Teacher Perception of Blended Learning on Student Engagement in the Post-Pandemic Era

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The world of education faced an unprecedented challenge when the pandemic forced schools to close and transform into remote education through digital platforms. When the schools started to reopen for face-to-face instruction post-Covid, instead of returning to the familiarity of traditional classrooms, the educators realized that the education landscape had changed. Digital platforms continued to play an integral part and students displayed disengagement from school. A public high school in southeast Texas implemented blended learning to increase student engagement. This case study investigated the perceptions of teachers on using blended learning to increase student engagement in the post-pandemic era in a K-12 setting.

Introduction

The term *new-normal* was first introduced in the business world and later adopted in other sectors, meaning something atypical earlier has now become the norm (Cahapay, 2020). In the context of K-12 education, the "new normal" is a flexible structure of classroom instruction and the permanency of digital education even after classes have now returned to in-person after the pandemic. Striking a balance between digital and traditional modes of instruction to keep students engaged has become the new challenge in post-COVID classrooms (Suriagiri et al., 2022).

This study sought to explore the experiences of teachers as they blended various modes of learning with an emphasis on relationship building during small group in-person instruction. Kohnke and Zou (2021) highlighted the importance of digital tools, independent study, and flexible and collaborative learning as important pedagogical techniques to improve students' learning experiences. Lane et al. (2021) reported a significant increase in Blended Learning (BL) implementation in post-secondary education as it emerged as a favorable mode of learning among higher-education students. Moreover, Short et al. (2021) indicated a rise in the popularity of this method in the K-12 context and Diziuban et al. (2021) also emphasized the increasing interest in BL and its impact on teaching and learning environments.

A remarkable attribute of the BL setting was allowing autonomy to students in learning, which improved communication between the students and their instructor and built trust and confidence (Suriagiri et al., 2022). Students with digital competence thrived in online environments and the sense of autonomy positively affected success in face-to-face environments (Suriagiri et al., 2022). While students having the opportunity to choose from various learning options is important in transferring ownership of learning to the learner, the role of the teacher in guiding students into making those choices is necessary (Bergdahl & Bond, 2022).

While the merits of student-led style of learning are well documented in higher education settings, there is limited information available in the K-12 area on the impact of BL in improving student engagement, the role of teachers and student readiness (Suriagiri et al., 2022). This research gathered perceptions from the participants on the efficacy of blending differentiated instruction, small group discussions, and collaborative learning to increase student engagement at a public high school in Southeast Texas.

Theoretical Foundation

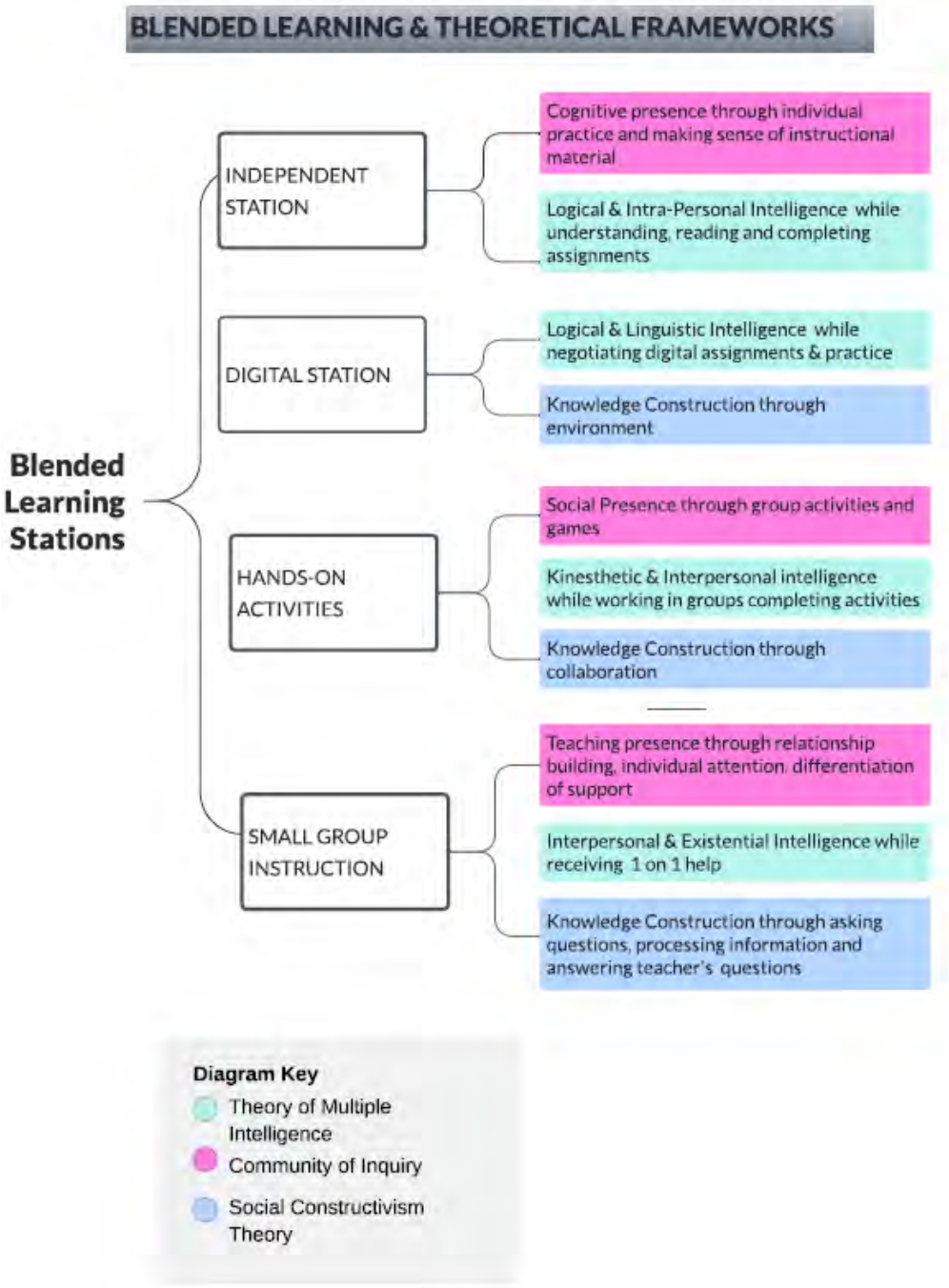
This research is grounded in a relationship between social constructivism theory, multiple intelligences, and the community of inquiry model and how they influence BL models. Social constructivism theory supports the pursuit of problem-solving by interacting with peers, instructors, and curriculum. According to Vygotsky (1962), the experience of reflecting with peers while problem-solving and learning is the essence of social constructivism. Planning different stations of BL and visualizing how students will rotate through the stations requires careful forethought. These are internal factors of the classroom that contribute to student engagement in constructing knowledge, according to

