, separate and very different methods of training the teachers and support professional. There is even a marked difference in the way regular education teachers see and understands behavior and intervention compared to special educators. There is also

evidence that the PBS model and IAT in general, are being used to facilitate special education placement instead of preventing identification. This is especially true with African American males.¹⁸ A new way of constructing meaning around behavioral intervention needs to be forwarded. A model less reliant upon external controls and more centered upon the idea of autonomy and the development of an internal locus of control.

Deconstruction of PBS

Lets deconstruct how a traditional PBS working group might begin to analyze a student's behavior. This example would be occurring during tier two or three of the intervention model. Notice the words and the concepts being used to discuss the student's behavior and how it differs from that of the above descriptions. This was taken from an actual PBS document.

Case Study of Language Used in Traditional PBS Intervention Development

An eight-year-old male student was brought before the intervention team today. It is the thought of the team that this student needs greater support and may be moving towards special education evaluation. Therefore, this should be considered tier 3 interventions. (Even though there was no evidence of previous interventions. No data was brought to the team). The student was measured using an observational tool and running record over a period of three weeks. Each day during the evaluation the student was observed to be 'off task' approximately 60% of the time. During these moments of 'off task' behavior the student would often begin bothering other students and disrupting the learning groups. It was observed that there were, on average, 5 incidents per day when the student would physically touch the work of other students or actually touch other students. Of those times he would physically touch students in a way that caused pain.

These incidents occurred during the periods of math, reading and language arts. It was also observed that this student had no incidents of these types of behaviors in other classrooms or other times during the days. Parents do not report any similar behaviors at home. Because of this discrepancy we further analyzed the behaviors in these specific classes.

Upon closer analysis we looked at the student behavior in light of classroom structure, reward contingencies for appropriate behavior and any indication of the environment providing reinforcement for these negative behaviors. We observed that the student's abilities in math and literacy related subject areas were in the typical range as evidenced by test scores. It was also observed that in these targeted classes there was far less structure and less teacher support during instructional time. Students were expected to work independently, silently and were to follow very strict behavioral guidelines in class. They were expected to work quietly and when they needed assistance, raise their hand until the teacher could come and assist them. Often it took a few minutes (as long as 10 minutes) as observed by PBS coordinator. If the teacher was unable to help the student within a few minutes he began to escalate his behavior, touch other students and eventually, sometimes hurt them.

The questions asked in this model are:

- What are the antecedents to the behavior?
- What is the frequency and intensity of the behavior?
- How is it impacting others?
- How is it impacting achievement?
- What reinforcement is present?
- Is this a skill deficit or a chosen behavior?

Our analysis concluded the following:

- 1. Student required skill-streaming scripts to follow in order to manage the time he was waiting for help.*
- 2. Student needed contingencies for waiting the appropriate amount of time for help.*
- 3. Student needed a behavioral contract targeting alternative behaviors during the escalation time between raising hand and receiving assistance.*
- 4. Student was observed as being rewarded for his maladapted behaviors and often received peer attention for his disruptive behavior. Also, student appeared to have learned that if he disrupted to the point of punishment he often did not have to complete the assignment and often was taken out of the classroom or sent home. This appeared to be reinforcing for him. We believe the evidence shows that he often wants to go home or get out of completing his work.*

If we critically look at the perspective used in analyzing the behavior of this student using the perspective of a typical PBS intervention model we see that the perspective is always looking at the student from a behavioral perspective. How is his negative behavior being reinforced? How can we change the reinforcement to encourage positive behaviors? How many times is he maladapting? When is he maladaptng? What is happening in the environment during these episodes? What skills is he lacking? There is little talk of language, or process. Nor is there any talk of the teacher's responsibility for what is happening with the student. While this may not reflect the intended purpose of the PBS model it is a reflection of how this process plays out in real time. It is almost always seen as a deficit in the student. A student "malfunction" of some kind. There is also no discussion about process, classroom structure or proactive methods that might prevent this particular kid from choosing this specific behavior. Finally, there is no discussion of the social dynamic of the classroom environment. These behaviors occur within the living eco system of the classroom. A classroom filled with living and breathing human beings. Often they are treated as if they don't exist. We focus on the broken student almost exclusively. The question is almost always "How do we fix this student so he adapts his behavior to the environment"?

