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AN EXPLORATORY CASE STUDY OF LEADERSHIP PRACTICES THAT ENABLE
INTERNATIONAL SCHOOLS TO BECOME BOTH HIGHLY EFFECTIVE AND
LEARNING PROGRESSIVE ENVIRONMENTS

by

Santha Kumar Sankaranarayanan

A dissertation submitted in partial fulfillment
of the requirements for the degree of

Doctor of Philosophy

August 2023

Dissertation Committee

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TITLE OF DISSERTATION: AN EXPLORATIVE CASE STUDY OF LEADERSHIP
PRACTICES THAT ENABLE INTERNATIONAL SCHOOLS TO BECOME HIGHLY
EFFECTIVE AND LEARNING PROGRESSIVE ENVIRONMENTS

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ABSTRACT

Highly effective learning progressive (HELP) environments can prepare students to be future-ready with the needed knowledge and skills to thrive in an ever-changing world. This case study captured the characteristics and measured the effectiveness of an international school working to become a HELP environment using the high-reliability schools (HRS) framework and the leadership practices that enabled them.

This mixed-method study used an explanatory sequential design, beginning with a survey of 122 teachers based on the HRS model (Marzano et al., 2014), where teachers were asked to respond to a series of statements designed to measure the case-study school's effectiveness and the associated leadership practices. A regression analysis of the survey results showed divisional differences to be statistically significant. This survey was followed by the second phase, with three focus groups and 15 individual interviews as the qualitative part of the study. A cross-case analysis between divisions revealed the leadership practices that helped to enable the divisions to implement the HELP characteristics.

The findings showed that effective leadership was indispensable to effecting change. The findings presented two extreme cases: (a) one in the elementary division, where the leadership effectively implemented the HELP characteristics, and (b) in the high school division, where the leadership did not effectively implement the characteristics. Results revealed establishing a trusting environment that allows for openness and risk-taking, feeling the pulse of the environment and providing constant support, developing a learning culture where learning is happening among the teams and from outside the teams, and building cohesion were some of the key leadership practices that effected significant change. The study also identified the key leadership practices that enabled each of the five levels identified by the HRS model. The results revealed that Level 1: safe, supportive, and collaborative culture was foundational for schools to effect the change.

This study had all the limitations of single case studies, so the findings are not generalizable in a traditional social science sense. However, the schools that are attempting to be effective in creating a reliable HELP environment can use this study as a marker to align their leadership practices.

DEDICATION

To my previous generation for believing in me . . .

To my current generation for instilling a sense of purpose . . .

To my future generation for showing promise . . .

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My family deity Vilangudaiyar Sastha, my favorite deities, Mahaperiyava and Saibaba, whose grace and blessings helped me accomplish what I have done today.

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CHAPTER ONE

INTRODUCTION TO THE STUDY

The world is in the midst of the fourth industrial revolution. According to the World Economic Forum, the fourth industrial revolution represents a fundamental change in how we live, work, and relate to one another (as cited in Schwab, 2016). The fourth industrial revolution is merging the physical, digital, and biological worlds. Smart technologies such as artificial intelligence, big data, augmented reality, and the internet of things (IoT) enable these shifts. To be prepared to work alongside these smart machines, children need to be educated differently (Marr, 2021). The National Education Association (NEA, 2018) put this imperative more bluntly in its document *An Educator's Guide to the 'Four C's'* in which it wrote the United States' current education system was “built for an economy and society that no longer exists” (p. 5). According to the NEA study, many K–12 students are not learning all the necessary 21st-century skills in school, and college students are not learning them very well either.

In the past 4 decades, more has been understood about how people learn through brain research. Interestingly, very few of these new understandings have found their way into the classrooms. An example is the understanding that every student is unique and learns at their own pace (Madrazo & Motz, 2005). If this is true, one of the ways a school should organize itself is to promote personalized learning (Dawson & Stein, 2008). Sadly, very few schools are personalizing learning for their students.

According to Stuart et al. (2018), the global education landscape has three types of schools: (a) highly effective schools, (b) learning progressive schools, and (c) a combination of highly effective and learning progressive schools. According to this distinction, highly effective schools are good at achieving the traditional metrics such as International Baccalaureate (IB)

scores, SAT scores, and college admissions, and they follow a traditional pedagogy,¹ with only small amounts of innovative programming such as personalization, providing students with voice and choice. Stuart et al. said the core learning in schools classified as “highly effective” does not include future-ready skills like collaboration and cognitive flexibility, as the learning is generally teacher-centered and focused on traditional assessments like exams. These schools provide few opportunities to prepare students for future jobs.

On the other hand, the learning progressive schools are amazingly innovative, focusing almost entirely on student interest and choice (Stuart et al., 2018). The pedagogical approaches are innovative, progressive, and student-centered providing voice and choice for the students and allowing personalization of their learning pathways. Students in these schools demonstrate robust trans-disciplinary skills and behaviors that lead to authentic learning experiences and interesting outcomes and products. However, students who attend learning progressive schools often have significant gaps in foundational knowledge. These schools empower students with choice and relevance but do not have a standards-based curriculum that guarantees foundational knowledge that will be taught and hopefully learned. Learning progressive schools often neglect the knowledge base students need and produce graduates who lack the essential competencies needed to access postsecondary education (Stuart et al., 2018).

The third type of school, called highly effective learning progressive (HELP) schools, combines the characteristics of highly effective and learning progressive schools (Stuart et al., 2018). These schools are highly focused on disciplinary outcomes, have a clearly articulated trans-disciplinary skills curriculum, and exhibit a learning progressive pedagogical approach

¹ Conventional teacher-centered pedagogical approaches

emphasizing lifelong learning outcomes. Stuart et al. (2018) indicated these schools place greater emphasis on helping students learn how to learn.

Statement of the Problem

International schools may be the perfect environment to implement the combination approach to teaching and learning described in the final paragraph of the previous section and captured by the acronym HELP. On the one hand, international schools serve a multicultural, international student population bringing in substantial cultural capital and the educational expectations associated with a wealth of cultural capital. The students' parents are accomplished leaders in their fields and have high expectations for their children. In short, international school students are almost invariably bound for college virtually by default and consequently require the sort of traditional content taught in so-called highly effective schools (Stuart, 2016).

On the other hand, international schools are well positioned to transform education delivery to their students. International school teachers, for instance, are widely traveled, speak multiple languages, and have cultural competencies to understand, live, and work within different cultural contexts. Furthermore, international schools are independent of the state or national education systems and often embrace international frameworks such as IB or Advanced Placement. International schools, if intended, have the ways and means to completely relook at their structures, culture, and agency to transform the education of their students (Stuart, 2016).

Unfortunately, very few international schools have tried or are trying to transform themselves to prepare their students to be future-ready while ensuring the teaching of the content required for college admissions. This lack of experimentation has occurred even though Thomas (2015) highlighted the need to incorporating future-ready skills in schools in general and international schools in particular. On the other hand, schools have been very slow to act.

Consequently, we have few images of how a school can be simultaneously highly effective in terms of traditional achievement measures and learning-progressive in terms of the way teaching and learning can happen in a school. We also do not know what school leaders do to promote a HELP environment.

Purpose of the Study

The purpose of the study was to describe an international school that is transforming into a HELP school using the high-reliability schools (HRS) framework and the leadership practices that enabled it to be effective from an HRS perspective. The study intended to do this by studying and then describing (a) an international school focusing on the effort of becoming a HELP environment and (b) the types of leadership practices in the school that appear to have enabled it according to the definition of the HRS framework. In short, the study captured the perceptions of teachers and leaders in a school aspiring to become a successful HELP environment.

Research Questions

The following research questions guided the study:

- What does an international school attempting to exhibit both highly effective and learning progressive environments look like when assessed using an instrument built from the HRS framework?
- What do international school leaders and teachers say about the effectiveness of what they have been attempting to do to transform their school into a school that can be considered both highly effective and learning-progressive? How do the faculty from different divisions perceive/assess this transformation?

- According to those who work in a HELP school, what have leaders done and continue to do to encourage effective implementation of the HELP characteristics from an HRS perspective? How do the faculty perceive these leadership practices and act upon them to effectively implement those characteristics?
- What problems arose during the transformation process to be a HELP school, and how were these problems addressed and managed?

CHAPTER TWO

LITERATURE REVIEW

Definitions

The education literature has a number of common terms that have been in use for many years, but still, some ambiguity exists in definitions and understanding. This section defines some of the terms used in this paper for better clarity and understanding for the reader.

Highly effective schools is a term used to define traditional schools focused on meeting the needs of all students by providing high-quality instruction in general education classrooms (McLeskey et al., 2012).

Learning progressive schools, according to Stuart et al. (2018), are the ones that differentiate themselves by moving away from traditional educational frameworks and focusing on a progressive pedagogy by providing voice and choice for their students.

Highly effective learning progressive (HELP) schools combine the characteristics of both highly effective and learning progressive environments (Stuart et al., 2018).

Guaranteed and viable curriculum means that what every student learns must be guaranteed, irrespective of who teaches it. The schools must provide enough time for students to learn so it is viable (Marzano et al., 2018).

Partnership for 21st-century skills, a framework for 21st-century learning, describes *transdisciplinary and future-ready skills* as creativity and innovation, critical thinking and problem solving, communication, collaboration, flexibility and adaptability, initiative and self-direction, social and cross-cultural skills, productivity and accountability, leadership, and

responsibility, and information and media literacy (Partnership for 21st Century Learning, 2016).

Competency-based education assumes that students must master a comprehensive set of learning objectives or competencies aligned with the standards (Le et al., 2014).

The Aurora Institute defined *personalized learning* as “tailoring learning for each student’s strengths, needs, and interests—including enabling student’s voice and choice in what, how, when, and where they learn—to provide flexibility and supports to ensure mastery of the highest standards possible” (Levine & Patrick, 2019, p. 6).

Disciplinary learning progressions are a set of learning targets students pursue to show mastery in a particular discipline. Students pursue learning pathways, subsets of the transdisciplinary skills and behaviors, based on their interests. The students can pursue the learning progressions at their own pace to show mastery of disciplinary knowledge and choose the personal learning pathways to meet the essential standards in ways that reflect their interests and passion (Stuart et al., 2018).

Progressive pedagogy is a set of instructional practices focusing on understanding and constructing meaning rather than rote memorization for students, which is predominantly student-centered (Stuart et al., 2018).

Search Strategy

The search for current (2011–2021) peer-reviewed articles was conducted via the Copley online library using the following databases: EBSCO, SAGE, ProQuest, Taylor & Francis, Wiley Inter-Science Journals, ERIC, Academic Search Premier, Educational Administration Abstracts, JSTOR, Primary Search, SpringerLink journals, and Education Source. Google Scholar was also used to search for open-access articles and books. The

search was extended up to 25 years, from 1997–2021, enhancing the depth of the history of effectiveness research and highly effective schools.

The search terms used to find articles specific to this study were highly effective and learning progressive, highly effective, learning progressive, progressive education, effectiveness research, education reform, professional learning communities, child-centered education, student agency, school reform, school improvement, competency-based education, personalized learning, teacher leadership, instructional leadership, leadership characteristics, K–12 education. Variations of these terms increased the exhaustiveness of this search. The terms highly effective and effectiveness research yielded many results, although the terms learning progressive or highly effective and learning progressive yielded none. Competency-based education yielded quite a few results, but the term personalized learning yielded few. The terms learning progressive and highly effective and learning progressive are reasonably new to the education literature and were not very popular search terms. Using the characteristics associated with those terms to identify similar terms yielded additional literature.

I organized the literature from the search into several emerging themes:

- International education landscape
- Highly effective schools
- Learning progressive schools
- Highly effective and learning progressive environments
- School reform - An adaptive challenge
- Implications for leadership
- Implications for future research

International Education Landscape

Stuart et al. (2018) found interesting patterns in the global education landscape, which include three types of schools: (a) highly effective schools, (b) learning-progressive schools, and (c) a combination of highly effective and learning-progressive schools.

Characteristics of Highly Effective Schools

The term “school effectiveness” has been in the education narrative since the 1960s (Lezotte, 1991). After Coleman et al.’s (1966) publication, a movement opposing the report and a cluster of studies followed collectively called the “effective schools research” defined the factors that make schools more effective (Lezotte, 2017). Lezotte (1999) developed seven correlates for effective schools. Merriam-Webster Dictionary (2021) defined a *correlate* as the one directly implies the other. The seven correlates that define a highly effective school are (a) a safe and orderly environment, (b) a climate of high expectations for success, (c) instructional leadership, (d) a clear and focused mission, (e) an opportunity to learn and student time on task, (f) frequent monitoring of student progress, and (g) home-school relationship (Lezotte, 1999).

After years of research and practice, what Lezotte (1999) termed as “critical periods,” the characteristics of highly effective schools went through several changes. A case study by McLeskey et al. (2012) showed that effective, inclusive schools focused on meeting the needs of all students, provided recognizably high-quality instruction in general education classrooms, used resources efficiently but flexibly to meet student needs, and used data systems to monitor student progress. Placing an emphasis on providing teachers with high-quality professional development; teachers were engaged in shared decision making and were primarily responsible for making decisions about the instruction approach used in their classrooms.

According to Stuart et al. (2018), highly effective schools are strong at traditional education metrics, such as IB scores, SAT and ACT scores, and college admissions. They provide a guaranteed and viable core curriculum, and their students can master the curriculum consistently. In *What Works in Schools Translating Research into Action*, Marzano (2003) coined the term *guaranteed and viable curriculum*, meaning that what every student learns must be guaranteed, irrespective of who teaches it, and the schools must provide enough time for teachers to teach and students can learn, so it is viable (Marzano et al., 2018). However, Stuart et al. (2018) pointed out that highly effective schools largely neglect transdisciplinary skills, such as thinking, social, research, etc., which transfer between and across disciplines in their curriculum. Partnership for 21st-century skills, a framework for 21st-century learning, describes transdisciplinary and future-ready skills as (a) creativity and innovation, (b) critical thinking and problem solving, (c) communication, (d) collaboration, (e) flexibility and adaptability, (f) initiative and self-direction, (g) social and cross-cultural skills, (h) productivity and accountability, (i) leadership and responsibility, and (j) information and media literacy (Partnership for 21st Century Skills, 2016).

Stuart et al. (2018) noted that highly effective schools follow a traditional pedagogy, with only small amounts of innovative programming, such as personalization, providing students voice and choice. They said the core learning does not include future-ready skills, like collaboration, cognitive flexibility, etc., as the learning is generally teacher-centered and focused on traditional assessments like exams, thus challenging the opportunities to prepare students for future jobs.

Critiques of Effective Schools Research

Cuban (1987), Good and Brophy (1986), and others (as cited in Mace-Matluck, 1987) have expressed concerns about the effective schools' concept and the way researchers define and operationalize it through standardized test scores. These concerns often are shared by practitioners and researchers alike. These critics have questioned the use of students' academic achievement in the form of test scores as a measure of school effectiveness in most studies and considered it too narrowly focused. Also, most early researchers of effective schools conducted their studies in elementary schools (Austin, 1978; Brookover & Lezotte, 1979; Edmonds, 1979). Critics have questioned if the findings from elementary schools were extendable to secondary schools, whose structure and organization is different from the elementary schools.

Methodologically similar studies (Brookover & Lezotte, 1979; Edmonds, 1979) have differed in their definitions of terms and concepts such as high expectations, instructional leadership, etc. Cuban (1984) questioned how lack of agreement of the terms affect findings that appear to be consistent. Most of the research has correlated school effects with student learning outcomes, and the authors have questioned how the presence of specific school characteristics or correlates causes effective teaching and learning in the classroom. After all, correlation is not necessarily causation. According to Murphy (1992), the effective schools movement developed strategies to promote the belief that all students can learn. However, it has failed to articulate the principles for new models of learning which can inform the transformation of learning and teaching in schools implementing effective schools correlates. He further said the effective schools movement criticized the existing system of learning and teaching, which has failed fundamentally to get beyond these deficiencies.

Characteristics of Learning Progressive Schools

Compared to highly effective schools, learning progressive schools are amazingly innovative, according to Stuart et al. (2018). The term “learning-progressive” used by Stuart et al. includes the characteristics of “competency-based education” and “personalization.” Le et al. (2014) said that competency-based education is an evolving field based on the premise that students must master a comprehensive set of learning objectives or competencies aligned with the standards. The authors also said the concepts behind competency-based education are not new but date back to progressive education ideals of the early 1900s, which gained popularity in the form of mastery learning in the 1970s and 1980s. The Aurora Institute defined *personalized learning* as “tailoring learning for each student’s strengths, needs, and interests— including enabling student’s voice and choice in what, how, when, and where they learn—to provide flexibility and supports to ensure mastery of the highest standards possible” (as cited in Levine & Patrick, 2019, p. 6). Le et al. (2014) pointed out that proponents call for integrating competency-based education with personalization to present a student-centered alternative to the traditional learning model.

