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Student Engagement and Equitable Student Learning Outcomes

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**STUDENT ENGAGEMENT
AND EQUITABLE STUDENT LEARNING OUTCOMES**

Douglas K. Harter

Educational Leadership Doctoral Program

**Submitted in partial fulfillment
of the requirements for Doctor of Education**

National College of Education

National-Louis University

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AND EQUITABLE STUDENT LEARNING OUTCOMES

Dissertation Hearing

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of the requirements for Doctor of Education

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ABSTRACT

Student engagement is consistently shown by research to be a critical component of student learning. An opportunity to link variables of perceived student engagement, perceived student-teacher relationship and clarity, an in-person learning format, and a remote learning format presented itself when, in March of 2020, all Illinois public schools were mandated by Governor J.B. Pritzker to teach in a fully remote structure due to the COVID-19 pandemic. Student survey data results were examined using Wagner et al's (2006) 4 C's model to determine if there were statistically significant differences among student engagement and student-teacher relationships when compared across in-person and remote learning environments. Implications for educators are posed to inform future practice.

PREFACE

Think about the most beautiful, memorable, and famous pieces of architecture in the world. You may be envisioning the Sydney Opera House, Eiffel Tower, or Chrysler Building. You might also picture the Taj Mahal, Potala Palace, or La Sagrada Familia. Regardless, none of these magnificent structures would exist without a clear vision, communication of the blueprint to those who were responsible for making it a reality, and ongoing supervision to ensure that it developed according to the plan.

Now consider education. When implemented successfully, learning is expected to be memorable, thus accessible and retainable. In order to have successful and sustainable teaching and learning, a similar formula to that of an architect that includes a clear vision, collaboration, and ongoing supervision needs to be in place. Quality instruction begins with a strong plan and proceeds with clear communication and an engaging format in order for it to be constructed well. “When students understand how they will be evaluated they can also self-evaluate more effectively, a metacognitive skill that can help students become more independent learners” (Schwartz (2017), p. 3). Within this dissertation, I will determine the extent to which the perception of student understanding of a task expectation, the blueprint of learning, results in a perceived successful learning outcome. To add value to this research, the engagement structures and tools ultimately apply to academic, social, emotional, behavioral, and any other task that involves a result or an expectation. As Shute (2008) explains about clarity, “Formative feedback has been shown in numerous studies to improve students’ learning and enhance teachers’ teaching to the extent that the learners are receptive and the feedback is on target (valid), objective, focused, and clear” (p. 182).

“To put it as succinctly as possible, if you want to change and improve the climate and outcomes of schooling both for students and teachers, there are features of the school culture that have to be changed, and if they are not changed, your well-intentioned efforts will be defeated.” (Sarason (1996), p. 373). Within my nearly thirty years as a postgraduate school educator, I have observed chronically inequitable systems, procedures, and strategies related to student engagement. When it comes down to it, educators are simply doing what they are trained to do with the resources that they are allotted. The major issue with student engagement lies within the institutional systems, procedures, and ingrained practices. With continuously updated and aligned federal, state, county, and district policies; focused professional development; accountability via the supervision and evaluation process; and overall fidelity to the process, equity will be improved over time. "The knowledge and skills to educate all children already exist. There are no pedagogical barriers to teaching and learning when willing people are prepared and made available to children” (Hilliard (1995), p. 35).

ACKNOWLEDGMENT

As quoted in Forbes in 2018, Michael Jordan promoted how “Talent wins games, but teamwork and intelligence win championships”. As a Chicago suburb resident from the 1980’s until the early 2020’s, I was a witness to the power of Michael Jordan and his influence on helping his other team members go from excellence to six championships in an eight year span (for the record, I’m a true Milwaukee Bucks fan). Similarly, this research project was a team effort with many experts in a supporting role. At the top is my wife Marge, who is THE reason that I have grown as an educator over the past 30 years. My children, DeLaney and Drew, are educational and social role models, having completed their graduate studies prior to this project’s completion.

Another tremendous support came from my National-Louis University professors. I could not have sustained this level of focus without the direction and expertise of Dr. Don Angelaccio, my dissertation supervisor. His proactive instruction and supportive feedback provided a strong pathway. Dr. Beth Minor offered so many instructional lessons and relevant feedback from this dissertation’s infancy until the final product. Dr. Harrington Gibson helped to set the tone and direction along with significant guidance over the course of this dissertation’s creation. And, finally, Dr. James Fitzpatrick, my doctoral internship supervisor, who supplied so much of the practical and experiential guidance within the coursework and writing process.

It would be an oversight to not mention my family of origin - father Gary, mother Nancy, and brothers Mike and Todd, who modeled and valued education during my formative years.

"Alone we can do so little; together we can do so much." (Helen Keller)

DEDICATION

I dedicate this project with deep gratitude to three individuals who mean the most to me and have supported me throughout my personal, educational, and professional life. First, my wife, Marge, the most capable educator that I've ever encountered. I would not be who I am without her as my other 99%. In addition, my children, DeLaney and Drew, who have been able to combine successful academics with outstanding artistic talents.

“The future belongs to young people with an education and the imagination to create”.

- Barack Obama

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EPIGRAPH

When these two quotes are combined, the resultant message aligns well with the purpose of this exploration:

From Hallinan & Kubitschek (1999), “The higher a teacher's expectations for a student, the higher the student’s achievement” (p. 46).

From Milner (2015): “A telling measure of any nation is how it treats its most vulnerable and marginalized citizens” (p. xi).

Student Engagement and Equitable Student Learning Outcomes

SECTION ONE: INTRODUCTION

Northwest Junior High School is the setting for this important and relevant research that will attempt to replicate prior studies related to student engagement and teacher clarity. Student engagement is already an initiative that is part of the formal school improvement plan at NJH, so the results will directly and authentically impact teaching and learning practices at this site. Since these topics have not been as intensively studied as other educational subjects, the results of this exploration could also alter teaching and learning practices across other educational communities.

Northwest Junior High School serves 7th and 8th grade and has the smallest number of registered students among the four junior high schools in the district. In 2020, the student population consisted of 45% White, 40% Hispanic, 11% Asian, and 2% Black. Alongside these statistics, 46% of the students were considered low-income, 10% were eligible for an IEP, 2% were designated homeless, and 11% qualified as English Learners. There was a 6% student mobility rate, 10% were considered to be chronically absent, and 2% were chronically truant. It is a welcoming home to two of the district's special education programs - one for students with severe and profound intellectual and/or motor disabilities and the other for students with relatively mild Intellectual Disabilities or more severe Learning Disabilities. NJH has been a school-wide Title 1 building for at least the past five years. The instructional approach is in transition from that of teaching in isolation and the use of core replacement models with struggling learners to that of collaboration, co-teaching, and a universal curriculum for all

students. The school has implemented PBIS systems for approximately fifteen years to the extent that schools from around the world have visited to observe and collaborate on the successful implementation of all tiers throughout the school. A formalized Social-Emotional Learning curriculum was being created and implemented along with professional development and systems to integrate restorative practices. Coaching for Culturally and Linguistically Relevant Teaching and Learning was offered to a core of volunteer teachers with a long-term plan of including all teachers in a cadre that would deeply study and consistently integrate culturally proficient practices.

Northwest Junior High School is located within the Northwest School District. As a district, it aims to build a connected learning community to enhance students' success. The district works closely with parents and other community members, PTA/PTSAs, senior citizens, area businesses, service organizations, and local governments. In one year, more than 10,000 volunteers contributed more than 160,000 hours of service in the schools. "Producing world-class learners in today's complex and fast-paced world is the single most important responsibility of the district. Schools, teachers, administrators, and support staff work together to ensure that all students enrolled in district schools receive the highest quality of educational opportunities that will not only enable them to meet or exceed state standards, but also will position them for success in future educational and career endeavors" (District website, 2020). The District's core values consist of visionary leadership; a learning-centered education; organizational and personal learning; valuing faculty, staff, and stakeholders; agility; a focus on the future; managing for innovation; management by fact; social responsibility; a focus on results; and creating value (District website, 2020). Northwest School District consists of twenty

schools with four junior highs, fifteen elementary buildings, and one early childhood center/alternative public day school. It covers approximately 35 square miles, with a 2010 population of 119,054. It had a 2017-18 enrollment of more than 12,400 pre-Kindergarten through eighth-grade students that come from diverse socioeconomic and ethnic/cultural backgrounds: 40% low-income, 26% English Learners, 11% with an IEP, and an 8% mobility rate. More than 70 languages or dialects are spoken in students' homes across the district. The district ethnicity categories are 39.6% Caucasian, 35.2% Hispanic, 18.7% Asian, 3.3% Black, 0.2% American Indian, 0.1% Native Hawaiian/Pacific Islander, and 2.9% that identify as having two or more races. It employs almost 2100 staff members with teachers having an average of thirteen years of teaching experience (District website, 2020).

Along with the strengths inherent in a widely diverse community, diversity also poses some challenges. Academia has the responsibility to challenge and develop all learners, from the highest achievers to those struggling to connect. Like many schools, Northwest Junior High has students along the continuum that show signs of disengagement, low proficiency, and/or relatively poor academic growth. Over the fourteen years that this administrator was in Northwest School District, the data consistently revealed low achievement growth for students in three main categories: low income, second language, and Hispanic subgroups. For this reason, professional development and school improvement initiatives purposefully focused around high-impact engagement strategies and equity considerations. Because it is hypothesized that teacher clarity is a factor in student engagement, this study will delve into the degree to which students perceive levels of engagement and teacher clarity along with a discussion of recommendations to be responsive in a culturally diverse community.

For transparency's sake, this research was conducted by the current principal of this school who has served in an administrative capacity at this site for 11 consecutive years. All of these student engagement initiatives were already part of the school improvement planning process so it was logical and part of the natural Participatory Action Research process (James et al (2006)) to add authenticity and data accountability to the existing plan.

PURPOSE

The purpose of this dissertation is to explore and, ultimately, improve current student engagement practices while introducing relatively new instruments that investigate engagement and clarity. By improving and prolonging student engagement, more time and effort will be dedicated to applying strategies to learning expectations and the concepts will be better retained by students. The awareness of the need for this exploration came from years of data reviews that show disproportionality of standardized test growth measures, most specifically among students identified as long-term English learners. It is theorized, based on observations and outcomes, that these students have become disconnected from learning over the years due to a combination of student frustration in transitioning to English content-based language as well as the lack of quality teacher professional development and coaching to support multilingual learners. The intent is to determine the best formula for these two variables throughout the process that begins with the instructor providing initial directions and ends with the ‘final’ student product. Schwartz (2017) writes,

For Hattie, most learning rests on student understanding of the success criteria for a learning task. Hattie calls this a “prelearning phase” because if students don’t understand

what it will take to be successful, they often act blindly and without motivation. He says that students who are taught the success criteria are more strategic in their choice of learning strategies, and thus more likely to encounter the thrill of success that will lead to reinvestment in learning (p. 2).

When these communication strategies are implemented with integrity, it is predicted that higher levels of prolonged engagement will be realized and the student products will have improved focus, relevance, and depth.

This study will be structured using student perception surveys, student interviews, and teacher interviews. The main data sources will be engagement and clarity surveys. One is the Classroom Engagement Inventory (CEI) that was created by Wang et al (2014). This will gather students' perceptions using a standardized format that has been validated in previous research studies. The second major data source comes from Bolkan's Clarity Indicators Scale (CIS) (2016); it delves into student perceptions of the clarity of instruction and expectations. Results of school wide walk-through engagement data will also be incorporated into the data set. The student engagement look-likes and look-fors were collaboratively determined by all of the certified staff members at Northwest Junior High, while the walk-through document was created by the NJH School Improvement Team and approved by all of the certified staff members using shared-decision making agreements.

RATIONALE

In the early stages of the school improvement learning process, Northwest School District used the Harvard DataWise framework (2016) to study and implement strategic school improvement initiatives. As part of the progression, each building reviewed learning data and

determined a priority content area focus. This is relatively simple for an elementary school as all teachers are responsible for instruction throughout the major content areas. For a junior high school that uses highly qualified teachers in specific content areas, it is more difficult to select a focus area that is relevant for every instructor in the building. Over the past four years, NWJH has focused professional development and strategies on improving math performance due to the relatively low achievement in that area. Later, in order to make it relevant to all content areas, the pathway to school improvement has been to focus on student persistence, perseverance, and engagement. For the past few years, at many of the junior high schools in the district, engagement has been the centerpoint of professional development due to its relevance across all content areas.

Teacher clarity is a component of high-impact teaching and learning. This is one of the twenty-two domains that are intended to be the “foundation for professional conversations among practitioners as they seek to enhance their skill in the complex task of teaching” (Danielson, 2017). Clear communication sets the tone for student success. It is one intent of this dissertation to assess the perceived level of quality practices that combine for clarity between teachers and students.

The ultimate purpose of any education-related venture is to achieve excellence, and that results from prolonged focus. Following the logic chain, engagement and perseverance occur due to high levels of clarity related to what is expected from the instructor. Engagement and perseverance are slightly different journeys on the same path. Engagement is the beginning of the trip, set in motion by necessary clarity of communication. The learning route has to be meticulously and universally designed in order to get everyone moving forward. The persistence

aspect maintains that momentum, possibly on different student trajectories but with ultimately parallel learning goals. The clarity and scaffolding that will be studied here demand a strong beginning, middle, and end. If this proves to be robust, learning will be observable throughout the classroom and continuously along the journey, resulting in a successful and equitable outcome for all learners.

“Hattie’s findings also shed light on what many already know” that “feedback is king (or queen) in terms of impacting learning for both students and adults” (Hattie and Yates (2014), p. 69). Teacher feedback can be simple, like a grade, or more complex, such as a rubric and/or individualized feedback on a project. Feedback benefits all learners and contains the potential to maintain student engagement. Black et al (2003) assert, “Feedback needs to be structured to identify for the learner what was done well, what needs improvement, and how to improve” (in Hattie & Timperley (2007), p. 88). It helps proficient students grow just as it does struggling learners. A great concern is with those pupils that, over time, become disenfranchised with the quality of their education. Regardless of the source or antecedent of the student struggle, it is an educator’s duty to provide the scaffolding, the clarity of expectation, and feedback on the cognitive processes that motivate a student to gain confidence and maintain learning momentum. As Marzano (2020) stresses, “cognitive engagement, which requires students to apply their thinking skills to reach a conclusion, should now be a vital part of the learning process”.

A main observation that sparked this research investigation was the systemic frustration with the type of learner who is, essentially, reinforced for being behaviorally compliant but not cognitively engaged. This student tends to sit quietly, completes relatively little of what is expected, and is given minimal feedback by adults. It almost seems like the instructor is

concerned that by setting a higher expectation, by offering a narrative critique, the student may become disruptive to others' learning opportunities. This student might get a low grade from the instructor who perceives inaccurately that this will motivate the student to improve. Within this scenario there is a risk that the teacher resorts to ineffective Self-Level feedback, focused on the learner rather than the learning goal (Hattie and Temperley (2007), p. 87), rather than higher level formats. Preferably, the student receives, in ascending order of quality: Task Level feedback (related to how well the learner performed and adding some feedback); Process Level (developmental statements wherein the teacher suggests strategies, promotes insight and facilitates relationships among concepts); and Self-regulation Level (encourages student autonomy and allows the learner to monitor and direct their own learning toward the goal (Hattie and Timperley (2007), p. 87). The most powerful feedback is when there is dialogue between the learner and the evaluator that helps make the learning visible (Hattie and Timperley (2007), p. 87). As Stiggins et al (2004) urge, "It's the quality of the feedback rather than its existence or absence that determines its power" (p. 40) and ability to maintain student engagement.

Teacher-student relationships (TSR) have been in the research with increasing frequency since the 1990s. Wang and Holcombe (2010) found a range of indicators of behavioral, emotional, and cognitive engagement that are predicted by teacher social support (pp. 658-660). Students' social functioning has been significantly associated with the quality of TSRs (Ladd, Birch, & Buhs, 1999), with behavior problems (Graziano, Reavis Keane, & Caulkins, 2007), with student engagement (Skinner, Wellborn, & Connell, 1990), and with academic achievement (Valiente, Lemery-Chalfant, Swanson, & Reiser, 2008). Roeser, Eccles, and Sameroff (1988)

reported how “increased teacher social support also leads to increases in students’ liking of school and improves students’ achievement outcomes” (Wang and Eccles (2012), p. 879). Hamre and Pianta (2001) showed the long-term influence of TSRs on students’ adjustment by connecting the amount of conflict with kindergarten teachers and how it “predicted children’s grades, positive work habits, and disciplinary infractions in lower and upper elementary school, and for boys even in middle school” (Roorda et al (2011), 493-494). Woolley and Bowen (2007) cited how a “growing body of research indicates that an important protective factor for youth at risk is the presence of supportive, attentive, and caring adults across a variety of contexts” (Scales & Gibbons, 1996; Wentzel, 1999) (p. 92). Wentzel’s research revealed “not only that children develop positive behavioral and social patterns on the basis of their relationship with supportive adults but also that those patterns affect all aspects of that child’s development, including school performance” (p. 93). Stipek (2002) added that students who feel socially supported “are more likely to focus on mastery goals as well as experience lower levels of task engagement anxiety” (Wang and Eccles, (2012), p. 879). Teacher-student relationships have the power to consistently promote student engagement or, oppositely, create a learning environment that tolerates disengagement.

Even though there is evidence to suggest the connection between student engagement, teacher clarity, and student achievement outcomes, the research is not consistent or conclusive. For many in the profession of education, the links among these variables seem obvious and intuitive, though statistically this type of thinking does not matter. The results of this research study could reinforce the data that supports these relationships and, if so, would be a critical

component of promoting professional development that focuses on student engagement and teacher clarity practices in all educational settings.

GOALS

As Dianno (2019) writes, “If we’re really putting an appropriate challenge in front of kids, they are going to fail at first. Our job is to ... support them to revise and make it better” (p. 2). We have to allow students the space to engage in a productive struggle as well as provide ongoing formative feedback related to progress in order to keep them appropriately engaged. A major goal of this dissertation is to reveal how the clear communication of expectations and engagement strategy implementation may have differed for the in-person students and those in the remote setting during the 2020 pandemic as a precursor to determining how to best meet the needs of the students in both settings. With these structures in place, one of the end products of this endeavor is to study the results using perception surveys and interviews. It is proposed that instructional quality will improve as a direct result of the explicit expectation from the instructor and the use of purposeful engagement strategies.

Murphy (2016) warns, “The average student engagement rate is around 50 percent” (p. 102). This statistic underscores the crucial nature of the need for strong clarity, ongoing formative feedback, and opportunities for revision in order to encourage learners to persevere and learn. A second goal of this study, then, is to measure how clear communication impacts prolonged student engagement and resultant learning outcomes.

RESEARCH QUESTIONS

The research questions set the tone for the entire research project. The questions need to be specific, focused, and measurable. With quality questions to guide the process, the rest of the research process is able to proceed.

The primary questions for this project include:

- 1) “To what extent do students perceive instruction to be clear and engaging during in-person learning?
- 2) “To what extent do students perceive instruction to be clear and engaging during distance learning?
- 3) Is there a significant difference in perceived engagement and/or clarity between the two learning formats?

These fit the “traits of good research questions criteria as established by James et al (2008): "significant ``, "manageable ``, "unambiguous ``, "self-reflective”, and “neutral” (p. 46).

Some questions related to the primary foci include:

Are there any specific findings within the engagement surveys that can inform future practices?

Are there any specific findings within the teacher clarity surveys that can inform future practices?

Are there any specific findings within the teacher relationship surveys that can inform future practices?