What is most disturbing is the tendency of these intervention teams to use the intervention process as a means of speeding up the identification process as opposed to using the interventions to avoid special education evaluation. It is well documented that outcomes are better for students if we can prevent the labeling and placement in special education¹⁹

As a result we would come up with intervention plans that reflect this perspective:

Sample Intervention Plan

1. Student will be taught several scripts that he can use during these wait times. The goal of these scripts is to increase the amount of time student can patiently wait in an appropriate manner while waiting for assistance.
2. A behavioral contract would be developed and monitored by the classroom teacher and the school psychologist that reinforced the desired 'wait time' behaviors. The term of 'wait time' would begin with 1 minute and increase to as many as 5 minutes. Rewarding appropriate behavior would be emphasized.
3. As part of this contract anytime student was removed from class for behavioral reasons a call would be placed to home informing parents of removal and detention during recess or after school would be the consequence.

While these interventions might help achieve the desired goal of increasing 'wait time'. There is little evidence that any of these interventions will aid the student in changing these behaviors and moving towards responsibility and autonomy. This

intervention plan is missing any metacognitive strategies that would assist the student in developing a sense of why he is choosing this behavior. It is also lacking any effort to encourage a community support effort. But most strikingly, it is being developed entirely external to the child.

Emphasizing Moral and Intellectual Autonomy

Very early in Piaget's career he began to write about autonomy. He saw autonomy as the central purpose for education²⁰ Kami was a student of Piaget and stated:

Autonomy means being governed by oneself. It is the opposite of heteronomy, which is being governed by someone else. Autonomy is the ability to make decisions by taking relevant factors into account, independently of rewards and punishments.²¹

Vygotsky also reinforces the idea that new learning, including behavior, independent of language development and conversation is not likely to be internalized. Piaget, Vygotsky and Kami all speak of the importance of process. Language and internalization independent of external reinforcement.²²

If there are flaws in the PBS model and we are certain that learning new behavior is more about an internal process than external controls;²³ that learning new behaviors requires language, interaction and thinking that the process of teaching these skills needs to be embedded in the culture of the school and the classroom that learning new behaviors and how to function autonomously involves realizing the interconnectedness of all things and all things in school;²⁴ then where is the model that incorporates these elements?

Montessori: The Method is the Message

“Scientific observation then, has established that education is not what the teacher gives; education is a natural process spontaneously carried out by the human individual, and is acquired not by listening to words, but by experiences upon the environment.”

Maria Montessori, Education for a New World

The investigator was asked to consult on a behavioral intervention at our university Montessori lab school. The student referred was an eleven-year-old female. The behaviors described were avoidant behaviors, off task and a tendency to socialize and have fun rather than complete work and engage in learning. A Functional Behavior Analysis was conducted and it was found that the student avoided most work but in particularly literacy related work. She would avoid it or engage others in social behavior to avoid completing the work. The plan was to intervene by removing the environmental distractors encouraging her to mal adapt her behavior, increase the reinforcement for appropriate, engaged behavior and structure her day into smaller time allotments to avoid boredom and distraction. She was capable of focusing for 13 minutes at a time. We would structure the day into thirteen-minute segments for success.

The year ended before we could implement these strategies. In the fall, she was transitioning into a new classroom, with a new teacher. It was agreed that a new FBA would be completed given the new environment. However, the behaviors were not observed. The off task behavior was gone. She was able to focus for longer periods of time and the avoidant behavior, while not completely gone, was diminished. When discussed with the director of the program she stated, “obviously the child had normalized”. She followed up by stating also “given enough time and consistency all children will normalize” and “it’s the

method”. The current teacher, Mr. Shanklin, defined and explained the concept of normalization in the following way:

Let’s start with a definition of normalization so we have a common foundation to work from. Before we can do that, we have to understand that Montessori is not just a philosophy of education for schools. It is a way of understanding and interacting with the natural development process of the lives of all children. It is not something that is meant just for 9-3, Monday thru Friday, September to May. Dr. Montessori believed that normalization was the single most important result of her work. It wasn’t something she set out to discover, she had no idea this is what she would find. Normalization wasn’t a theory she was trying to prove and therefore could have manipulated the results. Through her observations with children, she determined that an innate force that she called ‘horme’ drives them. (She also uses the term ‘mneme,’ referring to the memory of the impressions a child absorbs. Dr. Montessori believed that children are born normalized. Normalization is not a point of arrival; it is the point of departure. Children are born with the tools and tendencies they need to develop fully and healthily. The role of the adult in the child’s life then, is to prepare an environment that allows for the child to stay normalized as much as possible. Dr. Montessori observed these as some of the characteristics of normalized children:

- Love of work
- Joy in the moment
- Repetition, which leads to concentration
- Secure relationships with reality
- Honest, precise, and direct interactions with adults
- Love of order
- Self controlled and self disciplined
- Can resolve conflicts or ask for help when they can’t
- Comfortable working alone and with silence
- Appreciation of other children”

Further, Montessori talked about how with children’s behavior it is more about what we do ‘with’ children rather than what we do ‘to’ children that affects the normalization process. The behaviors are seen within a larger context. Dr. Montessori observed, what she called deviations, or, an action, behavior, or condition that is different from what is usual or expected. She claimed that deviations occurred when the child was in an environment or situation where they needed to defend themselves by rebelling against the limitations that restrict their natural development.

Some deviations that were observed were:

Fugue- (derived from the Latin word for running away or flight) The child takes excessive refuge in fantasy. Often uses materials in the environment for purposes other than what they were intended. (A ruler becomes a sword; triangle piece becomes an airplane bomber.)

Barrier – often seen when a child is coerced or manipulated into doing things. They build a wall to keep the adult out.

Attachment – Child is unable to do anything or few things without an adult or someone else to help them. Is often bored and not self directed.

Possessiveness – unwillingness to share. Has often been forced to share and not given a chance to choose to share or not. To share is volitional.

Desire for power – child repeatedly says no in an effort to control the situation.

Inferiority complex – child does not feel they are important.

Fearful – connected with inferiority complex. This can also be seen as compliance. (This one is scary to me because so often we see compliance as an appropriate behavior. But often, a child is complying out of fear. So they self protect by doing what they are told.)

Lying – children often lie because they want to please us. If they think they will displease us, they will lie to us.

In the Montessori model many of the premises that serve as foundations for the method are at odds with the traditional PBS model and the fundamental concepts the model is based upon. Instead of maladaptation to seek reward, children are defending themselves from a hostile environment. Also that ill prepared environment is what is wrong and it is the environment that is not allowing the child to grow and develop normally. Montessori also states that the first environment that needs preparation is the teacher herself.

The Cosmic Classroom

Cosmic education is a part of the entire Montessori curriculum and experience, but it is more prevalent in the elementary years because the work that comes from the curriculum is a part of what helps the normalization of the elementary child.

“Let us give the child a vision of the whole universe . . . for all things are part of the universe, and are connected with each other to form one whole unity.”

-Maria Montessori, To Educate the Human Potential

Lessons in the elementary (1st grade to 6th grade or 6-12 years) are meant to give the child a vision of the whole universe. The intended desire is that the child leaves elementary with a greater understanding that all of creation has some kind of role to play, or a cosmic task as it is called. This then leads the child to begin asking what their cosmic task is. What is my purpose? How can I make the world a better place? How can I work for the good of creation? The classroom community helps facilitate all of this as well, as the children at this age come in to an awareness of their actions, their emotions and how they impact and are impacted by others in their community. It is then a part of the classroom culture to model this interconnectedness. It manifests in teacher behavior, parent behavior, student behavior, physical environment of the school even in the teaching of social skills and social behaviors. It is embedded in the fabric of the classroom.

The student I was brought into intervene upon was now part of this greater whole and she was clearly feeling that connectedness. Whereas last year she was avoiding work and working very hard to not be noticed by the teacher now she was actively engaged and willing to take the social risks she was unwilling or unable to take last year. Mr. Shanklin related this story to me that illustrates her willingness to take such risks:

“Juliana read a piece of her own writing to the entire class on Friday. She sat on a stool in front of everyone, took a big sigh that was followed by several smaller sighs, and then proceeded to share a story about a bruised apple named Green, who was rescued from becoming applesauce, by a girl named Apple.”

Piaget spoke of this as ‘intellectual autonomy’ He felt that this ability to step out independently was the goal of education. One of Piaget’s students has written extensively on this topic of intellectual and moral autonomy. Kami found that for Piaget the goal of all education was moral and intellectual autonomy.²⁵ Contrary

to the role traditional teaching (and PBS), which is the transmission of knowledge and values from one person to another. Heteronomy is central to the PBS model because it is based upon the premise that behavior is outside of the child. It is seen as external. In a discussion about PBS and intervention then the perspective has changed from training or controlling behaviors of the student, which is often the goal of traditional PBS interventions, to allowing the child to normalize and allowing them to construct an understanding of their behavior and “normalize” or return to the natural state of engagement, concentration and connectedness.