Per the Aurora Institute’s (formerly called iNACOL) revised 2019 definition of competency-based education:

1. Students are empowered daily to make important decisions about their learning experiences, how they will create and apply knowledge, and how they will demonstrate their learning.
2. Assessment is a meaningful, positive, and empowering learning experience for students yielding timely, relevant, and actionable evidence.

3. Students receive timely, differentiated support based on their individual learning needs.
4. Students make progress based on evidence of mastery, not seat time.
5. Students learn actively using different pathways and varied pacing.
6. Strategies to ensure equity for all students are embedded in the culture, structure, and pedagogy of schools and education systems.
7. Rigorous, common expectations for learning (knowledge, skills, and dispositions) are explicit, transparent, measurable, and transferable. (as cited in Levine & Patrick, 2019, p. 3)

The connection between competency-based education and personalized learning was articulated by Patrick et al. (2013), who emphasized that “personalized learning is not equal to competency-based learning,” acknowledging that “they are related and terms are often (mistakenly) used interchangeably” (p. 22). The Aurora Institute defined competency-based education as the systems that provide the needed structures for personalized learning (as cited in Levine & Patrick, 2019).

The Gates Foundation asked the RAND Corporation to conduct a longitudinal study on personalized learning models, and they identified four essential attributes of a personalized learning model (Pane et al., 2015). They are (a) learner profiles, (b) personal learning paths, (c) competency-based progression, and (d) flexible learning environments. The learner profile strategy provides teachers with a deep understanding of each student’s individual skills, gaps, strengths, weaknesses, interests, and aspirations to help inform their learning. The personal learning path strategy is that each student must meet the learning goals and objectives meant for everyone, but they can choose their suitable learning experiences, and teachers match

different instructional approaches to the individual student's needs. The competency-based progression is that students advance based on clearly defined objectives and continuous assessment against the standards and goals occurs. The flexible learning environments allow the school to use resources such as staff, time, and space in flexible ways and to optimize available resources to personalize student learning.

Colby (2018) proposed a competency-based education framework that provides the architecture for transforming the current traditional system into a competency-based education system through four pillars: competencies, performance assessments, learning pathways, and competency-based grading. The competencies pillar builds a K–12 learning continuum with defined learning progressions that support competency development. The performance assessment pillar identifies performance indicators and assessment tasks that measure competencies. The learning pathways pillar provides opportunities for student voice, choice, and agency to support personalization. The competency-based grading pillar provides the progress toward the learning targets and competencies across the unit, grade, and toward graduation.

Critiques for Competency-Based Education Framework

Colby based their competency-based framework on the implementation of competency-based education in New Hampshire. New Hampshire is at the forefront of implementing competency-based education policy and practice in the United States, and the outcomes of this implementation are varied, according to Freeland (2014). According to Freeland, competency-based education takes longer to implement in some schools where the teachers fail to align with the vision. In those cases, the curriculum aligns with the policy, but the students cannot move at their own pace, as timely support is not available, resulting in gaps in student learning.

Technology infrastructure is another barrier that hinders this model, as schools are not ready with the learning management systems that would provide the pacing and pathways students need for effectively moving through the curriculum. As Colby pointed out, the focus of New Hampshire was on the high school, where framing the rules met the needs of high schools.

Methodologically, expanding the framework to K–8 needs to be reviewed and maybe incorporation of additional strategies needs to be considered. As Freeland pointed out, moving to competency-based education is not just a policy shift but requires designing a new teaching and learning model.

See Table 1 for highlights of the differences between traditional, highly effective schools and learning progressive schools (Stuart et al., 2018). Highly effective schools follow the traditional pattern of education but are mostly very effective in delivering them.

Table 1

Comparison of Highly Effective and Learning-Progressive Schools

Highly effective schools	Learning-progressive schools
Good at traditional measures of success	Future relevant
Viable curriculum for core disciplinary knowledge	Based on the learner's interest/choice
No focus on trans-disciplinary skills	Focus on transdisciplinary skills and behaviors
Traditional pedagogy with little room for innovation	Progressive pedagogy and authentic learning experiences

According to Stuart et al. (2018), the learning progressive schools differentiate themselves by moving away from traditional educational frameworks and focusing on progressive pedagogy. These schools focus almost entirely on student interest and choice. The pedagogical approaches are innovative and progressive as they personalize the curriculum,

providing students with voice and choice. Students in these schools demonstrate robust trans-disciplinary skills and behaviors that lead to authentic learning experiences (e.g., project-based learning) and interesting outcomes and products (e.g., building bridges using popsicle sticks). However, Stuart et al. mentioned that students often have significant gaps in foundational knowledge—the conceptual understanding behind those projects. These schools empower students with choice and relevance but do not have a standards-based, guaranteed, and viable curriculum, thus neglecting the knowledge base these students need; therefore, these students may lack the essential competencies needed to access postsecondary education.

HELP Schools

The third type of school, HELP schools, combines the characteristics of highly effective and learning progressive schools (Stuart et al., 2018). Stuart et al. (2018) visited more than 100 schools to understand what high-performing schools had in common and found these schools were progressive in pedagogical design and excellent in student outcomes. They stated, “these schools have all the characteristics of high-functioning PLCs, even if they do not use that nomenclature” (Stuart et al., 2018, p. 2). As a result, the authors coined the term HELP and described their characteristics based on the professional learning communities (PLC) at work model. These schools have highly focused disciplinary outcomes (i.e., the essential content that is vital for future learning), a clearly articulated transdisciplinary skills curriculum (i.e., the skills that have an impact across disciplines and are relevant for life beyond school), and a learning progressive pedagogical approach that emphasizes lifelong learning outcomes (e.g., learning to learn skills, growth mindset, grit). Stuart et al. (2018) also explained that different schools implement these approaches differently, but these schools have commonalities:

- They embody the essential practices of PLCs (Professional Learning Communities).
- They focus on essential disciplinary knowledge; incorporate transdisciplinary, future-ready skills; and cultivate student-agency behaviors.
- They teach students how to personalize their learning process. (p. 15)

DuFour et al. (2016) defined a PLC as:

An ongoing process in which educators work collaboratively in recurring cycles of collective inquiry and action research to achieve better results for the students they serve. PLCs operate under the assumption that the key to improved learning for students is continuous, job-embedded learning for educators. (p. 10)

According to DuFour et al., educators in a PLC engage in a collective inquiry into their practices, assess their student learning honestly, and do action research on their new practices constantly in a cycle for continuous improvement. Wagner and Dintersmith (2016) pointed out that in the 21st century, knowledge is much less valuable, and there is no competitive advantage in knowing more, as knowledge is readily available with the swipe of a finger. Hence, the HELP schools focus on essential disciplinary knowledge, which includes content that is vital for future learning. This reduction in breadth allows the schools to incorporate trans-disciplinary, future-ready skills often referred to as 21st-century skills, such as creativity, critical thinking, etc. (Stuart et al., 2018). Stuart et al. also pointed out that HELP schools teach students learning to learn skills, provide students with choice and voice, and cultivate dispositions like grit and a growth mindset. In addition, these schools teach students to personalize their learning by allowing the students to determine the pace to complete their learning targets and allowing for choice in demonstrating mastery.

The essential practices of PLCs include

- A focus on learning in which the fundamental purpose of schools is to ensure all students learn at high levels, and they align their policies, procedures, and practices to this purpose.
- A collaborative culture in which schools build a culture where teachers work together and assume responsibility for the learning of all students.
- A results orientation by which schools systematically monitor student learning on an ongoing basis to inform individual and collective practice (DuFour et al., 2021).

Characteristics of HELP Environments

HELP environments or schools ensure high-quality learning for all of their students, and to achieve that, teachers work together in PLCs to clarify what precisely each student must learn, monitor students' learning continuously, define what success means clearly, and provide systematic support for learning through interventions and extensions (DuFour et al., 2016). DuFour et al. (2016) said that in these schools, teachers work collaboratively and take collective responsibility for the success of each student. In order to ensure that all students succeed, educators focus on results.

According to Hattie's (2018) meta-analysis, in which he identified a list of factors having demonstrable correlations with student achievement, collective efficacy, which is part and parcel of the PLC process, had an effect size of 1.57, and response to intervention had an effect size of 1.29. According to the Cambridge Online Dictionary (2021), an *effect size* is a measure of the relationship between two variables to state how significant the effect of one of the variables is. In his book *Visible Learning for Teachers: Maximizing Impact on Learning*,

Hattie (2012) suggested that an effect size of 0.40 is the average effect that is expected from a year's schooling. He stated implementation of interventions of 0.40 and above will be most likely to improve student achievement.

Stuart et al. (2018) pointed out that HELP environments focus on results. They implement data-collection systems, including portfolio-based assessments, allowing schools to focus on individual student success to ensure high-quality learning for all students. These characters pertain to the highly effective side of the HELP environment. Stuart et al. also noted these schools emphasize helping students learn how to learn. The learning progressive side includes learning-to-learn skills, personalization, and trans-disciplinary skills. According to a paper published by iNACOL, personalized learning means tailoring learning for each learner's interests, strengths, and needs, and this approach encourages flexibility to support mastery and enables learners to influence how, what, when, and where they learn (Patrick et al., 2016).

A HELP environment incorporates robust metacognitive processes such as monitoring one's comprehension of a text and assessing their understanding using self-assessment etc., to help students learn how to learn (Stuart et al., 2018). Such an environment focuses on three critical areas in instruction: essential disciplinary knowledge, incorporating trans-disciplinary, future-ready skills, and developing student-agency behaviors. According to them, identifying essential disciplinary knowledge is critical for HELP schools to narrow the disciplinary content to essential knowledge while deepening the student learning experience. The schools also emphasize internalizing transdisciplinary skills such as creativity, innovation, etc., which will prepare the students for their future. In addition, HELP schools deliberately emphasize developing specific dispositions (e.g., developing a growth mindset and grit) that will help

students take specific and purposeful action to impact their success in learning and life. A growth mindset is a belief that an individual's personal qualities are not fixed and can grow over time (Dweck, 2016). Duckworth (2018) defined *grit* as the ability to persevere through challenges to consistently act on their goals or passion.

Figure 1 shows how various elements interact in HELP environments to provide agency for students in a personalized learning environment (Stuart et al., 2018).

Figure 1

Interactions of Various Elements in a HELP Environment

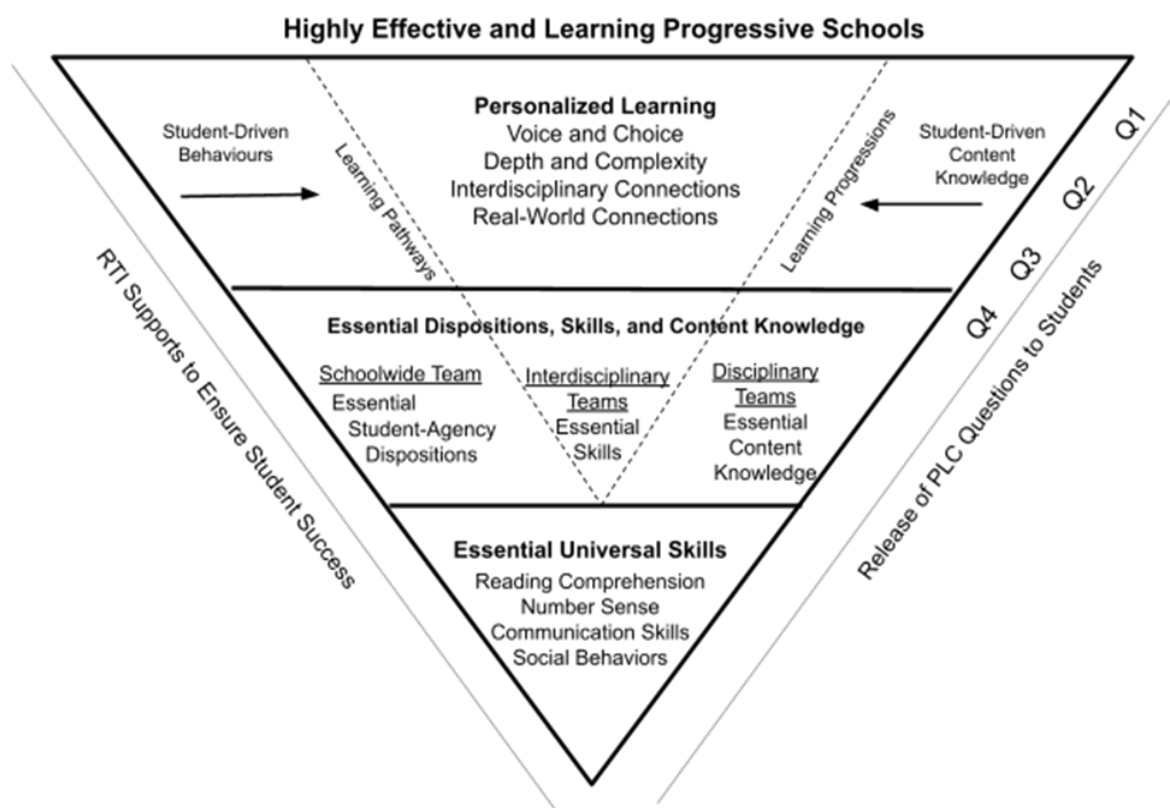


Figure 1 explains the interactions of various elements in a HELP environment. The main triangle explains the hierarchy of skills students will learn to develop the agency and

independence to pursue their learning. The basic foundation consists of the essential universal skills like reading comprehension, number sense, etc., over which the essential dispositions, skills, and content knowledge are built. The disciplinary teaching teams decide the essential content knowledge vital for future learning. The schoolwide teaching team decides the essential student-agency dispositions that are essential for learning and life. The interdisciplinary teams decide on the essential trans-disciplinary skills and behaviors that work across the disciplines and are essential for learning various disciplines. Learning progressions, which students pursue to show mastery, are subsets of the essential content knowledge of each discipline. Similarly, learning pathways for students to pursue based on their interests are subsets of transdisciplinary skills. The students can pursue the learning progressions at their own pace to show mastery of disciplinary knowledge and choose the personal learning pathways to meet the essential standards in ways that reflect their interests and passion. The goal of HELP schools is to ensure that students master “learning-to-learn” skills to personalize their learning to achieve their individual, life-long goals. Their intellectual curiosity may drive this interest, which could lead to a career later in life. Personalized learning is displayed at the top, which means that the students need to have a strong foundation of disciplinary and interdisciplinary skills to succeed in pursuing their personalized learning. The PLC at work model structures the process through four critical questions:

1. What do we want our students to know, understand, and be able to do?
(Learning Outcomes)
2. How will we know if they have learned it? (Assessment)
3. What will we do if they have not learned it? (Intervention)
4. What will we do if they have already learned it? (Extension)

The students in the HELP environment will take the ultimate responsibility of answering the four questions themselves. HELP schools gradually release the responsibility to the students to answer the four questions, starting from Question 4 and moving toward Question 1. Question 4 is about the extension, and it is easier to start with that as students would have acquired the essential knowledge and skills to do the extension work. The order of the questions is displayed on the right side of the triangle with an arrow. The response to invention happens throughout the learning process, from basic skills to personalized learning, and is represented on the left with an arrow (Stuart et al., 2018).

The literature has highlighted two popular models supporting the culture of continuous learning, like that of HELP environments. Researchers and practitioners have endorsed the concepts and practices that form the professional learning communities at work (PLC at work) process and the structures of the high-reliability schools (HRS) model as the best hope for significant school improvement (Bourrier, 2011). The PLC at work model proposed by DuFour and Eaker (1998) has become very popular among education practitioners and schools because the model is evidence-based and has proven effective. The other popular model, HRS, “involves monitoring the relationship between actions an organization works to enhance its effectiveness” concerning a set of research-based high-reliability indicators “and the extent to which these actions do, in fact, produce the desired effects” (Marzano et al., 2018, p. 28). “These two models are not competing approaches but are complementary and support and enhance each other for school improvement” (Eaker & Marzano, 2020, p. 2).