CONCLUSION

Ruby (2017) summed up the focus of this study aptly when she wrote, "Is your work finished or is it just *due?*" (p. 47). In my experience, far too many students submit projects that are below proficiency standards. This study will ultimately show the perceived impact that clear communication from an instructor has on student engagement. The expectation is that, with clear and ongoing formative feedback, the student will exhibit engagement and persistence to the degree that the learning product will be optimized. Since this study cannot be scientifically proven with a control variable, perception data will be used to look at the possible relationships. The following sections will contain more specific information on the tools that are being used and the results of the study.

SECTION TWO: REVIEW OF LITERATURE

This research project consists of interrelated educational themes. With engagement and instructional clarity as the primary variables, there are subtopics that contribute positively or become an obstacle to the learning goals. Student motivation is a factor in engagement; some individuals come to the lesson with intrinsic motivation based on interest or cultural relevance and others need supplementary external pushes and pulls. Teacher formative feedback is another skill that impacts engagement and teacher clarity. If a student is unsure of the purpose or direction of a lesson plan, it is more likely that they will disengage from the activity out of frustration. Students that are already struggling in school seem to be more at risk of losing learning momentum when faced with unclear content, expectations, or ongoing supportive information. The teacher relationship is a third consideration that leads to extremes of results on the engagement continuum. As Haim Ginott (1965) reflects,

I have come to the frightening conclusion that I am the decisive element. It is my personal approach that creates the climate. It is my daily mood that makes the weather. I possess tremendous power to make life miserable or joyous. I can be a tool of torture or an instrument of inspiration, I can humiliate or humor, hurt or heal. In all situations, it is my response that decides whether a crisis is escalated or de-escalated, and a person is humanized or de-humanized. If we treat people as they are, we make them worse. If we treat people as they ought to be, we help them become what they are capable of becoming (p. 21).

Professional literature related to student motivation

In a qualitative study that involved data collection via teacher observations, Dolezal et al. (2003) compared teacher instructional strategies to determine which result in higher levels of student motivation. Based on their results, motivation can result from a positive teacher relationship, which is one of the two measured variables in this study. Prior research tended to focus on the impact of single instructional techniques rather than simultaneous ones and summative effects that are within the Dolezal et al (2003) version. They found that the more engaging teachers used multiple strategies to improve student motivation. They documented that learning goals were more apparent in the engaging classrooms than performance goals. In addition, the less engaging teachers used instructional techniques that were believed to undermine student motivation; included in this are assigning relatively easy work and implementing slow-paced instruction.

Professional literature related to teacher feedback

Hattie (2009) describes that the “main purpose of feedback is to ‘reduce discrepancies between current understanding and performance and a learning intention or goal’” (p. 175). In a study that indirectly aligns with a variable in the Harter (2021) study, Schute (2007) completed a meta-analysis of hundreds of research studies related to teacher feedback in order to determine the most powerful and efficient types of formative feedback as well as the conditions under which the feedback helps the learner improve understanding. She found conflicting findings along similar variables. In addition, she found it difficult to isolate findings related to feedback because of the interaction with other variables such as student achievement level, task level, and prior student knowledge. The research that she reviewed shows how feedback can ”motivate

high levels of effort” (Locke & Latham, 1990; Song & Keller, 2001); “reduce uncertainty about how well (or poorly) the student is performing on a task” (Ashford, 1986; Ashford, Blatt, & VandeWalle, 2003); and “effectively reduce the cognitive load of a learning, especially novice or struggling students” (Paas, Renkl, & Sweller, 2003; Sweller, Van Merriënboer, & Paas, 1998) (p. 157). She found that specific feedback can be especially powerful, though if it is too complex it may be ignored and useless. In distinguishing between achievement levels, she found that lower proficiency learners benefit from immediate feedback while higher proficiency students prefer and/or benefit from delayed response. She discovered “that feedback generally improves learning, ranging from about .40 SD (Guzzo, Jette, & Katzell, 1985) to .80 SD and higher (Asevedo & Bernard, 1995; Kluger & DeNisi, 1996) compared to control conditions” (p. 176). This is considerable and significant. Also, it “improve(s) student learning and enhance(s) teachers’ teaching to the extent that the learners are receptive and the feedback is on target (valid), objective, focused, and clear” (p. 182). Calkins and Ehrenworth (2017) reiterate that Hattie (2008, 2016) “reviewed 180,000 studies involving 20 to 30 million students and found that of 100 factors that contribute to student achievement, providing learners with feedback rates in the very top 5–10% of influences. The feedback is especially valuable if the teacher helps the learner know where he is going, what progress he has made so far, and what specific activities he can do next to progress toward the goal”.

Butler and Winne’s (1995) theoretical framework was created in order to expand upon research related to classroom feedback. Whereas prior research focused on comparing single variables to single variables, their framework was intended to integrate multiple variables in the belief that other research was too simplistic. In summary, the researchers found that feedback

from an external source is mediated by student knowledge, beliefs, and thinking. This competes with other studies that tend to focus more on univariable effects rather than multiple interactions of variables. The findings are important as far as expanding the definitions and interactions of different variables as they relate to self-regulated learning. Ultimately, they hoped to inform future research efforts in a more multifaceted approach that encompassed the cognitive, social-emotional and physical aspects of the learner, the instructor, and the environment.

Professional literature related to student engagement

Handley et al (2011) believe that student engagement with feedback is more multifaceted and multidimensional than prior research has revealed, integrating factors among the student, instructor, learning environment, and time. In their research, they sought to determine the impact of engagement with feedback that involves the inclusion of human variables, the environment, and the summative effects over time with the intention to spark discussion and alter the trajectory of future research related to engagement. By developing momentum in this direction, they hope to influence the future of pedagogical thought and practice.

Since no studies existed that comprehensively analyzed student engagement differences between traditional and non-traditional post-secondary students, Arjomandi et al (2018) explored this topic. As they operationalized it, a traditional student typically enrolls in the university directly after completing secondary education. A non-traditional student may be the first in the family to enroll in a post-secondary setting, be an older student, be part-time, have a disability, identify with a minority group, work more than thirty hours per week, previously failed the course, or be a non-Christian. The authors referenced active teaching strategies as those that are intended to “complement, rather than substitute for, traditional teaching modes” (p. 125) (Jensen

& Owen, 2003; Baird & Narayanan, 2010; Velasco et al., 2012). For the purposes of this study, examples of active teaching strategies include visual aids, promoting hand-raising, questioning, annotating, problem-solving, group interaction, teacher-student feedback, quizzing, and simulations. Their research found weak connections between active teaching strategies and engagement for non-traditional students, though saw a strong alignment between engagement and gains in personal and professional skills for the non-traditional student. Non-traditional students showed higher engagement levels related to time and effort, interaction with classmates and instructors, greater motivation for studies, and larger gains in personal and professional skills as a result of their engagement. These findings are important to consider for marginalized populations in other educational settings.

Professional literature related to the benefits of a quality teacher relationship

Because of the minimal amount of research focused on variables that result in student growth, Dennie et al. (2018) followed up on prior research which suggested that positive rapport resulted in increased engagement which, in turn, improved standardized test scores and grade-point average. Their research investigated the impact of the teacher-student relationship on basic psychological needs, classroom engagement, and student growth in a middle school setting. The authors measured the teacher-student relationship using the Network Relationships Inventory - Relationship Qualities Version (NRI-RQV) created by Furman & Buhrmester (2009), one of the instruments that was selected for the original version of this Harter (2021) study. Within this research, neither the teacher-student relationship, support of student basic psychological needs, nor engagement had a statistical impact on student growth. They found that

strategies that are expected to improve student outcomes did not influence student growth, including the grade-point average and standardized test scores.

Randolph (2005) set up research to determine if a statistically-proven relationship exists between response cards (to objectively measure student engagement) and a series of critical classroom variables that include participation, achievement, behavior, and preference for the structure of participation. In totality, the response cards showed improvement over a hand-raising structure of discussion responses in all areas that were studied. Mean levels of participation increased 35.6%. Average achievement on quizzes and tests rose by 1.5 grade points and 3/4ths of a grade point on a four-point scale, respectively. Behavioral disruption intervals were decreased by 42.3%. Finally, more than four out of five students preferred the response cards. Though relatively brief, Randolph's study provided guidance on ways to quantify and statistically compare these variables.

As is common in decisions to pursue evidence and to replicate prior research, this dissertation topic on student engagement and teacher clarity (Harter, 2021) was selected due to the relatively small amount of research on these variables. Some previous studies delved into connected educational topics, though not focused on engagement and clarity simultaneously. And certainly not with the added variable of in-person versus distance learning comparisons. Once this is completed, it will contain components that will align with other work and it will stand alone with its own uniqueness.

SECTION THREE: METHODOLOGY

Introduction

Patton (2008) stresses the impact of utilization-focused program evaluation in comparison to a traditional approach. A utilization-focused structure has the end goal of seeking new knowledge, testing theories, establishing truths, and generalizing to other uses (p. 40). This entails the involvement of a committed stakeholder group that is invested in the findings of the research, an aspect that Patton (2008) called the “personal factor” (p. 66). Connectedly, because this study (Harter, 2021) is conducted exclusively in Northwest Junior High School, there are personal and professional commitments to student growth and fidelity to the process since all of the teachers and students are selected from this school and the researcher is the acting principal. A powerful component of utilization-focused evaluation is that the institution “learn(s) from the evaluation process itself or make(s) program changes based on the evaluation process rather than findings” (Patton (2008), p. 109), also referenced as a ‘developmental evaluation’ (p. 138). The purpose and process of this study’s methodology aligns with a utilization-focused approach in that it has been responsive to the needs of the students and actions of the teachers as it progressed.

Maxwell (1996) alerts that, “The study of causal relationships requires a strong chain of logic, with a wide range of diverse opinions collected and analyzed at each link in the chain” (James et al, (2008), p. 68). This research study will follow this advice using a mixed-methods design to explore the correlation between teacher clarity and student engagement. It will include quantitative data in the form of two student perception surveys. One of the surveys was developed by Wang et al (2014) and is titled the Classroom Engagement Inventory. A second

survey (Furman & Buhrmester, 2009) is called the Clarity Indicators Scale (Bolkan, 2016). Qualitative data will be in the form of student demographics and structured interviews of students and of teachers. The interviews are intended to provide additional insight and narrative into the thoughts and feelings of students and teachers related to engagement and clarity in the different instructional settings. The Research by Anderson et al. (1994), Higgs (2001), Maxwell (1996), and McKernan (1996) show that “when the same variables or elements can be observed or measured from three to four vantage points, PAR (Participatory Action Research) practitioners will be able to convince their constituencies that their conclusions are valid” (James et al (2008), p. 94). With the variety and range of the data sources, it is expected that the relevance and validity of this research will be maximized. The instruments and structures are established to respond to the research questions and determine if there are any significant differences in the comparisons of the in-person student engagement and teacher clarity relevant to those same factors in the virtual setting.

Invitations to participate in this study were sent out to students who were scheduled to matriculate to sixth grade at Northwest Junior High in the 2020-2021 school year as well as students that were seventh or eighth grade students at NJH during the 2019-2020 school year. The student surveys were sent via district email in April 2020 and again in August 2020 in accordance with Illinois Department of Public Health guidelines restricting personal contact during the COVID-19 pandemic. The emails included the informed consent document and both surveys in English and in Spanish. These were distributed to students as well as the students’ family members in order to maximize response rates. Ultimately, the sample of research participants was 50 students, while the overall population was closer to 750, a 6.67 percent

response rate. During the second quarter of the 2020-21 school year, while students still had the option to learn remotely and some had already returned to in-person learning, students were offered an opportunity to participate in a structured interview that aligned with the prompts from the student engagement and teacher clarity surveys. All certified staff members were invited to participate in a structured interview during the second quarter of the 2020-21 school year; twelve teachers volunteered to participate in this face-to-face interview. Every teacher that volunteered was selected to participate in the interview.

It is important that the variables in this study become operationally specified. Based on Miriam Webster's (2020) definition, *clarity* is “the quality or state of being clear.” Clarity in this case focuses on the expectations for learning that are provided by the teacher. This concept is integrated into the student surveys and is a major component of this research. *Relationships* is defined as “a state of affairs existing between those having *relations* or dealings”, according to Miriam Webster (2020). This term relates to the interaction between student and teacher that results in a level of engagement. Educational researchers differ on a specific definition of *teacher support*, though “it generally involves characteristics such as caring, friendliness, understanding, dedication, and dependability. Thus, teacher support refers to the extent to which students believe teachers value and establish personal relationships with them” (Ryan and Patrick, 2001, p, 438). Johnson et al (2001) refer to the affective component of engagement as *school attachment*, which is “the extent to which students ‘feel’ that they are embedded in, and part of, their school communities” (p. 325) (Moody, 1997; Spencer and Markstrom-Adams, 1990). Woolley & Bowen (2007) refer to a child’s relationship with an adult as ‘social capital’, “a product of the social environment that when present or available increases the probability that individuals will

achieve desirable outcomes” (p. 93). According to Miriam Webster (2020), *feedback* is defined as “the transmission of evaluative or corrective information about an action, event, or process to the original or controlling source.” Drago-Severson et al (2013) writes about the value of “developmentally supportive and developmentally challenging (i.e., ‘stretching) feedback” (p. 103) intended to “meet people where they are...and support growth” (p. 103). Reeves (2016) relates how effective feedback is fair, accurate, specific, and timely (pp. 68 - 71). Murphy (2016) sees “evidence-based action” at the core of feedback (p. 111). Shute (2008) specifically defined feedback “as information communicated to the learner that is intended to modify his or her thinking or behavior for the purpose of improving learning” (p. 154). Miriam Webster (2020) defines *engagement* as “emotional involvement or commitment.” Reeves (2016) interconnected emotional engagement with passion and purpose (p. 14). Ream and Rumberger’s (2008) view “emphasizes students’ action-oriented participatory behaviors in relation to schooling as we examine how such behaviors affect grades and aspirations, adolescent’s friendship dynamics, and subsequent educational attainment” (p. 112). Kuh et al (2008), who created the widely-used National Survey of Student Engagement (NSSE, Kuh, 2001) summarized that, “Student engagement represents both the time and energy students invest in educationally purposeful activities and the effort institutions devote to using effective educational practices” (p. 542). Fredericks et al (2004) recognized three types of engagement. *Behavioral*, which is evidenced by participation; *emotional*, which “encompasses positive and negative reactions to teachers, classmates, academics, and school and is presumed to create ties to an institution and influence willingness to do the work” (p. 60); and *cognitive*, which is related to investment, thoughtfulness, and “willingness to exert the effort necessary to comprehend complex ideas and master difficult

skills” (p. 60). Butler and Winne (1995) called *feedback* “an inherent catalyst” (p. 246); they distinguished between outcome feedback, which involves “binary information describing whether or not results are correct” (p. 250) and elaborated feedback, which has more depth. Csikszentmihalyi’s (1990) flow theory “describes the ultimate engagement as a state of ‘flow’ in which students are so intensely involved in an activity that nothing else seems to matter” (Athens, 2018, p. 28).

In order to promote authenticity in the data collection process, a few of the instruments that were validated in previous research endeavors will be used in this study rather than trying to create surveys from scratch. This will increase the opportunity that the tools will “reliably test the opinions and perceptions” (James et al, (2008), pp. 100-1) of the respondents. One of the instruments that will be used in this study was developed by Wang et al (2014), the Classroom Engagement Inventory. It is a thirteen-item survey that uses a five-point Likert scale to measure affective and behavioral compliance, effortful participation, and cognitive engagement. The reliability scores for each of these categories are between 0.82 and 0.90. A second survey is a 13 question survey created by Bolkan (2017) entitled the Clarity Indicators Scale. It focused on five dimensions of instructor clarity: coherence, interaction, structure, disfluency, and working memory overload. A third survey (Furman & Buhrmester, 2009) was selected in the original iteration of this study (pre-pandemic) and is called the Network of Relationships Inventory - Relationship Qualities Version. It would have gathered information on student perception of closeness with their teacher using a twenty-four question tool that also has a five-point Likert scale. The reliability among the five categories measured in this instrument range from 0.74 to 0.88. The student and teacher interviews are yet another instrument that were initiated after the

survey data was collected. These are both aligned with themes and language contained in the two surveys. The focus of the structured interviews are on pursuing a deeper understanding of what was collected in the surveys and observations. These, too, were adapted from prior-used instruments with input from participants in this study.

Students were recruited for participation in this study using an emailed Google Form that contained an explanation of the study and the two surveys, offered in English and in Spanish. These are the two most common languages in the school. The emails were sent directly to the addresses that were set up by Northwest School District and, at the same time, to the email addresses that were provided by the parents or guardians. By sending it to the students and, concurrently, their families, the goal was to maximize participation in the research. Embedded in the email communication were English and Spanish versions of the informed consent document. The Google Form was organized so that when the student indicated their primary language, it used skip-logic to get directed to the informed consent document. Because the student sample was sixth through eighth grade students, therefore between the ages of 11 to 14, their parents/guardians also had to indicate on the form that they provide informed consent to have their child participate in the study. When both the student and the adult checked the box that offered informed consent, only then did the four surveys become available for completion. If either the student or adult checked no, the Google Form skipped directly to a submission button and the survey was never revealed.

Anonymity of participants was ensured by only collecting demographic information such as grade level, gender, cultural background, and the actual survey responses. All of the collected data was stored exclusively in a password-protected laptop computer; the results were not shared

with anyone else. As was explicitly explained in the informed consent portion of the Google Form, there were no identified risks or benefits for choosing to participate or to not participate in the study.

Ethical Considerations

One potential ethical concern is that this study will be conducted in the school that this researcher leads, which could potentially impact the reader's perception of the validity of some of the data points and conclusions. The interview results may also contain some bias as the building leader is also the one conducting the interviews with staff and students from the school. A third possible ethical concern is due to the disappointing survey response rate of 6.67%; depending on the source and function of the survey, a 33% rate is frequently referenced as a higher quality response rate. While this fact has negative connotations, a secondary and concurrent benefit of having it conducted in the same building will be the collaboration and professional development that will occur throughout the course of the data collection. This aligns with the Participatory Action Research model described by E. Alana James and her colleagues (2008) that "engag(es) many partners in the process of school development and reform" (p. 7). Since engagement and clarity are already elements in the school's school improvement plan, this research will provide data on the effectiveness of aspects of the plan while informing partners on how to proceed with professional development and implementation.

By integrating the information from the two student surveys and including more in-depth extensions gathered from the student and teacher follow-up interviews, this exploration will begin the initial data analysis of in-person and distance learning. By combining the surveys, interviews, and descriptive review of the data, a narrative will develop that will compare and

contrast the perceptions of engagement and teacher clarity for the more traditional in-person and the more novel virtual instructional settings.

Data Analysis Techniques

The student survey data will be analyzed in multiple ways. From the least complex descriptive perspective, each question on each survey will be tallied separately according to grade level, gender, and ethnicity. These are purely for comparison; there is no statistical relevance among these findings. The student and teacher interview results are being used in a narrative form to explore common themes as well as further clarify and rationalize the survey findings. A descriptive analysis will identify components of student engagement and teacher clarity that students perceive to be different between the in-person and remote learning environments.

The purpose of this research is to determine if there are overall, gender-based, grade-based, or ethnicity-based differences in student perception of teacher clarity and student engagement between the more traditional classroom setting and the pandemic-mandated virtual learning setting. The teacher and student interviews, simple comparison of survey tallies, and the more complex T-test comparisons will help to uncover any trends among these variables.

SECTION FOUR: RESULTS

Interpretation

AS IS Related to Student Engagement

Wagner et al (2006) assert that a “system is perfectly designed to produce the results you're getting” (p. 106). This is the driving rationale of the Northwest Junior High continuous improvement process, to have a shared and common vision in place that produces the goals that are intended. Once the vision is determined and communicated to the learning community, it is critical that a purposeful and aligned process is implemented with fidelity. Among the aspects of this vision-aligned process are teacher lesson plans, goal-setting conferences, walk-through observations, formal classroom observations/post-observation conferences, and book studies/professional development sessions that focus on student engagement and teacher clarity. With all of these systems heading in the same direction, the school is redesigning the learning environment to achieve the intended results of improved student outcomes because of the active presence of explicit and universally consistent support related to student engagement.

