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How PBIS Instructional Strategies Can Influence Student Engagement

Kathy Tucker[1], Sunddip Panesar-Aguilar[2, *], Jamie Jones[1]

[1]Richard Riley of College of Education and Human Sciences, Walden University, Minneapolis, USA

[2]College of Health Sciences, University of St. Augustine for Health Sciences, St. Augustine, USA

Email address:
saguilar@usa.edu (S. Panesar-Aguilar)
*Corresponding author

Abstract: School districts across the United States are using multiple systems to improve teacher instruction and student engagement. The problem at a middle school in North Texas is that it is unknown how middle school teachers are using Positive Behaviors Interventions and Supports (PBIS) to engage students. The purpose of this basic qualitative study was to explore how sixth-grade teachers are using PBIS instructional strategies to engage students, as well as sixth-grade teachers' perceptions of PBIS for engaging students in the classroom. PBIS, along with Watson's behavioral theory and Vygotsky's cognitive development theory, served as the conceptional framework for this study. The research questions concerned how teachers used PBIS instructional strategies to engage students and teachers' perceptions of PBIS instructional strategies to engage students. This study encompassed open-ended semi-structured interviews using nine participants who were certified teachers, taught a core subject, and used PBIS instructional strategies in their classrooms. The data was collected and analyzed through the process of open, axial, and selective coding. Three themes emerged: effective environment, systems for support, and learning leakages. Teachers may benefit from positive social change by gaining insight needed to better meet the needs of all students through PBIS systems. Students may benefit from positive social change by and enhance the overall learning experience and in turn, improving student academic achievement.

Keywords: Student Engagement, Positive Behaviors Interventions and Support, Teacher Instruction, At-Risk Students, Engagement, Teaching

1. Introduction

Throughout the United States (U.S.), instructional change has been occurring in the educational system, and each year district leadership teams seek better ways to meet the needs of the students they serve [1, 2]. At the same time, problems with students' behavior and attendance have also been increasing. These increasing problems create barriers affecting schools to meet the needs of the students they serve. Therefore, districts must find a way to overcome these behavior and attendance barriers across all school levels [3]. These behavior problems contribute to the attendance problem. Students who exhibit disruptive behaviors risk being removed from the classroom and are alternatively placed in in-school suspension (ISS), on-campus intervention (OCI), or suspended receiving no academic instruction causing them to fall behind [4].

PBIS was introduced to the district in 2012 and PBIS training is offered during the summer and is ongoing throughout the school year. Teachers are receiving this training, but it is unknown how middle school teachers are using PBIS instructional strategies to engage students. There has not been a significant reduction in office discipline referrals (ODRs). This professional development (PD) is offered to all teachers and is reinforced during professional learning communities (PLC). On average, PD is offered every 6 weeks, and PLCs occur daily at the middle school. Measures have been put in place to lessen classroom disruptions, such as small group instruction, parent call log teams, social caseworkers, and gender groups. Even with these measures, in an instructional team meeting at the middle school, one of the instructional coaches suggested students stay behind unless they stay after school for tutoring or come early for tutoring. The instructional coach also suggested teachers could reduce the number of referrals being written due

to students' poor choices and behavior and handle those infractions in the classroom with the students.

Teachers are under time restraints from pacing guides, which are set by the district for how long each unit should take, that allows little flexibility to address student off-task behavior [5]. Time restraints may pose a disconnect of the use of the PBIS instructional strategies to engage students in the classroom. When students experience learning problems, teachers rely on strategies, interventions, and assessments of those outcomes to effectively identify and create a plan of action to resolve the problem [6]. PBIS instructional strategies are successful if they are implemented with fidelity, for PBIS serves "to realign resources and design interventions to promote positive student outcomes" (p. 90) [5]. These positive student outcomes could include higher student attendance, more student engagement, and an overall appreciation of education [6].

The problem is that despite the efforts of middle school administrators requiring teachers to use PBIS instructional strategies to improve student engagement, it is unknown how middle school teachers are using PBIS instructional strategies to engage students. PBIS is a system geared towards equipping teachers with a range of interventions to reinforce appropriate student conversation/behavior conducive to learning in a positive learning environment [7]. Within PBIS, there are instructional strategies to support students. PBIS also equips teachers with instructional strategies such as Kagan Structures, such as think pair share, rally coach, and rally robin [8], so the teachers can effectively deliver an engaging lesson with few disruptions.