Authors and PLC at work experts DuFour et al. (2016) described the characteristics forming the foundation and culture of PLCs as shared mission, vision, values, and goals, collective inquiry, collaborative teams, action research and experimentation, continuous

improvement, and results orientation. Collaboratively developed shared mission (i.e., purpose), vision (i.e., clear direction), values (i.e., collective commitments), and goals (i.e., indicators, timelines, and targets) reinforce the moral purpose (i.e., the why) and responsibility of the educators' day-to-day work and how their work will improve their schools. Engaging in meaningful and focused collective inquiry augments improvement efforts and results in growth for students and teachers in a PLC. Working and supporting each other in collaborative teams to fulfill the school's core mission of learning for all, supports holding each other mutually accountable. Action research and experimentation have recognized the power of learning by doing and learning by experimentation (DuFour et al., 2016). Continuous improvement is engaging in a systematic process of collecting evidence, developing and implementing strategies, assessing their impact, and applying new knowledge in ongoing cycles as part of the daily routine. Results orientation focuses on regularly assessing every initiative and practice against results, which is key in a PLC environment (DuFour et al., 2016).

Hierarchical key factors organize the HRS model into levels (Marzano et al., 2014). Level 1, *safe, supportive, and collaborative culture*, is foundational to any school as it addresses basic human needs and supports student learning. Level 2, *effective teaching in every classroom*, is one of the most influential predictors of student learning. Level 3, *guaranteed and viable curriculum*, addresses the quality of teaching, *guaranteed* means the student receives the same content regardless of teacher, and *viable* means covering the curriculum in the time available. Level 4, *standards-referenced reporting*, addresses the process of record-keeping and reporting to consistently monitor individual students' progress. Level 5, *competency-based education*, allows educators to monitor individual students and provides opportunities for

students to move through the curriculum at their own pace. The HRS levels fit nicely within the PLC process. As stated by Eaker and Marzano (2020):

Stated differently, the HRS levels and the PLC process are not competing frameworks or frameworks designed to do the same things in different ways. Rather, HRS levels articulate, at a fairly granular level, specific elements to which leaders should attend if they wish to add a high-reliability perspective to their PLC work. (p. 18)

The HRS levels are hierarchical, and schools focus their attention and resources on achieving each of these levels before moving on to the next, finally achieving the fifth level, competency-based education. This hierarchical approach concurs with the characteristics defined by Stuart et al. (2018; see Figure 1). Stuart et al. pointed out that it is far easier to move from the highly effective side to the learning progressive side than the other way.

Critiques for Using PLC at Work Model and HRS Model for HELP Environments

PLC at work and HRS models are process-oriented models. The PLC at work model defines criteria for developing a work culture in schools (DuFour et al., 2016), and the HRS model identifies standard operating procedures to bring reliability to schools (Marzano et al., 2014). The methodologies used to describe both models have been case studies. Also, many process criteria or standard operating procedures have been defined for schools to apply to their contexts. Case study research has often been charged with causal determinism, nonreplicability, subjective conclusions, absence of generalizable conclusions, biased case selection, and lack of empirical clout (Creswell, 2014). In the case study research, the outcomes produced by different schools may not be the same and will depend on how the schools implemented the process and their local contexts.

Similarly, Stuart et al. (2018) also did case studies of different schools as their methodology to define the characteristics of HELP schools. These outcomes are not generalizable, but the process criteria can be applied to individual schools' local context to effect school improvement. School size also plays a role in implementing reforms. Smaller schools are in a better position to implement reforms because they are more engaging workplaces for adults and students (Stoll et al., 2006). In addition, the school's location, local community, access to outside professional learning, and staff turnover can also affect the sustainability of effective PLCs in a school (Stoll et al., 2006). DuFour et al. pointed out that the PLC is not a sprint but a marathon; sustaining it to effect improvement requires much effort and commitment from educators and leaders.

School Reform – An Adaptive Challenge

The key question is how to change schools into HELP environments. The current problem with education is one of obsolescence in need of reinvention, rather than failure in need of reform (Wagner et al., 2006). Wagner et al. (2006) noted the term education reform implies schools were good in their delivery but now have gone wrong, and they need to return to their former glory. Many school change initiatives of late focus on accountability in education, meaning that educators are not delivering instruction effectively. These initiatives do not focus on schools functioning differently to teach, learn, and lead for a new context, meaning the problem is technical rather than adaptive. According to Wagner et al. (2006), "It is this assumption - this definition of the problem as being minor and technical in nature, with a solution that would leave the system virtually intact - that we question" (p. 708). They continued stating, "A *technical challenge* is one for which a solution is already known—the knowledge and capacity exist to solve the problem" (Wagner et al., 2006, p. 49). On the other

hand, an *adaptive challenge* is “one for which the necessary knowledge to solve the problem does not yet exist. It requires creating the knowledge and the tools to solve the problem,” while working on it (Wagner et al., 2006, p. 49).

The problem in changing the present educational system is an adaptive challenge rather than a technical one, according to Wagner et al. (2006). According to Heifetz and Linsky (2002), responding to an adaptive change with a technical fix may work for a short time but will not produce a long-term solution. A technical fix is a temporary solution to ameliorate a problem without understanding or addressing the roots of the problem. In order to make real progress, leadership needs to address the deeper issues and accept a solution that may change the organization to be upside down (Heifetz & Linsky, 2002). When organizations undergo adaptive changes, they transform into new organizations and become learning organizations (Hubbard et al., 2006). A learning organization is skilled at creating, acquiring, and transferring knowledge and at modifying its behavior to reflect new knowledge and insights (Garvin, 2023). These types of organizations require different kinds of leaders, who recognize they have to change to lead the organizational change (Senge, 1999). Senge (1999) noted this challenge requires not only leaders to change, but everyone in the organization who works at various levels to change, learn new skills, and work in different ways. This challenge suggests that in education, educators must confront some fundamental beliefs and assumptions about the nature of learning, the nature of schooling, and the leadership of schools. This challenge means educators must rethink how they teach, organize, deliver, and assess in schools. When educators reinvent themselves, the schools may become completely different organizations. In short, the schools envisioned are different from what is experienced today.

Implications for Leadership

Leaders need to clearly define the purpose and goal behind the change they seek, to generate the needed momentum and urgency for change, and people need to fully understand the why behind the goals for the journey they are beginning (Sinek, 2013). Sinek (2013) also pointed out that these goals should be important and ambitious. They should stretch people to do things they value—to have their reach exceed their grasp—because that produces top performance. He added that simultaneously, people must believe the goals are meaningful and potentially achievable; setting impossible goals produces weaker, not stronger, performance, as people do not put in the needed effort if it is not achievable. Also, leaders must regularly revisit the goals to remind the stakeholders of their work's purpose.

Change is messy work, and it requires a tolerance for ambiguity. Leaders must be comfortable with uncertainty and ambiguity and be perceptive to emergence (Wagner et al., 2006). Wagner et al. (2006) stated that school change is adaptive, and the knowledge and skills needed to find a solution must be developed along the way. Leaders need to move away from the belief that they are responsible for providing solutions and instead institute shared accountability for solving a common problem. This change requires capacity building at all levels in schools.

Capacity building requires sustained effort—not just professional development days but various forms of coaching and mentoring, effective use of staff meetings, and other in-school time (Fullan, 2005). It also requires support through related practices such as supervision and evaluation. In short, capacity building has policy, leadership, and systemic and procedural implications (DuFour & Fullan, 2013).

Leadership Characteristics

Wilhoit et al. (2016) noted:

Leadership is the art of enabling a learning community to transform from its current to the future state by dramatically and continuously improving its capacity to deliver on the goal of readiness for every child through influence on the organization itself, its stakeholders, and the systems within which it operates. (p. 9)

Wilhoit et al. described leadership not as that of a single individual but as the collective work of a team that possesses the required skills, dispositions, complementary knowledge, and contextual understandings. The authors described key dimensions of leadership as shared vision, values, culture, capacity building, accountability, and trust. Leadership must be able to develop and share a commitment to a clear and coherent vision for learning with the shareholders. Leadership must exemplify a belief in the moral imperative to advance learning with equity and justice in the community. Leadership should exemplify and value a growth mindset and foster a deep commitment to the culture of learning. Leadership must be mission-focused on developing the individual and collective capacity to respond to the needs of all students and fostering innovation for breakthrough learning to occur and thrive. Finally, leadership should establish systems of shared responsibility for supporting all students to succeed, work toward continuous improvement of the individual and the system, and build trust and confidence in the system.

Muhammed and Cruz (2019) described the role of a transformational leader as a person who effectively communicates the rationale (i.e., the why of the work), effectively establishes the trust (i.e., the who of the work), effectively builds capacity (i.e., the how of the work) and gets results (i.e., the do of the work). First, they say leaders need to skillfully

communicate the vision clearly, so the people involved understand it well and are personally compelled to contribute to it. Second, they must connect with their stakeholders intellectually and emotionally. This personal connection to the stakeholders helps to build trust and make them see how their leader has an ethical connection to their purpose. Third, leaders must invest in training, resources, and time if they want their educators to embrace and invest in their new ideas and practices. Finally, leaders must skillfully assess and meet the needs of their stakeholders and require them to fully participate in the improvement process.

PLC at work model defines principal leadership action in a PLC culture through an evaluation tool. Kanold (2020) described the PLC leadership actions as follows. First, leaders must create a common understanding among the educators about the PLC process and language to understand why it is so important to pursue as a school. Second, leaders also build a clear understanding of what areas of the process, say well-defined parameters and priorities, need to be honored (i.e., tight) in terms of everyone following it and what areas can be flexible, where leaders encourage autonomy and creativity (i.e., loose) for individuals to innovate. Third, leaders build collaborative teams and provide structure so teachers work together to improve themselves and the students. Fourth, leaders systematically monitor the evidence of student learning and associated teacher actions to improve student learning. Finally, leaders establish a system of timely intervention to support student needs appropriately.

The HRS model provides five levels organized in a hierarchy for school leaders to consider and plan long-term school development. These are a safe, supportive, and collaborative culture, effective teaching in every classroom, guaranteed and viable curriculum, standards-referenced reporting, and competency-based education (Marzano et

al., 2014). The guiding indicators within those levels guide the leaders to implement and monitor those initiatives within their schools. Furthermore, Marzano et al. (2006) identified 21 responsibilities for a school leader and integrated them within the guiding indicators for various levels of the HRS model (Acosta, 2020). For example, Level 1: safe, supportive, and collaborative culture, one of the leading indicators is “The principal acknowledges the success of the whole school as well as individuals within the school” (Warrick, 2020, p. 325).

The Council of Chief State School Officers and the Jobs for the Future (2017) has developed a leadership competencies framework for learner-centered, personalized education. The framework involves four categories: (a) leaders and vision, (b) leaders and self, (c) leaders and systems, and (d) leaders and others in four domains. The foundational domain under the leaders and vision category is about vision, values, and culture for learner-centered, personalized education. There are three supporting domains, one under each category. The domain under the leaders and self category points to personal skills, mindsets, and values. The one under the leaders and others category highlights capacity building for innovation and continuous improvement, and the one under the leaders and systems category indicates the role of shared responsibility and structures for continuous improvement. The framework defines indicators for each domain. For example, for the foundational domain, vision, values, and culture competencies, one of the indicators says that “Successful leaders in learner-centered, personalized settings will create and share a vision to prepare students for the future via inclusive, learner-centered, personalized approaches” (CCSSO and Jobs for the Future, 2017, p. 22).

Overview of the Literature Reviewed

Overall, the literature has defined specific standard dimensions of leadership and characteristics for leaders for highly effective and learning progressive environments. The common dimensions include shared vision, values, and culture, capacity building, collective efficacy, and focus on continuous improvement. Almost all the models and frameworks highlight these dimensions including PLC at work, the HRS model, the Wilhoit et al. (2016) model, and leadership competencies for learner-centered, personalized education framework. Similarly, in terms of leadership characteristics, Wilhoit et al., Marzano et al. (2006), Kanold (2020), and Muhammed and Cruz (2019) pointed to leaders communicating a clear rationale to their constituents, building capacity, and collective efficacy, focusing on student learning and continuous improvement, and breaking the status quo. At the same time, the literature has pointed to certain specific dimensions and characteristics related to highly effective or learning progressive goals. The HELP environment will certainly benefit from this literature as the environment carries the best elements of highly effective and learning progressive characters. However, it will benefit more from developing specific leadership dimensions and characteristics of the HELP environment, which is currently limited.

The PLC at work model is a conceptual model that focuses on best practices for an effective school (Eaker & Marzano, 2020). These practices include concepts that support schools to be highly effective. It identifies processes to push schools toward becoming a highly effective environment. The HRS model is more explicit in this aspect by providing a structure for schools to follow to become highly reliable (Eaker & Marzano, 2020). This model provides standard operating procedures to make schools become highly effective. Colby's (2018) competency-based education framework and CCSSO's leadership

competencies for learner-centered, personalized education framework focus on the learning progressive side alone assuming that all schools following this framework have a strong highly effective side. This belief does not help schools shift to HELP environments because the main understanding from the HRS model and PLC at work model is that the schools need to have a strong highly effective character before moving into the learning progressive one. Stuart et al. (2018) provided the roadmap for schools to become HELP environments, which was one of the very few pieces of literature available about shifting schools toward HELP environments. Stuart et al. (2016), *Global Perspectives: Professional Learning Communities in International Schools*, focused on PLCs and HELP environments in international schools. The literature around HELP environments that combine highly effective and learning progressive characteristics has been limited.

Implications for Future Research

This literature review focused on the available literature about schools with environments that combine highly effective and learning progressive characteristics and the leadership practices that promote schools to become HELP environments. The terms HELP and learning-progressive seem to be fairly new to education parlance. They yielded no results during the search. Stuart et al. (2018) defined the terms HELP and learning progressive and their characteristics in their work, *Personalized Learning in a PLC at Work: Student Agency Through the Four Critical Questions*. The term learning progressive, defined by Stuart et al., includes the characteristics of competency-based education and personalized learning. According to them, the HELP environments combine the characters of highly effective and learning progressive sides.

The literature pertaining to highly effective environments was extensive, and there has been a growing body of literature around competency-based education and personalized learning environments, which represents learning on the progressive side. This literature has included characteristics of the environment and measurement of effectiveness to a greater extent. However, literature on HELP environments that combine both characteristics is limited. The closest literature pertaining to the HELP environments are Marzano et al.'s (2014) HRS model and DuFour et al.'s (2021) PLC at work model. Marzano et al.'s model provides some structure for schools to follow to become reliable environments, but it is more structured on the highly effective side. The PLC at work model is a conceptual model that promotes the key characteristics that will help schools become highly effective and reliable. Implementing these characteristics can provide the foundation to build the learning progressive approaches in schools, as part of them becoming HELP environments. Stuart et al. (2018) used the PLC at work model to define the HELP environment.

A highly effective school is a school that adheres to the tenets of a PLC and commits to ensuring all students learn at the high levels necessary to thrive in this ever-changing world (Stuart et al., 2018). HELP schools add one important construct to the mix: student agency. Giving students agency over their own learning allows them to personalize their learning and achieve higher levels of learning (Stuart & Callaway, 2023, p. 26).

However, different schools approach the same concepts differently to become HELP environments. There needs to be more clarity on how schools systematically approach the key characteristics of HELP environments, which is one gap in the literature.

In terms of leadership practices, a huge body of literature has described leadership characteristics for implementing highly effective environments. Wilhoit et al. (2016) and Muhammed and Cruz (2019) defined how various leadership approaches and characteristics make schools highly effective. There is also a growing body of literature on competency-based education and personalized learning. CCSSO and Jobs for the Future (2017) have defined leadership practices for competency-based education. The leadership practices related to learning progressive environments are limited because a wide range of environments come under the theme “progressive environments,” and they are personalized to their needs. For HELP environments, PLC at work and the HRS models have defined leadership characteristics but are limited to the highly effective side only, representing a second gap in the literature.

The third gap in existing literature is related to measurement. If schools want to measure themselves on where they are in the HELP continuum, they cannot at this point, due to a lack of measurement criteria. The HRS model and PLC at work model have described some measurement criteria based on their defined characteristics, which again pertain to the highly effective side.