Institutions require leadership in order to achieve successful results. That leader is in the role because, as Senge (2000) believes, “catalyzing people’s aspirations doesn’t happen by accident; it requires time, care, and strategy” (p. 72). Wagner et al (2006) extend this thinking to specify that, “Change leaders are well positioned to enter the enacting phase once they’ve built a solid foundation on a clearer definition of the problems, greater urgency for change, increased clarity about the desired outcomes, and a beginning sense of what this work entails” (p. 153). With a strong change agent/agents at the helm, schools are in a position to facilitate and sustain

meaningful improvement initiatives which, hopefully, will show evidence that the years of initiatives focused on student engagement result in positive student achievement.

In a well-established system, leadership is not supposed to be in the hands of one or two individuals. To be executed effectively, guidance needs to be a joint effort among district and building leaders, teachers and support staff, and the family, student, and business community. In order to pursue goals intentionally, Wagner et al (2007) provide a framework that incorporates four ‘arenas of change’ - context, culture, conditions, and competencies - that become the path for transforming change (pp. 98 - 106) and necessitate the involvement of everyone within the system.

Table 1 - AS IS (now) Related to Student Engagement

Context	Culture	Conditions	Competencies
<p>One district</p> <ul style="list-style-type: none"> ● 20 schools <p>4 junior highs</p> <ul style="list-style-type: none"> ● Four out of 45 certified teachers are in their first four years of their education career <p>2018 ISBE</p> <p>Underperforming designation based on EL math performance which led to School Improvement goals</p> <ul style="list-style-type: none"> ● Transition from DataWise School Improvement and focus on math or reading SIP goal to that of building-based EL 	<p>Initial hesitation by some teachers to allow walk-through observations out of concern that results will be used evaluatively</p> <ul style="list-style-type: none"> ● Offer to engage additional teachers in walk-throughs; few willing to commit <p>Small percentage of teachers that appear willing to innovate with culturally and linguistically teaching and learning systems and others that seem to oppose</p> <ul style="list-style-type: none"> ● Level of 	<p>PD related to behavioral, emotional, and cognitive engagement</p> <ul style="list-style-type: none"> ● SIP committee studied look-likes and created engagement look-fors <p>Shared decision-making used to decide final components of walk-through look-likes and look-fors</p> <ul style="list-style-type: none"> ● Engagement walk-throughs completed by principal during the first year and by SIP members during the second year <p>Discussion protocol used to process engagement data</p>	<p>What staff already knows/does to engage students in learning</p> <ul style="list-style-type: none"> ● Initial focus by teachers on rationalizing results of walk-through data rather than use the information to improve engagement practices <p>SIP team chose to initially conduct walk-throughs in each other’s classrooms to safely test documentation of observations and to ensure inter-rater</p>

<p>and engagement SIP goals</p> <p>Third year of engagement-specific School Improvement focus</p> <ul style="list-style-type: none"> ● PD related to EL strategies, co-teaching, culturally and linguistically relevant teaching and learning, math, SEL <p>New superintendent and deputy superintendent</p> <ul style="list-style-type: none"> ● New superintendent team has implemented initial vision, resulting in improved systems <p>Daily team collaboration - one 7th grade team, one 8th grade team, one enrichment team</p> <ul style="list-style-type: none"> ● Continuation of PD and SI plan 	<p>distrust among building employees</p> <p>Resentment from teachers for the SIP team roles</p> <ul style="list-style-type: none"> ● Ongoing PD and in-class coaching opportunities related to content, pedagogy, and integrating SEL, CLR 	<p>after each cycle of walk-throughs</p>	<p>reliability</p> <ul style="list-style-type: none"> ● Seven-member School Improvement Team that is innovative and motivated.
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As Is Context

Wagner et al (2006) challenge leaders to believe that, “We need to understand all this contextual information to help inform and shape the work we do to transform the culture, conditions, and competencies of our schools and districts” (p. 104). Northwest School District contains nineteen public general education schools. In 2018, all but four of these schools earned a summative Every School Succeeds Act (ESSA) designation of Commendable or Exemplary. Northwest Junior High School is in its third year of targeted school improvement due to its 2018

ESSA summative designation of *Underperforming* due to results of the English learners subgroup (during the second year, the school attained *Commendable* status). NWJH has transitioned from a Harvard DataWise school improvement format focused exclusively on math achievement of the English learner and Hispanic subgroups to one that is more of a hybrid that uses the ESSA Illinois Quality Framework rubric and School Improvement Plan (<https://sec1.isbe.net/iwas>). The 2019-22 ESSA School Improvement Plan was three-fold:

1. Progressively increasing student attendance rates using monthly data review and communication with families. In 2020-21, students were assigned an adult mentor that checked in directly with each high-risk student on a weekly basis.
2. Educator professional development - focused on co-teaching, social-emotional learning, and culturally and linguistically relevant teaching and learning in addition to high-impact strategies used to teach students with a primary language other than English.
3. Improving student engagement - several sessions of professional development on types of engagement followed by multiple iterations of classroom walk-throughs to gather authentic data on progression of student engagement throughout the school. This is the origin of the decision to further conduct research on this topic.

As described previously, Northwest Junior High has a diverse community that in 2020 consisted of 47% White, 39% Hispanic, 8.5% Asian, and 2-1/2% Black students. Forty-five percent of the students come from families that qualify for free/reduced lunch, 14.5% qualify as English learners, and 11% are eligible for special education services. In contrast, out of the 65 staff members, sixty-one are Caucasian (94%) and four are Hispanic (6%). Even though professional development is focusing on culturally and linguistically relevant teaching and

learning, there is the potential for inherent bias in an environment where a vast majority of the adults come from one cultural background while the families and students have a variety of other backgrounds. Although we all strive to act in a culturally aware manner, we also have to realize that we also carry with us levels of implicit bias that could unintentionally affect how we teach and interact with our school community.

Walk-through observations were conducted by building administrators and school improvement team members during the 2018-19 and 2019-20 school years. During the first rounds, which consisted of two distinct episodes of walk-throughs, 26 of 32 (81.3%) of the randomly-selected classrooms were observed to have evidence that 75 to 100% of students were actively engaging in the instruction and resources. During the 2019-20 school year, the data collection instrument was updated to include objective data on engagement as well as the subjective information on the engagement strategies that were being used in each randomly observed classroom. For the second year, inter-rater reliability was also addressed by having multiple observers in order to reach consensus on the observation data. During the 2019-20 school year's collection, 14 of 22 (63.6%) of the randomly-selected classrooms showed evidence that 75 to 100% of students engaged with the instruction and resources.

As Is Culture

Danielson (2006) reports, "The culture of the school has an important influence on how the school operates and the extent to which it can achieve positive results for its students" (p. 45). The teachers in Northwest Junior High are passionate about teaching, learning, and supporting students' social-emotional needs. Oftentimes this is the basis for conversations that lead to innovative shared decisions about instruction, supports, and interventions. Sometimes

these passionate conversations become conflictual due to philosophical differences and temporarily negatively impact the staff rapport, resulting in avoidance, cliques, and distrust. Ultimately, staff members return to the professional relationships and not overtly resent the previous interactions.

The School Improvement Team - balanced to include a diverse group among grade levels, content areas, and specialists, though all-female except for an administrator - are motivated and have ongoing professional discussions about teaching and learning. This group, unfortunately, has encountered a level of covert resentment by other staff members due to the perception that they are favored by administration. This has not been explicitly observed by administrators though it was reported by school improvement team members on one occasion.

Wagner et al (2006) discuss the concept of “individual and collective mindsets” (p. 102). These mindsets have the potential to support or undermine the vision and resulting direction of an organization. Connectedly, there is an historic dichotomy among the teachers, divided by those that are committed to innovation and those that are satisfied with performing the status quo. The split among the teachers has impacted the implementation of student engagement data-gathering, data processing, and making informed and shared decisions about follow-up planning. For example, the teachers’ union was initially opposed to the concept of classroom walk-throughs to collect engagement statistics. There was distrust in the process until assurances were made between the union and district leadership that information from the walk-through observations would not be used evaluatively. During the first few rounds of walk-throughs, only building administrators conducted the collaboratively-created instrument. When this entered a second year of observations, the School Improvement Team conducted more in-depth and shared

research of high-impact engagement strategies, created a document to record the observations, practiced the observations in each others' classrooms in order to ensure inter-rater reliability, and scheduled multiple observers into each classroom so the data could be collaboratively discussed and then submitted. After each cycle, a discussion protocol was used in an all-staff meeting to consider patterns and set goals for improvement.

As Is Conditions

Wagner et al (2006) raise awareness that new competencies can be “seriously undermined by the conditions of work imposed on them” (p. 101). Alternately the conditions can also facilitate a positive progression. Northwest Junior High School is located in a district with fifteen elementary schools, four junior high schools, and one therapeutic/early childhood center. At the beginning of the 2019-20 school year, the district hired a new superintendent and deputy superintendent after one position had a retirement and the other position had a resignation to accept a superintendent role in a nearby district. Even though the top administrators were no longer leading, systems and key personnel were still present throughout Northwest School District that facilitated collaboration and shared decision-making among the remaining district-level and building-level teams. At the district level, there are divisions that work together to research and adopt instructional resources, review masses of data, create and facilitate professional development for building leaders related to academic and social/emotional school improvement, oversee budgets and finances, and support multilingual programs and students with disabilities. At the building level, teachers have a daily, scheduled grade-level teacher planning period and an every-other-week Early Release Friday Staff Development session. During the weeks where there isn't scheduled all-staff professional development, shared-decision

making is used to determine which groups gather for team planning; most frequently this is either coordinated by grade level or by content area. There is a School Improvement Team that is made up of volunteer staff members, many who were purposefully requested by the principal in order to provide content and specialization balance and leadership. This motivated group typically meets monthly in order to research, discuss, and plan for implementing processes and practices throughout the school.

Most seventh-grade core and special education classrooms are located in one area of the building with most eighth-grade core and special education classrooms in another part of the building. English as a Second Language classrooms are proximal to each other regardless of grade level. This arrangement provides efficiencies in teacher collaboration and having time-efficient student passing periods. World language and physical education courses are situated centrally so both grades are able to access these courses. Other elective classroom settings are determined by availability. Beginning in the 2019-20 school year, hallway locker assignments were alphabetical by last name in order to facilitate cross-grade rapport among students. Almost every teacher has an exclusive teaching space; a relative few share classrooms due to lack of space in the building.

Instructional budgets are organized by individual teachers and by content area. Each teacher is allotted a set amount of money to use for classroom purposes. Each content area has an additional larger budget that can be used for common supplies and resources. Larger expenses are typically addressed at the district level or using the limited building budget.

Student engagement and corresponding strategies have been the explicit focus of professional development beginning with the 2018-19 school year and extending through the

2019-20 school year until the COVID-19 pandemic led to totally remote teaching and learning. The major focus of teacher learning began with understanding the types of engagement (behavioral, emotional, and intellectual). It proceeded into the study of high-impact engagement strategies using Hattie's (2012) meta-analysis that resulted in the documentation of more than 250 influences on student achievement. These were then prioritized by NJH teachers to determine which ones would be used throughout the grade levels and content areas. This process extended to a series of walk-through observations to collect authentic data on student engagement followed by whole-school processing of the data using formal Notice and Wonder discussion protocols. The first round of walk-through observations was completed exclusively by the building principal, the next two rounds by a combined team of building administrators and the school improvement team, and another was planned to also integrate volunteer teachers, though this was foiled by the March 2020 statewide shutdown of public schools due to the COVID-19 pandemic.

As Is Competencies

The certified staff at Northwest Junior High have education, training, and experience on quality instructional and positive classroom management strategies. In 2019-20, four out of the 45 certified teachers were in their first four years of their education career, meaning these teachers were not yet tenured. In 2020-21, Northwest Junior High School hired a new, though experienced, assistant principal and six additional new teachers. The remaining teachers were tenured, with two of them being within one year of retiring. Every certified educator is licensed and highly qualified in the content area that they teach using criteria established by the Illinois State Board of Education. All classified paraprofessionals are also licensed using ISBE criteria.

During the walk-through observations to collect objective and subjective data on student engagement strategies and student look-likes in 2019-20, the survey instrument revealed teacher patterns of student engagement strategies. Among the more commonly used engagement strategies, in order of frequency, were having students annotate/highlight/underline, use think-pair-share, take notes, have students provide an oral and/or written summarization of content, engage in a turn and talk, and use a formal discussion protocol (Figure A).

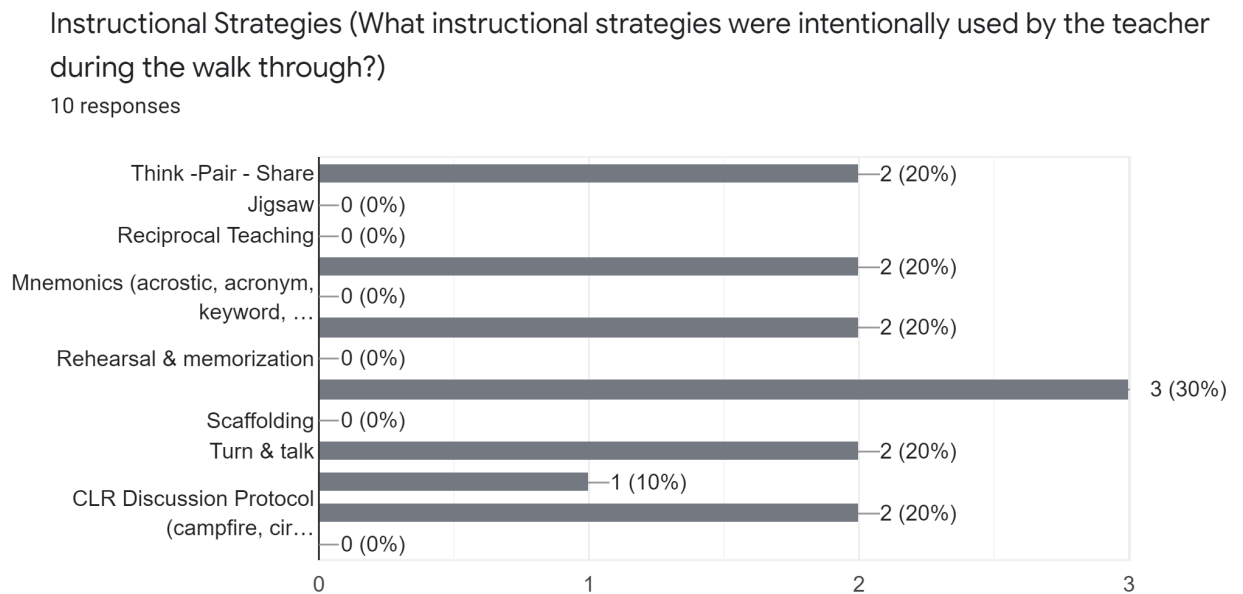


Figure A - 2019-20 Walk-through observation results on teacher instructional strategies

Among the most frequently observed clarity checks were consultation among peers, the teacher challenging students to explain their response, a student initiating a clarity check, and

having students explicitly reflect on the content (Figure B).

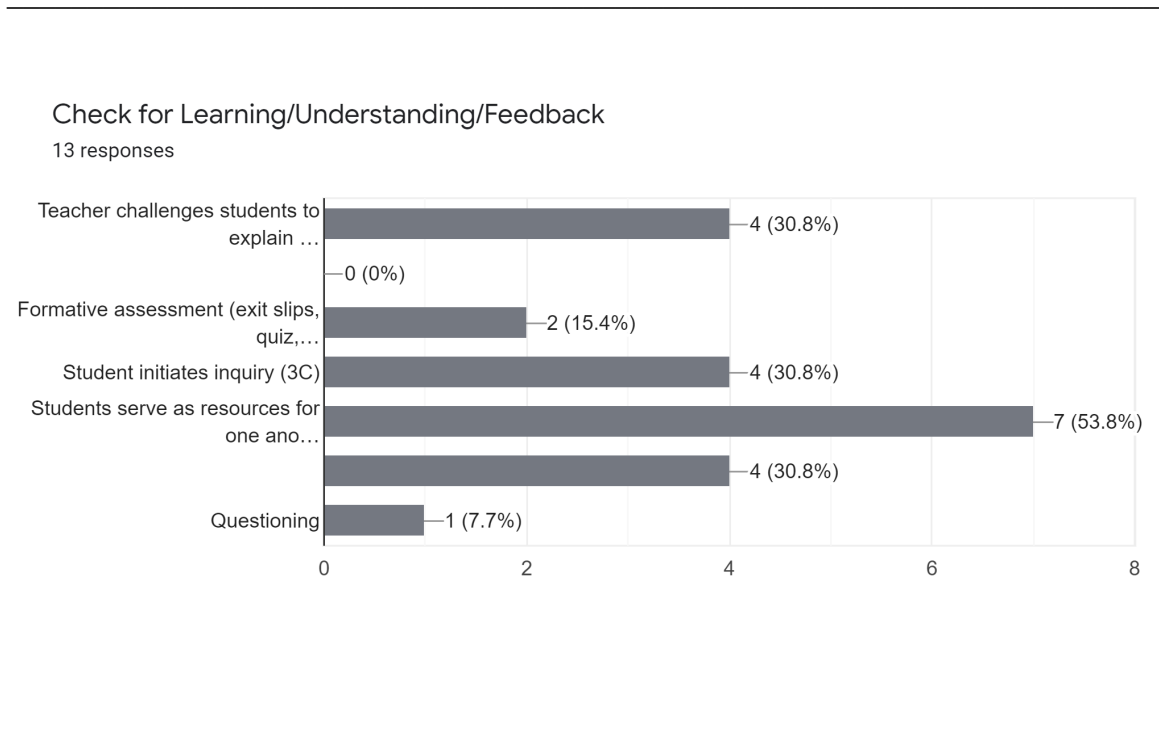


Figure B - 2019-20 Walk-through observation results on student clarity/check for learning strategies

Originally, this research project was intended to capture how student engagement and teacher clarity combine for positive learning outcomes. Students and teachers were already recruited using emailed information and class presentations. Consent forms to complete surveys had been returned. Classroom observations and interviews were being scheduled. Then all Illinois public schools were closed by the governor due to the COVID-19 pandemic, severely restricting the ability to complete the research process as initially planned. All of the data was discarded and the process to renew the plan began.

After some self-permission to feel disappointed and then reflect on how to salvage this project, believing that the pandemic had permanently interfered with its success as it was originally drafted, an epiphany appeared in the middle of one night. When one is given lemons, one must make lemonade. This became an opportunity to collect authentic and relevant student engagement data as it was happening, and compare perceptions of in-person teaching and learning to the experiences of a distance learner.