The research questions for this basic qualitative study were focused on how middle school teachers are using PBIS instructional strategies to engage and support students in the classroom. The following research questions supported the exploration of PBIS instructional strategies teachers use and the perception of how PBIS instructional strategies assist with student engagement:

RQ1: How do middle school teachers use PBIS instructional strategies to engage students in the classroom?

RQ2: What are middle school teachers' perceptions of PBIS to engage student learning?

2. Conceptual Framework

Grounded in behavioral theory, PBIS is a framework that entails a system that allows changes to occur for both the teacher and the student while also promoting positive behaviors to create an environment conducive to learning [9]. PBIS, a tiered process, emphasizes three preventative methods. Each tier has a focus point that guides the intervention process.

According to Center on PBIS, the first tier is the instruction given on behavior expectations, and when working within this tier, the focus is on preventing new behavior problems by implementing high-quality learning for all students [7]. Next, is school/home communication, and within this tier, the school/home communication is increased, and the focus is on nonresponsive approaches to problematic behaviors [7]. By involving guardians quickly and putting measures in place

such as small groups, the students are better able to adapt to the directions requested by the teacher [7]. Finally, individualized interventions are needed. Within this tier, a focus on reducing the intensity of prevalent problem behaviors one-on-one is suggested [7, 9]. The framework is further validated by behaviorist theoretical underpinnings for PBIS, which calls for three basic components: systems change framework, school building level procedures, and the use of varied levels of interventions and support.

PBIS relies on the use of proactive strategies and interventions to increase desired positive student behavior [5]. PBIS has a foundation in the philosophical terms of Vygotsky's theory of cognitive development, which is based on the principle that a student's cognitive development evolves from social interaction [10]. Vygotsky investigated the relationships between teaching and child development and proposed that teaching leads to development. According to Vygotsky, teachers should promote a child's development by stimulating capabilities. To be effective, teaching needs to anticipate development.

3. Data Collection and Analysis

After reviewing other qualitative research designs, a basic qualitative study was appropriate. A basic qualitative study is flexible and is used to study a real-world problem in the field, featuring participants' experiences and perceptions [11]. A basic qualitative study design with interviews only was used to explore how middle school teachers are using PBIS instructional strategies to engage and support students and middle school teachers' perceptions of PBIS to engage students in the classroom.

3.1. Participants

The participants within this basic qualitative study consisted of all academic core teachers in the chosen site. The participants of this basic qualitative study were chosen based on the following criteria: certified teacher, core content teacher, and their use of PBIS instructional strategies.

Table 1 shows the teacher participants, years, and content areas they teach.

Table 1. Teacher Experience and Content Area.

Participants		Years of Experience	Content Area
1	P1	15	Science
2	P2	11	Science
3	P3	6	Social Studies
4	P4	5	English
5	P5	15	English
6	P6	4	English
7	P7	6	English
8	P8	5	Math
9	P9	6	Science

Questionnaires

To address the research for this study, the data was collected from semi structured interviews. The data was only used to look for evidence of implementation of PBIS instructional strategies and student engaged instruction to address

achievement of the Texas Essential Skills. This exploration may help determine what PBIS instructional strategies teachers use and teachers' perception of using them to increase student engagement during instructional time.

Interviews

Interviews allow for an in-depth view of the perceptions and the practices of the participants. The interviews were important to this basic qualitative study because questions were developed by the researcher answer the questions *how what*, and *why*. The design of the interview questions was derived from the PBIS framework and related literature of the study.

3.2. Data Analysis and Findings

Participants were interviewed via Zoom and each interview was audio recorded. After all the interviews were completed and confirmed, each interview were transcribed and the transcript emailed to each participant to check for accuracy.

A thematic analysis of interview data was conducted using an open coding process to condense paragraphs to sentences and sentences to words/phrases or single words. Similar data was organized using code words/phrases based on related categories from a conceptual lens such as involvement, dedication, commitment, accountability, and training or lack thereof. Once open coding was completed, axial coding was initiated in the third phase.

Lastly, selective coding was conducted to decipher themes during this phase. The following themes stemmed from the open and axial coded data: effective environment (Theme 1), systems of support (Theme 2), and learning leakages (Theme 3).

The data revealed the teachers' use of PBIS instructional strategies to engage students in the classroom through differentiated instruction, peer collaboration, giving immediate feedback, and providing engaging activities. The data also revealed a positive perception of PBIS instructional strategies from the teachers. However, the teachers collectively only used one PBIS instructional strategy consistently. The following is an explanation of findings as they aligned to research questions.