OECD, in its report, “How to measure innovation in education?” stated that both policymakers and educators share the belief and conviction that educational systems are running up against a wide range of challenges that educators must address to provide the best possible education for younger generations (as cited in Daly et al., 2021). The report also stated that “when considering the improvement of learning outcomes, concepts like self-regulated learning (e.g., Garcia et al., 2018; Rovers et al., 2019) and personalized learning experiences and environments (e.g., Prain et al., 2013; Richardson, 2019) have been

suggested” (Daly et al., 2021, p. 7). From this, it can be understood that there will be much support for studies that clearly articulate different parameters for enabling schools to become HELP environments and how to measure them against their current status.

Conclusions

The literature review indicated limited literature on HELP environments, specifically around leadership characteristics and measurement. School effectiveness has been a hot topic since the 1960s and has gone through generations of research and practice to evolve into what it is today. The world has changed significantly since the COVID-19 global pandemic, and educators are questioning the value of traditional education (Stuart & Callaway, 2023). Eaker and Marzano (2020) pointed out that the traditional one-size-fits-all approach is no longer valid, and traditional school structures need to meet the goals of excellence and equity. Stuart and Callaway (2023) pointed out that “educators must shift toward a more personalized educational approach that meets the needs of students, and they said this shift requires a culture of continuous improvement where leaders pay attention to school structures and culture” (p. 13). HELP schools have evolved to meet student needs and prepare students with future-ready skills (Stuart et al., 2018). As practitioners and researchers worldwide see more value in HELP environments to enable schools to prepare students for their future and more international schools tend to move toward becoming HELP environments, it is imperative to produce knowledge in this area.

CHAPTER THREE

METHODOLOGY

There has not been much written or studied about highly effective learning progressive (HELP) environments, especially about the leadership practices that enabled them to combine these two characteristics. The purpose of this study was to begin filling the gap in the literature and to capture the leadership practices that enable international schools to become HELP environments through this case study. There has been some evidence that international schools want to become HELP environments, as they see value in preparing students for their future (Daly et al., 2021). However, due to the absence of the right instrument to measure the HELP characteristics specifically, this study used the high-reliability schools (HRS) framework to capture the effectiveness of the environment based on the characteristics defined by the HRS framework and the leadership practices that enabled them from an HRS perspective. During this study, I surveyed and interviewed faculty from an international school attempting to become a HELP environment and captured their perceptions on two major constructs: the effectiveness of their environment measured using the HRS framework and the leadership practices that enabled its development.

The following research questions guided the study:

1. What does an international school attempting to exhibit both highly effective and learning progressive environments look like when assessed using an instrument built from the high-reliability schools (HRS) framework?
2. What do international school leaders and teachers say about the effectiveness of what they have been attempting to transform their school into a school that can be

- considered both highly effective and learning-progressive? How do the faculty from different divisions perceive/assess this transformation?
3. According to those who work in a HELP school, what have leaders done and continue to do to encourage effective implementation of the HELP characteristics from an HRS perspective? How do the faculty perceive these leadership practices and act upon them to effectively implement those characteristics?
 4. What problems arose during the transformation process to be a HELP school, and how were these problems addressed and managed?

The research questions helped capture what a HELP environment looked like when measured using the HRS framework and how the faculty and leadership assessed its effectiveness from an HRS perspective. The research questions also helped capture the leadership practices that enabled these characteristics. This chapter explains the research design, site, participant selection procedures, measuring instruments, and methodology employed to capture the research constructs in this study. Finally, this chapter presents an overview of my positionality with respect to this study.

Research Design

This study employed a mixed-method explanatory sequential design. The design first employed a quantitative survey method followed by a qualitative phase, which employed focus group and individual interview methods. The second qualitative phase used in-depth semistructured interviews helpful in making sense of the survey data. The rationale for using an explanatory sequential mixed methods design was to establish complementarity. Creswell and Plano Clark (2011) described the goal of complementarity as a means to “seek elaboration,

illustration enhancement, and clarification of the findings from one strand with the other strand” (p. 290).

Quantitative Phase

The quantitative phase used a survey that the case study school administered. The survey used the HRS framework (Marzano et al., 2014).

Why HRS Framework

This section explains why the HRS framework captures the HELP characteristics. According to Stuart and Callaway (2023), HELP schools add one more construct, student agency, apart from adhering to the tenets of a professional learning community (PLC). The PLC at work model provides the highly effective side of a HELP school while adding student agency incorporates the learning progressive nature of a HELP school. According to Eaker and Marzano (2020):

The HRS levels fit quite nicely within the PLC process. Stated differently, the HRS levels and the PLC process are not competing frameworks or frameworks designed to do the same things in different ways. Rather, the HRS levels articulate, at a fairly granular level, specific elements to which leaders should attend if they wish to add a high-reliability perspective to their PLC work. (p. 18)

Table 2 displays how HRS levels fit nicely with PLC at work process, as explained by Eaker and Marzano (2020).

Table 2*Comparison of HRS Framework and PLC at Work Model*

HRS framework	PLC at work model
<p>Level 1: Safe, Supportive, and Collaborative Culture</p> <p>1.1 The staff members perceive the school environment as safe.</p> <p>1.2 The staff members perceive the school environment as orderly.</p> <p>1.3 The stakeholders perceive the school environment as safe.</p> <p>1.4 The stakeholders perceive the school environment as orderly.</p> <p>1.5 Teachers have input in the decision-making process regarding school initiatives.</p> <p>1.6 Collaborative faculty teams regularly interact to address common issues regarding curriculum, assessment, instruction, and the achievement of all students.</p> <p>1.7 Data is used to make decisions related to curriculum, assessment, instruction and student achievement</p> <p>1.8 The staff members have formal ways to provide input regarding the optimal functioning of the school.</p> <p>1.9 The stakeholders have formal ways to provide input regarding the optimal functioning of the school.</p> <p>1.10 Our school’s accomplishments have been appropriately acknowledged.</p> <p>1.11 The resources of the school (fiscal, operational, and technological) are managed in a way that directly supports teachers.</p>	<ul style="list-style-type: none"> • “It would be difficult, if not impossible, to overstate the importance of building a cultural foundation to drive all other aspects of the school-improvement process. • Viewed together, the cultural and structural characteristics of a high-performing PLC and the leading indicators of the HRS model, coupled with associated practices, offer a valuable tool for developing a culture of continuous improvement.” <p>(Eaker & Marzano, 2020, p. 19)</p>
<p>Level 2 – Effective Teaching in Every Classroom</p>	<ul style="list-style-type: none"> • “Collaborative teams focus on the learning of each student, skill by skill, the requirement for effective teaching in every classroom becomes even more important. PLCs view improving

HRS framework	PLC at work model
<p>2.1 The school leader communicates a clear vision as to how instruction should be addressed in the school.</p> <p>2.2 Support is provided to teachers to continually enhance their pedagogical skills through professional growth plans.</p> <p>2.3 Predominant instructional practices throughout the school are known and monitored.</p> <p>2.4 Teachers are provided with clear, ongoing evaluations of their pedagogical strengths and weaknesses that are based on multiple sources of data.</p> <p>2.5 Teachers are provided with job-embedded professional development that is directly related to their instructional growth goals.</p> <p>2.6 Teachers have opportunities to observe and discuss effective teaching.</p>	<p>teaching practice through the lens of collaborative teams.</p> <ul style="list-style-type: none"> ● Effective teaching begins with clear, appropriate, and focused agreement about what every student needs to learn and what student work will look like if students are successful. The teams collaboratively develop common formative assessments to monitor the learning of each student on a frequent and timely basis. ● The team collaboratively analyzes the results of these common assessments. This analysis allows teachers to decide on interventions and extensions for students based on the data. Not only that, these data also provide team members, both collectively and individually, with information to address their instructional effectiveness in each unit. ● The team members engage in collective inquiry into effective teaching practices and then test the selected practices in their classroom through action research, with an emphasis on results - the effect on student learning or behavior. ● In short, with the PLC process, collaborative analysis of student learning data and the process of collective inquiry and action research improve teaching. The end result is a culture of continuous improvement of teaching practices.” <p style="text-align: right;">(Eaker & Marzano, 2020, p. 19-20)</p>
<p>Level 3 – Guaranteed and Viable Curriculum</p> <p>3.1 The school curriculum adheres to specific standards</p> <p>3.2 Clear and measurable goals are in place that focus on improving overall student achievement at the school level.</p> <p>3.3 Data is used to regularly monitor progress toward school achievement goals.</p> <p>3.4 Appropriate programs and practices are in place to help students meet individual achievement goals when data indicate interventions are needed.</p>	<ul style="list-style-type: none"> ● “In <i>What works in schools: Translating research into action</i>, Marzano (2003) coined the term guaranteed and viable curriculum, meaning that what every student learns must be guaranteed, irrespective of who teaches it, and the schools must provide enough time for students to learn, so it is viable (Marzano et al., 2018). ● Both the PLC process and the HRS model recognize the embedding a guaranteed and viable curriculum in a school’s structure and culture is an essential requirement for improving student achievement. In an effective PLC, teams work from the assumption that if we want all students to learn at high levels, the first question to address is, Learn what? ● Gaining a deep understanding of what students must learn begins with deep learning within each

HRS framework	PLC at work model
<p>3.5 The school curriculum is focused enough that it can be adequately addressed in the time available to teachers.</p> <p>3.6 All students have the opportunity to learn the critical content of the curriculum.</p>	<p>team. The first step educators in PLC take when making decisions is to learn together, and developing a guaranteed and viable curriculum begins with collaboratively reviewing standards and assessments.</p> <ul style="list-style-type: none"> • Teacher teams engage in the collaborative prioritization of standards, providing more time to the most essential skills and knowledge. In a PLC, this collaborative activity results in a guaranteed and viable curriculum. Importantly, teams use this approach to “unpack” the standards into learning targets and determine what each target should look like in student work if students demonstrate proficiency.” <p>(Eaker & Marzano, 2020, p.21-22)</p>
<p>Level 4 – Standards-referenced Reporting</p> <p>4.1 Clear and measurable goals are in place that are focused on improving achievement of individual students within the school.</p> <p>4.2 Data is used to regularly monitor progress toward achievement goals for individual students.</p>	<ul style="list-style-type: none"> • “Both the PLC process and the HRS model shift the emphasis from a whole-school perspective to a sharp focus on the learning of each student, grade by grade, subject by subject, unit by unit, skill by skill, and name by name. One of the important ways to do that is standards-referenced reporting. This process starts with a guaranteed and viable curriculum. • During each unit of instruction, teams monitor the learning of each student on a frequent and timely basis through the use of collaboratively developed common formative assessments. In these assessments, the emphasis is on the most essential skills and concepts that all students must acquire. In both the PLC process and the HRS model, the emphasis is on clarity and specificity regarding what students should learn and alignment with the standards and assessments. • High-performing PLCs develop an effective, systematic plan for providing each student with additional time, support, or extension of his or her learning within the school. This reporting system informs students and parents of student learning levels in relation to common standards.” <p>(Eaker & Marzano, 2020, p.23-24)</p>
<p>Level 5 – Competency-based Education</p> <p>5.1 Students move on to the next level of the curriculum for any subject area only after they have</p>	<ul style="list-style-type: none"> • “In high-performing PLCs, teacher teams collaboratively drill deeply into each standard, identifying the most essential skills and concepts all students must learn, and teams collaboratively

HRS framework	PLC at work model
demonstrated competence at the previous level.	agree on what these student outcomes look like in student work.
5.2 The school schedule is designed to accommodate students moving at a pace appropriate to their situation and needs.	<ul style="list-style-type: none"> • Such specificity provides the impetus for teams to monitor the learning of each student - skill by skill - through the use of frequent and timely collaboratively developed common formative assessments.
5.3 Students who have demonstrated competency at levels articulated in the system are provided immediate opportunities to begin work on advanced content and/ or areas of interest.	<ul style="list-style-type: none"> • Taken together, these two activities allow schools to create systems that provide additional time and support for struggling students and extensions for students who demonstrate proficiency.” (Eaker and Marzano, 2020, p.25)
Level 5 – Personalization (Not part of HRS framework but added to the instrument to capture student agency as part of HELP environment)	<ul style="list-style-type: none"> • Stuart et al. also point out that HELP schools teach students learning to learn skills, provide students with choice and voice and cultivate dispositions like grit and growth mindset.
5.4 The school provides opportunities for students to personalize their learning.	<ul style="list-style-type: none"> • In addition, the schools teach students to personalize their learning by allowing the pace to complete their learning targets and allowing for choice in demonstrating mastery. (Stuart et al., 2018)

The HRS framework provided research-based criteria for schools to measure if the schools were highly reliable. As Marzano et al. (2018) stated, “At its core, a high-reliability perspective involves monitoring the relationship between actions an organization takes to enhance its effectiveness and the extent to which these actions do, in fact, produce the desired effects” (p. 29). The survey used the leading indicators (i.e., research-based practices) and lagging indicators (i.e., monitoring progress toward improvement in key areas of need) from the HRS framework to assess the effectiveness of schools where those who work within it considered it to be a HELP environment. The survey can be found in Appendix A.

Survey Instrument

The survey instrument consisted of five levels as indicated in the HRS framework:

- Level 1: Safe, supportive, and collaborative culture

- Level 2: Effective teaching in every classroom
- Level 3: Guaranteed and viable curriculum
- Level 4: Standards-referenced reporting
- Level 5: Competency-based education and personalization

As per the HRS framework, Level 5 is competency-based education. A personalization component was added to the survey under Level 5 to capture the student agency in a HELP school. According to Stuart and Callaway (2023), HELP schools add one more construct (i.e., student agency) apart from adhering to the tenets of a PLC.

Each level has leading indicators, which are research-based practices, and these indicators are divided into lagging indicators for monitoring progress toward those key practices. These indicators helped assess the overall effectiveness of schools that aspire to be a HELP environment and helped capture the major research constructs in this study. The survey used a 4-point scale and a not applicable or unknown category. The purpose of using the 4-point scale was to clearly distinguish between the absence and presence of specific indicators identified by the survey. Scales 1 (*nonreflective*) and 2 (*partially reflective*) represented the absence of the indicators or the development of those indicators in their infancy. Scales 3 (*mostly reflective*) and 4 (*highly reflective*) represented those indicators' of advanced development or the developed stage. If a particular indicator was not applicable or not known, then the participant could choose 5 (*not applicable/not known*), which was rare given the survey was taken by faculty members (i.e., teachers and teaching assistants).

The survey included demographic questions, such as the division faculty members worked at, gender, role, years of experience in education, number of international schools they

have worked at, and years of experience in the case study school. The survey had 29 rating questions, and each level had the following number of questions:

Level 1: Safe, supportive, and collaborative culture: 11 questions

Level 2: Effective teaching in every classroom: six questions

Level 3: Guaranteed and viable curriculum: six questions

Level 4: Standards-referenced reporting: two questions

Level 5: Competency-based education and personalization: four questions

The survey participants chose a rating based on the presence of the indicators, in the school, specifically with respect to their division. The mean rating given by the participants in a division for a particular level was used to decide the presence or absence of the indicators for that level.

Qualitative Phase

The qualitative phase of the explanatory mixed-methods sequential design used focus group and individual interview methods. This study used the focus group interviews conducted by the school. Three focus groups, one from each of the three divisions, were given a leadership inventory as a reference by the school to identify the leadership practices commonly used by leaders to promote the five levels of the HRS framework identified in the survey. The leadership practices inventory referenced was based on the Leadership Practices Inventory (Kouzes & Posner, 2007). The Leadership Practices Inventory is a 360° instrument that measures the frequency of 30 behaviors, identified by Kouzes and Posner (2007) as the behaviors leaders engage most frequently while performing at their best. The participants were given the inventory just as an example to identify the leadership practices that enabled the HELP environment, and they did not have to use it to identify the HELP leadership practices. However, some participants used some of the common leadership practices identified by the inventory to highlight the HELP

leadership practices. The focus groups identified their perceived leadership practices that enabled or could have enabled the implementation of HELP characteristics in their division. This data also helped frame interview questions to capture the perceptions of the faculty and leadership toward the HELP implementation (using the HRS framework) and the impact of those actions.

Individual Interviews

The semistructured interviews were conducted with the faculty and leadership to get in-depth qualitative data to make sense of the quantitative results. The interviews focused on gaining answers specifically relevant to the research constructs and discovering the divisional differences in implementing the HELP environment from an HRS perspective. The interviews also provided an opportunity to gain insight into the leadership practices that enabled or could have enabled the effective implementation of those characteristics.

Consistent with that written by Kvale and Brinkmann (2009) about interviewing, the interviewer followed a “participant” style of interviewing, where the interviewer was not a passive spectator of the interviewee’s life but actively participated in creating a conversation. The interviews were semistructured; as Glesne (2015) pointed out, questions often emerge during fieldwork and may add to or replace preestablished ones. This combined strategy helped to explore certain subjects in greater depth and further probe a newly emerging area of inquiry, as Patton (2015) pointed out.