For the updated research project, the primary data came from two surveys. One was an adaptation (it excluded three of the original questions) of the Classroom Engagement Inventory (CEI) that was created by Wang et al (2014). It was validated in previous studies and consent was given by the authors to include the instrument in this research study. This was intended to capture the students' perceptions of a range of emotions and actions related to engagement. A five-point Likert scale was used that ranged from 'Strongly Disagree' to 'Strongly Agree'. The specific questions are as follows:

- 1. I felt excited while with this teacher.*
- 2. I felt interested while with this teacher.*
- 3. I felt happy while with this teacher.*
- 4. I had fun while with this teacher.*
- 5. I felt proud while with this teacher.*
- 6. I got really involved in class activities.*
- 7. I actively participated in class discussions.*
- 8. I formed new questions in my mind as I joined in-class activities.*
- 9. I compared things I learned with things I already knew.*
- 10. I worked with other students and we learned from each other.*
- 11. If I made a mistake, I tried to figure out where I went wrong.*

12. *I went back over things I didn't understand.*
13. *I thought deeply when I took quizzes in this class.*
14. *I asked myself some questions as I went along to make sure the work made sense to me.*
15. *I searched for information from different places and thought about how to put it together.*
16. *If I was not sure about things, I checked my book or used other materials like charts.*
17. *I judged the quality of my ideas or work during class activities.*
18. *I tried to figure out the hard parts on my own.*
19. *I was "zoned out"; not really thinking or doing classwork.*
20. *I let my mind wander.*
21. *I just pretended like I was working.*

The second instrument was Bolkan's (2016) Clarity Indicators Scale (CIS) which collected information about the degree to which a student believes that the teacher was clear in their expectations and presentations. The five factors that are integrated into the survey questions relate to disfluency, working memory overload, interaction, coherence, and structure. It has been validated in previous studies and consent was given by the author to include these instruments in this research study. A five-point Likert scale was used that ranged from 'Strongly Disagree' to 'Strongly Agree'. The specific questions are as follows:

1. *My teacher had a hard time explaining their thoughts.*
2. *The amount of information presented in our lessons could be overwhelming.*
3. *My teacher first explained things and then stopped so we could ask questions.*
4. *My teacher went off-topic when lecturing.*
5. *My teacher's lectures were well organized.*
6. *My teacher had a hard time coming up with appropriate examples to explain course concepts.*
7. *There is so much to learn during our lectures that I had a hard time keeping up in this class).*

8. *My teacher made sure to ask questions to find out if we understood what we were learning.*
9. *There was a lot of unnecessary information in our lectures.*
10. *My teacher had a hard time explaining things in a simple manner.*
11. *Class lectures made me feel anxious because of the amount of information we were asked to learn all at one time.*
12. *My teacher took the time to answer class questions if things didn't make sense.*
13. *It was easy to follow along with the structure of my teacher's lessons.*

In addition, teacher and student interviews were conducted in order to explore the survey results in more depth.

Fifty-five students in grades 6, 7, and 8 from Northwest School District completed the surveys. Fifty-eight percent of the respondents self-identified as male along with forty-two percent female. Fifty-three percent of the surveyees self-reported as White, twenty-seven percent Hispanic, eleven percent Asian, four percent Black, and two percent each of American Indian, Multi-ethnic, and Other. Fifty-one percent of those completing surveys were sixth graders who were enrolled in a feeder school that matriculated to Northwest Junior High in the school year 2020-21. The seventh (twenty-five percent) and eighth graders (twenty-four percent) that completed surveys were already enrolled at Northwest Junior High during the 2019-2020 school year. The surveys were offered in English and Spanish; sixty-six percent elected to complete the English surveys while thirty-four percent chose the Spanish surveys.

In order to best understand the level of student engagement and teacher clarity for in-person compared to distance learning models, students completed both of these surveys to represent their perceptions in the school-based and remote settings for a total of four completed surveys (all students were in school prior to March 13, 2020 and then all students were in a

remote setting for the final nine weeks of the school year due to the COVID-19 pandemic). The results were then summarized according to the variety of demographic factors and compared across the surveys. A two-tailed T-test was then conducted on the data to help determine the significance of each of the results.

Table 2 - Classroom Engagement Inventory (Wang et al, 2014): Ethnicity

Summaries

1 - Strongly disagree **2 - Disagree** **3 - Neither agree nor disagree**

4 - Agree **5 - Strongly agree**

1. I felt excited while with this teacher.

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	3.927	4.200	4.200	4.333	5	4	4	4
Distance	3.818	3.483	4.467	3.667	5	4	1	5

2. I felt interested while with this teacher.

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	3.982	4.28	4.467	4.000	4.5	5	4	3
Distance	3.855	3.552	4.400	4.167	4.5	3	1	5

3. I felt happy while with this teacher.

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	4.073	4.400	4.600	4.000	4.5	5	3	4
Distance	3.945	3.655	4.467	3.833	4.5	4	3	5

4. I had fun while with this teacher.

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	4.164	4.56	4.467	4.167	5	5	4	4
Distance	3.855	3.483	4.467	3.500	5	5	3	5

5. I felt proud while with this teacher.

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	4.018	3.931	4.533	4.000	4.5	5	2	5
Distance	3.909	3.621	4.333	3.667	4.5	5	4	5

6. I got really involved in class activities.

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	3.836	3.517	4.200	4.000	4	5	5	4
Distance	3.782	3.483	4.400	3.667	4	4	3	4

7. I actively participated in class discussions.

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	4.127	3.759	3.933	4.000	4.5	5	5	3
Distance	3.709	3.448	4.200	3.167	4.5	4	3	4

8. I formed new questions in my mind as I joined in-class activities.

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	3.764	3.759	3.800	3.833	3.5	4	4	3
Distance	3.309	3.172	3.867	3.167	3	3	1	3

9. I compared things I learned with things I already knew.

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	3.964	3.931	4.133	4.000	4	2	4	4
Distance	3.709	3.517	4.267	3.500	3.5	5	1	4

10. I worked with other students and we learned from each other.

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	3.927	3.828	4.400	4.166	4	2	1	3
Distance	3.673	3.655	4.133	2.5	4	5	1	5

11. If I made a mistake, I tried to figure out where I went wrong.

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	4.182	4.207	4.333	4.000	3.5	5	3	4
Distance	4.109	4.172	4.200	4.000	4	5	1	4

12. I went back over things I didn't understand.

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	4.000	4.000	4.133	4.000	3.5	5	2	4
Distance	4.018	3.931	4.533	3.500	3.5	5	1	5

13. I thought deeply when I took quizzes in this class.

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	4.182	4.172	4.400	3.833	4	5	2	5
Distance	3.945	3.897	4.333	3.500	4	4	1	5

14. I asked myself some questions as I went along to make sure the work made sense to me.

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	3.964	3.828	4.333	4.000	3.5	5	1	5
Distance	3.709	3.586	3.933	3.833	3.5	4	3	4

15. I searched for information from different places and thought about how to put it together.

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	3.836	3.552	4.133	4.5	3	5	5	3
Distance	3.600	3.448	3.733	4.167	3	3	4	4

16. If I was not sure about things, I checked my book or used other materials like charts.

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	3.982	3.897	4.400	4.000	4.5	1	3	3
Distance	3.945	3.897	4.133	3.833	4	5	4	2

17. I judged the quality of my ideas or work during class activities.

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	4.036	3.897	4.400	4.166	4	1	5	4
Distance	3.818	3.828	4.067	3.667	3.5	4	1	4

18. I tried to figure out the hard parts on my own.

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	3.873	4.138	3.400	4.5	2.5	3	3	4
Distance	3.818	3.931	3.467	4.167	2.5	5	5	4

19. I was “zoned out”; not really thinking or doing classwork.

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	2.309	2.414	2.333	1.667	1.5	2	3	4
Distance	2.145	2.207	2.000	2.000	2	3	1	4

20. I let my mind wander.

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	2.309	2.448	2.267	1.667	2	2	3	3
Distance	2.255	2.379	2.200	2.000	2	1	1	4

21. I just pretended like I was working.

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	1.582	1.414	1.867	1.167	1.5	1	2	5
Distance	1.691	1.690	1.800	1.500	1	1	1	4

Interpretation

The data was compared the in-person responses to the distance learning responses across both instruments. During the coding process, the questions were separated into categories based

on whether the response indicated a positive impact versus a negative impact. For example, a higher score in the question, “I felt excited while with this teacher” was considered a positive impact; a higher score for, “I was ‘zoned out’, not really thinking or doing classwork” was considered a negative impact.

In congregate (n = 55), students rated the in-person modality more positively in relation to engagement than the distance learning setting in nineteen of the 21 questions (90.5%). White students perceived the in-person setting more engaging in 95.2% of the questions, Asian/Pacific Islander and Black students in 90.2%, Multi-ethnic 90%, American Indian 71.4%, Hispanic 61.9%, and Other 57.1%. The average of the 147 responses among the seven ethnic categories was 78.9% with the mode being 71.4%. With respect to clarity, all respondents considered the in-person format more positively in nine out of 13 (69.2%) questions. American Indian students perceived the in-person setting with more clarity in 92.3% of the questions, Black students 84.6%, Multi-ethnic and Other 76.9%, White students 69.2%, and Hispanic and Asian/Pacific Islander students 61.5%. The average of the 91 responses among the seven ethnic categories was 74.7%, with the mode being 76.9%.

A relevant set of data occurred in relation to the results of White, Asian/Pacific Islander, Black, and Multi-ethnic students compared with American Indian, Hispanic, and Other students. The first group all had results that showed 90-plus percent of the engagement questions being perceived favorably toward in-person learning while the second group all had results that were considerably discrepant (71.4%, 61.9%, and 57.1%, relatively) in lower numbers of questions that were perceived as positive toward in-person learning. It is hypothesized that this difference is due in part to the already-existing achievement and language discrepancies between the two

groups, meaning that the perceived engagement by the lower-scoring groups was already lagging and may not have been impacted as greatly by the distance learning format.

A descriptive comparison was conducted across each of these 21 questions. Most response averages were relatively similar. The following prompts had mean scores that were different by at least 0.5 points (or at least two points for those categories that had two or fewer members) on the 5-point Likert scale. A half-point difference is the equivalent of midway between ‘strongly agree’ and ‘agree’ or ‘strongly disagree’ and ‘disagree’. A full point difference means an entire span between a ‘strong’ response and one that is not strong. If a negative number is shown, it indicates the higher Likert score for the remote setting. These are ranked from the widest span to the least wide span:

All (55) -

<None>.

White (n=29) -

“I had fun while with this teacher” (1.077);

“I actively participated in class discussions” (0.833);

“I felt happy while with this teacher” (0.745);

“I felt interested with this teacher” (0.728);

“I felt excited with this teacher” (0.717);

“I formed new questions in my mind as I joined in-class activities” (0.587).

Hispanic (n=15) -

<None>.

Asian/Pacific Islander (n=6) -

“I worked with other students and we learned from each other” (1.666);

“I had fun while with this teacher” (0.667);

“I felt excited with this teacher” (0.666);

“I formed new questions in my mind as I joined in-class activities” (0.666);

“I went back over things I didn’t understand” (0.5);

“I compared things I learned with things I already knew” (0.5).

Black (n=2) -

<None>.

American Indian (n=1) -

“If I was not sure about things, I checked my book or other materials like charts” (-4);

“I compared things I learned with things I already knew” (-3);

“I worked with other students and we learned from each other” (-3);

“I judged the quality of my ideas or work during class activities” (-3);

“I searched for information from different places and thought about how to put it together (2);

“I felt interested with this teacher” (2);

“I tried to figure out the hard parts on my own” (-2).

Multi-ethnic (n=1) -

“I judged the quality of my ideas or work during class activities” (4);

“I felt interested with this teacher” (3);

“I felt excited with this teacher” (3);

“I formed new questions in my mind as I joined in-class activities” (3);

“I compared things I learned with things I already knew” (3);

“If I made a mistake, I tried to figure out where I went wrong” (2);

“I asked myself some questions as I went along to make sure the work made sense to me” (-2);

“I felt proud while with this teacher” (-2);

“I got really involved in class activities” (2);

“I actively participated in class discussions” (2);

“I tried to figure out the hard parts on my own” (-2);

“I was zoned out; not really thinking or doing classwork” (2);

“I let my mind wander” (2).

Other (n=1) -

“I felt interested with this teacher” (-2);

“I worked with other students and we learned from each other” (-2).

Judgment

From a purely numerical perspective, there was a relatively high number of survey responses where there was a minimum 0.5 difference between the in-person and remote perception of engagement for different ethnicity groups. Three of the highest differences between results focused on having fun with the teacher, working with peers, and actively participating. These responses seem reasonable as this was the first foray for many instructors and many students into remote learning structures, so teaching and learning in the virtual setting was unfamiliar. Of interest is that the one student that self-identified as multi-ethnic had thirteen of the twenty-one responses with a minimum difference of two Likert scale points; that the one student who self-identified as American Indian had 5 responses wherein the remote learning environment was perceived as preferred; and that the Hispanic and Black subgroups had zero responses that had relative differences in perception between the in-person and remote settings.

Table 3 - Classroom Engagement Inventory (Wang et al, 2014): Gender Summaries

1 - Strongly disagree **2 - Disagree** **3 - Neither agree nor disagree**
4 - Agree **5 - Strongly agree**

1. I felt excited while with this teacher.

	Male (32)	Female (23)
In-school	3.969	3.870
Distance	3.813	3.826

2. I felt interested while with this teacher.

	Male (32)	Female (23)
In-school	4.156	3.739
Distance	3.844	3.870

3. I felt happy while with this teacher.

	Male (32)	Female (23)
In-school	4.188	3.913
Distance	4.063	3.783

4. I had fun while with this teacher.

	Male (32)	Female (23)
In-school	4.219	4.087
Distance	3.844	3.870

5. I felt proud while with this teacher.

	Male (32)	Female (23)
In-school	4.094	3.913
Distance	4.031	3.739

6. I got really involved in class activities.

	Male (32)	Female (23)
In-school	4.031	3.565
Distance	3.969	3.522

7. I actively participated in class discussions.

	Male (32)	Female (23)
In-school	4.063	4.217
Distance	3.719	3.696

8. I formed new questions in my mind as I joined in-class activities.

	Male (32)	Female (23)
In-school	3.719	3.826
Distance	3.219	3.435

9. I compared things I learned with things I already knew.

	Male (32)	Female (23)
In-school	4.063	3.826
Distance	3.781	3.609

10. I worked with other students and we learned from each other.

	Male (32)	Female (23)
In-school	3.938	3.913
Distance	3.688	3.652

11. If I made a mistake, I tried to figure out where I went wrong.

	Male (32)	Female (23)
In-school	4.156	4.217
Distance	4.063	4.174

12. I went back over things I didn't understand.

	Male (32)	Female (23)
In-school	3.875	4.174
Distance	4.000	4.043

13. I thought deeply when I took quizzes in this class.

	Male (32)	Female (23)
In-school	4.250	4.087
Distance	3.906	4.000

14. I asked myself some questions as I went along to make sure the work made sense to me.

	Male (32)	Female (23)
In-school	3.969	3.956
Distance	3.688	3.739

15. I searched for information from different places and thought about how to put it together.

	Male (32)	Female (23)
In-school	3.875	3.783
Distance	3.563	3.652

16. If I was not sure about things, I checked my book or used other materials like charts.

	Male (32)	Female (23)
In-school	4.188	3.696
Distance	4.031	3.826

17. I judged the quality of my ideas or work during class activities.

	Male (32)	Female (23)
In-school	4.250	3.739
Distance	3.781	3.870

18. I tried to figure out the hard parts on my own.

	Male (32)	Female (23)
In-school	3.844	3.913
Distance	3.844	3.783

19. I was “zoned out”; not really thinking or doing classwork.

	Male (32)	Female (23)
In-school	2.188	2.478
Distance	2.031	2.304

20. I let my mind wander.

	Male (32)	Female (23)
In-school	2.219	2.435
Distance	2.063	2.522

21. I just pretended like I was working.

	Male (32)	Female (23)
In-school	1.563	1.609
Distance	1.531	1.913

Interpretation

When this engagement data was viewed from the lens of gender, only minor differences are apparent. They are not statistically significant, though, when reviewing perceptions of engagement results (81.0% for males and 76.2% for females,) which amounts to the difference of one question.

A descriptive comparison was conducted across each of these 21 questions. Most response averages were relatively similar. The following prompts had mean scores that were different by at least 0.5 points (or at least two points for those categories that had two or fewer members) on the 5-point Likert scale. A half-point difference is the equivalent of midway between ‘strongly agree’ and ‘agree’ or ‘strongly disagree’ and ‘disagree’. A full point difference means an entire span between a ‘strong’ response and one that is not strong. A negative score indicates a higher preference score in the remote setting. These are ranked from the widest span to the least wide span:

Male (n=32) -

“I formed new questions in my mind as I joined in-class activities” (0.5).

Female (n=23) -

<None>.

As compared to the ethnicity summaries that had 23.1% of the responses that exceeded the predetermined difference in Likert scores, those respondents who self-identified their gender had merely one question (2.4%) that had a difference of more than 0.5 on the Likert scale, and this was just on the border of that research study-imposed benchmark. It is beyond the scope of this investigation to understand the rationale for this broad difference between the ethnicity and gender responses.

Table 4 - Classroom Engagement Inventory (Wang et al, 2014): Grade-level

Summaries

1 - Strongly disagree **2 - Disagree** **3 - Neither agree nor disagree**
4 - Agree **5 - Strongly agree**

1. I felt excited while with this teacher.

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	4.286	3.714	3.385
Distance	4.321	3.357	3.231

2. I felt interested while with this teacher.

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	4.357	3.786	3.385
Distance	4.464	3.214	3.231

3. I felt happy while with this teacher.

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	4.464	3.857	3.462
Distance	4.429	3.500	3.385

4. I had fun while with this teacher.

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	4.500	4.000	3.615
Distance	4.321	3.571	3.385

5. I felt proud while with this teacher.

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	4.429	3.643	3.538
Distance	4.286	3.571	3.154

6. I got really involved in class activities.

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	4.214	3.571	3.308
Distance	4.143	3.643	3.154

7. I actively participated in class discussions.

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	4.214	4.071	4.000
Distance	2.357	3.643	3.231

8. I formed new questions in my mind as I joined in-class activities.

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	3.964	3.857	3.231
Distance	3.571	3.143	2.923

9. I compared things I learned with things I already knew.

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	4.107	3.929	3.692
Distance	3.929	3.867	3.231

10. I worked with other students and we learned from each other.

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	4.286	3.500	3.615
Distance	3.857	3.643	3.308

11. If I made a mistake, I tried to figure out where I went wrong.

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	4.179	4.071	4.308
Distance	4.143	4.071	4.077

12. I went back over things I didn't understand.

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	4.107	3.857	3.923
Distance	4.179	3.929	3.769

13. I thought deeply when I took quizzes in this class.

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	4.429	4.000	3.846
Distance	4.143	3.929	3.538

14. I asked myself some questions as I went along to make sure the work made sense to me.

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	4.143	3.786	3.769
Distance	3.857	3.500	3.615

15. I searched for information from different places and thought about how to put it together.

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	4.036	3.929	3.308
Distance	3.607	3.929	3.231

16. If I was not sure about things, I checked my book or used other materials like charts.

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	4.250	3.786	3.615
Distance	3.964	4.357	3.462

17. I judged the quality of my ideas or work during class activities.

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	4.214	3.929	3.769
Distance	4.036	3.857	3.308

18. I tried to figure out the hard parts on my own.

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	3.679	4.000	4.154
Distance	3.536	4.429	3.769

19. I was “zoned out”; not really thinking or doing classwork.

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	2.214	2.214	2.615
Distance	2.036	2.143	2.385

20. I let my mind wander.

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	2.071	2.286	2.846
Distance	2.071	2.214	2.692

21. I just pretended like I was working.

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	2.071	1.643	1.462
Distance	1.679	1.500	1.923

Interpretation

When looking at engagement from the lens of grade levels, 8th graders perceived the in-person format more positively at 85.7%, 6th graders at 76.2%, and 7th graders at 66.7%. For clarity, 7th graders perceived in-person learning to have a more positive perception in twelve of the 13 (92.3%) questions, while both 6th and 8th graders felt this way in nine out of 13 (69.2%) of the questions. Given the number of students in each category, these results wouldn't be impacted statistically by a few students, so that doesn't apply as it did in the ethnicity category.

The rationale for the differences in grade level perceptions, given that the highest and lowest are both in the junior high settings, is not currently understood.

A descriptive comparison was conducted across each of these 21 questions. Most response averages were relatively similar. The following prompts had mean scores that were different by at least 0.5 points (or at least two points for those categories that had two or fewer members) on the 5-point Likert scale. A half-point difference is the equivalent of midway between 'strongly agree' and 'agree' or 'strongly disagree' and 'disagree'. A full point difference means an entire span between a 'strong' response and one that is not strong. A negative score indicates a Likert perceptual preference for the remote setting. These are ranked from the widest span to the least wide span:

6th grade (n=28) -

“I actively participated in class discussions” (1.857).