Siddiqi et al. (2022). Social Constructivist Theory is an appropriate framework because, through group activities, discussions, and explorations, learning can be transformed from a passive, disengaged activity to an active learning process.

In addition, Gardner's Theory of Multiple Intelligences suggests offering various learning modes to cater to diverse learners' strengths. Gardner's theory provides a

Figure 1

Inter-Relationship of Theoretical Frameworks in Blended Learning Environment



framework for developing instructional design, which includes a variety of techniques, delivery, and media. The third framework supporting BL is the Community of Inquiry model of learning proposed by Garrison et al. (2000). It considers cognitive, social, and teaching components in a BL environment. The interplay of various aspects of learning theories in a BL environment is illustrated in Figure 1.

BL in Education

BL has received much attention in the past decade due to its promising nature of transforming education from teacher-led to student-led learning (Truitt & Ku, 2018; Zainol et al., 2018). Post-COVID conversations about how to facilitate 21st-century education present opportunities to envision what a post-pandemic K-12 classroom would look like that engages all learners (Tarc, 2020); as well as get an understanding of how teachers will be included and supported to transform education (Hill et al., 2020; Netranzi, 2020; Tarc, 2020; Zhao & Watterston, 2021). Since student engagement is an indicator of student learning and achievement, it is important to explore if BL can mitigate the challenges of post-COVID classrooms and improve student achievement in high school settings (Halverson & Graham, 2019; Kurt et al., 2022; Lane et al. 2021; Tas, 2016).

BL is referred to as the new-normal of the educational landscape post-COVID and reported as becoming increasingly popular in the K-12 area (Graham, 2019). Research showed BL brought positive learning outcomes in post-pandemic classrooms by increasing student engagement (Heilporn et al., 2021; Lane et al., 2021; Sahni, 2019; Suriagiri et al., 2022). Graham (2019) noted most teachers have limited experience in combining multiple modalities of instruction and therefore, professional development for the teachers is critical to support successful implementation of BL. Short et al. (2021) underscored the need for strong leadership to support BL implementation and additional planning time for the teachers to prepare for blended instruction besides periodical professional development. Chen (2016) added that in addition to relevant training and professional development, skillful implementation of BL requires accountability from all stakeholders- teachers, administrators, students, and parents. Singh et al. (2021) found: a clear need for conducting studies to demonstrate effectiveness of blended and hybrid instruction and how instructors can work on designing their classes making it a viable option during current times and as we prepare to teach in the post-vaccine and post-pandemic world. (p.143)

Extensive work has been done in higher education and on student perspectives about blended classrooms. However, the impact of BL on increasing student engagement in K-12 setting and the perspectives of teachers implementing BL with school-age children are scarce (Heilporn et al., 2021; Sahni, 2019; Singh et al., 2021). Student Engagement is a solution to re-ignite passion for learning after the pandemic, reduce dropouts, improve self-esteem, and encourage critical thinking (Kurt et al., 2021; Waldrop et al., 2019). While it is not the objective of this paper to study the nuances of SE, it is important to describe various dimensions of SE available in the literature to understand how blended teaching impacts different aspects of SE. Following are the four dimensions of SE, as described in the literature:

Behavioral Engagement

Indicators of behavioral engagement include participating in activities, intentionally putting effort to overcome challenges, participating in school-based activities, and asking relevant questions (Lei et al., 2018; Waldrop et al., 2019). Li and Xue (2023) identified behavior as an external factor affecting student engagement determined by social, family, and school environment.