Patton (2015) described the types of questions to consider when developing interview questions. Experience/behavior and opinion/value questions were included in the interviews, as suggested by Patton. The interview guide was primarily used as a checklist or an outline to ensure that all the important points were covered, as pointed out by Kvale and Brinkmann (2009). Appendix B includes the interview guide.

Research Site and Participants

The site for this study was an international school in Africa serving children of international and diplomatic communities. This international school had about 850 students from 65 countries and 155 faculty members from 30+ countries. This international school has been working to become a HELP school for the past 5 years. It has employed strategies like PLCs, guaranteed and viable curriculum, standards-referenced reporting, and personalized learning to develop the school into a HELP environment.

Quantitative Phase

All teachers in all three divisions (i.e., the elementary, middle, and high school divisions of the case study school) received the survey, which was the entire population of teachers. The case study school administered the survey, and this study used the data. The survey was voluntary, and a random sample of 120 faculty members responded to the survey.

Qualitative Phase

The case study school conducted the focus group interviews to understand the leadership practices employed in different divisions, and this study used the corresponding data. The school reached out to specific faculty members and asked them if they would be willing to be part of the focus groups. Among those who volunteered, five people from each division received invitations to participate in the focus group activity based on their experience in the HELP implementation. The focus group activity was conducted separately as divisions, and the participants reflected on the leadership practices based on their respective divisions. Purposive sampling was used for the focus groups, as the teachers were selected purposely for an equal representation of each division within the groups based on their experience in implementing the HELP environment.

The interview participants consisted of two groups: faculty and leadership. I contacted the faculty members to find out if they would be willing to be part of the interviews. They were contacted based on their experience in developing the HELP environment at the case study school, and based on who volunteered, three faculty members from each division received invitations to participate. If fewer than three volunteers in a division, then I contacted more faculty, so a sample of three per division was maintained. The interview participants also represented the demographic aspects identified in the survey (i.e., gender, role, years of experience in education, number of international schools worked at, and years of experience in the case study school). A purposeful selection of the interview participants ensured an equal representation of each division within the groups.

The interviewed leadership participants comprised a deputy head of the school, two principals, one deputy principal, and two coordinators. They were contacted based on their experience in developing the HELP environment at the case study school, and those who volunteered received invitations to participate in the interviews. A few were involved in the HELP environment from the beginning, and some had 2–3 years of involvement. The participants were conveniently selected.

Data Collection and Analysis Procedures

Quantitative Phase of Data Collection

In the first phase of data collection, a survey was administered by the case study school using Zoho Survey. The divisional leadership allocated a specific time frame for the faculty to complete the survey, though they were free to do it at any time during that period. Three reminders were sent to the faculty requesting them to complete the survey.

Quantitative Data Analysis Procedures

The quantitative data collected were analyzed using SPSS. A regression analysis was conducted to analyze the data and draw inferences from different data sets within the study. The data sets included faculty demographic information such as role, work division, gender, years of experience in education, number of international schools worked at, and years of experience at this particular school.

Missing Value Analysis

The survey was optional and sent to all faculty members, and the case study school collected their feedback. Out of 155 faculty members, 120 responded. A missing value analysis found that 103 members had fully completed the survey, and 17 members had partially completed the survey. I applied a common and accepted remedy in the case of missing data, whereby the variable's mean replaces blank data (Curley et al., 2017). This practice is commonly known as the imputation of the data. Using this method, I extracted 120 usable data sets.

Reliability Check

I conducted a reliability test on the survey items, and Cronbach's alpha value was in the range of 0.94–0.95 (see Table 3). The reliability of the survey's internal consistency is greater than the accepted cutoff, and a test-retest correlation of 0.77 was identified (Blackwell et al., 2007).

Table 3

Reliability Cronbach's Alpha for Individual Survey Items

Level	Item	α
1	SC1: The staff members perceive the school environment as safe.	0.95

Level	Item	α
	SC2: The staff members perceive the school environment as orderly.	0.95
	SC3: The stakeholders perceive the school environment as safe.	0.95
	SC4: The stakeholders perceive the school environment as orderly.	0.95
	CC1: Teachers have input in the decision-making process regarding school initiatives.	0.94
	CC2: Collaborative faculty teams regularly interact to address common issues regarding curriculum, assessment, instruction, and the achievement of all students.	0.95
	CC3: Data are used to make decisions related to curriculum, assessment, instruction, and student achievement.	0.94
	CC4: The staff members have formal ways to provide input regarding the optimal functioning of the school.	0.94
	CC5: The stakeholders have formal ways to provide input regarding the optimal functioning of the school.	0.95
	SE1: Our school's accomplishments have been appropriately acknowledged.	0.95
	SE2: The resources of the school (fiscal, operational, and technological) are managed in a way that directly supports teachers.	0.95
2	VS1: The school leader communicates a clear vision as to how instruction should be addressed in the school.	0.94
	PG1: Support is provided to teachers to continually enhance their pedagogical skills through professional growth plans.	0.94
	PG2: Predominant instructional practices throughout the school are known and monitored.	0.94
	PG3: Teachers are provided with clear, ongoing evaluations of their pedagogical strengths and weaknesses that are based on multiple sources of data.	0.94
	PL1: Teachers are provided with job-embedded professional development that is directly related to their instructional growth goals.	0.95
	PL2: Teachers have opportunities to observe and discuss effective teaching.	0.94
3	GC1: The school curriculum adheres to specific standards.	0.95
	GC2: Clear and measurable goals are in place that focus on improving overall student achievement at the school level.	0.94
	GC3: Data are used to regularly monitor progress toward school achievement goals.	0.94
	GC4: Appropriate programs and practices are in place to help students meet individual achievement goals when data indicate interventions are needed.	0.95

Level	Item	α
4	VC1: The school curriculum is focused enough that it can be adequately addressed in the time available to teachers.	0.95
	VC2: All students have the opportunity to learn the critical content of the curriculum.	0.95
5	GS1: Clear and measurable goals are in place that is focused on improving the achievement of individual students within the school.	0.94
	GS2: Data are used to regularly monitor progress toward achievement goals for individual students.	0.94
	PS1: Students move on to the next level of the curriculum for any subject area only after they have demonstrated competence at the previous level.	0.94
	PS2: The school schedule is designed to accommodate students moving at a pace appropriate to their situation and needs.	0.94
	PS3: Students who have demonstrated competency at levels articulated in the system are provided immediate opportunities to begin work on advanced content and/ or areas of interest.	0.95
	PS4: The school provides opportunities for students to personalize their learning.	0.95

Regression Analysis

Regression analysis is a form of predictive modeling investigating the relationship between the dependent (i.e., target) and the independent (i.e., predictor) variables. The demographic variables served as the independent variables, and the perception of effectiveness in various HRS levels in the case study school was the dependent variables for the regression analysis. The demographic variables included role, the division they worked at, gender, years of experience in education, number of international schools they worked at, and years of experience at this particular school. I used regression analysis to identify the correct predictors, and then further explored the information using qualitative methods. The next chapter provides a detailed analysis of the findings.

Qualitative Phase of Data Collection

The second phase of data collection involved focus groups and individual interviews. Three focus groups, one from each of the three divisions, were given a leadership inventory by the school to identify the leadership practices commonly used by leaders to enable the HELP environment. The leadership practices used were based on the Leadership Practices Inventory (Kouzes & Posner, 2007). The focus groups consisted of five faculty members from the same division working together to identify leadership practices that supported or could have enabled the HELP environment in their division. At the end of the activity, the focus groups identified the top six leadership practices that are key for enabling the HELP environment. These practices helped frame the leadership questions during the individual interviews.

The individual interviews involved 15 faculty and leadership members drawn from different divisions, including a school deputy head. The participants were contacted and requested to participate in the interviews. Willing participants communicated their convenient times for the scheduling of the interviews. I conducted the 60–90 minutes interviews through the Zoom video platform. The interviews were semistructured and followed an interview guide (see Appendix B) as an outline for conversational interviews with the participants. I also participated in the interview process to enable the participants to dig deeper into the areas of significance.

Qualitative Data Analysis

After recording the interviews via Zoom, I transcribed them through Otter.ai and cleaned them. Then, the data were fed into NVIVO for coding. According to Polkinghorne (1988), data analysis can be approached in two ways: narrative analysis and the analysis of narrative.

Narrative analysis organizes the qualitative data into a story, and analysis of narrative strategy

codes narratives from the stories derived from the interviews into categories. I used analysis of narrative strategy in this study.

I coded qualitative data based on a priori category themes based on the research questions. Some subcodes that emerged inductively during the coding process. After the initial coding, I organized the qualitative codes into subcodes and categories. Depending on the number of codes and subcodes, as Donmoyer (2020) pointed out, codes were combined or separated based on emerging themes. This process of combining or separating the codes happened over the different coding cycles and when arriving at different categories and themes, as Saldana et al. (2013) pointed out. Finally, a thematic analysis was done within the framework of the HRS model (Marzano et al., 2014), and the codes and categories were turned into the final narrative using the method of inductive coding.

Cross-Case Analysis

I then used the codes derived from the qualitative data to develop a cross-case analysis of the three divisions within the case study school. Undoubtedly, the HELP environments in different divisions operated differently based on the needs of the division and provided for an embedded multiple-unit analysis within the overall case. The ultimate goal was to understand the effectiveness of the HELP implementation in different divisions and to generate grounded hypotheses about the relationship between the effectiveness of HELP implementation and leadership practices. This internal cross-case orientation was consistent with what Erickson and Gutierrez (2002) had recommended when they wrote:

In particular, scientifically rigorous research on what works in education requires sustained, direct, and systematic documentation of what takes place inside programs to

document not only “what happens” but also how students and teachers adapt interventions in interactions with each other in relation to dynamic local contexts. (p. 19)

Member Check

In addition, as Merriam and Tisdell (2016) suggested, “A second common strategy for ensuring internal validity or credibility is *member checks*. Also called *respondent validation*, the idea here is that you solicit feedback on your preliminary or emerging findings from some of the people that you surveyed/interviewed” (p. 246). The findings were shared with some participants, and their feedback was obtained.

Confidentiality

The confidentiality of the participants and the information they shared during the interviews and other phases of data collection has been maintained. Participant names were coded and kept on a secure server. I am the only individual with the ability to connect the codes to the person for any further communication regarding this research.

Positionality

I was an insider and played an oversight and support role in this school. This study is considered *backyard research*, as Glesne (2015) pointed out. Consequently, there was a participant–observer component to the research design. Glesne (2015) pointed out that backyard research can create political and ethical dilemmas, and uncovering some dangerous knowledge during interviews as a covert observer was politically risky and also led to guilt or anxiety over the role. Glesne also pointed out that this participant–observer role can create tension between a participant and an observer, but when the researcher is an insider, the tension is lessened. I mostly played the observer role in this study during the interviews. Also, during the interviews, I was very careful how I worded my questions to avoid leading or influencing how participants

responded. I also made it clear that the observations I made and the report were purely for this study and the personal information of the people who worked in the school would be kept confidential. One advantage I had was that I left the school halfway through the study, and it allowed the interviewees to be much more open with their views, assuring that none of the information would be circulated to the school or used against them.

The next chapter summarizes the key findings and analyzes the quantitative and qualitative data within the framework of the four research questions, using a cross-case analysis of different divisions within the case study school. Discussion of emerging themes is located in the discussion section.

CHAPTER FOUR

FINDINGS

The purpose of the study was to describe a school that is transforming to become a highly effective learning progressive (HELP) school using the high-reliability schools (HRS) framework and the leadership practices that enabled it to become one from an HRS perspective. Survey data from 120 faculty members, three focus group interviews, and 15 individual interviews with faculty and leadership from the case study school answered the following questions:

1. What does an international school attempting to exhibit both highly effective and learning progressive environments look like when assessed using an instrument built from the HRS framework?
2. What do international school leaders and teachers say about the effectiveness of what they have been attempting to transform their school into a school that can be considered both highly effective and learning-progressive? How do the faculty from different divisions perceive/assess this transformation?
3. According to those who work in a HELP school, what have leaders done and continue to do to encourage effective implementation of the HELP characteristics from an HRS perspective? How do the faculty perceive these leadership practices and act upon them to effectively implement those characteristics?
4. What problems arose during the transformation process to be a HELP school, and how were these problems addressed and managed?

The first two questions were mainly answered by the survey data and supported by the outcomes of the interviews. Data from the focus group and individual interviews answered Questions 3 and

4. In this chapter, there is an exploration of the main findings that helped answer the four research questions. Quantitative data in tables and qualitative data in quotes and figures support the written findings for each research question. The organization of Chapter 4 starts with an explanation of the sample demographics illustrated in Table 3. A question-by-question analysis follows. A discussion with references in figures is shown in Appendix D, which explain the first research question. Tables shown in Appendix C and the following discussion explain the second research question. These questions were addressed using descriptive and inferential statistics, and the interview data. I used interview data to answer the third and fourth research questions and the discussion around them. A conclusion regarding this chapter follows the final research question.

Sample Demographics

Table 4 shows the frequency counts for the survey's demographic variables. The faculty from elementary, middle, and high school divisions and faculty serving all divisions participated in the survey. Fifty faculty members from the elementary school, 32 from the middle school division, 32 from the high school division, and six faculty members who serve all three divisions responded to the survey. The faculty roles included teachers, educational assistants, teacher leaders, and administrators. The sample included 49 men and 71 women, with female respondents comprising a more significant proportion. The respondents' years of experience in education ranged from 2 years or fewer (4.2%) to more than 20 years (19.2%), with a "median for grouped data" formula yielding a median number of 14 years working in education. The number of international schools the respondents worked in so far during their careers ranged from one school (44.2%) to more than six schools (1.7%). The respondents' years of experience in the case study school ranged from 2 years or fewer (22.5%) to more than 20 years (3.3%),

with a median for grouped data formula yielding a median number of 5.1 years working at the case study school (see Table 4).

Table 4

Frequency Counts for the Demographic Variables

Variable	<i>n</i>	%
Identify the division you primarily work with		
Elementary school	50	41.7
Middle school	32	26.7
High school	32	26.7
Whole school	6	5.0
What is your role		
Teacher	66	55.0
Educational assistant	43	35.8
Teacher leader	7	5.8
Administrator	4	3.3
Gender		
Male	49	40.8
Female	71	58.2
Years of experience in education		
2 years or fewer	5	4.2
3–5 years	14	11.7
6–10 years	21	17.5
11–20 years	57	47.5
20+ years	23	19.2
How many international schools have you worked at		
1 school	53	44.2
2–3 schools	49	40.8
4–6 schools	16	13.3
6+ schools	2	1.7
Years of experience at ICS		
2 years or fewer	27	22.5
3–5 years	38	31.7

Variable	<i>n</i>	%
6–10 years	31	25.8
11–20 years	20	16.7
20+ years	4	3.3

Research Question-by-Question Analysis

RQ 1: What Does an International School Attempting to Exhibit Both Highly Effective and Learning Progressive Environments Look Like When Assessed Using an Instrument Built From the HRS Framework?

This research question is answered with descriptive statistics from the survey and supported by the interview data. The survey was based on the HRS model (Marzano et al., 2014) and is organized into five levels. Level 1: safe, supportive, and collaborative culture, is foundational to any school as it addresses basic human needs and supports student learning. Level 2: effective teaching in every classroom, is one of the most influential predictors of student learning. Level 3: guaranteed and viable curriculum, addresses the quality of teaching; guaranteed means that no matter who teaches, the student receives the same content, and viable means covering it within the time available. Level 4: standards-referenced reporting, addresses the process of record-keeping and reporting consistently to monitor individual students' progress. Level 5: competency-based education, allows educators to monitor individual students and provides opportunities for students to move through the curriculum at their own pace. A personalization component was added to Level 5 in the survey instrument to capture the student agency in a HELP school. This component is based on Stuart et al.'s (2018) definition of student agency in a HELP school. Each question at every level can link to specific aspects of the environment, and the rating of those questions indicates the presence or the absence of specific characteristics in the school.