7th grade (n=14) -

“I formed new questions in my mind as I joined in-class activities” (0.714);

“I felt interested with this teacher” (0.572);

“If I was not sure about things, I checked my book or used other materials like charts” (-0.571).

8th grade (n=13) -

“I actively participated in class discussions” (0.769).

Other than the relatively high difference among the sixth grade and the eighth grade students related to active participation in the two settings, there were few other results that exceeded this research project's definition of significance. This is counter to the trend among the ethnicity groups, and similar to that found among the gender groups. Again, the rationale for these results goes beyond the scope of this research.

Judgment

Overall, this engagement data reveals a narrative that, overall, students tended to perceive in-person learning with relatively higher levels of engagement, with some differences based on various demographic themes. Based purely on the aggregate responses, themes become apparent. As a whole, 90.5% of the fifty-five student respondents indicated that they perceived the in-person modality more engaging than the virtual learning environment. There were variations based on ethnicity - more than 90% of White (95.2%), Asian/Pacific Islander and Black (90.2%), and Multi-ethnic students (90%) reported more positive perceptions related to engagement, while American Indian (71.4%), Hispanic (61.9%), and Other (57.1%) students expressed less perceived favoritism to in-person modality in relation to feeling engaged in learning. Gender data was comparable, with eighty-one percent of male and 76.2% of female students reporting in-person learning as more engaging. Grade-level responses varied, with eighth-grade students seeing in-person instruction as more engaging (85.7%), followed by 6th graders (76.2%), and then 7th grade students (66.7%). These themes were confirmed by data collected from teacher interviews. The educators consistently expressed concern about the number of students who elected to keep their device cameras off during remote instruction, who did not respond to teacher prompts either verbally or in the virtual Chat room, and who appeared to enter the virtual

classroom for attendance purposes and then showed no evidence of remaining in the virtual environment during instruction. Students that engaged in the interviews did not have the same perspective as their teachers; many of them did not perceive much difference in their levels of participation. This difference between the adult and student perspective is easily explained by the relative profile of a student that would volunteer to participate in a research interview - those students are also more likely to be active and engaged in the classroom environment.

Recommendation

As the learning environment quickly transitioned from the more traditional in-person format to a government-mandated virtual structure, it became readily apparent that most teachers weren't technologically prepared. Although other institutions such as universities and virtual academies had been instructing online, public schools tended to not be utilizing the technology as they taught more traditionally with students in a brick and mortar setting. When it becomes safe for students to return in-person, districts should continue to offer virtual options for students with social-emotional issues, those who can't access due to health concerns, and during temporary or extended periods of time when in-person learning isn't accessible due to environmental circumstances.

Conclusion

Remote learning began for many school districts out of a mandate. As this data shows, during the onset students struggled with transitioning to learning online. It is here to stay.

Districts need to continue investing in technology, platforms, online curricula, and professional development so they are responsive to students’ engagement and learning needs.

Another dataset comes from the results of Bolkan’s (2016) Clarity Indicators Scale. The summaries of the ethnicity, gender, and grade-level data is located below, followed by a discussion of some of the descriptive findings.

Table 5 - Clarity Indicators Scale (Bolkan S. 2016): Ethnicity Summaries

1. My teacher had a hard time explaining their thoughts (D).

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	2.109	1.793	3.133	1.500	1.5	3	1	1
Distance	2.164	2.103	2.200	1.500	1.5	4	5	4

2. The amount of information presented in our lessons could be overwhelming (WM).

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	2.709	2.759	3.133	2.167	2.5	1	1	2
Distance	2.655	2.690	2.867	1.5	2	4	5	3

3. My teacher first explained things and then stopped so we could ask questions (I).

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	4.109	3.931	4.600	3	4	5	5	4
Distance	3.800	3.586	4.533	3.500	4	3	1	4

4. My teacher went off-topic when lecturing (C).

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	2.164	2.069	2.133	1.833	2.5	5	5	1
Distance	1.909	1.828	2.000	1.833	2	2	1	4

5. My teacher's lectures were well organized (S).

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	4.218	4.172	4.467	4.333	4.5	2	3	4
Distance	3.982	3.966	4.133	4.00	4	2	3	5

6. My teacher had a hard time coming up with appropriate examples to explain course concepts

(D).

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	1.782	1.966	1.733	1.167	1.5	2	2	1
Distance	2.182	2.000	2.533	1.833	1.5	5	3	2

7. There is so much to learn during our lectures that I had a hard time keeping up in this class

(WM).

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	2.291	2.310	2.667	1.833	2.5	1	1	1
Distance	2.382	2.414	2.467	1.500	3	2	3	4

8. My teacher made sure to ask questions to find out if we understood what we were learning (I).

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	4.309	4.138	4.733	3.833	4.5	5	4	5
Distance	3.909	3.690	4.400	3.33	4.5	4	5	5

9. There was a lot of unnecessary information in our lectures (S).

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	2.236	2.207	1.933	2.333	1.5	5	5	3
Distance	2.073	1.897	2.200	2.167	1.5	5	1	4

10. My teacher had a hard time explaining things in a simple manner (D).

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	2.127	2.069	2.2	2.000	1.5	2	2	5
Distance	1.855	1.862	1.733	1.667	1.5	5	3	1

11. Class lectures made me feel anxious because of the amount of information we were asked to learn

all at one time (WM).

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	2.327	2.448	2.600	1.500	2	1	3	1
Distance	2.291	2.414	2.333	1.667	2.5	1	3	2

12. My teacher took the time to answer class questions if things didn't make sense (I).

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	4.255	3.931	4.667	4.167	4.5	1	5	4
Distance	2.836	3.793	3.8	3.667	4.5	4	5	4

13. It was easy to follow along with the structure of my teacher's lessons (S).

	All (55)	White (29)	Hisp (15)	Asian/Pac (6)	Black (2)	Am Ind (1)	Multi-Eth (1)	Other (1)
In-school	4.073	3.897	4.400	4.167	3.5	5	4	4
Distance	3.945	3.931	4.067	3.833	4.5	1	5	4

Interpretation

The data showed a relatively less favorable perception of teacher clarity when compared to engagement. When considering all ethnic categories, 69.2% responded in favor of perceiving teachers to have more clarity in the in-person format. When looking at all ethnic categories, this also showed a wide range. American Indian (92.3%), Black (84.6%), and Multi-ethnic students were above the average result while White (69.2%), Hispanic and Asian/Pacific Islander students (both at 61.5%) were below the average. It is suggested that this range is due more to the number of students in each ethnic group (50 versus 4) and the lower number of questions (13) in the clarity survey versus 21 in the engagement survey; statistically, one student's response would have a greater impact in a category with fewer respondents than one that had many respondents.

A descriptive comparison was conducted across each of these 13 questions. Most response averages were relatively similar. The following prompts had mean scores that were different by at least 0.5 points (or at least two points for those categories that had two or fewer

members) on the 5-point Likert scale. A half-point difference is the equivalent of midway between 'strongly agree' and 'agree' or 'strongly disagree' and 'disagree'. A full point difference means an entire span between a 'strong' response and one that is not strong. A negative scale score indicates a preference for the remote setting. These are ranked from the widest span to the least wide span:

All (n=55) -

"My teacher took the time to answer class questions if things didn't make sense" (1.419).

White (n=29) -

<None>.

Hispanic (n=15) -

"My teacher had a hard time explaining their thoughts" (0.933);

"My teacher took the time to answer class questions if things didn't make sense" (0.867):

"My teacher had a hard time coming up with appropriate examples to explain course concepts"

(0.8).

Asian/Pacific Islander (n=6) -

"The amount of information presented in our lessons could be overwhelming" (0.667);

"My teacher first explained things and then stopped so we could ask questions" (-0.5);

“My teacher took the time to answer class questions if things didn’t make sense” (0.5).

Black (n=2) -

<None>.

American Indian (n=1) -

“It was easy to follow along with the structure of my teacher’s lessons” (4);

“The amount of information presented in our lessons could be overwhelming” (-3);

“My teacher went off-topic when lecturing” (3);

“My teacher had a hard time coming up with appropriate examples to explain course concepts” (-3);

“My teacher took the time to answer class questions if things didn’t make sense” (-3);

“My teacher had a hard time explaining things in a simple manner” (-3);

“My teacher first explained things and then stopped so we could ask questions” (2).

Multi-ethnic (n=1) -

“My teacher went off-topic when lecturing” (4);

“My teacher had a hard time explaining their thoughts” (-4);

“The amount of information presented in our lessons could be overwhelming” (-4);

“My teacher first explained things and then stopped so we could ask questions” (4);

“There was a lot of unnecessary information in our lectures” (4);

“There was so much to learn during our lectures that I had a hard time keeping up in this class” (-2).

Other (n=1) -

“My teacher had a hard time explaining things in a simple manner” (4);

“My teacher had a hard time explaining their thoughts” (-3);

“My teacher went off-topic when lecturing” (-3);

“There was so much to learn during our lectures that I had a hard time keeping up in this class” (-3).

For what is similar to the engagement survey, the results from the ethnic group comparisons revealed a relatively high frequency (25.3%) of perceived differences between the in-person and remote learning setting prompts. A common difference in this survey was that the teacher wasn't responsive to questions when things weren't clear to the degree that this question had significant differences within the entire sampling group as well as in three specific ethnicity categories.

Whereas the White subgroup had six of the 34 different scores in the engagement survey, they had zero of the 23 different scores in the teacher clarity survey. The Hispanic subgroup had zero different scores in the engagement survey, while three were communicated in the clarity survey.

The one student who identified as American Indian and the one student who identified as multi-ethnic again showed relatively more frequent perceptual differences (56.5%, with 58.8% of the total in the engagement survey). These two ethnic categories also had seven of the 11 responses that signified a preference for the virtual learning setting.

Table 6 - Clarity Indicators Scale (Bolkan S. 2016): Gender Summaries

1. My teacher had a hard time explaining their thoughts (D).

	Male (32)	Female (23)
In-school	2.219	1.957
Distance	2.031	2.348

2. The amount of information presented in our lessons could be overwhelming (WM).

	Male (32)	Female (23)
In-school	2.813	2.565
Distance	2.750	2.524

3. My teacher first explained things and then stopped so we could ask questions (I).

	Male (32)	Female (23)
In-school	4.438	3.652
Distance	3.969	3.652

4. My teacher went off-topic when lecturing (C).

	Male (32)	Female (23)
In-school	2.063	2.304
Distance	1.844	2.000

5. My teacher's lectures were well organized (S).

	Male (32)	Female (23)
In-school	4.250	4.174
Distance	4.125	3.783

6. My teacher had a hard time coming up with appropriate examples to explain course concepts

(D).

	Male (32)	Female (23)
In-school	1.750	1.826
Distance	2.156	2.217

7. There is so much to learn during our lectures that I had a hard time keeping up in this class

(WM).

	Male (32)	Female (23)
In-school	2.313	2.261
Distance	2.531	2.174

8. My teacher made sure to ask questions to find out if we understood what we were learning (I).

	Male (32)	Female (23)
In-school	4.500	4.043
Distance	3.969	3.826

9. There was a lot of unnecessary information in our lectures (S).

	Male (32)	Female (23)
In-school	2.125	2.391
Distance	2.344	2.130

10. My teacher had a hard time explaining things in a simple manner (D).

	Male (32)	Female (23)
In-school	2.031	2.261
Distance	1.813	1.913

11. Class lectures made me feel anxious because of the amount of information we were asked to learn all at one time (WM).

	Male (32)	Female (23)
In-school	2.219	2.478
Distance	2.344	2.217

12. My teacher took the time to answer class questions if things didn't make sense (I).

	Male (32)	Female (23)
In-school	4.500	3.913
Distance	4.031	3.565

13. It was easy to follow along with the structure of my teacher’s lessons (S).

	Male (32)	Female (23)
In-school	4.125	4.000
Distance	4.188	3.609

Interpretation

In relation to clarity, the divide was considerable with 11/13 (84.6%) responses by males that suggested in-person learning was more positively viewed as compared to 46.2% by females.

A descriptive comparison was conducted across each of these 13 questions. Most response averages were relatively similar. The following prompts had mean scores that were different by at least 0.5 points (or at least two points for those categories that had two or fewer members) on the 5-point Likert scale. A half-point difference is the equivalent of midway between ‘strongly agree’ and ‘agree’ or ‘strongly disagree’ and ‘disagree’. A full point difference means an entire span between a ‘strong’ response and one that is not strong. A negative scale score indicates a preference for the remote learning setting. These are ranked from the widest span to the least wide span:

Male (n=32) -

“My teacher made sure to ask questions to find out if we understood what we were learning” (0.531).

Female (n=23) -

<None>.

As was suggested in the student engagement survey results, the gender categories showed minimal differences in perception related to the in-person versus the remote learning setting.

This is quite interesting since the ethnicity categories showed such a high frequency of differences of teacher clarity between the two instructional structures.

Table 7 - Clarity Indicators Scale (Bolkan S. 2016): Grade-level Summaries

1. My teacher had a hard time explaining their thoughts (D).

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	2.357	1.571	2.154
Distance	2.107	1.929	2.538

2. The amount of information presented in our lessons could be overwhelming (WM).

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	2.929	2.429	2.538
Distance	2.571	3.286	2.154

3. My teacher first explained things and then stopped so we could ask questions (I).

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	4.250	4.286	3.615
Distance	4.214	4.000	2.692

4. My teacher went off-topic when lecturing (C).

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	1.857	2.714	2.231
Distance	1.893	1.787	2.077

5. My teacher's lectures were well organized (S).

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	4.464	4.071	3.846
Distance	4.214	3.929	3.538

6. My teacher had a hard time coming up with appropriate examples to explain course concepts

(D).

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	1.643	1.857	2.000
Distance	2.179	2.000	2.385

7. There is so much to learn during our lectures that I had a hard time keeping up in this class

(WM).

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	2.357	2.071	2.385
Distance	2.357	2.571	2.231

8. My teacher made sure to ask questions to find out if we understood what we were learning (I).

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	4.571	4.429	3.615
Distance	4.143	4.143	3.154

9. There was a lot of unnecessary information in our lectures (S).

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	1.893	2.286	2.923
Distance	2.000	2.000	2.308

10. My teacher had a hard time explaining things in a simple manner (D).

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	2.285	1.857	2.077
Distance	1.607	2.214	2.000

11. Class lectures made me feel anxious because of the amount of information we were asked to learn all at one time (WM).

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	2.357	2.286	2.308
Distance	2.214	2.429	2.308

12. My teacher took the time to answer class questions if things didn't make sense (I).

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	4.571	4.214	3.615
Distance	3.893	3.929	3.154

13. It was easy to follow along with the structure of my teacher's lessons (S).

	6th grade (28)	7th grade (14)	8th grade (13)
In-school	4.286	4.071	3.615
Distance	4.071	4.071	3.538

Interpretation

The clarity perception data can also be compared in light of gender or grade level. Interestingly, males viewed the in-person format favorably with an 84.6% response while females responded at a 46.2%, a considerable difference of five of the 13 questions. The grade-level data also revealed more drastic differences with 7th graders perceiving in-person learning more positively in twelve of the 13 (92.3%) questions, while both 6th and 8th graders felt this way in nine of 13 (69.2%) of the questions. Once again, the rationale for the differences in grade level perceptions, given that the highest and lowest are both in the junior high settings, is not presently known.

A descriptive comparison was conducted across each of these 13 questions. Most response averages were relatively similar. The following prompts had mean scores that were different by at least 0.5 points (or at least two points for those categories that had two or fewer members) on the 5-point Likert scale. A half-point difference is the equivalent of midway

between ‘strongly agree’ and ‘agree’ or ‘strongly disagree’ and ‘disagree’. A full point difference means an entire span between a ‘strong’ response and one that is not strong. A negative scale score indicates a preference for the virtual learning setting. These are ranked from the widest span to the least wide span:

6th grade (n=28) -

“My teacher had a hard time explaining things in a simple manner” (0.678);

“My teacher took the time to answer class questions if things didn’t make sense” (0.678);

“My teacher had a hard time coming up with appropriate examples to explain course concepts” (-0.536).

7th grade (n=14) -

“My teacher went off-topic when lecturing” (0.927);

“The amount of information presented in our lessons could be overwhelming” (-0.857);

“There is so much to learn during our lectures that I had a hard time keeping up in this class” (-0.5).

8th grade (n=13) -

“My teacher first explained things and then stopped to ask questions” (0.923);

“There was a lot of unnecessary information in our lectures” (0.615).

As the data relates to teacher clarity, students in the ‘all respondents’ category communicated the in-person learning structure as being more clear in 69.2% of the survey questions. Though on the average students believe that clarity was higher in a more traditional classroom setting, American Indian (92.3%) and Black (84.6%) students perceived relatively higher levels of clarity, while Multi-ethnic and Other (76.9%), White (69.2%), Hispanic and Asian/Pacific Islander (61.5%) reported relatively lower perceptions of clarity for the in-person learning format. There was a broader gender gap, with males reporting in-person learning with nearly twice the frequency (84.6%) than female students (46.2%). In exception to the engagement data, 7th grade (92.3%) perceived more clarity with in-person learning while both 6th and 8th grade students believed this to be the case in 69.2% of the questions. Prior to the pandemic, disengaged students would relatively easily blend into an otherwise engaged classroom. As long as they weren’t disruptive to others’ learning, it was observed that many long-term English learner students (often within the low-income, second language, and Hispanic subgroups) were able to exhibit low engagement during classroom activities and discussions, as well as exhibit low levels of engagement with assignments that were expected to be completed outside of the school setting. There is relatively little consequence for a disengaged student in junior high school; no students were ever prevented from transitioning to high school due to failing grades.

Additional insight is added to this research study’s objective data using information garnered from teacher and student interviews. In all twelve interviews, teachers expressed frustration about the vast numbers of students, consistently those from disadvantaged circumstances, that would rarely sign into remote lessons during the pandemic. Oftentimes,

teachers described, students would log into the online classroom to prove attendance, keep their camera off, and fail to respond to verbal or chat responses. Lessons would be created that could be completed during the 40 minute session, and the interviewees complained how even these assignments were rarely submitted. Another factor that teachers exposed that made online learning a challenge was the lack of experience and professional development in using the tools and technology for distance learning. The teachers recognized that families were in crisis, that physical and mental health needed to remain a priority, though it didn't reduce the stress of needing to work harder and for longer hours during virtual instruction in an effort to engage students. Teachers also acknowledged that this equity issue was exacerbated by the need to implement online instruction during the pandemic. Recommendations to address these concerns will be included later in this study.

Student interviews tended to not align with the perceptions of engagement and lack of clarity that were expressed by their instructors. While the teachers detailed frustration with the outcome of their efforts to create meaningful lessons, the students that volunteered to be interviewed more frequently reflected that distance learning was successful for them, they felt engaged, and were experiencing learning. Students explicitly mentioned that they were able to access the lessons and understood the content. Many of them did not express a high degree of relative difficulty with clarity in the remote learning environment as compared to the in-person format. A rationale for this disconnect between student and teacher interview responses is that it is likely that the profile of the student volunteer respondents predisposes them to classroom success. In other words, students who were willing to participate in the interviews had a higher likelihood of also participating in and responding to the virtual learning activities.

Although the responses to these prompts were assigned a Likert scale value, the ultimate goal was not to assign value to or judgment upon either of the learning formats. The purpose was to find the relative strengths from the perspective of students and use that information to continuously improve both learning environments. There are components to traditional learning practices that benefit distance learning strategies and there are aspects of distance learning techniques that coordinate well in the more traditional learning setting. By tapping into students' impressions of what works for them, we are being instructionally and culturally responsive to their needs.