Emotional Engagement

Students feel emotionally engaged when they feel positive about their learning environment, including teachers, students, and school (Waldrop et al., 2019). If a teacher fails to establish a supportive environment by adopting harsh corrective measures, it hurts emotional engagement, leading to emotional anxiety for the learner (Li & Xue, 2023). An enthusiastic and fair instructor who understands student needs and supports student autonomy is instrumental in helping students be emotionally engaged (Pedler & Hudson, 2020).

Cognitive Engagement

When a student displays ownership toward learning and mastering skills, it is called cognitive engagement (Sinatra et al., 2015; Tas, 2016). Instructional practices and resources employed by the teacher in the learning process play an important role in stimulating cognitive engagement in the students (Pedler & Hudson, 2020). Lei et al. concluded that going deeper into the content matter was an attribute found in highly motivated students, aiming to improve understanding, versus a less motivated student, whose goal was to pass the content.

Agentic Engagement

Agentic engagement is when students actively participate in their learning by asking questions or suggesting alternatives, which can significantly impact the course of instruction (Sinatra et al., 2015; Tas, 2016). Being an agent of one's learning requires motivation (agency) and action (agentic engagement) (Reeve & Shin, 2020). Agentic engagement is the reciprocity expressed by the student to the learning environment.

Rethinking Post-COVID Classrooms in BL Context

Re-engaging students who returned from remote education and who had experienced childhood trauma due to death, poverty, isolation, etc., was one of the biggest challenges facing educators (Parker & Hodgson, 2020). To address the challenge of re-engaging students in post-COVID classrooms, there has been a huge emphasis on student autonomy in the learning process (Oranga & Matere, 2022; Suriagiri et al., 2022). Darlene-

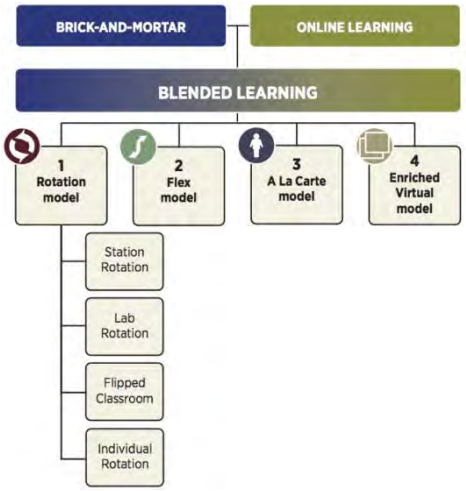
Hammond et al. (2020) stressed the need to utilize in-person and synchronous time for teaching new skills, inquiries, and introducing varied learning resources so that students can indulge in self-directed learning during asynchronous learning periods. Lane et al. (2021) attributed post-secondary students' increased motivation and on-task behavior to blended teaching methods. The researchers observed instead of providing quick answers to student questions, allowing them to reflect and provide feedback to each other to help refine responses would transfer ownership of learning to the learners.

Yet another aspect of rethinking teaching style is the importance of allowing movement in the class. Rands and Gansemer-Topf (2017) studied the effect of creating active learning spaces in the classroom to improve SE by rearranging furniture, learning tools, and allowing movement. The Clayton Christensen Institute (2012) popularized the concept of student control over “time, place, path and/or pace” in the online component of blended instruction (Staker & Horn, 2012, p. 34). However, the flexibility of the pathway to learning could be detrimental to learners who rely on instructive teaching and cannot make decisions for themselves (King, 2023). Students with digital competence thrived in online environments and the sense of autonomy positively affected success in face-to-face environments (Suriagiri et al., 2022). While students having the opportunity to choose from various learning options is important in transferring ownership of learning to the learner, the role of the teacher in guiding students into making those choices is necessary (Bergdahl & Bond, 2022)

Models of BL

BL describes a blend of brick-and-mortar, face-to-face instruction with computer-based, online education (Graham, 2006; Singh et al., 2021). No matter which specific

Figure 2
Common Models of BL



Note: Source: Clayton Christensen Institute (2012).

model of BL or a blend of online and in-person delivery is adopted, the most important aspect of meaningful learning for the students is the pedagogy itself (Graham, 2019). Staker and Horn (2012) and The Clayton Christensen Institute (2012) laid out four BL models: rotation, flex, a la carte, and enriched models (Figure 2).

Rotation Model

Staker and Horn (2012) described different forms of rotations that use a variety of learning modalities to teach a concept. Students move cyclically, completing tasks that involve various modalities, one of which is small-group instruction with the teacher (Truitt & Ku, 2018). In the station rotation method adopted in this study, the teacher set up predetermined learning stations, and students were intentionally grouped. At least one of the stations is digital, another is teacher-led, and there are other manipulatives, exercises, etc., at the other stations. Besides the promises that the station rotation model will help student engagement, there are a few perceived threats to this model. Technical incompatibility between the teacher and/or the students and lack of integrity, especially as students are not being monitored at every station, can prevent drawing the maximum benefit, as noted in the SWOT analysis by Singh et al. (2021).