The effectiveness of a school that has attempted to be a HELP environment for the past 5 years can be understood using the ratings. The ratings 0–1 indicate *nonreflective*, 1.1–2 indicate *partially reflective*, 2.1–3 indicate *mostly reflective*, and 3.1–4 indicate *highly reflective*. A rating of 2.1 and above indicates that the environment is effective, which means that the actions taken by the organization have yielded the desired results (Marzano et al., 2018). Depending on the range (2.1–4) of the rating, it indicates that the environment is *mostly reflective* or *highly reflective* of the change. See Appendix C for various demographic variables and the rating given for various levels. The percentage of respondents rating 2.1 and above (i.e., *mostly reflective* and *highly reflective*) among different demographic groups indicates that the effectiveness of the case study school is significant. However, during regression analysis, only the demographic variable, division, was found to be statistically significant, which means that the divisional results are caused by something other than chance. If division alone is considered, the percentage of respondents indicating *mostly reflective* and *highly reflective* within various divisions still indicates that the effectiveness of the case study school is significant.

In the interviews, I asked a question about whether the survey items captured the effectiveness of the participants' environment, and 100% of the respondents replied in the affirmative. When asked about the key characteristics of a HELP environment, the following are some of the predominant characteristics identified by the respondents: a safe environment, personalizing learning, guaranteed and viable curriculum, professional learning communities, continuous growth, collaboration, student-centered, learning hubs, risk-taking, and shared mindset (see Appendix D). As part of the interviews, the respondents identified the various aspects developed in the case study school as part of becoming a HELP environment and confirmed that they were reflective of the current environment. Those aspects have been

segregated into various levels as identified by the HRS model (Marzano et al., 2014) for easier understanding (see Appendix D):

Level 1: Collaborative culture, professional learning community, supportive environment, collaborative environment, safe environment, and student support.

Level 2: learning progressive ecosystem, collaborative environment, data-informed decisions, student support, supportive environment, student-centered learning experiences.

Level 3: guaranteed and viable curriculum, conceptual understandings, trans-disciplinary approaches, teacher agency, and curricular planning.

Level 4: standards referenced reporting, benchmark assessments, learning measurement, data-informed decisions, and developmental continuum.

Level 5: personalizing learning, learning hubs, PLE_x, learning communities, competency-based, Inception, student agency, student interest, and demonstrating mastery

RQ 2: What Do International School Leaders and Teachers Say About What They Have Been Attempting to Do to Transform Their School Into a School That Can Be Considered Both Highly Effective and Learning-Progressive? How Do the Faculty From Different Divisions Perceive/Assess This Transformation?

This research question was answered by inferential analysis of the survey data and by individual interviews. The survey based on the HRS framework measures the effectiveness of a school. I initially hypothesized that the various demographic variables identified in the survey would impact the survey data. These variables included their division (i.e., the division where the respondents predominantly worked), role, gender, years of experience in education, years of

experience in international schools, number of international schools they worked at, and years of experience in the particular case study school. Contrary to the hypothesis, the regression analysis showed that only the division of the participants was a statistically significant predictor of faculty perception of Level 1: safe, supportive, and collaborative culture, $R^2 = 0.19$, $F(1, 6) = 4.54$, $p < .001$; Level 2: effective teaching in every classroom, $R^2 = 0.21$, $F(1, 6) = 4.92$, $p < .001$; Level 3: guaranteed and viable curriculum, $R^2 = 0.15$, $F(1, 6) = 3.19$, $p < .006$; Level 4: standards-referenced reporting, $R^2 = 0.16$, $F(1, 6) = 3.59$, $p < .003$; and Level 5: competency-based education and personalization, $R^2 = 0.17$, $F(1, 6) = 3.80$, $p < .002$. See tables in Appendix C for detailed regression results.

The regression results showed it was clear that only the demographic variable “division” was statistically significant. Interestingly, none of the demographic variables have affect the perception of the effectiveness of the HELP environment. This statistical significance allowed for a cross-case analysis between divisions within the case study school. Table 5 displays ratings provided for various levels by the faculty respondents from different divisions.

Table 5

Division Wise Ratings for Various Levels

Level	<i>n</i>	<i>SD</i>	<i>M</i>
Level 1: Safe, supportive, and collaborative culture			
Elementary school	50	0.72	3.51 ^a
Middle school	32	0.95	3.13 ^a
High school	32	0.96	2.84 ^b
Level 2: Effective teaching in every classroom			
Elementary school	50	0.74	3.27 ^a
Middle school	32	1.04	2.78 ^b
High school	32	0.90	2.51 ^b

Level	<i>n</i>	<i>SD</i>	<i>M</i>
Level 3: Guaranteed and viable curriculum			
Elementary school	50	0.60	3.52 ^a
Middle school	32	0.78	3.21 ^a
High school	32	0.85	2.80 ^b
Level 4: Standards-referenced reporting			
Elementary school	50	0.68	3.41 ^a
Middle school	32	0.82	3.00 ^a
High school	32	0.87	2.77 ^b
Level 5: Competency-based education and personalization			
Elementary school	50	0.77	3.35 ^a
Middle school	32	0.96	2.98 ^b
High school	32	0.91	2.64 ^b

Note. ^a Highly Reflective, ^b Mostly Reflective.

Cross-Case Analysis

The data showed there were significant differences between the divisions. As per the survey respondents, the elementary school reported *highly reflective* for all five levels, and the high school reported *mostly reflective* for all five levels. The middle school reported *highly reflective* for certain levels and *mostly reflective* for other levels. If ordered per the mean rating from high to low, the elementary ($M = 3.27\text{--}3.52$) is at the higher end, followed by the middle school ($M = 3.21\text{--}2.78$) and then high school ($M = 2.84\text{--}2.51$). The standard deviation explains the spread of the data, and the divisions showed significant differences. The standard deviation for elementary ($SD = 0.60\text{--}0.77$) was the lowest among the three (middle school $SD = 0.78\text{--}1.04$; high school $SD = 0.87\text{--}0.96$), indicating more coherence than the other divisions.

Level 1: Safe, Supportive, and Collaborative Culture

This level has three components: a safe culture, a supportive environment, and a collaborative culture. See Table 6 for the mean ratings for each of these sublevels.

Table 6*Mean Ratings for Level 1 Subcategories*

Subcategory	<i>M</i>	<i>SD</i>
Safe culture		
Elementary school	3.69 ^a	0.57
Middle school	3.50 ^a	0.69
High school	3.32 ^a	0.84
Supportive environment		
Elementary school	3.44 ^a	0.77
Middle school	2.94 ^b	1.04
High school	2.44 ^b	0.88
Collaborative culture		
Elementary school	3.35 ^a	0.76
Middle school	2.88 ^b	0.95
High school	2.86 ^b	0.91

Note. ^a Highly Reflective, ^b Mostly Reflective.

The survey data indicated all three divisions reported *highly reflective* of a safe culture, as the school has all the safety measures in place, regularly practices emergency drills, and the school leadership has been in regular touch with the local security agencies to maintain the safety and security of the school. As one faculty member put it, “Even though we were in the middle of a trend of a pandemic, and we were in the middle of a civil conflict, it made us feel like the environment was safe.”

For a supportive environment and collaborative culture, the elementary school reported *highly reflective*, and other divisions reported *mostly reflective*. The interview data also confirmed this. There was much congruence in what the elementary leadership and the faculty shared during the interviews. A leadership team member from the elementary school said, “Intentionally, we spend time building teams, we spend time having them understand one

another, we give them time to do things together and build that relationship. We are very, very involved in their collaborative meetings.” She also said, “We find ways to try to ease the stresses that come up. And we are very, very responsive in doing those . . . And I’m just telling you what I think is the reason for us being *highly reflective*.” Regarding the supportive environment, the middle school and high school faculty differed from the elementary faculty and said they were not well supported. One MS faculty member said:

They (admin) need to have a pulse of the place, and you know, they come in with an agenda, and all they do is just push their agenda, not knowing what the ground reality is and not knowing what people are going through.

In a high school faculty member’s words, “This (the environment) was intimidating enough that you had to answer things certain ways, or people were not going to create openings in order to receive retribution,” the high school environment is well explained. In terms of collaborative culture, as one of the senior leadership members said, “In the ES [elementary school], they have to work together on a daily basis with daily collaborative meetings, but in middle school, not all the teachers work in that environment, and so their collaboration time, maybe only once a week,” which helped explain why middle and high school divisions were reporting *mostly reflective*. In addition, the nature of learning environments in those divisions varied. In elementary school, the students worked in learning communities and worked together all day except during their specials, so the collaborative culture tended to be well-established. In middle and high school divisions, students worked in different subject areas with multiple teachers in a somewhat siloed environment.

Level 2: Effective Teaching in Every Classroom

This level has three subcategories: vision, pedagogy, and professional learning. The survey data indicated that in terms of vision, elementary and middle school divisions reported *highly reflective*, and the high school division reported *mostly reflective*. Regarding pedagogy and professional learning, the elementary division reported *highly reflective*, and both middle and high school divisions reported *mostly reflective* (see Table 7).

Table 7

Mean Ratings for Level 2 Subcategories

Subcategory	<i>M</i>	<i>SD</i>
Vision		
Elementary school	3.60 ^a	0.49
Middle school	3.25 ^a	0.80
High school	2.81 ^b	0.90
Pedagogy		
Elementary school	3.17 ^a	0.77
Middle school	2.69 ^b	1.03
High school	2.35 ^b	0.83
Professional learning		
Elementary school	3.26 ^a	0.75
Middle school	2.67 ^b	1.10
High school	2.58 ^b	0.97

Note. ^a Highly Reflective, ^b Mostly Reflective.

The interview data also pointed toward these divisional differences. Faculty and leadership from all three divisions confirmed that the former head of the school established the whole school vision well across the divisions. The head of the school's vision inspired the staff

members, and that inspiration has been a driving force in the school. As one faculty member put it, “When [name removed] was the head of school here, he had, like, a singular and clear and contagious vision for what it would be.” When translated into practice in various divisions, the differences came. One middle school faculty member said, “The divisional admin themselves seem to lack clarity in terms of, you know, either they lacked clarity, per se, or the way they communicated to us was not very clear.” In the words of a high school faculty member, “I think that part about the shared vision—in my opinion, I think that kind of becomes muddy in high school,” which helped explain how middle and high school divisions differed from the elementary school in terms of translating vision into practice.

Level 3: Guaranteed and Viable Curriculum

Level 3 has two subcategories: guaranteed curriculum and viable curriculum. The survey data shown in Table 8 pointed to elementary and middle school divisions reporting *highly reflective*, and the high school division reporting *mostly reflective* for both subcategories.

Table 8

The Mean Rating for Level 3 Subcategories

Subcategories	<i>M</i>	<i>SD</i>
Guaranteed curriculum		
Elementary school	3.54 ^a	0.57
Middle school	3.24 ^a	0.81
High school	2.78 ^b	0.86
Viable curriculum		
Elementary school	3.47 ^a	0.66
Middle school	3.16 ^a	0.72
High school	2.84 ^b	0.82

Note. ^a Highly Reflective, ^b Mostly Reflective.

Regarding the interview data, I noted a similar trend concerning this level. An elementary leadership member reported:

We have a core curriculum, and at the same time, teachers have a lot of flexibility as to how they use them. And when they use them, you know, there is, like, a lot of agency within that. In addition to that, because we have the support of our curriculum coordinators, they spend a lot of time working in all areas of the curriculum, not just the PYP [primary years program] curriculum, in math, reading, and writing; they are very much involved in that.

In middle school, a faculty member said:

I mean, last year, we were using common core state standards, but now we use the MYP [middle years program]; it is not specifically using common core. Instead, we are using a variety of standards. I would say that so far, it is very effective.

In high school, the faculty had mixed feelings about their curriculum. They have a set International Baccalaureate (IB) diploma program, but for the other grades, the alignment of departments was inconsistent. A high school faculty member mentioned, “In terms of the highly effective (learning-progressive approaches), I do not think we made many changes. We just revisited the Next Generation Science Standards (NGSS) curriculum and made sure that it was aligned.” A senior leadership member said, “We have not reached the level of a guaranteed viable curriculum.”

Level 4: Standards-Referenced Reporting

Level 4 has two subcategories. One is the clear and measurable goals for individual student achievement, and the other is data use. Regarding goals, the elementary school reported being *highly reflective*, and the middle and high school divisions reported being *mostly reflective*.

The middle school is closer to being *highly reflective*, considering the mean rating. Regarding data use, both elementary and middle school divisions reported being *highly reflective*, and the high school reported being *mostly reflective* (see Table 9).

Table 9

The Mean Rating for Level 4 Subcategories

Subcategories	<i>M</i>	<i>SD</i>
Clear and measurable goals		
Elementary school	3.24 ^a	0.74
Middle school	2.97 ^b	0.78
High school	2.75 ^b	0.88
Data use		
Elementary school	3.58 ^a	0.57
Middle school	3.03 ^a	0.86
High school	2.78 ^b	0.87

^a Highly Reflective, ^b Mostly Reflective.

The interview data displayed apparent differences between the elementary and other divisions but only a little difference between the middle and high school divisions. An elementary school leadership member pointed out a reason for their growth, saying:

We grew to understand how to articulate that individual child as a learner in relation to our learning objectives by just being really clear and nonjudgmental. Because even in some of the statements, you know, you want to be objective, not subjective.

An elementary school middle-level leader said about goal setting, “I do not think any of us really sat down and coconstructed the goals. You know, I think we did it as a team because everything we did was as a cohesive unit.” Another elementary leadership member added, “I

would say our standards-referenced data comes from the MAP. And our teachers need a lot of guidance, and they get guidance from the ES leadership team to interpret that data.” A middle school faculty explained:

You know, whatever standards we get identified as the power standards for this school year as part of the viable curriculum, and that is what we reported on, on Power school, our student information system. So that way, it was kind of guaranteed that these were the standards that we addressed. And these are the standards that the students have been assessed on.

Another middle school faculty member explained the goal-setting process, saying:

As a team of math or design or language, we have the students we know every single student in depth, then we flag the ones that need higher support. Based on data, we will look at all the data, we are looking at all that social-emotional, where were they, when they came, what happened and where they have been, or have they been out sick? What is not right? . . . So having that roadmap—our data actually build the roadmap. And then we have the students. And the collaborative teams, we come up with a plan.

A high school faculty member said:

The standards reference reporting help measure individual student achievement. I mean, I think that is the way it should be done. Students can see where they are, teachers can see where they are, and then we plan all the strategies according to that. So that is really the baseline of our practice.

A middle-level leader in the high school said this about goal setting:

The curricular goal has been the same goal for multiple years, which is okay, power standards, and, you know, designing assessments around them, but right, if that is the same goal for 4 years, that would indicate what is happening.

The middle-level leader continued with the standards-referenced reporting:

That does not happen in high school—[High school] is expected to use your professional judgment to come up with a number, and they [faculty] have the data to back up that number. How you arrive at that number and what standards that number refers—is not clear.

Level 5: Competency-based Education and Personalization

Level 5 is divided into four subcategories for ease of understanding. They are competency levels, pacing, extension, and personalization. The survey data displayed that the elementary division reported being *highly reflective* for all four subcategories, while the middle school division reported being *highly reflective* for extension and personalization and *mostly reflective* for the other subcategories. The high school division reported being *highly reflective* only for personalization and *mostly reflective* for other subcategories (see Table 10).

Table 10

Mean Ratings for Level 5 Subcategories

Subcategory	<i>M</i>	<i>SD</i>
Competency levels		
Elementary school	3.18 ^a	0.77
Middle school	2.81 ^b	0.96
High school	2.50 ^b	1.05
Pacing		
Elementary school	3.38 ^a	0.81
Middle school	2.81 ^b	0.99

Subcategory	<i>M</i>	<i>SD</i>
High school	2.53 ^b	0.98
Extension		
Elementary school	3.32 ^a	0.84
Middle school	3.00 ^a	1.07
High school	2.47 ^b	0.80
Personalization		
Elementary school	3.52 ^a	0.65
Middle school	3.31 ^a	0.69
High school	3.06 ^a	0.67

^a Highly Reflective, ^b Mostly Reflective.

In terms of interview data, elementary teachers reported they followed comparatively advanced ways of measuring competence, supporting pacing, providing extension, and personalizing learning through their hub communities. The elementary principal reported that they “have a great deal of personalization in the units of inquiry where students can develop their own lines of inquiry, can pursue their interest in, you know, sort of like a PLE_x model that you are familiar with.” PLE_x is a personalized learning model implemented across the case study school in various formats. In middle school, one of the faculty members said:

PLE_x is for all grades, and everybody had to do it no matter what, and they (students) had the freedom to choose anything that interested them. So, there was that flexibility.