Judgment

As a whole, this shows trend information that students value face-to-face instruction due to the improved outcomes of active participation and ability to ask and form new questions during the in-person activities. In addition, students reported that they had more fun in person and compared things/made connections with background information that already existed. This process of identifying strengths of in-person learning can also be generalized from the data to genders, ethnic groups, and grade levels. As we know from other research, the preferences that these students describe (universally designing lessons with student interest and cultural relevance in mind, active learning, promoting questioning, and having students make comparisons) are key components to having students encode content and make connections to prior learning. These strategies will be explored in more detail later in this research project.

Recommendation

During the state-mandated COVID-19 pandemic school closures, another mandate was established by the Illinois State Board of Education that schools were to “use a pass-incomplete system that doesn’t give failing grades, doesn’t punish kids for lack of participation” (Chicago Tribune, 2020). This was an effort to promote equity during a time of chronic crisis. “The emphasis for schoolwork ... during the remote learning period is on learning, not on compliance. A focus on keeping children emotionally and physically safe, fed, and engaged in learning should be our first priority during this unprecedented time” (Chicago Tribune, 2020). While this mandate did provide equity and priority on emotional well-being, it also resulted in high levels of student disengagement. As professional development and practice with the remote learning tools progressed, teachers became much more adept, proficient, and responsive to student learning as it relates to teacher clarity. It is highly recommended that this process continue, and that learning data is regularly reviewed in order to ensure equitable learning outcomes.

Conclusion

Upon similar lines to that of the Classroom Engagement Inventory, the Clarity Indicators Scale surveys contain trend data that inform school systems on what students perceive as responsive to their needs. As a whole, the CIS leads us to information that in the traditional classroom students felt that teachers took the time to answer clarifying questions. In addition, it showed how students need teachers to first explain content and check for understanding, stay on topic, keep instruction methodology relatively simple, and provide examples. Hattie (2012) points to multiple key understandings for teaching and learning, which is especially crucial

during virtual learning. This includes taking advantage of the social rapport between the student, peers, and teacher; being carefully attentive to student feedback; balance “precious knowledge with deep learning”; be cognizant of what it is to be a learner (and expand this concept to being an online versus an in-person learner); be a reflective practitioner; and use collaboration opportunities with colleagues and professional organizations (pp. 212-16).

SECTION FIVE: TO-BE FRAMEWORK

"Continuing with Wagner's process, we next identify the ideal To-Be framework connected to each of the Four C's."

Context	Culture	Conditions	Competencies
<ul style="list-style-type: none"> ● One district 20 schools ● 4 junior highs Four out of 45 certified teachers are in their first four years of their education career ● Transition from DataWise SI and focus on math or reading SIP goal to that of building-based SIP goal Second year of engagement-specific SI focus ● PD related to EL strategies, co-teaching, culturally and linguistically relevant teaching and learning, math, SEL New superintendent and deputy superintendent ● Daily team collaboration - one 7th grade team, one 8th grade team, one enrichment team New superintendent team has implemented initial vision, resulting in improved systems ● Continuation of PD and SI plan 	<ul style="list-style-type: none"> ● Increasing numbers of teachers willing to observe each others' classrooms and engage in discussion protocol related to pluses/deltas Teacher relations are professionally more trusting ● Teachers engaging in regular PLCs with common formative assessments, collaborative data review, and sharing of instructional strategies 	<ul style="list-style-type: none"> ● PD related to behavioral, emotional, and cognitive engagement SIP committee studied and created engagement look-fors ● Shared decision-making used to decide final components of walk-through look-fors Engagement walk-throughs completed by principal last year and by SIP members this year ● Discussion protocol to process engagement data after each cycle of walk-throughs 	<ul style="list-style-type: none"> ● Staff able to objectively review school walk-through data to set goals for continuous improvement ● Teachers observed to innovate and integrate more high-impact engagement strategies in their classrooms

Table 8 - Four C's To-Be Framework Summary

Context

Over the course of this research, the new superintendent team began to implement their initial vision. During the transition, the new team interviewed and surveyed district- and building-level leaders in order to better understand strengths and growth opportunities. One of the first and most obvious focus areas related to the physical plant and life-safety status of each building. A second priority area of the new superintendent team was to understand and provide leadership for the district departments - Administrative Services (Technology, Communications, Human Resources), Business and Auxiliary Services (Nutrition, Transportation, and Environmental Services), Teaching and Learning (Multilingual, Literacy, District Improvement and Data), and Student Services (Special Education and Health). It was decided that the departments would be restructured to take better advantage of staff strengths and to address efficiencies; these took effect after the summer of the new superintendent team's second year. The district- and building-level professional development and school improvement structures continued to progress in a similar direction as it was prior to the new superintendent team, though had to make some adjustments due to the lack of achievement data that is typical during non-pandemic conditions. It is important to stress that the many challenges that have resulted from the pandemic have altered the resource and time allocations for district-level and building-based administrators and staff.

Culture

Danielson (2006) promotes, "Many times, improvement occurs when teacher leaders motivate colleagues to become more skilled and thoughtful regarding their work, encouraging

them not to do things differently but to do them *better*” (p. 12). During the second year of this explicit student engagement focus at Northwest Junior High, members of the School Improvement Team requested to participate in the data collection process that was conducted solely by the administrative team the previous year. There were previous collaborative conversations about involving them in the future, though this group chose to do so more immediately (“if not now, when”). This transition to involving teachers in observing each other met with renewed discomfort and mistrust among some staff members as they were not accustomed to having colleagues in a position to ‘criticize’ their lessons. This was eventually overcome with building-level transparent conversations and agreements. Before the statewide pandemic school closings, union members outside of the School Improvement Team also expressed interest in being part of the walk-through observations; this shows the ultimate benefit of transparency, collaboration, perseverance, and pursuit of improvement efforts.

During the discussion of the walk-through data using “protocol-guided conversations” (Curry (2008), p. 742) following each observation cycle, the initial focus by teachers was on rationalizing the results based on external variables of the walk-through data rather than to process how to use the information to improve the current student engagement practices. Staff tended to focus on perceived collection errors made by the School Improvement Team, the validity and reliability of the results based on the brief amount of time spent in each classroom, and the selection of the engagement categories, for example. This was anticipated, to a degree, based on the culture that had been observed in staff meetings. After the first round of many more planned observation/discussion protocol-guided sessions, the plan was to have the future processing time guided away from potential perception of errors and more toward the value of

the actual data as it relates to the improvement and consistency of teacher practices.

As a result of this process, the tone is being set for teacher relations to be professionally more trusting and willing to participate in informal observation/feedback triads. Additionally, it is projected that they objectively engage in regular professional learning community collaborations with the utilization of common formative assessments, collaborative data review, and sharing of philosophies and instructional strategies.

Conditions

At the district level, administrative divisions were reconfigured and took effect during the 2021-22 school year. At the building level, the conditions will essentially remain static as they relate to professional development and the engagement/clarity improvement processes.

Competencies

As we already know about using a strengths-based approach with students, “Building on an existing strength in a diverse leadership team is superior to forever attempting to fix one’s weaknesses” (Reeves, 2006, p. 24). Senge (2000) projects that, “Team learning is a discipline of practices designed, over time, to get the people on a team thinking and acting together” (p. 73). As the process to continuously improve student engagement at Northwest Junior High School began, professional development was provided to all certified staff members. It was completed in small, previously-established groups based on common teaching assignments to promote relevant connections and discussions within already-functioning grade-level or enrichment teams. The initial professional development focused on the commonalities and differences among behavioral, emotional, and cognitive engagement. These sessions were intentional in order to then use the collected information to follow up by identifying types of engagement

‘look-likes’ in each classroom and then gathering potential student engagement ‘look-fors’ from all teachers. After shared decision-making among all certified staff members to decide on the final components, the School Improvement Team organized these look-fors into logical groupings and used them to identify the degree to which students were observed in each engagement category during the 5- to 7-minute walk-through observations.

The School Improvement Team collaborated on what each type of engagement might look like in various classrooms. They then elected to conduct walk-through observations in each other’s classrooms to safely test the documentation prior to rolling it out building-wide. This was also an opportunity to test and ensure inter-rater reliability of the observers. As Murphy (2016) wrote, “Promoting teacher learning is one of the most, if not *the* most, powerful leverage points in the portfolio leaders have to prompt school improvement and increase student learning” (p 83) (Askew, Fountas, Lyons, Pinnell, & Schmitt, 2000; Rowe, 2005). A natural side effect of regularly collecting walk-through data on engagement is that *what gets measured gets done*. In other words, the simple fact that attention is being paid to engagement strategies in the classroom has a tendency to self-fulfill and increase the likelihood that teachers will be integrating those high-impact engagement practices.

Using Wagner et al’s (2006) Arena’s of Change (pp. 98 - 104) as a framework, also known as the 4 C’s, there are considerations that must be addressed in order to facilitate the planned engagement improvements universally and with consistency. Realistically the first C, context, won’t shift a great deal throughout the change process. Though Northwest Community School District and the community partners are in the midst of a redistricting effort, slowed by the social and financial impact of the COVID-19 pandemic, the pending shifts will not directly

affect the engagement goals. Ultimately, the alignment of the elementary and junior high schools will allow for consistency of practices, though those systems will likely not be realized for a number of years. What will have more of a direct impact when the neighborhood schools are aligned is the longitudinal familiarity by the district-level administrators and community partners as well as the building-level professional development, collaboration, implementation, and feedback related to student engagement. Over time and with practice, along with encouraging the feeder elementary schools to introduce common engagement strategies in the earlier grades, student engagement will correspondingly improve. A component of the community that may complicate, or possibly become additional staff motivation for continuous improvement, is the progressive demographic increase in second language families and those with lower incomes (this will occur at an even faster pace if the district realigns, with the departure of the relatively higher-income families on the west side of the district from the Northwest Junior High attendance boundaries).

The second interdependent influence in Wagner et al's (2013) 4 C framework is the culture. As is attributed to Gideon Gartner (2000) of the Gartner Group and Mark Fields (2006) of Ford Motor Company (who apparently credited the quote to social ecologist Peter Drucker), "Culture eats strategy for breakfast". Essentially, the organization's emotional and social makeup can support or undermine the actual improvement strategies that are being proposed. The efficacy of the plan can be sabotaged, directly or indirectly, if the culture isn't shared and adopted throughout the system. It takes only a few naysayers to negatively impact an initiative enough to make it unsuccessful. The leader has to take the responsibility of proactive culture- and capacity-building and distribution of leadership seriously so there is enough trust and

interdependence to initiate, evaluate, and sustain efforts. In the case of Northwest Junior High School, the intended culture shift is toward a more transparent, trusting, collaborative, and flexible group of teachers that voluntarily engage in peer observations and follow-up discussions of high-impact engagement strategies. The ultimate outcome is for all staff members to understand and inherently implement these techniques, regardless of the grade level or content area. Because of our pre-existing opportunity gaps with second language, students in poverty, and those with disabilities, it is even more critical to purposefully integrate these strategies into classrooms that contain higher numbers of these populations, such as the English Language Development and co-taught multilingual and special education classes.

The third C relates to the conditions, namely “the visible arrangement and allocations of time, space, and money” (Wagner et al (2006), p. 102). Time is a resource that is finite and regularly seems unavailable. While it is the school’s primary responsibility to provide direct services to students and families, in order to conduct this with accuracy and fidelity we need to engage in our own teaching and learning opportunities so we can build understanding, commitment, and capacity throughout the system. Given the district-negotiated agreement and resultant schedule, there is a 45-minute time span every two weeks during Early Release Friday that can be used for whole-school professional development. As Loehr and Schwartz related in the *Harvard Business Review*, “Great athletes spend a lot of time practicing and a little time performing, while executives (and teachers in this case) spend no time practicing and all of their time performing” (Goleman et al (2013), p. 157). Northwest Junior High School has capitalized on this limited allotment of ‘practice’ time by reserving each available opportunity toward learning about engagement, discussing how it appears in a well-designed lesson, and

collaborating with the use of structured, efficient discussion protocols to dissect building-based engagement data while planning for improvement.

For the fourth and final C in this framework, Wagner et al (2006) discussed the competencies. Over the course of this study and improvement process, Northwest Junior High School progressed from a conglomeration of educators with a wide band of proficiency in the understanding and implementation of student engagement techniques to a more focused and consistent set of engagement tools as a result of the purposeful professional development and observation/feedback/processing/planning loops. Through these repeated cycles, teachers have slowly gained trust and confidence in the walk-through peer observation procedures. As Goleman et al (2013) related, “Visionary leaders articulate where a group is going, but not how it will get there - setting people free to innovate, experiment, and take calculated risks” (p. 57). The ultimate goal is to have all staff be able to independently, objectively, and willingly participate in triads of teachers in the *#observeme* movement followed by discussion protocols that identify strengths and quality practices.

The steps and Arenas of Change (Wagner et al (2006)) described here have been progressively implemented over the course of three years and are continuing to be discussed, planned, and integrated authentically into teacher practices. Research, collaboration, and planning resulted in purposeful and progressive strategies to facilitate the utilization of common and student-recognizable engagement practices regardless of the grade level or content area of the instructor. As a result of the efforts that were organized and enacted by the administration and staff at Northwest Junior High School, systems to support teachers and to improve strategies are progressing. The implementation has been intentional, planned, and school-wide in order to

ensure that the intended results are guaranteed and have fidelity of implementation. A cautionary note comes from Wagner et al (2006), “New competencies they acquired are seriously undermined by the conditions of work imposed on them” (p. 101). There is an omnipresent possibility that federal, state, or district procedures, policies, and structures could provide obstacles to this important work. Going forward, ongoing professional development and in-class coaching opportunities occurred related to student engagement using content, pedagogy, culturally and linguistically relevant teaching and learning strategies, trauma-informed and equitable practices, and social-emotional learning lessons. Danielson (2006) asserts, “As teachers in a school improve their practice and share their findings with colleagues, the collective wisdom increases” (p. 35). The ultimate vision for this process is for all staff members to be able to objectively review school walk-through data using a discussion protocol to set goals for continuous improvement and then follow up with consistently integrating those techniques within their lessons. Similarly, it is a goal to have teachers collaborate in authentic Professional Learning Communities.

More recent cases of schools significantly increasing student achievement found that teachers also used common end-of-unit tests, thus having a comparable basis for determining how effective the unit was in producing student learning as well as for comparing student performance on the common tests across classrooms and students. In those instances where students were placed into heterogeneous classrooms, variations in classroom performance could then be explained by variations in individual teaching practice. The collaborative groups would then question the teachers whose students did well above the average, seeking to determine what else the teacher had done

instructionally so those additional practices could be included in the curriculum unit in the next year. The group would also provide assistance to teachers whose students lagged the average performance” (Odden, 2012, p. 18).

Wagner et al (2006) succinctly state, “Competencies are most effectively built when professional development is focused, job-embedded, continuous, constructed, and collaborative” (p. 99) as is the case when professional learning communities act with agency.

There are two additional data components that are relevant in this research, neither of which turned out to be available due to the impact of the COVID-19 shutdown of the schools in mid-year. One set of data is the walk-through observations that recorded teacher strategies and resultant student behaviors. If this was able to be repeated every other month as intended, it would have better shown the pattern and progression of teacher-based skills to promote student engagement. Unfortunately, the observations ceased when schools were shut down statewide in March of 2020. When schools opened in August of 2020, students remained fully in a virtual learning format. When students were invited back to the buildings in October of 2020, it was in a concurrent learning model with approximately two-thirds of the students in a virtual learning situation every day. With this format so vastly different from the way the early data was collected, there was not a valid way to compare the data sets. The same logic applies to the data collected on student ‘look-like’ behaviors; since the learning environments were so vastly different, the decision was made to discontinue data collection that would have been able to oversee the progression of student behaviors to see if there were any changes as a result of the initiatives that were intended to improve the outcomes.

Once it was obvious that the comparative data was not able to be used, a second type of

data collection was initiated. This newer direction, involving the CEI and CIS, was intended to determine, based on student perception, whether an in-person or distance format was more engaging and whether teachers were perceived to be more clear in an in-person or a distance format. Based on the overall 90.5% of questions that alluded to the in-person format being perceived as more engaging, this would seem to be the more student-preferable of the two settings. Because schools had no control over whether they chose all-remote teaching and learning when the Illinois governor unilaterally closed public schools in March of 2019 and thus had little time to provide the professional development and technology to implement it with quality, it is not surprising that students had a preference of in-person over virtual learning. It is believed, though, that after critical professional development and practice on how to more effectively use technology in distance learning, these results would show marked differences.

Given these results, two suggestions are proposed. Though research and professional development related to student engagement strategies was already implemented with the assumption that students were in a traditional classroom setting with the teacher, these don't necessarily apply cleanly to teaching and learning in a virtual classroom. Because the choice to revert to distance learning was based on Illinois Department of Public Health statistics rather than an optimal teaching/learning format, ongoing research and professional development on how to best engage students and provide clear instruction is warranted. Connectedly, it is recommended that learning data from remote teaching be reviewed regularly and ongoing professional development be implemented in order to know how to best adapt lessons for the virtual setting. A professional learning community format is suggested that strategically interrelates data collection, regular review of it among teaching teams, and collaboration among

teams in order to share effective strategies. This will be discussed in more depth later in this study.

A purposeful vision and systems will need to be in place in order to develop, support, and sustain continuous improvement student engagement goals. Any organization, schools included, tends to get into a pattern of thinking and behavior that results in automaticity. As examples, principals may become accustomed to looking within the same learning environment and seeing similar instructional strategies during observations without questioning their relative value or lack thereof; teachers may reuse lesson plans annually with only minor updating because it has become a routine; and students may seek grades over learning proficiency because that is a standard that is familiar. Over time, these concepts have to be purposefully assessed and reassessed in order to ensure that they are in the process of continuous improvement and are producing excellent results.

As written by Collins (2005), “Greatness is an inherently dynamic process, not an end point. The moment you think of yourself as great, your slide toward mediocrity will have already begun” (p. 9). Similarly there is a concept called the Sigmoid Curve. It is a visual model for the life cycle of organic and non-organic items. For the purpose of this explanation, it becomes a tool to be used in the pursuit of constant innovation. According to the model, it becomes necessary to integrate a new improvement initiative before the previous one becomes ineffective because then the curve reverses course and progress ultimately dips into the negative.

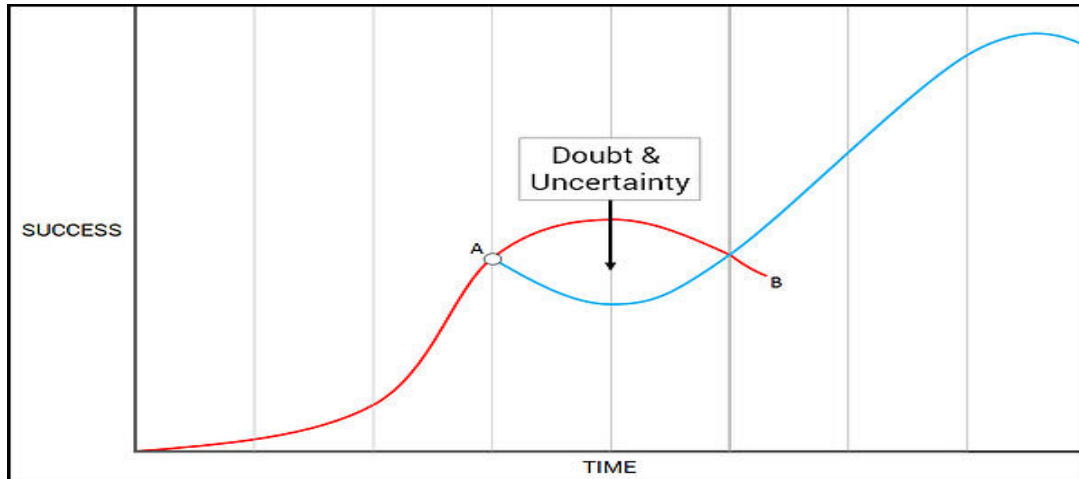


Figure C Sigmoid Curve

<https://uplandsoftware.com/cimpl/resources/blog/the-sigmoid-curve-a-model-for-constant-business-growth-and-innovation/>

By initiating an improvement initiative prior to the growth curve planing out, the institution has the time to implement it, get new momentum in place, and begin an upward curve while avoiding the impending regression into failure. This aspect of the improvement process is the major responsibility of the leader(s). Goleman et al (2013) promoted, “Once leaders understand their own vision and values and can perceive the emotions of the group, their relationship management skills can catalyze resonance” (p. 31).