Methodology

The researcher conducted a case study to focus on the blended learning program at the research site and understand its impact on student engagement in the post-pandemic era. A case study is an in-depth exploration of a bounded system (blended learning methodology in this case) based on extensive data collection (Creswell & Poth, 2016). An intrinsic case study was an appropriate research design because the researcher wanted to highlight teachers' experiences with blended learning implementation with high school children and the challenges (Creswell & Guetterman, 2019). The researcher aimed to provide "rich, contextual details about the strengths and weaknesses" of this teaching methodology in the post-pandemic times through semi-structured interviews with the teachers who implemented blended learning at the research site (p. 478). A case study involves extensive data collection by drawing information from multiple sources (Creswell & Poth, 2016). For that reason, the researcher drew information from the interviews and used the TAPR data as a reference to explain the themes that emerged from the teachers' responses. Understanding teachers' perspective of improving student engagement in a blended environment, the amount of preparation it required, the available support structure and the quality of professional development provided, together with the TAPR data painted a wholesome picture of the impact of BL at the high school. . Interviewees for the study were selected by purposive sampling. All participants had implemented BL with the freshmen for at least one full school year.

Research Design

The purpose of this qualitative study was to understand teacher perceptions on

using BL to increase student engagement post-pandemic at a public high school in southeast Texas. The following research questions guided this study:

1. What are teachers' perceptions of the challenges in engaging students post-pandemic at a public high school in southeast Texas?
2. What are teachers' perceptions of the impact of BL in increasing student engagement post-pandemic at a public high school in southeast Texas?
3. What are teachers' perceptions of their efficacy of teaching using BL methodology post-pandemic at a public high school in southeast Texas?

Texas Academic Performance Report (TAPR) Data and Performance Bands

In the state of Texas, students must pass five end-of-course (EOC) exams in high school to graduate. Performance on the EOC exam has four levels: Does Not Meet (Fail), Approaches, Meets, and Master grade level. Texas Education Agency (TEA) establishes cut scores that define performance levels for an assessment called standard setting. Number of questions one needs to answer correctly in different performance levels is called the 'Raw Score' (TEA, 2023). Cut scores for different performance bands in subject areas for the past two years for ninth-grade students are listed in Table 2.

Table 2

Performance Bands EOC 2021-22 and EOC 2022-23

	English 1		Algebra 1		Biology	
Year	**2021-22**	**2022-23**	**2021-22**	**2022-23**	**2021-22**	**2022-23**
Approaches	38	27	20	20	18	14
Meets	44	36	34	32	30	25
Masters	58	54	41	41	41	38

Data Collection Procedures

Participants of this study were certified classroom teachers in the state of Texas and implemented BL in the freshmen grade level at a public high school in southeast Texas during the year 2022-23. Responses to the interview questions were coded to look for themes. Repetitive occurrences of "routines, rituals, rules, roles and relationships" helped determine patterns of a BL classroom (Saldaña, 2021, p. 8). Summarization of participants' responses along with verbatim quotes were used to answer the research questions. Additionally, a comparative chart of student achievement between 2021-22 and 2022-23 presented differences in student success experienced by different demographics from year to year. Demographics of the participants is presented in table 3.

Table 3

Participant	Gender	Total # of years teaching	# of years teaching in BL format	Subjects Taught
P-1	M	5	1	Biology, Physics, Chemistry
P-2	F	10	2+	Biology, AP Biology, Physics
P-3	F	4	2	Biology, Chemistry, Environmental Systems
P-4	F	10	3	English, Career & Technology
P-5	F	35	4	Algebra, Geometry
P-6	F	4	4	English 1

Limitations

Limitations are those factors that may affect the study and over which the researcher cannot exercise control (Creswell & Guetterman, 2019). The researcher selected one high school in a single school district where BL was being implemented. This limited the research findings to one location and largely within one grade level, the ninth grade. Moreover, the perception of all teachers who implemented BL is not included in the study as they were unavailable for an interview. Therefore, more generalizability of the results is needed.

Findings

The campus improvement plan of the research site targeted not just increasing the passing percent but to also increase the percent of students achieving 'masters' performance. Meeting standards in the EOC exams is a requirement of high school graduation and is also an important factor in the campus performance report card (TEA, 2023). Therefore, the TAPR data was referenced to see if the success experienced by the students in various demographics was different between the two years of interest.

Research Question One

What are teachers' perceptions of the challenges in engaging students post-pandemic at a public high school in southeast Texas? The researcher found three themes in this research question: *regression in understanding school norms, lagging social skills and lack of confidence,* and *complacency*. Table 4 presents some direct quotes relevant to these themes, and discussion of the themes follows.

Table 4
Themes in Responses to RQ1

Theme	Response
Regression in understanding school norms	P4: It's kind of like you had to relearn to walk after a mini-stroke, they were relearning how to talk or do anything. P5: They would work only if the teacher was right next to them. P2: Allowing students to turn in work right up to the very last minute snowballed into habitual late work.
Lagging social skills and lack of confidence	P1: They just seemed out of it, like they had just woken up; students had fallen behind in social development. P3: Students needed to get their confidence back, think on their feet, speak for themselves. They relied on technology so much that it was a distraction. P4: It was a slow process of getting them to communicate; never had kids so quiet in a bad way; was 1 to 1 technology necessary after coming back fully in person? Couldn't we go back to having just class-sets?
Complacency	P2: There was no urgency due to the limitless grace towards turning the assignments. Everybody needed a little kickstart to become interactive again. P1: Only if you approached them, then you had some way of getting them to be involved with you, or else they would just goof around.