Students could choose whatever they were interested in pursuing, but it should still follow certain criteria and should be something that is achievable. And you know, it was fantastic.

The faculty member continued:

They personalize learning through the hub model in the middle school as a math teacher, and students were given an opportunity to just, you know, show mastery of the standard; if they did not show mastery early on, then there will be timely intervention, and they will be given the support until they show mastery.

The middle school piloted hubs for Math and Humanities. The other classes were run in the traditional format, except those teachers teaching the same subject in a grade level collaborated. A high school faculty member reported that “the Inception program, which is entirely based on student interest and charges them to go beyond the regular school curriculum and kind of follow their passion.” Another member said:

I think it is very personalized learning. We take students where they are, offer them opportunities to enrich or reinforce according to their needs and make sure that they are all reaching the standards or exceeding standards. I think this vision is quite clear in every teacher’s mind. You know, standards and rubrics are in place for us to know to do that, so I think extension, enrichment, and interventions are just strategies we use to make this a reality.

Another high school faculty member highlighted the absence of hubs or the coteaching model for not being able to support pacing and extension in the regular classroom, saying:

When I have groups of 12 students, I feel very powerful. And I feel that I am doing a good job in this HELP environment. (If I am a single teacher in my classroom of 23 students (my largest group this year), and I do not feel so powerful.

Similarly, as per the interview data, the divisions differed greatly in how their leadership approached HELP implementation, which led to varied outcomes in the divisions.

RQ 3. According to Those Who Work in a HELP School, What Have Leaders Done And Continue to Do to Encourage Effective Implementation of the HELP Characteristics From a HRS Perspective? How Do the Faculty Perceive These Leadership Practices and Act Upon Them to Effectively Implement Those Characteristics?

Schools that envision becoming HELP environments undergo a fundamental change in how they deliver learning compared to the traditional mode of delivery. It is a paradigm shift for the faculty and leadership involved in enabling these environments, as their training and experience have been with traditional schools. This section describes a school's attempt to become a HELP environment and explains the perspectives of the faculty and leadership from an HRS lens. This section also highlights what leaders did to encourage faculty members to implement the HELP approaches effectively and how the faculty perceived and implemented them in their classrooms, including how the leadership practices enabled or disabled the successful outcomes.

The previous head of school was the one who brought this HELP vision to this case study school. According to one of the leadership members:

He [head of school] brought a lot of inspiration through his vision and made a sort of moral argument, which was that if you do not do that, then you are not a good person, and you are not a good educator.

That moral argument found a strong resonance among the faculty members, and they subscribed to the vision very well. From an elementary leadership perspective:

Also, a lot of work happened, not just from, you know, way up [from] the director . . . but even going down toward the principals and the deputy principals at that time and so forth. There was a lot of passion around it, and that passion kind of spread.

This passion helped to develop excitement among the stakeholders, the faculty in particular. The elementary leadership team member continued:

The leadership and the support of the leadership, the vision of the leadership, the ability of the leadership to inspire and to motivate people to get into this and to consider it . . . that was a strength that we had.

This vision and support brought a lot of change to the school. A senior leadership member said:

I think the biggest change overall is the change in the pedagogical mindset. The thing is, you have to change. You can tell people they got a new job, and you can give them a new classroom, but they will not change anything until you change their mindset.

The leadership was able to communicate the vision with clarity and was able to explain how the vision would affect instructional practice and, ultimately, student learning. The leadership also made it clear where the school was heading. In one of the faculty members' words:

They [leadership] were very clear; once they got going with that, it was not negotiable. There was a real clarity of expectations. And they were willing to say to the faculty, "If you do not want to do this, then it is okay for you to move on from [the case study school]."

This showed decisive leadership, which communicated the change effectively. "The leadership did a lot of vision casting," said a senior leadership member, and:

Did a lot of work around teaching, a lot of work around educating, a lot of work around PLC; he [head of school] did a ton of videos that were consistent, constantly shared with the staff, and allowed the staff to kind of gain a better understanding.

The school organized several workshops on the professional learning communities (PLC) at work model and organized research and development (R&D) trips for faculty members to visit

other schools and learn new ideas related to the HELP environment. The R&D teams developed some pilot initiatives to try and implement HELP approaches. The school supported them. A senior leadership team member said, “And then, once that pilot class was up and running, we gave that class a lot of support. So, they needed a ton of support because they were diving into something new.”

Leadership Approaches

After the schoolwide vision casting, the divisions developed further the HELP approaches, such as PLC culture, guaranteed and viable curriculum, standards referenced reporting, and personalization. They implemented them in a way that worked for their learning environments. Among the three divisions, the elementary division has implemented these approaches effectively, as per the survey analysis. Here are some of the leadership approaches that emerged during the interviews, which the elementary division implemented.

Developing a Dynamic and Responsive Leadership Team. The elementary leadership developed a team consisting of a principal, a deputy principal, three coordinators, and learning coaches to be very dynamic, listen to situations on the ground, and support faculty and students. The elementary leadership team adopted a coaching model to support the faculty. One of the elementary leadership team members said:

Having a coach or a curriculum coach [role] . . . one of our major jobs was to go in and facilitate teams in collaborating around first, like articulating our curriculum, then looking at student work, responding to it, and doing that all as a team. And because of the role, it [the support] happened, and it often happened because there was some accountability there.

Having midlevel leadership really helped elementary leadership to support faculty very well. A midlevel leader in the elementary school said, “In terms of having the role of the midlevel leader, I think that role is so crucial. I am no longer in a midlevel leadership role the same way. But I think that is key.” The faculty perceived this support well. One of the elementary faculty members said:

Principals come in to see our work as well, so holding us accountable is one thing that they are doing, and also providing coaches and learning instructors/learning coaches is also something that we are doing well.

Establishing a Safe and Supportive Environment. The environment in the elementary division was open, safe, and supportive. This environment promoted risk-taking and the learning process included making mistakes without retribution. Here is what an elementary leadership member said: “Taking risks - we take risks, and it is not always successful, but we believe in mistakes like that. That is what learning is - right? You are not punished for making mistakes. Basically, you learn from it.” The outcome of this approach was the development of a trusting environment. The faculty could express their opinions openly without any retribution, and they could seek help when needed. An elementary faculty member confirmed this by saying, “Right. If you make a mistake, the attitude is, well, we learned from our mistakes. And that is, you know, that is what we do.” The same faculty member continued:

Know anything about Story Workshop? I had never ever worked with that before. Yeah, but I was encouraged to try, and I was in, and I had somebody besides me saying, Oh, yeah. Or I loved the way you did that, or I have done this before; you might want to try next time.

This environment encouraged elementary faculty to try new instructional practices in the classroom and reflect on them as a team.

Building a Collaborative Culture. “If you want a trusting, highly collaborative work environment, then you need to model being trusting and highly collaborative,” said the elementary school principal, who continued, “We identified some key working agreements on the ES [elementary school] leadership team and shared them with all the other teams, and that included one of the guidelines—we talk to people and not just about people.” The elementary school principal also said, “We frontload at the beginning of the school year with sort of a curriculum of relational trust exercises, protocols, that we encourage these team leads that we are training to use with their team.” The elementary division has learning hubs where multiple faculty members work with students and have gone away from single-teacher classrooms. As multiple adults work together, it is important to maintain the right kind of team dynamics and to develop a collaborative culture to enhance collective teacher efficacy. This approach has helped to build strong teams in elementary school. An elementary faculty member explained:

We also have embedded time for the collaborative meetings; we do get held accountable for most of the things that we do, which really does keep us on track. And also, working in a hub would make you be like, become responsible, like what you do, and you always have to have check-ins. And if there is a fallout, somebody would definitely be jumping in and supporting us.

The entire school has a PLC structure embedded in the work culture. Specific times are allocated in the schedule, and the faculty meet as PLC groups for at least 1 hour per week. The PLC has grown in the elementary school, and they meet daily to work on various aspects of student learning. This was explained by an elementary leadership team member, who said:

Intentionally, we spend time building teams; we spend time having them understand one another; we spend time/ we give them time to do things together and build that relationship. We are very, very involved in their collaborative meetings. We are very involved in that. We were in the classrooms a lot . . . the support in terms of manpower because we have our deputy principals, we have our PYP coordinators, and we have two PYP coordinators, which is more than most schools have.

Developing the Division as a High-Functioning Team. The goal of the elementary leadership was to develop the division into a high-functioning team. An elementary school leadership member felt that “leadership that is very coherent, on one end, can bring about cohesion within this organization and will certainly help.” Another key goal is modeling the values in day-to-day actions. As the elementary school principal put it:

One of my values is trust and, like, what it means to have trust in the team. And if you can say to your principal, like, I do not like the way you did this, it did not work for me, you know, and then sign your name. I feel like it is still working.

Another leadership team member said:

When we go, we build trust, and we share the good things that we see. And then we say, hey, how can we support you? I noticed X, Y, and Z; how can I support you? Here is some coaching. Can I coach you on this? Can I help you with this? So that is kind of how we approach it. It is not like a top-down, you have to do this, you have to do this. Let us do this together; how can we support you? How can we help this team? Again, how can we help these students learn better? So that is kind of how we approach it.

The elementary faculty view these practices positively, and they are in sync with these approaches. As one faculty puts it, “What you are really good at, somebody else is not, and what

they are really good at, you might not be, and that is why we work in teams, and I had never experienced that before.” She continued:

The other thing is an investment of administration in the staff. And I do not mean that in a financial way in any way. I mean that in a personal investment of knowing whom you have on your team, and what strengths they bring, and what kind, in order to move us to this common vision that we are all sort of moving toward, and I see it really.

Other Divisions

The resources available to all the divisions were the same, and the whole school’s approach toward HELP was the same. The divisional leadership was responsible for using the resources to gain the most out of them. The school implemented PLC approaches across the school, providing time and resources. The middle school piloted learning hubs in two subject areas: math and humanities. The high school piloted math and foreign languages. In addition, the high school developed a program called Inception, where students can pursue a path, choose the subject areas that interest them, and graduate with a school diploma. The high school also had an IB diploma program. There were some natural constraints for the middle and high school in developing a collaborative culture due to its learning environments. As one middle school faculty put it:

Mostly reflective makes sense because you start to become more specialized in fields when you start moving up into middle school and high school. And so the support is there, but maybe not as personal or impactful as it could be.

A high school faculty member put it differently:

When I see the teams in elementary in the hub model, having to just meet all the time, discuss students all the time, be together all the time, share the knowledge, and share the space, I think they are becoming very good at it, being immersed in that environment.

Leadership beliefs and approaches also play a role in this. The middle school principal said:

I am from the belief that no one has become a better teacher because I have supervised them. Okay. I seriously do not believe in building learning cultures; I believe in team-setting goals. I believe in the healthy pressure of team goals where everyone has agreed on a goal. And everyone now has to kind of bring the evidence to the table. And there is a healthy kind of pressure for the team that now we need to do something because the whole team is watching and learning from each other. That is what I believe in.

Given this belief, the leadership approach was quite different from the elementary school approach. A middle school faculty member articulated the difference in the leadership approach, saying:

What we got from the leadership was, you know, you should go in and then pilot the hub model; that is all we got; we would have appreciated it, if the leadership kind of gave us a little bit of an insight into what the hub model was all about, and what the leadership was envisioning.

The faculty member continued, “Among the faculty, there is always, you know, a desire to just collaborate with each other; there is openness and everything, but then there is not that much of a collaboration, you know, from the admin.” Another middle school faculty member puts it like this:

There were kind of two different eras, in my opinion, of the leadership in the middle school, I feel like the initial era was the vision was set from the leadership of being progressive. And that vision was set out there. And the teachers were kind of like what you are saying about bounded autonomy. The second half of my time in middle school was more, I guess, kind of. I mean, the vision was kind of explained. But also, I do not know how clearly the “why” was explained.

The high school division’s experience was very different. As one of the high school faculty put it:

I think the high school vision really existed and was from the whole school vision, but no one really wanted to follow that vision because it was presented in a way that was not positive. So, I think everyone disconnected from there. And even if the vision existed, I do not think anyone really bonded to it . . . there were so many interferences to it that it was never really carried out or adopted by the faculty in high school. There was a disconnect between the leadership and faculty.

A midlevel leader from the high school said:

There was a lack of follow-through; the principal was not leading conversations with the curriculum coordinator or the coach or whatever; we had a deputy principal, you know, those of the leadership back then, they were not able to either create a system or able to get the (buy-in from) teachers.

The environment was not conducive for faculty members to express their opinions or concerns. The midlevel leader explained, “This (environment) was intimidating enough that you had to answer things certain ways, and people were not going to create openings in order to receive retribution.” The divisional leadership played a role in translating the whole school vision in

their divisions in multiple different ways, which were sometimes optimistic and sometimes not that positive, according to the responses.

RQ 4: What Problems Arose During the Transformation Process to Be a HELP School, and How Were These Problems Addressed and Managed?

The leadership and faculty pointed out the problems that arose in several areas during the transformation process, which the leadership had to resolve. Here are some mentioned during the interviews.

Teacher and Student Mindset

Teachers who have been trained and experienced in just ticking all boxes in terms of covering curriculum may need help understanding the opportunities a learning progressive environment provides. The teachers need to have an open mindset to explore and use the opportunities that emerge organically in such an environment. As one of the elementary leaders pointed out:

I think that in order to have a highly effective learning progressive school, there need to be teachers who understand the role of voice and choice with learning, which I think starts to take it toward more learning-progressive, but also understand the role of a well-articulated curriculum.

Another elementary leadership member pointed out that people wanted to maintain the status quo:

Because this is the kind of stuff that, you know, it is new, you know, there is not a lot of data out there. There are not a lot of people doing it. And so for people to jump in and say yes, I can do this, it takes a little bit of courage. It takes a little bit of adventurous spirit, it takes a bit of risk, you know, and not everybody is up to that. Yeah, some people are

happy with the status quo, and because it is, you know, it is a new thing, and I think we for many years, as educators, we used to be teaching in our own way, there was not a lot of collaboration.

The leadership faced resistance, and they had to work their way through in making them understand that this is one of the good ways to teach, as a middle school leader pointed out, “Getting everyone on board. And, you know, having that belief that this is one of the ways, that is one of the good ways to (teach), while the research speaks for it, in very many ways.” When the leadership tried to educate the faculty, as a high school faculty member pointed out:

There is a lot of passive aggressiveness or a lack of willingness to engage, or, you know, in the meeting, people might change and like one or two teachers might leave the meeting and be like, “Oh, that is new.” But then everyone reverts to the same practices.

The change was slow, but leaders were steadfast and were very clear that this would be the direction for the school and provided the support needed, as one of the senior leaders explained:

Working with people personally, encouraging people personally, educating them, getting people to clarify their thinking, push forward in their thinking in smaller, even larger teams. Also, one of the most significant things was changing the job description and salary benefits of the teaching assistants because their role changed from being an assistant to a teacher to being a collaborator in the hub. We also changed the schedule to allow teams to meet more in their collaborative teams.

Regarding student mindset, some students did not take the personalized learning process so seriously; as one of the middle school faculty pointed out, “This is not as meaningful as a written test. They can kind of not take it as seriously and be focused more on things instead of the learning process.” Similarly, the high school students did not take the Inception approach so

seriously. A high school faculty member said, “They might not buy into it because the assumption is like, if you are academically weak, you do Inception.” Inception was an alternate pathway introduced in the school for students to pursue their personalized learning paths. The leadership had to work hard educating the students and parents on how this really helps them learn.

Pedagogical Conflicts

When a school changes its pedagogical approach, it faces specific challenges. As the elementary principal said:

It is easy to throw the baby out with the bathwater in terms of traditionals, the like, self-contained classroom where you have one teacher and a group of kids, that can be really negative in terms of opportunities for personalization, and differentiation, but it can be really positive in terms of pastoral care if the children have a good relationship with their teacher. And so that is a structure that is challenging for us to come up against. And teachers are accustomed to having their own space, their time, and their own group of students with whom they form these close bonds. And so there are a lot of growing pains.

She continued to explain how she resolved it, saying:

In the hub model, we have a personalized learning advisory, so that is where the children start their day in the morning, meeting with their group homeroom teacher. So we ended up having to, you know, make sure that we are really intentional about building relationships.