Erikson uses the terms autonomy, initiative and industry to describe the characteristics that answer the questions “Is it ok to be me?” “Is it ok for me to do, move and act?” “Can I make it in this world of people and things?” In the Cosmic Classroom these are the goals and intellectual and moral autonomy are the outcomes.²⁶

Internalization

The issue of internalization in the traditional PBS model has been challenged throughout its existence. Critics like Kohn, Deci and Greenspan contend that the best outcome you can hope for using a behavioral PBS model is control of student behavior. Kami contends that there are three negative outcomes if negative reinforcement or punishments are used to modify behavior. They are calculation of risk, blind conformity or revolt.²⁷ He also found that behaviors will not internalize if external rewards or punishments are used because there is an implied meaning that there is no value to this desired behavior so I will have to pay you for it.²⁸

Montessori used a constructivist framework for understanding behavior. The child normalizes, feels worthy, feels a part of a community and therefore chooses to conform so they can remain in the community. This is a much different perspective of human behavior. It also requires a much different approach to intervention as well.

If we wish to change behavior, if we wish to rely on the student’s internal locus of control we can never impose our will on them. Bribing them to behave in the way we wish will result, even on the best of days, mere control. Vygotsky found that when learning new concepts students require the creation of new language²⁹ Language that is both external and internal. Providing time to discuss behavior and problem solve with students allows them to understand their behavior, create new language around the new behavior and internalize the new behavior more readily. When they see that there is no attempt at coercion and that this change will help them remain in this desired community, they internalize the behavior themselves. This is the authentic change Montessori was speaking of when she spoke of the child’s natural desire to feel part of the greater connectedness of the universe.

Reconstruction: A Hybrid Framework

Somewhere between the Cosmic Classroom and the PBS model lays a rational and applicable way of thinking about intervention. A framework that incorporates the ideas of intellectual autonomy, internalization of new behaviors and working with children, while still valuing the idea that controlling student behavior is still necessary at times, albeit a poor substitute for internalization. This model would include the following premises:

1. A model that embraces the concept of connectedness and that children’s natural state is ‘normalized’ and that the extinguishing of old behaviors (old model) is really attaining ‘normalization’
2. A model that utilizes an ecological model of understanding children and children’s behavior.
3. A model that utilizes the development of new language around learning new ways of being.
4. A model that validates and internal reality that affects children’s behavior.
5. A model that values the effective preparation of the environment (including the teacher)
6. A model that values a proactive emphasis of preventing behavior as opposed top reacting to it.
7. A model that accepts that control of behavior is sometimes necessary.
8. A model that puts children at the center of constructing knowledge.
9. A model that incorporates the community in changing behavior.

10. A model that provides what a child needs to become both intellectually and morally autonomous.

Established Support for Developing an Autonomy Driven Model

Dewey found that the primary aim of education was to empower the child with self-control. The discipline that must be developed in order to establish self-control is taught by the student being part of a caring community who provides lots of practice in social situations and feedback when needed. Simply removing external controls is not enough. We must create a classroom climate that encourages connectedness and caring about each other. This type of classroom must teach through example and practice. It should be embedded within the academic day and not taught as a disconnected skill set has stated that this type of classroom community requires the following expectations from children:

1. Know names
2. Take Turns
3. Share
4. Make room for everyone
5. Join activities and small groups
6. Invite others to join the group.
7. Be friendly
8. Be cooperative
9. Learn to solve conflicts peacefully.³⁰

All of these are balanced with the value of individual needs as well as the goals of a Cosmic Classroom stated above. This classroom should also communicate to all members that this is a place “to see and be seen” and that “it matters to us that you are here”³¹

Neo-Montessori Constructivist Intervention Model (NMCI)