As Goleman and others (2013) reference in the second portion of the above quote, not only do leaders have to support the procedural aspects of change, it is even more critical that they consider the human elements. Volumes of researchers point to the necessity of supporting the emotional needs of staff members during the improvement transition. Lubelfeld and Polyak (2017) stress, “When employees feel respected and valued they have a greater likelihood of following through with the initiatives” (p. 11). Goleman et al (2013) advocated, “Even if they get

everything else right, if leaders fail in this primal task of driving emotions in the right direction, nothing they do will work as well as it could or should” (p. 3). They follow up by stating, “Socially skilled leaders tend to have resonance with a wide circle of people - and have a knack for finding common ground and building rapport” (Goleman et al (2013), p. 51). Just like we need strong rapport in order to improve student trust and development, we also need to parlay the relationships among staff members as a catalyst for bonding around our common goals.

“It is through systems thinking and collegial conversation that administrators and teachers begin the process of critically analyzing assumptions that perpetuate the status quo, recognizing previously unseen complexities and conflicts within the school, welcoming problems as friends, and perceiving the gaps between what is and what can be” (Zmuda et al (2004), p. 55). As was previously introduced, an initiative that should be pursued as a result of this research is an improved focus on engagement strategies that span the array of learning environments. Northwest Junior High School has already invested more than two years in developing their collective understanding of high-impact student engagement strategies. As the administration and staff did not anticipate the pandemic and the need to enact long-term distance learning, all of the data collection and professional development was exclusively related to in-person engagement strategies. Although some techniques may be universal, many are more applicable to students that are physically in front of the teacher. With this in mind, we have to engage in a shift in mindset and skill set in order to support our learning community within a variety of learning environments.

A highly recommended path to continuous improvement of in-person and distance learning engagement practices is through the introduction of Professional Learning Communities

(DuFour et al, 2006). The DuFours, the originators of PLCs, precisely reiterate its essential elements - “a focus on learning”, “a collaborative culture with a focus on learning for all”, “collective inquiry into best practice and current reality”, “action orientation: learning by doing”, “a commitment to continuous improvement”, and “results orientation” (DuFour et al, (2006), pp. 3-5). Within these purposeful collaborative structures, teams of educators and community members are able to pursue the school’s vision using the six elements described above. The NWJH teachers have already participated in professional development, walk-through observations, and in-person engagement data review using discussion protocols. With the use of a formal professional learning community model, they would expand this focus into including collaborative study, review of distance learning engagement strategies, and action planning as a team of learners and educators. As DuFour et al (2006) describe, “Collective inquiry enables team members to develop new skills and capabilities that in turn lead to new experiences and awareness. Gradually, this heightened awareness transforms into fundamental shifts in attitudes, beliefs, and habits which, over time, transform the culture of the school” (p. 4).

The data was able to provide an in-depth view of the circumstances that were present as the staff at Northwest Junior High ventured through professional development and universal implementation of purposeful engagement strategies. The next step in the process of continuous improvement is to delve into specific strategies that will support the findings.

SECTION SIX: STRATEGIES AND ACTIONS

Contextually, Northwest School District has been comprehensively studying community population and registration trends and building utilization statistics to determine if there is a need to redistrict or reassign neighborhoods to schools. Currently, many elementary schools split into two or three junior high schools, complicating the ability to have consistency in instructional practices. A successful end result of the redistricting will mean that elementary schools will align with junior highs and will also matriculate to a common high school. This is in stark contrast to the current plan which, in the case of Northwest Junior High, even splits into two different high school districts. As this redistricting process progresses, it is critical that preparations for enacting consistent student engagement strategies remain on the forefront. This future alignment will allow for vertical collaboration, aligned language and common practices throughout the nine years of elementary and middle school, efficient communication systems and, potentially, the efficient sharing of resources among the feeder elementary and junior high schools.

“Collective inquiry enables team members to develop new skills and capabilities that in turn lead to new experiences and awareness. Gradually, this heightened awareness transforms into fundamental shifts in attitudes, beliefs, and habits which, over time, transform the culture of the school” (DuFour et al (2006) p. 4). As Lubelfeld and Polyak (2017) sagely communicated, “Educators need to let go of the thought that ideas come from administrators and teachers enact the change” (p. 29). In a healthy organizational culture, the leaders excel at staying abreast of current research, listening to the data and voices in the community, and expertly facilitating the continuous improvement process. The leader then orchestrates change using the professional and

personal strengths of staff, experiences, and combined expertise throughout the community, incorporating the talents and natural and grown leadership within the system.

As this engagement initiative began, there was a culture of distrust among some staff, a relative lack of understanding of the value and methods of integration of engagement strategies, and a divide in the school among those who were comfortable with the status quo and those who prided themselves in professional challenges that lead to improved practices. Lubelfeld and Polyak (2017) project that, “The learning leader often has to unlearn how they listen so that they can create conditions of trust and empathy through changed actions” (p. 9). Over the course of this research and the accompanying authentic school improvement process, three synergistic variables came into play. The first was the shared decision-making creation of building norms that promoted universal expectations for each other and by each other. As a result of actions by the School Improvement Team, at the beginning of each team meeting the norms are visually posted and verbally promoted. Goleman et al (2013) point to the critical benefit of these by reporting how “the norms of a group help to determine whether it functions as a high-performing team or becomes simply a loose collection of people working together” (p. 175). An explicit focus of the norms was placed on positive and interdependent relationships and behaviors. These were intentionally written to mirror two of the three positive behavioral expectations of students that have been in place for more than a decade - mutual responsibility and respect (the third student expectation, safety, was purposefully not included as it was deemed an obvious and unnecessarily promoted norm for adults). The accountability to these norms was shared by building administrators and the teacher’s union leadership, creating a common ground for the sustainment of professionalism.

Wagner et al (2006) promote the necessity of using change levers within the process of continuously improving school systems. These change levers include the purposeful use of relevant data, whole-community accountability, and relationships (p. 134-136). They synergistically combine to create powerful, relevant, and sustainable growth. A connected example of how levers were used within these engagement initiatives was the attention focused on improving organizational capacity relevant to the understanding and application of engagement strategies. Wagner et al (2006) relate how “competencies are most effectively built when professional development is focused, job-embedded, continuous, constructive, and collaborative” (p. 99). Northwest Junior High has been prioritizing the inclusion of engagement strategies in the school improvement plan and staff learning for the previous three years and has progressively integrated professional relationship-building circles, collective efficacy, walk-through observations, data collection and review, discussion protocols that discuss the evidence and set goals, and collaborative planning of follow-up plans based on the data.

More evidence related to the improvement of conditions within the school is the increasing number of faculty members that have been interested in engaging in walk-through observations of colleagues. This collective ownership and contribution to the overall leadership of the community became infectious as more and more bargaining unit members became committed to the process. An additional consideration is posed by Goleman et al (2013) that is especially relevant during COVID-19 virtual learning and staff social distancing: “In an era when more and more work is done long distance, relationship building, paradoxically, becomes more crucial than ever” (p. 51). A major initiative that was purposefully initiated during the period while students were in the pandemic virtual learning mode was the intentional opening of every

staff meeting with a restorative circle activity that promoted interpersonal understanding and trusting relationships. This was critical from an emotional safety and social-emotional perspective as well as establishing professional trust that will be counted on when future difficult conversations and decisions need to take place.

The conditions related to the engagement-increasing initiative progressed along multiple lines of purposeful action. A theme that permeated through these efforts, as quoted by Goleman et al (2013), is that “Nothing important gets done alone” (p. 51). This series of improvement efforts formally began with time devoted to professional development. Rather than attempt to reach every staff member in one fell swoop, a two-tiered professional learning plan was delivered to three different teams. These teams were aligned along natural groupings of educators that have common planning time, collaborate regularly, and have already built professional relationships around common teaching and learning practices. The focus of the two-session professional development was to better understand the distinguishing characteristics of behavioral, emotional, and intellectual engagement followed by the identification of specific ‘look-likes’ of each type of engagement. These were later used to identify ‘look-fors’ that would be recognizable regardless of the type of classroom that was observed during walk-throughs. The next logical step was to have the School Improvement Committee, a representative group, research high-impact student engagement strategies and follow up with teaching these to colleagues. Over the span of two school years, this team participated in walk-through observations of peers in order to collect data on these quality engagement strategies for the purposes of assessing the plan’s effectiveness while facilitating quarterly discussion protocols with the staff to continuously improve practices. This process was described by Wagner et al

(2006): “The work of reinventing schools and districts is not technical work that can be controlled by fiat from the top of the organization. Instead, it is adaptive work that requires changes in people's heads, hearts, and action” (p. 138).

Prior to the intensive building-wide focus on engagement strategies, there was a relative competency skill deficit throughout Northwest Junior High. The team had to first build capacity, deeply understand the necessity of quality student engagement techniques, and expand their toolbox of strategies. It was also important that there exist a common set of teacher tools that students could recognize and routinize in order to lessen the amount of time teachers would need to spend explaining each type of discussion/response protocol. Fortunately, the district concurrently contracted with Dr. Sharroky Hollie for professional development and coaching in Culturally and Linguistically Relevant Teaching and Learning (culturallyresponsive.org). Among the many benefits of this comprehensive training, there were discussion and response protocols that were inherently engaging for any audience due to the consideration and integration of cultural relevance. After multiple days of professional development during student non-attendance days so all personnel were able to attend simultaneously, there was a series of cohorts that followed up with binder studies and coaching/feedback sessions by CCRTL trainers. Kouzes and Posner (2012) reinforced the benefit of Dr. Hollie’s work by stressing, “Motivation to perform a task increases only when employees have challenging goals and receive feedback on their progress” (p. 282). The previous teacher skill deficits were now replaced by sound strategies and opportunities for practice so, in order to continue to focus and sustain momentum, the use of the CLR mindsets and tools were reinforced during informal and formal observations,

Student Learning Objective (SLO) processes that were part of summative evaluations, ongoing Friday Early Release professional development, and team collaborations.

Strategy	Action
Improve staff buy-in related to engagement initiatives	Shared leadership via School Improvement Team and teacher teams to study, document, and communicate common engagement strategies used throughout the building
Alignment of strategies with elementary schools	Monthly collaboration with leaders at feeder elementary schools to align engagement systems
Improvement of professional relationships and team efficiencies	Shared decision-making creation of group norms
Improve understanding of engagement strategies	Professional development on behavioral, emotional, and intellectual engagement look-likes
Improving trust in walk-through among staff	Inclusion of teachers on walk-through observations
Improve implementation and consistency of engagement strategies	Professional development and coaching related to Culturally and Linguistically Relevant Teaching and Learning mindsets & discussion and response protocols

Table 9 - NWJH Strategies and Actions

As Wagner et al (2006) remind us, “To generate the much needed momentum and urgency for change, people need to fully understand the *why* behind the journey they are beginning. This understanding can also reinvigorate people who entered school and districts with the most ideal of intentions but who, over the years, have gradually become skeptical, resigned,, or lethargic” (p. 138). In order for the Northwest Junior High school improvement plan to proceed with fidelity, there needs to be a sense of collective efficacy that results from the

intentional strategies and actions detailed above. As was proven over this three-year project, time has to be allotted to allow the vision to proceed with purposeful catalysts and then progress organically with administrative guidance.

Following a detailed journey through the strategies that resulted from this participatory action research, a relevant discussion will ensue that focuses on aligned implications and policy recommendations.

SECTION SEVEN: IMPLICATIONS AND POLICY RECOMMENDATIONS

Anyone who has been in the role of an educator understands that student engagement is a multi-faceted concept. On the surface, engagement is a function of the lesson plan, positive rapport with the teacher, and the instructional resources. At its core, though, it is much more complex. Student variables that also impact student engagement include race, student history of academic success, language and content proficiency, social-emotional functioning, history of trauma, the presence of a disabling condition, and socio-economic status (which potentially also affects variables such as nutrition, healthcare, recreational opportunities, housing, perception of safety, access to resources, and so much more). Having tools and strategies that positively and proactively address the many factors that determine student engagement will result in improved student outcomes.

A concept that crosses into and supports multiple variables in a student's system is their culture. Culture extends far beyond one's race, religion, and country of origin or food, music, and language. Culture encompasses such other implicit characteristics as kinesics, proxemics, norms, values, gender expectations, core beliefs, assumptions, conceptualizations, and so much more. The iceberg model (image 7.1) is a relevant visual representation of what one is better able to assess on the surface and some of the other variables that are more difficult to measure.

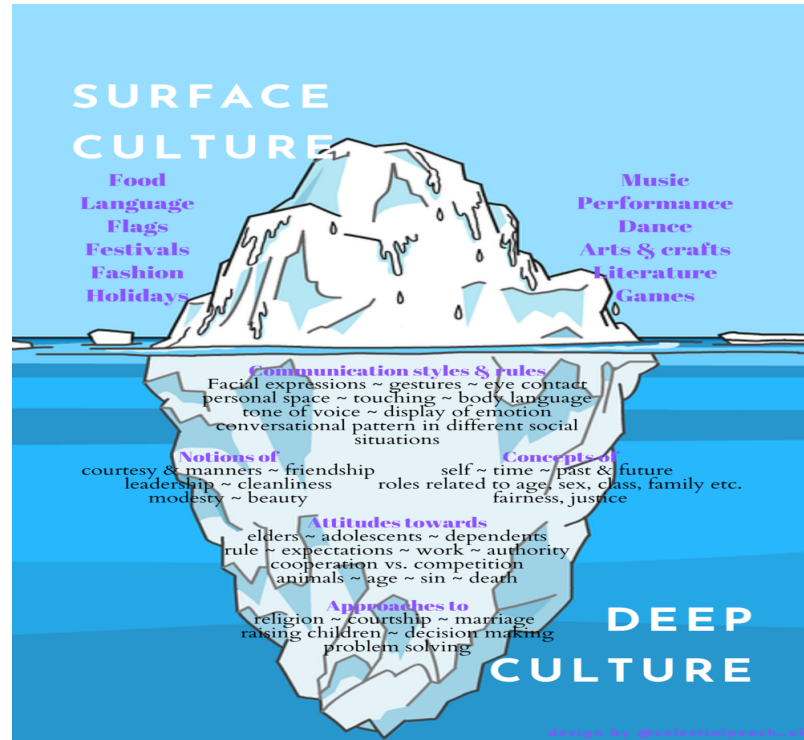


Image 7.1 - The Iceberg Model

<https://www.celestialpeach.com/blog/cultural-iceberg-cultural-appreciation>

By better understanding and accommodating for the many layers of a student’s culture, the institution will be better able to engage that student and the student body as a whole while leading to improved teaching and learning outcomes throughout the entire learning community.

The policy implication that is aligned with this engagement research is to ensure that cultural proficiencies are at the centerpoint of the entire educational experience. Personnel within a school system, especially the administrators that provide leadership for creating systems and supports, need to have high cultural intelligence. According to a Mindset article (2021), this concept is similar to emotional intelligence (an EQ) wherein one is able to accurately perceive others “feelings, wants and needs, and understand how their own emotions and behavior affect others”. In addition, schools also need supplemental skills in order to be responsive to the

cultural factors of the student body. This CQ, as the Mindset (2021) article promotes, permits staff “to be attuned to the values, beliefs and attitudes of people from different cultures, and to respond with informed empathy and real understanding”. With a strong CQ mindset at the forefront of the vision and action, all policies and procedures will align with a culturally responsive lens and continuous improvement in equitable student engagement data will result.

Educational Analysis

From a purely educational standpoint, teaching and learning with a culturally relevant mindset and skillset is the focus of this study’s policy recommendations. “After all, schools cannot change the demographics of their students. They are what they are. What can be changed are curriculum and instructional practices that positively impact the students that attend the school” (Odden, 2012, p. 7). In order to have students feel comfortable and successful with learning, the content must be created and delivered from the students’ cultural perspective. The time where an instructor gets to feel accomplished by simply fact-lecturing, a sit-and-get format, must go the way of the dinosaur (may they rest in peace). We must ensure that learning is happening, and that teachers have the tools that result in academic growth. Lindsey et al (2019) profess that, “For students to learn what their teachers have to offer, they must feel fully appreciated as individuals within the context of their own distinctive ethnic, linguistic, and socioeconomic backgrounds and with their own particular genders, sexual orientations, and sensory and physical abilities” (p. 15). Keep in mind that there is also an age culture among all of the other societal cultural components, something that adults of all ages need to understand and appreciate. If we expect students to engage in learning, it is critical that we approach all of our educational structures with our clientele’s age culture in mind. This generation gap and already-existing outdated institutionalized policies have the potential to place impenetrable

barriers to student learning and functioning, especially for students coming from non-majority communities that may not have the same traditions that match the centuries-old white male culture that created the present educational ideology.

Goodlad and Oakes (1988), in a prophetic article published more than 30 years ago, asserted that, “Teachers must function more like orchestra conductors than like lecturers: getting things started and keeping them moving along, providing information and pointing to resources, coordinating a diverse but harmonious buzz of activity” (p. 19). Likely without realizing it, these authors were referencing the value of engagement tools such as discussion/response protocols and callback tools in a culturally responsive classroom. Discussion protocols become particularly relevant and familiar when they are explicitly taught, modeled, and used in multiple contexts. Milner (2015) adds that “educational experiences that build on the assets of students, pique their curiosity and interest in learning, and cultivate mind-sets and practices to improve community” (p. 5) are the basis of effective teaching and learning.

Participating in professional learning communities (PLCs) is yet another structure that will promote universal cultural responsiveness. Odden (2012) suggests that, “Principals and the teachers in the effective schools...believed that the way to change culture in a school and get a more uniform employment of effective instructional practice into all classrooms was to organize teachers into collaborative teams to work together” (p. 20). Teacher isolation is a sure way for staff to stagnate in their thought processes and behaviors. Fitzpatrick (2020) recommends that, “Allowing teachers to discuss and review best teaching practices and assessment tools would be a far better use of time than the frantic observation cycles that have little impact in improving instruction” (p. 51). After the staff has been led through professional development that will

address the rationale and any potential factors of resistance, additional growth and sustainment will transpire when teachers meet regularly in groups to collaborate on a guaranteed curriculum, review common formative assessments, and use outcome data to improve everyone's practices.

The Danielson Group (2020) created a framework specifically for remote teaching. This updated version of the evaluation framework focuses on three of the original eight most critical domains that address the priorities for distance learning- Knowing and Valuing Your Students, Building Responsive Learning Environments, and Engaging Students in Learning. One component of this is a supervisor's observation tool that contains a checklist for proficiency and a section for narrative comments. There is also a Companion Document that facilitates a teacher's self-assessment and reflection; it includes a simple checklist of proficiency as well as space to include a narrative of evidence and goal-setting in each of the three domain areas. While this is valuable during the time that students are in a remote learning setting, it will continue to have relevance when students are back in an in-person format.

Economic Analysis

It is the role of the school system to provide equitable access to relevant and engaging learning. National data has long proven the disproportionate successes of school systems in relation to marginalized groups. Milner (2015) stresses that "children living in poverty are not poverty stricken when it comes to intellectual ability, work ethic, resilience, survival skills, and determination" (p. xiii). In *Race(ing) to Class: Confronting Poverty and Race in Schools and Classrooms* (Milner (2015)), Haberman is referenced as explaining that "students living in poverty are too often miseducated because they are not prepared to think through complex problems, build on their own creativity, or develop their own consciousness about how to deal

with , respond to, and disrupt inequitable situations” (p. 17). Discussion protocols are a quality engagement tool to use that taps into the individualism of students and helps them to make personal connections to course content and resources.