Regression in Understanding School Norms

The researcher found that on returning to the in-person school, students had forgotten what it was like to be in school environment and abide by the expectations along with the importance of punctuality. Virtual schooling did not require students to be present in class on time and they could complete assignments right up to the very end of the grading cycle.. Merely showing up to class on time and staying in classroom for the entire class period seemed to be a struggle for the students. They had to be re-trained on the

importance of the punctuality and the consequences of missing deadlines.

Lagging Social Skills and Lack of Confidence

The researcher found that engaging students in classrooms in the years following the pandemic was an uphill task. Students returned with severe deficiencies in social skills such as communication, participation, and engagement with learning. Students were hesitant to take ownership of their learning and were ready to give up at the first instance.

Complacency

Students found it challenging, after the pandemic, to complete assignments in a timely manner by pacing themselves. Typically, an exam that was scheduled to be completed in one to two hours transformed into a twelve-hour, open-book assignment during virtual schooling (Bashir et al, 2021).

Research Question Two

What are teachers' perceptions of the impact of BL in increasing student engagement post pandemic at a public high school in southeast Texas? The researcher found four themes in this research question: *growth occurs over time; intentional grouping and activities; relationship building;* and *teacher buy-in and student accountability*. Table 5 presents some direct quotes relevant to these themes, and discussion of the themes follows.

Table 5

Themes in Responses to RQ2

Theme	Response
Growth occurs over time	P3: There was a learning curve, they grew a lot, started to problem solve, push themselves, take responsibility for their own education. P5: Students may not want to move in the beginning, so give them small bites, get them used to it, students need to feel yes, I can do this.
Intentional grouping and activities	P5: Gamification of learning like using Desmos, motivates students to not give up; They keep playing as if it was a video game even when they are unsuccessful, it doesn't faze them, they just wanna win. P6: Choice works for advanced learners but for the others, teachers provide specific direction "you do this and this today.

Relationship building	P3: Mini-lessons in small groups were my favorite; a pat on the back, weird conversations, there was human connection. P1: Downfall of the mini-lesson is that you're responding more to those who are more vocal so it's not uniform. P5: My teacher's right here, I can really just reach out and touch him.
Teacher buy-in and student accountability	P3: There needs to be teacher buy-in if you want to see the students grow. The more buy-in I had, the more my students persisted. P3: If [students] don't see their own growth, they're not gonna put in the effort. P2: What [students] get out of today is how much effort [they] put in today.

Growth Occurs Over Time

The researcher documented teachers' responses indicating improvement in student engagement as time went by. Since students were so used to teacher-directed learning, they required some time to process how to make learning related decisions on their own. Once it became a routine, students rose to the expectation. Just like students, teachers also got more adept in planning meaningful learning experiences and gauge potential disruptions as they did it more often.

Intentional Grouping and Activities

The researcher found there were more chances of students being engaged at least during part of the lesson cycle because a variety of learning modes were offered during a blended lesson. Higher achieving students who did not need further instruction were sent to the station where the teacher created opportunities for critical thinking, creating, communicating, collaborating, and showing citizenship to extend their learning. Independent learners had online resources to learn and practice by self-direction. Many of those online resources offered accessibility, which was helpful for emergent bilingual students. Students who were ahead in their learning took the ownership of leading their classmates to finish their work. It was an opportunity to grow leadership qualities in students and deepen their understanding of the concepts.

Relationship Building

The researcher found that mini-lessons in small groups were the most favorite aspect of the blended classroom amongst the teachers in increasing student engagement. Students were not embarrassed to be vulnerable in a small setting near the teacher. Some teachers played games with a small bunch of students as they showed their mastery; others made students draw or write with chalks and markers on dry-erase boards, desks, or index cards; a few other times, students would do test corrections and learn test-taking skills as they sat in small groups with the teacher at a table. Teachers often used stamps, stickers, prizes, or treats to give away at the mini-lesson station to reward student participation.

Teacher Buy-In and Student Accountability

Students mimic the adults in the classroom, and if the teacher is averse to BL and appears to be doing it merely for compliance, this methodology will fail to achieve its goals. From an observer's view, the classrooms appeared chaotic and often loud. There was always a plan beneath the obvious. Visible movement of learning in the form of checklists and progression boards was important for the teacher to gauge student learning and to make student accomplishment visible and use it as an encouragement. However, the amount of success a student would experience from carefully planned learning activities was ultimately tied to the student's desire to learn. This is not necessarily an attribute of a blended lesson but learning in general.

Research Question Three

What are teachers' perceptions of their efficacy of teaching using BL methodology post-pandemic at a public high school in southeast Texas? The researcher found four themes in this question: *beginning apprehension, continuous modeling, training, and feedback; lack of confidence; understand the 'why'*. Table 6 presents some direct quotes relevant to these themes, and discussion of the themes follows.