RQ1: The Use PBIS Instructional Strategies to Engage Students.

Research question 1: *How do middle school teachers use PBIS instructional strategies to engage students in the classroom?* In focusing on RQ1, the findings from the analysis of interview data implied all teachers used PBIS instructional strategies in the classroom; however, they only used one strategy to engage students.

Interview data showed all teachers were aware of the constructs of PBIS per their responses. During the interviews, the teachers shared how they monitored their students, scaffolded material, modeled the assignments, and reinforced positive behaviors to provide the instruction needed for their students to achieve and grow in their academia [12]. Participant P4 used volunteers to repeat what the students were to do before she turned them loose to work independently, then asked questions to make sure everyone understood. Three

key principles vital to creating productive learning environments are: being proactive—developing positive and respectful school climates, being fair—making clear and appropriate expectations, and being scientifically based—using data to guarantee fairness and equity for all students. The data demonstrated the knowledge of the teachers' expertise in their content areas. The interviews revealed they took the time to learn and build relationships with their students to offer them the best academic experience possible as all teachers expressed as much through their responses. There was a lack in how to accomplish engagement other than through turn and talk or think-pair-share. There were missed opportunities by the teachers to engage students with other strategies as there was never a mention of another engaging instructional strategy used.

Theme 1: Effective Environment

Theme 1, teacher-student relationships, emerged from data on teacher responses about using PBIS instructional strategies to engage students in learning. All the participants conveyed they want the students to feel safe in their classrooms and comfortable enough to take risks answering questions especially when they were unsure of the answers. Participants P1, P3, and P4 did this by greeting the students at the door while the others asked questions about the weekend or good day/bad day "by a show of hands…." While discussing student engagement and the reluctance of some students, the participants suggested that making the atmosphere of their classroom inviting helped to relax the students where they "wanted to engage with each other." Participant P6 offered incentives for participating such as getting to sit in a different seat, the student and a partner being able to sit in a different area of the room, or 10 points added to a homework assignment. Participant P6 said, "if they know it's no penalty for getting the answer wrong and are rewarded for just trying, they perform."

According to many of the participants, once they have established a rapport and built relationships with the students, teaching was easy. They observed the students wanting to be in class even if they did not do well on the assignments, at least they would try and accepted help when offered. Participant P1 stated:

> We don't know what students go through at home; at least we can give them what we would want from an adult. It's easy to care about them. [Laughing participant P1 continued] You might not always like their behavior, but that you can correct with the right relationship.

The participants affirmed that an effective environment was necessary for learning to take place.

Theme 2: Systems for Support

From similar responses affirming maximizing student achievement, the theme of systems for support emerged. Overall, the participants had systems in place to help guide their work and help determine what steps to take next. One participant, P8, stated:

> I would survey students about particular things in the lesson to see who was getting it and who was lost. Depending on the number of students that were understanding or not, I

would have information stations and have captains of the table. And the ones that understood and could explain that particular process step would be the captains, and the other students would visit whatever table they needed to if they were stuck on that part. This worked well with science, and I would imagine it would work with math too.

The teachers spoke candidly of their experiences and shared how when the students are aware they would get support from the teacher, they performed much better and they turned in more work. Participant P9 shared,

My students know if they are stuck on a problem they had for homework because I skip around on the question/problems I have them to complete, they can come in the next morning and get help working through that question and complete another one similar, and I'll grade that one.

Another participant, P7, said, "When the students know the process of my systems, they no longer see it as a treat."

All participants through their responses conveyed how they use some type of system to help support the learning in their classroom and help their students achieve.

RQ2: Teachers' Perceptions of PBIS.

Research question 2: *What are middle school teachers' perceptions of PBIS to engage students?* In focusing on RQ2, information was obtained about the teachers' perceptions of PBIS to engage students. The findings revealed teachers' perceptions of PBIS to engage students to be affirmative according to their responses. The teachers shared how peer-to-peer collaboration was an effective tool to use when introducing new concepts. They also conveyed that this helped develop cooperative learning skills with the students; a skill that proved to be vital as the year progressed. Teachers expressed how audio, visual, and kinesthetic instruction helps to maximize student learning and engagement as it addresses multiple learning styles. A consensus was formed that learning was inevitable when the students were allowed to converse with one another with the teacher being the facilitator; knowledge that might not ordinarily arise surfaced, based on the verbal responses.