From an economic perspective, culturally responsive teaching and learning is a cost-effective way to improve student engagement. It will begin with some initial costs while the professional development is getting implemented and reinforced. With a mile-high and years-long perspective, though, the results are predicted to be well worth it. Not only will the student engagement aspect of the learning environment be positively impacted along with the expected achievement scores, the social-emotional climate of the building is also intended to be positively impacted. When students are engaged in learning, it is less likely that they are disruptive, disrespectful, or non-compliant which will maximize focused instructional time.

A stance that is common among researchers and practitioners is the theme of equity. Because families and students arrive at learning in different positions, equitable resource allocation will provide the necessary balance. Equity means that only those who need the additional support will receive it. Fiscally, that puts less of a strain on a school’s budget at the same time that, educationally, everyone gets what they need. In order to bring this analysis into the present, Marzano (2020) writes about the COVID-19 challenges “As the pandemic continues to disrupt traditional K–12 education worldwide, Dr. Robert J. Marzano sees this moment as an incredible opportunity. Dr. Marzano, with more than 50 years of education research, thinks this “new normal” of teaching will spawn innovative ideas and attitudes for delivering quality instruction now and in the future”. Marzano didn’t mention it, but these innovations would come

with little expense; it would take collaboration among the teachers to exchange interactions about high-impact practices.

Social Analysis

“Schools cannot change the demographics of their students...What can be changed are curriculum and instructional practices that positively impact the students that attend the school” (Odden (2012), p. 7). Scanlon and Lopez (2012) stress the importance of instruction that “addresses the needs of all students, affirms students’ cultural identity, and draws on students’ background as an asset” (p. 588). One of the components of a comprehensive culturally responsive school is having a positive and proactive social environment alongside an instructionally responsive learning environment. Student culture does not necessarily align with current school expectations. As a result, students may unwittingly violate an adult-defined rule. Explicitly defined, modeled, practiced, and reinforced behavioral and social expectations are at the core of a successful learning environment. A confidential way to report disrespect and unsafe activities are a necessary supplement to this. In addition, an approach to teaching and reinforcing expected student behaviors is to first validate and affirm the student's culturally-defined behavior that may actually be functional in a non-school setting. Once that is accomplished, the staff is then responsible for explaining how that behavior is less functional in a school setting while explicitly teaching the school-appropriate behavior. This aligns with restorative learning environment practices that help to rebuild relationships that are damaged by behavior that is not expected in a school setting.

Another consideration within the social realm of creating and maintaining a culturally responsive school is ensuring that students feel empowered. Growth occurs when students

interact with the content. As reported in Yair (2000), Aness (2003), Darling-Hammond et al. (2002), and Laffey (1982) is the strength of “having students assume responsibility for their efforts" (p. 109). Learning is far from a passive process. Lubelfeld and Polyak (2017) iterate this matter well, “Students learn and grow more when they have ‘choice and voice’ in their learning” (p. 11). Wagner et al (2006) also relate to the importance of student empowerment by addressing that, “Most adolescents today also say that in order to be motivated to learn and to do well in school, they need many more opportunities for hands-on learning, as well as closer relationships with their teachers" (p. 7). Learning is inherently a social process that is accelerated by integrating purposeful discussion protocols that are developed with cultural factors in mind. In a similar manner, something that has been difficult to sustain during the COVID-19 pandemic, “Gaining learners’ attention—what used to be called ‘winning the battle’, Marzano says—is now even harder to do without the movement or visual cues typically found in a physical classroom.” (Marzano (2020).

Political Analysis

As discussed above, a culturally proficient school addresses the academic and learning environment simultaneously. In order to promote sustainability and generalizability, the school’s leadership also has the responsibility to promote a mindset of inclusivity throughout the community. Douglass Horsford et al (2019) wrote, “For parents, and particularly low-income parents, authentic participation would have to move beyond merely volunteering in the school to (1) governance and decision-making, (2) organizing for equity and quality, (3) input toward a culturally responsive curriculum, and (4) home educational support” (p. 168). The likelihood of a culturally responsive initiative to become relatively automatic if it is systemically integrated

throughout the school system and community is heightened by intentionally and explicitly including the surrounding community in the initiatives.

“These new learning leaders are going to need to learn how to lead from the front, middle, and behind” (Lubelfeld and Polyak (2017), p. 94). Schools are powerful change agents, within the school itself as well as the potential to impact the surrounding community. Lindsey et al (2019) suggest, “As you respond constructively to issues that arise from the opportunities provided by diversity and equity, you can change policies and practices that may negatively affect community members whose ethnicity, gender, age, sexual orientation, language, or ability differ from those of school leaders” (p. 16). Rosborg et al (2003) point toward educational leaders to take the responsibility of facilitating the responsiveness plan. “To be a leading citizen means you lead others. You persuade them, challenge them, inform them, and educate them...The key word is involvement” (p. 21). A thorough approach is to include the parents in communications that describe the culturally responsive intentions, goals, and strategies as well as suggestions for how to reinforce it in the home environment. Douglass Horsford et al (2019) pose that, “Much current literature also questions whether parent and community participation can be effective without understanding how particular parents or communities view their schools and how they define involvement” (Gold, Simon, & Brown, 2004; Green, 2015; Ishimaru, 2014, p. 168). As is the case with students, it is necessary that a school leader understands the community constituency, the informal and formal leaders, and the controversial topics with which to approach carefully.

Legal Analysis

The Illinois State Board of Education only recently (December 2020) passed amendment Title 23, Section 24.5 that mandates the Illinois Culturally Responsive Teaching and Learning Standards which will take effect in October of 2021. The subsections of this regulation address self-awareness and relationship to others, awareness of systems of oppression, the individual nature of students, students as co-creators, leveraging student advocacy, family and community collaboration, cultural identity in content areas, and student representation in the learning environment. This amendment substantiates the proposed school policy recommendation from this research and will add incentive for staff to integrate these concepts into their daily practices. From a leadership perspective, a state regulation in and of itself is not sufficient enough to motivate instructors to rethink their approach to teaching and learning. It will still take a skilled instructional leader to create urgency, buy-in, and provide professional development and support that will help the school make this shift.

A substantial component of cultural responsiveness is to adapt and align the school's vision, mission, policies, and procedures manual to reflect a more inclusive mindset. It is not enough to be responsive merely with the teaching resources. A comprehensive approach is to additionally update the behavior management expectations and practices, positive behavioral decision rules and supports, curricular resources, and the website and communication messaging. With all staff and policies aimed in the same direction, meaningful academic and social/emotional/behavioral progress is more likely in the school's future.

A concern for schools that have not yet transitioned to cultural responsiveness is the punishment-to-prison pipeline. Outdated discipline practices have resulted in exclusionary

decisions that alienate students and families, remove them from learning opportunities that will then broaden the opportunity gap, and criminalize behaviors that may be part of the student's cultural background. Integrating restorative justice concepts into the existing policies will teach and reinforce the school-expected behaviors and bridge the potential gaps between the student culture and the school culture.

Moral and Ethical Analysis

“While it is clear that low-income children will likely need greater levels of scaffolding to make up for the out-of-school factors that favor more affluent, mostly White students, (Berliner, 2009; Delpit, 1995) they should not receive a fundamentally different education” (Douglass Horsford et al (2019), p. 156). Schools have a moral and ethical responsibility to support all students and families toward growth and success. Murphy's (2016) research exposes that, “Engagement is lowest during the most heavily emphasized instructional formats in schools: teacher-centered instruction” (Yair (2000), p. 102). A culturally responsive learning environment would include some direct instruction, of course. That is one methodology used by the content expert to transmit knowledge. More time, though, has to be devoted to student verbal interactions and making connections using purposefully designed discussion and response protocols. When students make personally and culturally relevant connections to the content, the brain more strongly encodes the information and makes it available for re-uptake, recall, and further manipulation. Fitzpatrick (2020) expounded that, “An important role that leaders must play is to build the capacity of their people” (p. 15), and cultural responsiveness is a direction that will have a significant impact on the successes inside and outside of the classroom.

Yair (2000) proceeds to describe how his research shows that student engagement “is lower still for students of color” (p. 102). Because of this historical long-standing inequity, the moral and ethical responsibility that was mentioned previously applies even more to marginalized populations. Additional concerning data reported by Yair (2020) is that, “disengagement also increases as youngsters move up through the grades (Collins & Valentine, 2010; Yair, 2000) (p. 102). So, as students matriculate out of primary grades and advance toward secondary settings where they are expected to learn more career-specific skills, their attachment to the content is progressively reduced by institutionalized practices. This simply must improve and schools have the responsibility to lead that process.

Education is a community responsibility. School systems must include the entirety of the citizens within its boundaries in the vision and the actions of educating its youth. Teachers will have increased success and resultant positive relationships with students and families due to the responsive strategies. By being more responsive to the students’ backgrounds and needs, we are automatically being responsive to the community as a whole. The property values, businesses, and agencies benefit when the school system is successful and vice-versa. Everybody benefits when equity is at the center of planning and implementation.

This research study has focused on student engagement and perceptions of students and teachers prior to and during the COVID-19 pandemic. Regardless of the format with which teachers are instructing and students are learning, engagement practices need to be strong. A school policy that is being suggested as a result of this research is integrating culturally and linguistically relevant practices throughout the systems in the school.

SECTION EIGHT: CONCLUSION

“Significant research demonstrates that in our drive toward higher academic achievement, we have increasingly alienated students and their families, ignored the background knowledge that students actually do have, and suppressed creativity and entrepreneurial instinct” (Purinton and Azcoitia (2016), p. 1). After successive years of data reviews that showed underperforming students from the English learner, poverty, and Hispanic subgroups, Northwest Junior High has since engaged in focused professional development and improvement initiatives to improve student engagement and resultant equitable learning outcomes for all students, though particularly to target the chronically underperforming subgroups. The concept behind the engagement-specific focus was to provide relevant support and goals for all instructors, regardless of the content area that they teach. In a junior high setting, a reading or math goal would have less applicability to an Orchestra or Art teacher than it would to one that explicitly teaches reading or math. With one overarching focus, the professional development focused on engagement and strategies is applicable to all staff members. Also, students will see the products and applications of the staff learning in each of their classes throughout the day, reinforcing and rehearsing them across all subjects. As Goleman et al (2013) advocated, having common engagement strategies throughout the day, every day, will allow students to “bring bad habits into awareness, consciously practice a better way, and rehearse that new behavior at every opportunity until it comes automatic” (p. 156). The best case outcome is that students leave the two years at Northwest Junior High having deeply learned, practiced, and internalized quality engagement strategies that will be useful in their future educational and career pursuits.

Fernando M. Reimers, director of the Harvard International Education Policy Program, wrote about how virtual learning “will most likely work well for children whose parents have more education, who have other social advantages, and who have access to resources...For many children lacking those conditions, the period of physical distancing is likely to result in very limited opportunities to learn” (NEA Today (2020)). In addition to engagement, teacher clarity was added as a research variable in order to have an additional data point to explore the value of in-person versus remote learning environments. Unlike the formal professional development that was in place for engagement, a formal teaching mechanism was not provided that related to teacher clarity. Clarity was selected to measure how well students perceived and internalized instruction, regardless of the format of the classroom. A lack of teacher clarity presents itself as a component that has the potential to magnify any student skill set that is underdeveloped. If a student has an already-existent language or processing issue, a neurodiverse condition, or any identified or not-yet-identified disability that impacts learning, lack of clarity is likely to inequitably impact that student’s success. These facts make teacher clarity a strong data source to ascertain how students are functioning in the two types of learning settings that existed during the COVID-19 pandemic.

As has already been communicated, the intent of this research is not to choose the ‘better’ type of learning environment. In reality, we need quality in-person learning as much as we’ll need quality virtual learning. Educational institutions will have to be able to pivot and intermix the more traditional in-person instruction with the more progressive distance learning formats. Post-secondary institutions offer synchronous and asynchronous, online and live, and exclusive or blended courses to fit the many needs and learning styles of adult learners. As such,

elementary and secondary schools will need to prepare students to be successful in any type of learning situation. Also, having different learning formats offers the option to provide quality learn-at-home options while allowing schools to maintain learning momentum during inclement weather or quarantine situations. Additionally, schools will then be able to concurrently offer full-day professional development and a day of student learning, something that had to be one or the other prior to asynchronous learning structures.

High-impact engagement teaching and learning strategies and teacher clarity will need to be present in any and all types of classrooms. What has been advocated here is that there also needs to be a strong component of equity attached to whatever is selected as the learning format and that it is universally applied to all students - including the resources, lesson plan, objectives, activities, and assessments. As was discussed throughout this project, it is recommended that cultural proficiency, equity, and accessibility be addressed by training, application, and coaching on cultural proficiency, trauma-based and restorative practices, multi-tiered systems and supports, culturally and linguistically relevant teaching and learning, and professional learning communities. Each of these recommended tools are universally applicable, while at the same time have the power to impact historically marginalized populations due to the responsive nature of each of them.

Going into this extended study, and throughout the process of improvement efforts at Northwest Junior High, it is clear that “culturally proficient leaders (must) focus on equitable access and outcomes as they build a systemic culture that takes into account all aspects of the school’s educational processes” (Lindsey et al (2019), p. 176). This definitely needs to involve collective efficacy in order to have an impact throughout the system, with all students, across

every content area. In the pursuit of academic success, the entire team at Northwest Junior High School was strategically led through professional learning and the refinement of engagement strategies. Simultaneously and prophetically, Northwest School District had also contracted with Dr. Sharroky Hollie to embed and layer culturally proficient mindsets and skill sets into the expanding practices. As a result, the school was able to combine the strength and relevance of improving engagement with the cultural responsiveness of the equity focus.

A large portion of these efforts took place during the COVID-19 pandemic. During this time, it was crucial that physical and emotional safety was at the core of all activities. This reality created complications for digging deeply into improvement initiatives and addressing any possible deficit thought patterns that existed in the learning community. In part due to natural and typical time constraints, because of the social distancing modifications, and as a result of the relatively fragile physical and emotional states of students and staff, it was difficult to lead and maintain the laser focus that was needed to make impactful progress related to engagement and to cultural proficiency. During this necessary pause to prioritize everyone's mental health needs, the professional tone was set related to building the educational teams' collective efficacy to use professional learning and student data to improve the system. Louis et al (1995) promote the implementation of professional learning communities as a means toward the "deprivatization of practice" (Marzano et al (2009), p. 63). These authors go on to suggest how this is "perhaps one of the most difficult aspects of PLCs to implement" (Marzano et al (2009), p. 63). The stage was set through the leadership and modeling from the School Improvement Team to first observe each other and collect data and, then, to encourage colleagues to observe other colleagues. Given the formal teachers' union resistance to allowing non-evaluative classroom walk-throughs in the

early stages of our school improvement focus on engagement, Northwest Junior High has taken the initial step toward deprivatizing. There are still a few systems to enact in order to reach what DuFour, Eaker, and DuFour (2005) recommend regarding PLCs - “teachers planning together, developing and scoring assessments together, reading and discussing professional literature together, and observing each other using instructional strategies” (Marzano et al (2009), p. 82).

Some resistance to change is expected and should be embraced. All behavior is purposeful, and that is the same for resistance. It serves to communicate an imbalance in the system, an unmet need, a message that something else needs to happen. It may present for a number of reasons - insufficient data to create urgency and investment among staff toward the change initiative, the leader’s lack of clarity on the purpose or plan, or simply a lack of interest by that staff member in needing to shift current practices (“if it’s not considered to be broken, it doesn’t need to be fixed”). Based on the source of the resistance, a leader should address the resistance strategically. A successful leader needs to anticipate resistance and be proactive with organizing the information and research that substantiates the need for a novel approach. If the reason for the resistance is more about commitment, Lindsey et al (2019) recommend two basic steps:

- 1) “Acknowledge the feelings of the complainers”, and;
- 2) “Explain that the changes are being made to serve the students and their families better.

The plan is not to fix something that is broken; it is to grow as a school community for the students’ benefits” (p. 112).

Homeostasis, preferably with the addition of the new initiative, will return once these conditions are satisfied.

Based on the Goleman et al (2013) research on leadership, there are four styles that positively impact student performance (p. 53). One is visionary - the necessity for this became completely visible due to a combination of this leader's doctoral coursework on the importance of visioning plus the absence of consistent staff characteristics that became magnified during the pandemic. In order to ensure that everyone at Northwest Junior High shared a similar conceptualization of why they teach, a series of activities were planned by this writer that facilitated the exploration and documentation of the common values. These characteristics were to become what many districts call a vision statement, the core beliefs that drive all decisions and directions. A second impactful leadership style that became prominent during this research was affiliative, based on harmony, putting people first, and empathy for others' emotions. While the school team was exploring its core values, it was important to concurrently integrate a foundation of trust and rapport within and among staff. To that end, routines and expectations were established in which every staff meeting - all-staff, grade level, paraprofessional - began with a structured community circle activity that facilitated the sharing of some personal or professional information. This accomplished three major goals - to begin each meeting with a warm-up, engaging activity; to learn about each other; and to model the worth of this process for teachers to use with their students. A third high-impact leadership style is democratic, using the expertise of each member to communicate knowledge and perspective, build capacity throughout the system, and create and sustain buy-in. The NJH School Improvement Team worked closely with each other and the grade-level teams in a democratic, shared decision-making format to research proven engagement strategies, provide professional development on engagement to all teachers and support staff, and create an engagement data-collection tool that was used to discuss

ongoing strengths and opportunities. Goleman et al's (2013) fourth impactful leadership style that is shown to "create the kind of resonance that boosts performance" (p. 53) is coaching. This was used explicitly with the teachers that were in the Culturally and Linguistically Relevant Teaching and Learning cadres. Trained representatives supported, observed, and provided immediate reinforcement and recommendations for improvement.

Purinton and Azcoitia (2016) advocate strongly that, "The school leader of the future must...deliberately and proactively reconnect schools to their communities, creating schools that are hubs for their communities" (p. 2). Some community school initiatives are already running such as extending the school day for academic support and extracurricular activities; partnering with a local community college to provide adult English proficiency courses with tutoring and childcare for younger family members; and offering food and clothing from a local pantry. Except for the food provision, all previous community school programs and services were paused due to the mitigations from the COVID-19 pandemic. A future leadership goal is to reinstate and expand the community school systems. Purinton and Azcoitia (2016), describe the characteristics of a prominent community-focused school. These include affirmation, which is accomplished by actively listening to, pursuing, and being open to new ideas; contribution, which is acts that implement learning-relevant programming that is relevant to learning, social-emotional, health, nutrition, career, and life skills; power, which refers to giving voice to those who are historically underserved; purpose, being the catalyst and centerpoint for progress; and challenge accompanied with corresponding accountability features (pp. 4-5).

A final point about leadership lessons that was raised by Wagner et al (2006) as they urge leaders of all types to "anticipate the obstacles that are likely to cross our paths as we try to

realize our aspirations” (p.54). A similar, relatively well-known saying is that if you can predict it, you can prevent it. Leaders can save a great deal of time and energy if they are able to visualize how an initiative will proceed and backward plan each step so it will progress successfully.

“Educational experiences that build on the assets of students, pique their curiosity and interest in learning, and cultivate mindsets and practices to improve community” (Milne, 2019, p. 5) are critical. Educators throughout the United States are explicitly and purposefully integrating culturally relevant themes into macrolevel and microlevel decisions. Support on social media for historically-discriminated-against cultures has been common. More and more districts are integrating literature that is representative of diverse ethnic groups and cultures. Districts are mandating staff development on culturally relevant and anti-racist practices. Equity-based Board of Education policies are becoming more frequent. The messages are clear; education needs to eliminate disproportionate outcomes using equity as the target.

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