Table 6

Themes in Responses to RQ3

Theme	Response
Beginning Apprehension	P6: It was my first-year teaching and I was learning how to teach in hybrid environment and incorporate BL; I didn't know what I was doing. P2: The hardest part in the beginning was students lacking motivation; Later as I got better, my students did better. Feel bad for our first-time teachers having to implement blended who were so new to the teaching environment.

Continuous Modeling, Training, and Feedback	P6: Procedures are the most important factor behind a successful blended lesson. So may be help a teacher with those basics first? P1: Need handholding in designing stations in the beginning; experiential PD and social learning with colleagues was helpful. P3: Two days of training in the beginning, so many resources were presented, it was a BL throw-up.
Lack of confidence	P2: If we failed, it wouldn't be detrimental [*about using blended days for reviews*]; it was a safe way of doing it with a team of new teachers. P4: Certainly not the first day of a new content.
Understand the 'Why'	P5: Why does blended stop after 9th grade? It's the only time they are applying skills of a 21st-century learner, it should be made mandatory for the upper-level students. P6: It didn't really bring people on-board, it was all about how to do it versus *why* should you do it, it took time to understand the purpose and goal behind blended. P3: Remember these are teenagers, they're gonna be goofy, lazy, don't expect them to learn without guidance from the teacher; start off with lot of hand holding then they slowly become self-reliant like babies. I wasn't sure then. but most of my kids got meets and masters in their EOC and it was my first year teaching Biology.

Beginning Apprehension

The basic requirements of a successful implementation of BL are great classroom control, knowing what works for the diverse learners, experience in pivoting, etc., that come naturally with experience. Participants felt that the new teachers were at a

disadvantage in these areas. Although teachers were apprehensive about the benefits of the methodology and were unaware of the reason behind the implementation, as time went by, after a few training sessions and implementations, there was an increased buy-in from the teachers.

Continuous Modeling, Training, and Feedback

The sheer volume of resources shared with staff at the beginning of the school year was beneficial in creating a BL toolbox and overwhelming. Teachers felt that spreading the training over the school year into smaller segments would have been far less overwhelming and easier to adopt. Teachers supported being observed and receiving feedback, however, they emphasized that modeling strategies with the students could be more beneficial than merely providing feedback. Opportunities to observe team members implementing BL and breaking a large team into smaller groups could also have benefitted the teachers.

Lack of Confidence

The researcher sensed teachers' lack of readiness to teach using a blended format from the content chosen for blended days. Every participant said they did not teach a new concept using blended methodology but used it only for review purposes. They feared students not comprehending new information if they were studying it on their own at the learning stations and might lead to disengagement. Most teachers did not take a grade on those days, and few used informal grading to assess completion. Not taking grades was meant to offset the risk of students making zeroes for non-completion of self-guided assignments.

Understand the 'Why'

The researcher felt that the teachers asked to implement BL needed to know why the initiative was taken. For someone who has no classroom experience or has always taught using traditional lecture and worksheet methods, letting students rotate within the classroom and being unable to monitor students constantly can be unnerving. The researcher also noticed the apprehension amongst the teachers on the amount of time it took to plan the learning stations and the outcome it produced. Some teachers questioned why BL was not sustained beyond ninth grade. Two participants mentioned they would like to see BL continue beyond ninth grade because as students grow older, they can guide their learning better. Unless it is how students learn all four years of high school, they are not being prepared to be the 21st-century learners that is often discussed.

Milestones of BL

When asked to recall positive experiences with student performance in the EOC exam, one participant mentioned being pleasantly surprised at some specific students' scores because they did not show much promise in day-to-day assignments. Teachers utilized 1:1 devices to the fullest extent on blended days by providing short, recorded

lectures and self-scoring assignments to allow practicing skills, generate quick data to make data-based groupings and gamify assignments. However, nearly all the interviewees underscored the importance of paper-based assignments, hands-on activities, creating models, expressing thoughts by writing on index cards, and communicating verbally with classmates to be important in learning apart from computer-based learning on blended days. Although the campus did not meet its yearly performance goal in 2022-23, it should not solely be attributed to BL methodology because this model of teaching and learning is primarily people-based. There were mixed results seen in the EOC exam, which are represented in the following charts:

Figure 3 *English I: Approaches and Masters*

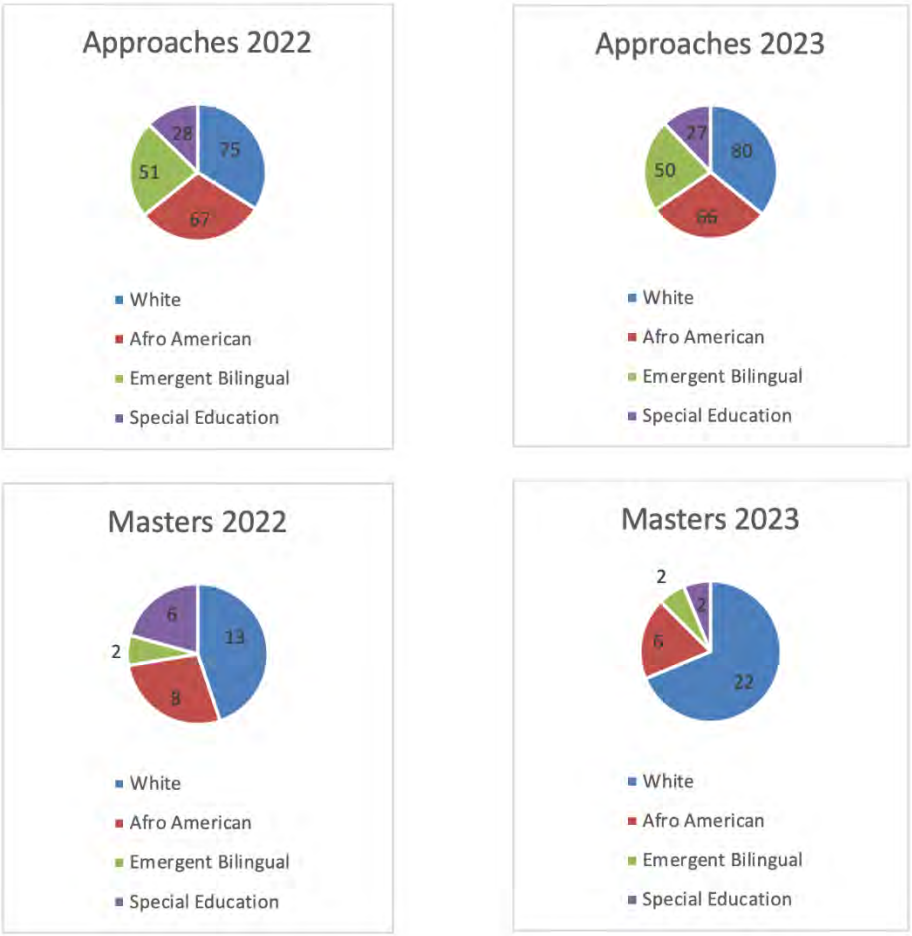


Figure 4 *Algebra I: Approaches and Masters*

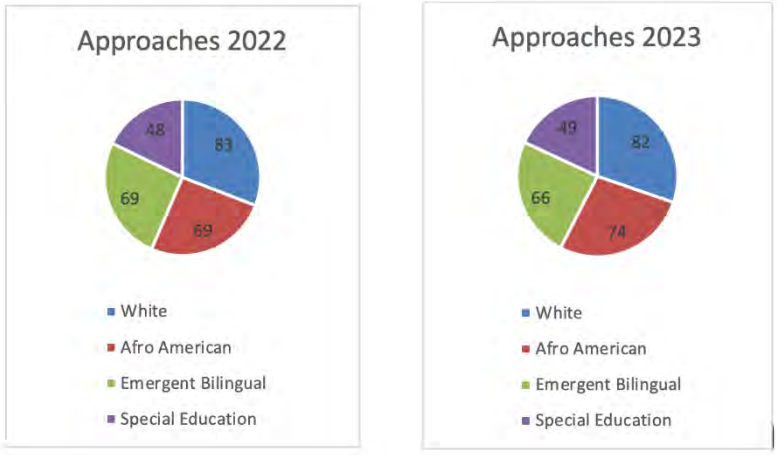


Figure 4 *Algebra I: Approaches and Masters continued*

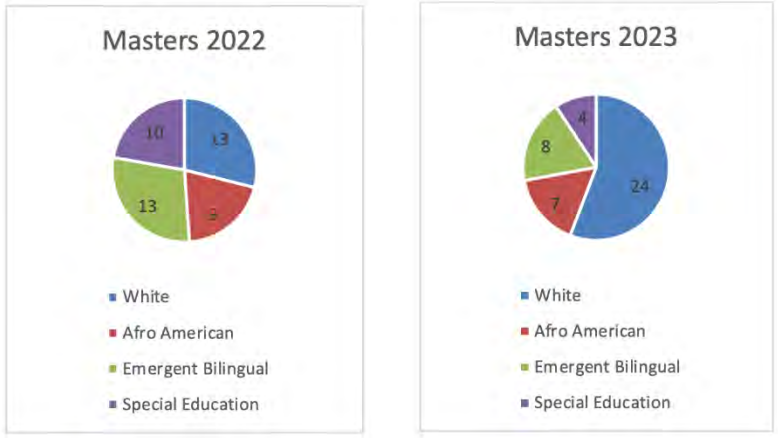
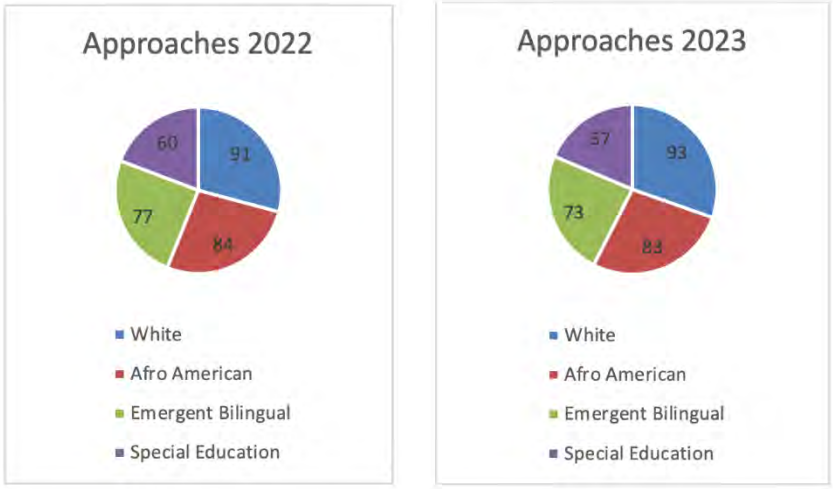
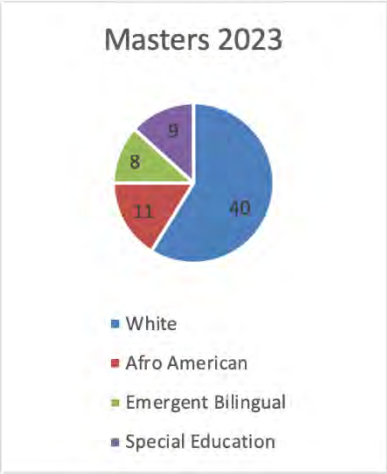