The knowledge base that PBIS instructional strategies are beneficial to students alone is not enough. Teachers must seek out which of the strategies best fit the instruction at the time; gaps in the practice occur if they do not. The PBIS framework should be integrated with planned instruction to support behavior, student social competence, decision making, and academic achievement [13]. For PBIS instructional strategies to be effective, they must be implemented and practiced with fidelity.

Based on the verbal responses of the interviews, it was found that the teachers need PD on how to effectively integrate PBIS instructional strategies in their instruction. The findings from this study can be used to address this gap by providing research-based results that teachers can use to assist them in writing and planning their lessons to implement PBIS instructional strategies to engage students.

Theme 3: Learning Leakages

In response to the data of teachers' perceptions of PBIS instructional strategies to engage students in learning, the findings revealed the participants were aware of learning leakages and used them to their advantage. The last theme that emerged from the data was learning leakages. Each participant offered some sort of model for the students before they allowed them to work independently on any part of an assignment. The model either came from the teacher or a peer (depending on the lesson). Showing differentiation, a term meaning matching different teaching styles to tailor to the needs of students, allows for success for students with different learning styles [14]. The participants suggested that learning can come from hearing the information in multiple ways and from multiple people even the students' peers. One participant, P4, stated, "I let them work with a shoulder partner if the partner understands. Sometimes the verbiage they use is a little different, and it works." Many of the participants conveyed after they shared out that they ask the students what they heard and how what someone said offers insight or changes the perspective. Participant P5 said, "By asking questions after sharing, it allows me to see the depth of the understanding they have. I love seeing the lightbulb come on when they get it." All the other participants, P1, P2, P3, P6, P7, P8, and P9, had similar responses as they too allow students to work in pairs sharing out with the group or just with each other.

4. Conclusion

This study was conducted to explore how middle school teachers used PBIS instructional strategies to engage students. The perspectives of the teachers were comprised of various methods of how to best use PBIS instructional strategies within their classroom, but they lacked PD on the different PBIS instructional strategies that worked best with different activities to engage the students.

The potential barriers to the research study are funding and scheduling time for the training. Because the budget is decided upon before the close of the prior school year, the district/campus may not have the funding to support such training. If this is the case, two alternate avenues for funding could help. One way is to have an outside source fund the training. This study site's district has a private organization that funds schools for projects and training that are outside of the regular budget if approved through their proposal process. If that does not work, another way is to go through the site-based decision-making committee (SBDM) to request money to be moved to allow for the training to take place. The principal would have to agree that the training is necessary and then present it to the committee for them to vote.

The second barrier is scheduling time for the training before the academic school year begins. Because this training will be considered a school-wide PD outside of the district PD given the week before the students return, the teachers will be asked to commit to three days before the official report day. Things that will need to be considered are the benefit of the added time and the buy-in from the teachers.

The first consideration could be handled by the principal giving the teachers flex-time for attendance. Each year teachers are required to receive a certain number of flex-time hours. Giving them 12 hours for this training would be a selling point that most would appreciate. The next consideration would be the teacher buy-in. The teachers would need to see the relevance of the training. If the principal requires at least two strategies to be present in the lesson plan and implemented, the teachers will see the need and benefit of learning the strategies well enough to use with the students daily. These potential solutions would work for both the teachers and the administration. Teachers would get flex-hours and learn new strategies that would impact instruction and student learning, and administrators will see an improvement in instruction and student learning during walk-throughs.

However, there were different ways to address this problem of study. One could have been to evaluate the implementation process of PBIS. By doing this, using a number of ODR to gauge if the process was being done with fidelity is recommended. Using both ODR and test scores to determine if the implementation of PBIS instructional strategies improved standardized test scores is recommended. Each of these different methods would have helped address a gap in practice and lead to viable ways to improve the problem.

A different approach to address this problem could have been to use a concerns-based adoption model (CBAM). By using this model, it is recommended to start with a survey to determine the needs and concerns of the teachers and address them directly [15]. Using the CBAM provides a tool for evaluating and a system to monitor growth as well as to support ownership of the change. This strategy would give teachers a say, as the survey would address areas of concern and show relevancy to their needs creating a sense of teacher buy-in.

This research has provided potential avenues for future research and potential influences on local and state policymakers to make available funding to create positive change. In education, there is no "one size fits all." It is a daily struggle to ensure that the needs of all students are met. Though sometimes teachers/educators fall short, the results of this research have provided opportunities for support from administrators and peers so, in the reteaching stage, the teachers can focus on the misconceptions and revamp the lesson. It is all a process.

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