-See figure #1

Neo-Montessori Model for Constructivist Intervention

The purpose of the continuum is to provide teachers with a model that graphically shows what we know to be true about behavior change in the classroom. This paper only addresses tier three interventions. However, tier one and two would have the same emphasis that would require the development of trust, community and rules, rituals and routines in the classroom to form the community alluded to in Montessori’s concept of the cosmic classroom. It is the emphasis of the process of learning new behaviors; guiding students to an internal understanding of the reasons why we are asking them to behave in a certain way that leads them to new frameworks of understanding. It was also developed to graphically display the outcomes you will attain by using strategies on the left or the right. If control is what you seek, then the strategies on the right are where you look. If change and internalization are your goals then the strategies on the left are where you begin. Ultimately it is a road map for professionals to use when developing an intervention. The left side embodies many of the Montessori concepts that work toward ‘normalization’. The right embodies many of the traditional PBS strategies. This model aims to de-emphasize the right and emphasize the left in daily practice as well as intervention development.

Flow of the Continuum

The model is placed upon a line moving from the left to the right. We can characterize the line and its movement left to right as moving from less restrictive strategies that encourage the responsibility for behavior by the student to more restrictive strategies that emphasize teacher control and increased control by the teacher. The entire model is based upon an ideal of ‘positively regarding’ children regardless of their behavior. This model represents intervention from a professional’s perspective, teacher, school psychologist etc.³² The model is split into two unequal sides. The larger of the

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two halves is called the 'with children' side. It is larger because of the evidence we have in education suggests that these methods give us the best outcomes with all children. These outcomes would include autonomy and internalization. The shorter side of the model represents the methods of intervention that we use when control is our desired outcome. Unlike the Montessori method, this model does see a purpose and a value in controlling student behavior. If the behavior is causing a care and safety risk or if control is necessary to make an academic point, then control is an appropriate method. The furthest you could theoretically travel to the right is to physically intervene. Strategies requiring professionals to physically restrain students to maintain their care and safety.

In this model we spend extra time and effort on the left side of the model. Even on tier three. Perhaps even more because we are on a tier three intervention. The values that characterize this 'with children' side of the model are looking at human behavior from a constructivist perspective. It also emphasizes the building and sustaining of personal relationships with others. In fact it is seen as a major thrust and outcome of these strategies and seen as fundamental in the internalization of new ways of thinking. Fundamental to this side of the model and when learning any new behavior or concept, is the creation of new language around new learning. The process of learning is valued over the product of learning. This side of the model contains all of the strategies or 'ways of thinking' about behavior that will prevent behaviors before they are issues in the classroom. This premise is fundamental to the new model. It is always better to prevent behaviors rather than intervene or react to them.

The 'to children' section of the model is a necessary but less desirable side of the intervention model. It acknowledges the fact that there are times when control is needed. These will often take the form of some type of reward and punishment model, contract, or some type of external control imposed on students. However, when the right side is considered for interventions it is asked that the planners think of the most restrictive practice needed to gain control of the behaviors and then work backwards towards the 'with children' side. This will allow for the control that is needed but also will encourage thinking deeply about the process necessary for the student to take responsibility for their behavior and change it. In essence, moving only as far right as needed and then doubling down on the less restrictive and more autonomy producing processes on the left side.

For example, if we were to look at the strategies of the right side of the continuum, they would begin with less restrictive and controlling strategies like individual contracts, rewards, punishment driven bribes. The thought being that these methods are necessary for controlling behavior of the student in an effort to maintain control in the classroom and maintain a civil environment as well. As you moved further to the right strategies that would include time out, removal from the classroom and punitive consequences might be utilized. You could move no further to the right than physical crisis intervention, which would only be used to prevent harm to the students or others in the environment. Wherever you discern this reliance on control to take you, you must simultaneously utilize and emphasize the relationship building strategies of the left side of the continuum. This fluid nature of the NMCI can best be illustrated by the following figure:

Figure #1

Sliding Focus: Interventions and the NMCI

When an intervention team is beginning to look at designing a NMCI, they discern the most restrictive or controlling method they would possibly need to control the student and the situation. In essence the group would decide, theoretically, how restrictive they might have to be given the evidence of past behavior of the student. This would be indicated by the far right edge of the circle. However, the far left edge of the circle would still be within the 'with student' side of the continuum. Illustrating the continued need for intervention from that side of the continuum. A more disruptive and out of control student would require more restrictive methods from time to time. A less severely affected student might require less control and would be available for the relationship building strategies on the left. However, the left side of the continuum is never forgotten and it's strategies never forgone. The neglect of these 'change' strategies is often completely forgone within many applications of the PBS model.