Figure 5 *Biology: Approaches and Masters*





Discussion

No formula for successful implementation can be applied to every situation. The possibility for the teachers to implement BL with little variations depending on the group of students they serve can produce desirable outcomes instead of working in a rigid structure. Artificial intelligence and advanced technology have diminished the importance of traditional skills such as repetition, memorization, and recall, and 21st-century skills such as critical thinking, collaboration, and creativity have become more desirable (Zhao & Watterston, 2021).

On behavioral engagement during the blended day, teachers unanimously agreed on the importance of providing clear guidelines for completing assignments and establishing clear classroom expectations before teaching in a blended environment. The thoughtful grouping of students to eradicate the possibility of mischief was one of the considerations when planning blended days. Teachers put a lot of effort into arranging the furniture to avoid crowding during rotations, thereby preempting unnecessary confrontations among the students.

On emotional engagement during a blended day, the opportunity to meet in small groups with a handful of students was the highlight of a blended day for all participants. There were moments of intimate sharing where the affective filter was lifted, there was laughter and excitement, and there were opportunities for closing the gaps in learning. Participants reiterated the importance of teacher involvement in BL implementation.
On cognitive engagement, teachers expressed that thoughtful grouping of students played an important role in supporting students' cognitive engagement. Placing learners of mixed abilities can impede master learners' desire to take learning to the next level, and conversely, it can make growing learners conscious of their lack of knowledge.

On agentic engagement during a blended day, one of the key adjustment teachers had to make in their teaching approach was to relinquish control and allow students to learn independently in a manner that appealed to them. Students found the opportunities in a BL environment to assert themselves, questioned and debated, as the teacher took on the role of a facilitator rather than an instructor.

Implications

While the researchers stressed that emotional engagement has the greatest impact on student engagement, the participants opined behavioral engagement is a significant factor with school-age children. Teachers expressed that the deeper involvement of the administration in curbing behavioral infractions might bring some reprieve and improve efficiency. Given every school campus's constraint in staffing, one must get creative in setting aside more time for planning purposes. Clear communication about the goals and processes, support structures, and expectations must be relayed to all parties to emphasize the importance of the blended learning initiative.

Recommendations & Future Research

Teachers will have a learning curve and must feel supported wherever they are on their continuum of growth. As stressed by Singh et al. (2021), there needs to be a supportive environment and all stakeholders to assume responsibility. Preparation and execution can be exhausting, and a new teacher might give up trying if their struggle is not understood. Although autonomous learning enhances student engagement in higher education students, school children require training to be independent learners (Sahni, 2018). Incidents of disengagement stemmed from activities that were not age-appropriate and were either too elementary or too complex. According to Lane et al. (2021), the instructor must help students see the relevance of the activities with the day's learning objectives. Providing 'I can' statements can help students have tangible goals and feel accomplished at the end of class. Some teachers suggested the presence of two adults in the classroom could help run a blended lesson more efficiently. Perhaps teachers within a team can merge their classes if the numbers are manageable.

Some participants expressed their preference towards designing a blended lesson independently, without having to restrict themselves within the team expectations. A case study to determine whether being a part of a small learning community is a helpful factor in developing a master instructor of BL or a constraint could be a research topic for the future. Since certain demographics of students responded positively to BL, research on BL will benefit from studies focusing on which groups of students respond positively to learning autonomy. A quantitative study using Pearson's correlation can be conducted to determine if there is a linear relationship between BL and student achievement.

Conclusion

Singh et al. (2021) asserted the need for more studies to determine the effectiveness of BL in the post-pandemic era. This study contributed to the need by adding teacher perspectives on BL implementation to increase student engagement. BL by station rotation method has opportunities for developing 21st-century learners. With every implementation all stakeholders become more skilled, urging the high school educators to rethink their roles in classrooms.

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