Case Study Using the NMCI Intervention Framework

If we use the same description of behaviors we used in the PBS example we can see the contrasting emphasis and language used in this hybrid model.

The questions asked during the NMCI approach are quite different:

- Does this student feel a valued part of the community?
- What is preventing him from succeeding in math and literacy related classes?
- How far to the right on the continuum does this child require interventions to go?
- How will this student engage?
- What are the student's strengths?
- What learning style does this student manifest?
- What are the origins of this behavior?
- What have we done thus far to engage this student?
- Does this student trust us/classroom/school/peers?
- What language does the student need to engage more meaningfully?

The NMCI would be concerned at looking at the preparation of the environment, including the teacher and the level of differentiation used in instruction. A fundamental premise of this model is to look at how engaged the student is in learning and the extent to which the teacher is seeking the correct formula for that specific child. Engaged students act out less. With the student described in the intervention above the NMCI approach would explain the behaviors described as efforts to avoid feeling inadequate in math and literacy related coursework. It would also presume that the inability to wait probably has more to do with the fact that the teacher is taking so long to help. Research suggests that wait time for students of this age should be no more than a few seconds and if you are unable to answer the question at that time the teacher should communicate this and mention that they will be able to help when they are able to.³⁴ Our goal, then, would be to construct interventions that built confidence and a sense of efficacy for the student. The idea that a behavior is a

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'wont' behavior (in other words a behavior the student has the ability to use but chooses not to) is seen as irrelevant. Engagement and a feeling of being capable trump all of these behavioral constructs.

An intervention plan would be developed by beginning as far to the right as the team feels will be necessary to use as a starting point. Then the interventions will move to the left and emphasize the 'with' child interventions. An example of a written intervention plan using this model is provided in Figure # 2.

Conclusion

The concept of 'normalization' implicitly seems to value the importance of community and feeling a valued part of ones community. As such, the use of practices that allow for individuals to care about each other remain a focus regardless of the level of control being imposed on the student. Rogers suggested that all of us need unconditional positive regard to survive.³⁵ Montessori adapts this slightly with the emphasis on all of us needing to feel a part of a larger whole. The cosmic classroom takes this to its ultimate iteration and states that we all need to realize our place and connectedness in the universe, in our lives and in our classrooms. The interconnectedness of human beings to the Earth and to each other is the essential element in the Montessori method and in this new theoretical framework for intervention. This interconnectedness is also the essence of normalization and as such is the central focus of the new model. Ultimately the goal of NMCI should be a student feeling valued as a part of the greater whole of the classroom culture, and universe. The outcome of that connectedness is the return of the natural balance that Montessori called 'normalization'

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Figure #1

Figure #2
Sample NMCI Intervention Plan

Target- To improve engagement in learning and to develop authentic feelings of inclusion in the community.

“With” Child Interventions

1. Greet Child Everyday upon arrival (teacher or assistant)
2. Parent Home journal. Signed and brought back to school (student/teacher)
3. Participation in group meeting/ emphasis on inclusion in group (student)
4. Specific /targeted one on one time with teacher daily in math and literacy(teacher)
5. Patience Card- Reminder card listing 3-5 strategies for waiting including “ask three before me”. (student)
6. Leadership Positions assigned to student during reading/math(teacher)
7. Check in with teacher about behavior in morning, lunch and end of day (teacher/student)
8. Group meeting addressing issues of patience and waiting(student/classmates)
9. Teacher actively documenting strategies being used for active engagement and confidence building (teacher)
10. Daily calls home to check in with parents about said behavior. (teacher)

“To” Child Interventions

1. Physical Crisis Intervention (teacher)
2. Removal if a threat to self or others.(teacher)

This plan will be deemed effective if there is an increase in engagement in math and literacy related tasks as measured by observation of both teacher and student.

- It is assumed that this child will only need physical intervention in the case of them being a threat to themselves or others. This does need to be included however, and the child and parents made aware that this may be an intervention if care and safety becomes an issue.
- It is also assumed that engagement, confidence and feeling a valued part of the community are at the root of these behaviors. Addressing these is the bulk of emphasis of this intervention plan.
- Each intervention iteration must last a minimum of 20 school days before adapting.
- If it is improving the behavior stay with the intervention.
- If intervention is not measured to be working within the first 20 days. Re-evaluate and reconfigure the plan modifying it where the data shows that specific strategy is not working.