Another challenge was related to changing the approaches for younger kids. The challenge here is that teachers cannot change everything because they are responding to new shifts. There are certain aspects that are consistent in children’s lives, and as a school, teachers

need to cater to that. This aspect was pointed out by another leadership member from the elementary school who said:

Our 3 year olds now are very similar developmentally to our 3 year olds, like 50 years ago, in terms of, you know, like their gross motor development, and you know, linguistically and cognitively. So I do not know, I have the answer. Given all these things, what is tricky is that we are trying to respond to some of the shifts that need to happen . . . but some of the other things that we know are going to continue being consistent in children's lives.

The IB Diploma program is an intensive, time-bound program where students must cover the syllabus in 2 years and sit for a written exam. Therefore, bringing in learning-progressive approaches was a challenge. A midlevel leader in the high school pointed out:

DP [diploma program] has its own thing and momentum, and whether or not we are doing the DP well, you could make the argument either way, or both ways, is you have this test that is pretty retrograde in terms of like by hand, memorization, all right, and we are all doing the same thing. You have teachers who are succeeding at preparing kids for that test and the way that they are, but they are not doing that necessarily, in learning progressive ways.

Another high school teacher said:

Well, they have to sit for paper exams, IB exams, yeah. That means you have to cover the curriculum within those 2 years. Sometimes you have to intervene and change your pace and teaching style, and usually, it is going back to direct teaching.

The school created an alternative to the DP [diploma program], where students can pursue their personalized learning pathways based on their interests, leading to a high school diploma.

The elementary principal explained the following challenge:

I would say there is more frustration around pedagogical practices in elementary school than anything else. During the school day, practices are really varied. And the levels of satisfaction around those practices are also really varied. And so I would say it is definitely translating into like, you know, progressive and innovative practices, but whether everybody is secure and feeling that those are best practices is a question.

In order to support teachers feel secure about their practices, the school has been organizing R&D trips to schools that are pursuing similar approaches for teachers to interact and learn from each other.

Another challenge was related to the hub size. A senior leadership member said:

When you have four sections, that could be up to 80 students, it becomes more difficult to keep track of everybody. And, of course, to be personalized, you need to keep track of everybody for data reasons, for natural reasons, for everything else. So, one of the challenges is that we are a four-section school. And that has an additional level of challenge to implement hubs than perhaps a smaller school would.

Teacher and Student Understanding

The level of understanding of HELP approaches by teachers and students posed another challenge. A leadership member pointed out:

The prior ways of teaching and learning, and also how they learned themselves, sometimes can get in the way of working toward a HELP environment. And I think that is the biggest thing to overcome and probably the hardest. If previous ways of teaching and learning have been that, I just need to sort of get through this material and tick all these boxes in the standards without seeing how you can still have a lot of hands-on

learning and student voice within these things and how they fit together, I think that leads to disagreements among teachers on a teaching team and leads to not having clear understanding across everyone with what we are doing. And then I think it prohibits growth.

A senior leadership member said:

In the elementary school, the hubs are working. Okay. But I think that there is still a bit of teachers holding on to, you know, their own group of kids on their own. They are not quite coteaching at the level we wanted to.

Another leadership member pointed out:

I think there are many pieces of personalization that people yet do not really understand, what that word means, and that is why we were not able to actualize it. It was a lack of understanding not just across the teacher body but even across the leadership.

To explain the problem better, a leadership member said:

In terms of leadership, the part that was the most difficult was translating the vision, which everyone signed up for, into the practice, which everyone struggled to do.

Everyone says, yes, I want to do this; how do I do it, and every teacher is different in how they do it. And that becomes challenging, and the professional learning part is that I cannot just send you on a course to learn this; you have to figure it out. And that is against, you know, the current traditional model.

In terms of students understanding the HELP approaches, one high school faculty member said:

I mean, starting 2 years ago, there is this study hall that came into our schedules in high school, so they are supposed to be independent and personalized learning time. And it has been very much misused by the students more than anything else.

A middle school faculty member responded:

Students, you know, will take some time to fall into that practice of taking responsibility for their own learning. Taking student agency did not happen right away on Day 1; you know, it is a culture; you have to invest some time, you have to be patient, you need to be counseling your students, and you need to be constantly coaching your students to help them understand what they should be doing.

Faculty Turnover

In international schools, faculty turnover is high, affecting the transformation process in various ways. A senior leadership member pointed this out when saying:

Another big challenge for us, specifically as a school, is that we have a high transition of teachers, which really is a struggle for us because the learning curve is high. Team dynamics is an essential part of an effective working team. And, if we have high transitions, you lose both the knowledge and the dynamics on a regular basis.

He explained further:

All of those staff that we trained for 2 years to be ready then could do it. And by the time COVID stopped, half of them had left because we have a high transition here. And then we are currently faced with a lot of staff who kind of know what they are meant to be doing. But they have not had a chance to implement it, trying to teach staff who were coming in who want to do it, but do not know how. We are a bit of the blind leading the blind in the best possible way.

An elementary faculty member said:

One of the things that I noticed happening is a high teacher and administrator turnover. Many ideas of what you would want, you know, like, would be transitioned, and people

would have different viewpoints of personalized learning and collaborative learning and others.

Similarly, the leadership turnover caused much more damage than others. A leadership member pointed out:

Creating a guaranteed and viable curriculum can take you years to do it in the usual way. And then, one of your curriculum coordinators changes, or the Head of the Office of Learning changes, and then you know, you are in a different direction.

An elementary faculty member said:

We lost a person who had a clear vision of where early years could be highly effective [and learning progressive]. And the person that came in, she did not have that vision. The new people that have come into the early years this year were hired for, had been in environments that were highly progressive, but without that clear vision, they are not being encouraged to continue to move us in. In fact, they are being told to back off. And I can tell you right now; they will not stay. They will do their 2 years, and they will get out unless things really, really change, unless that vision is clear again, which is sad.

A senior leadership member added:

Once you lose the head of school, who is the visionary sort of lead and has sort of like having a knowledge background, and then if you theoretically lose the deputy head of school, you actually put a lot more stress on the system.

Then, the whole direction of the school changes, as a high school faculty member reasoned, “When a new administration comes in, it always brings in something new . . . instead of building up from what is existing and improving it.” The case study school has managed the faculty and leadership turnover in multiple ways. Apart from training, the school made sure that at least one

person per grade level stayed with the school for a longer time by hiring a local or a foreign hire with local grounding. An elementary faculty member explained this, saying:

At least one person per grade level to help support, you know, because you can only do so many training sessions at a time, but the person who was working with you on the ground should know what that looks like, and what that feels like, on the ground. When it comes to the nitty gritty, somebody has to know, and that has been helpful. That is how we are training each other.

However, the turnover has created some learning loss, and especially when leadership turnover happened, the effect was significant.

Conclusion

The four questions covered what an international school attempting to be a HELP environment looked like when assessed using an instrument based on the HRS framework and the leadership practices that enabled it to implement the environment effectively. The HRS framework, which was employed, measures the effectiveness of a school. As Marzano et al. (2018) stated, “At its core, a high-reliability perspective involves monitoring the relationship between actions an organization takes to enhance its effectiveness and the extent to which these actions do, in fact, produce the desired effects” (p. 29). The questions highlighted the importance of a safe, supportive, and collaborative culture; the presence of effective teaching in every classroom; the provision of guaranteed and viable curriculum; assessment based on standards; and providing student voice, choice, and personalizing their learning in enabling a HELP environment and how faculty and leadership assessed the effectiveness of such an environment. These questions also focused on the challenges faced by international school leaders as they attempt to transform their school into a HELP school, such as faculty turnover, teacher and

student mindset, teacher and student understanding, and the complexities of overcoming traditional educational structures in enabling a school to become such an environment. The questions further explained how leaders' attitudes and approaches affected the transformation, especially how a robust leadership team effectively translated the HELP vision into practice in a division. Though it is a case study of one international school, it highlights the issues and challenges international schools commonly face. The next chapter focuses on a contextual analysis of the case study school, specifically on the leadership practices that enable international schools to effectively implement HELP environments and how to sustain them from an HRS framework perspective.

CHAPTER FIVE

DISCUSSION OF FINDINGS AND CONCLUSIONS

Chapter 5 discusses the overall findings regarding the four research questions and offers several suggestions and recommendations based on those findings. This chapter also reviews the clear leadership practices key to enabling international schools to become highly effective learning progressive (HELP) environments from a high-reliability schools (HRS) framework perspective that were identified through this study.

This research aimed to describe a school that was transforming to be a HELP school using the HRS framework and the leadership practices that enabled it to become one from an HRS perspective. This study employed a mixed-method explanatory sequential design. It used an international school as a single case to use this design. This single case study involved an embedded multiple-unit analysis approach within the single case study (Yin, 2018). This study focused on a single international school and treated the different divisions (i.e., elementary, middle, and high school) as cases. This study then compared and contrasted the divisions with each other, including how leadership impacted the development of HELP characteristics within the different divisions from a HRS perspective. The HRS perspective focuses on five levels: (a) a safe, supportive, and collaborative culture; (b) effective teaching in every classroom; (c) guaranteed and viable curriculum; (d) standards-referenced reporting; and (e) competency-based education, which fits nicely into a HELP school. See Table 2, which explain how HRS fits nicely into HELP aspects and why I selected this framework for this study. Survey data from 120 faculty members, three focus group interviews, and 15 individual interviews involving faculty and leadership from different divisions provided answers the following four questions:

1. What does an international school attempting to exhibit both highly effective and learning progressive environments look like when assessed using an instrument built from the HRS framework?
2. What do international school leaders and teachers say about the effectiveness of what they have been attempting to transform their school into a school that can be considered both highly effective and learning-progressive? How do the faculty from different divisions perceive/assess this transformation?
3. According to those who work in a HELP school, what have leaders done and continue to do to encourage effective implementation of the HELP characteristics from a HRS perspective? How do the faculty perceive these leadership practices and act upon them to effectively implement those characteristics?
4. What problems arose during the transformation process to be a HELP school, and how were these problems addressed and managed?

The first two questions captured what the case-study school environment looked like, and its overall effectiveness, using the HRS framework lens, and Questions 3 and 4 captured the leadership practices that enabled its overall effectiveness. The survey used the HRS framework, which studies the overall effectiveness of a school (Marzano et al., 2014). The interviews also were based on the framework to capture the HELP characteristics and the leadership practices that enabled the effective implementation using the HRS perspective. This framework formed the basis for the discussion in this chapter. The survey data were analyzed using regression analysis, revealing statistical significance. Statistical significance is a determination that the relationship between two or more variables is caused by something other than chance (Gallo,

2022). This significance of divisional data indicated the differences expressed in the survey data could be explored further through a cross-case analysis and interviews.

Level 1: Safe, Supportive, and Collaborative Culture

Safe culture means the staff members, including faculty, students, and parents, feel that a school is a safe place with safety systems and all the needed safety protocols (Marzano et al., 2014). For example, the school has emergency management procedures practiced by staff and students and updated regularly. In addition, the school leaders communicate routinely with parents about any incidents, and they seek the support of external agencies to maintain the safety and security of the school. This definition reflects the literature regarding the HRS model (Marzano et al., 2014). These aspects are essential for any school, including HELP schools. A collaborative culture is foundational for a HELP school and reflects all characteristics of a professional learning community (PLC; Stuart et al., 2018). The survey respondents from all three divisions reported that these characteristics were *highly reflective* in their divisions. Interview data also confirmed that the stakeholders felt that the school was safe and that all the needed protocols and procedures were in place.

In a collaborative culture, teachers regularly meet as PLC teams to address common issues related to curriculum, assessment, instruction, and achievement of all students. The PLCs have specific goals and a structure to make teacher collaboration effective. Data use is widely present in the school to make curriculum, assessment, instruction, and student achievement decisions. Also, teachers have input in the decision-making process of the school initiatives. The school has systems in place to collect feedback from teachers, students, and parents regarding the optimal functioning of the school. The collected feedback is analyzed and shared transparently and needed action is taken based on the feedback (Marzano et al., 2014).

The survey data displayed differences on these aspects between the elementary school and other divisions. All divisions had a strong PLC structure in place, but the impact of the PLCs differed between elementary and other divisions. One of the main reasons cited was because of the nature of the learning environment in middle and high school divisions compared to elementary. The elementary school had learning hubs for all grade levels, and those hubs made collaboration between faculty easier and more effective. In contrast, in the middle and high schools, the learning environment is predominantly divided by subject areas and specializations. They were piloting two hubs at this time, within predominantly siloed learning environments. Data were used in all divisions to make curriculum, assessment, instruction, and student achievement decisions.

Strong midlevel leadership in elementary school supported collaboration. The elementary school leadership intentionally built teams and trained faculty in relationship building. This approach is in line with what DuFour and Marzano (2011) who stated: “The time principals devote to building the capacity of teachers to work in collaborative teams is more effective than time spent attempting to supervise individual teachers into better performance” (p. 60). Clear structures were in place to support collaboration, including structured time and clear expectations. The learning hubs supported collaboration and team dynamics in a big way. Support and modeling collaboration was part of the expectations of the elementary school leadership team. The faculty concurred that this approach enhanced the collaborative culture in the elementary school.

In middle school, the PLC structure provided for collaboration and meeting time. The leadership expressed that they valued collaboration. The faculty also said they valued collaboration among their peers, but there was a general feeling that the leadership should have

done something to promote it other than the meeting time provided. They also felt that the hub model promoted collaboration. The leadership and the faculty agreed that the time to meet with each other was difficult, apart from the scheduled time. However, the leadership did not do much to promote the hub model to enhance collaboration and address the lack of meeting time.

In high school, the siloed subject areas and singleton subjects did not provide opportunities for teacher collaboration. The faculty were eager to collaborate, but the leadership did not support it. Collaboration happened within departments in whatever way possible during the planning times.

In middle school, the faculty had mixed feelings about voicing opinions, and some felt unheard and put down, so they did not feel safe expressing opinions. In the high school, there was a breakdown in communication between the faculty and leadership resulting in the faculty feeling unsupported, unheard, and unsafe in expressing their opinions.

In terms of voicing opinions by faculty and stakeholders, formal ways were available in all divisions, but in the middle school and high school divisions, faculty members felt they experienced repercussions when expressing their opinions. The absence of openness and the lack of freedom to express opinions freely in middle and high school were reported as significant issues during interviews.

In a supportive environment, the school leaders acknowledge individual, team, and divisional accomplishments and openly celebrate them regularly. The school leaders also provide and manage the fiscal, operational, and technological resources effectively to support teachers to maximize instruction. The leaders prioritize time and effort to maximize the focus on instruction. The leaders also support teachers with appropriate training to use the resources effectively (Marzano et al., 2014).

The survey data displayed a difference between the elementary school and other divisions regarding the supportive environment. The interview respondents also expressed specific differences in those divisions. Elementary school leadership believed that mentoring people required much support and care. The way the leadership team facilitated support reflected this belief. The faculty felt well supported. The hub model promoted team building and relationships. The robust leadership team focused on capacity building to promote that. Trust was an expressed value in teams, and leadership modeled collaboration and support. This leadership approach connected with the literature well. Muhammad and Cruz (2019), when describing the role of a transformational leader, said that people needed to connect with their leader on a personal level; they needed to know that the leader had an emotional connection to the purpose rather than just an intellectual one. The faculty concurred with this approach, which encouraged them to join the team.

Elementary faculty felt they were well supported and their accomplishments celebrated. In middle and high school, the faculty felt acknowledging individual and team accomplishments was superficial and lacked sincerity. However, those divisions felt well supported with resources. This showed the middle and high school divisions had all the needed resources, but effective implementation was an issue.

Leadership Practices

Marzano et al. (2018) described Level 1: safe, supportive, and collaborative culture as foundational – “If the faculty and the stakeholders do not believe that the school is safe, supportive, and collaborative, they will spend their energy trying to meet these needs and not focus on student learning” (Eaker & Marzano, 2020, p. 11). Leadership has an important role, and the differences in the ratings among the divisions strongly connect to the presence or

absence of effective leadership. A strong leadership team with modeling collaboration and support as an expectation has helped the elementary school accomplish its mission. This approach was very much in line with what DuFour et al. (2016) said: “The creation of a guiding coalition or leadership team is a critical first step in the complex task of leading a school” (p. 15). In addition, feeling the pulse of the division, providing the needed support, modeling values in action, making people understand expectations, and adhering to the agreed norms were the practices that enhanced their work culture. On the other hand, the absence of trust, lack of openness to express opinions, transparency, and top-down leadership were practices that harmed the middle and high school divisions. When the faculty and leadership reflected on the leadership practices that enabled or could have enabled this level, the following were some of the practices highlighted by them:

- leads with a strengths-based perspective
- treats people with dignity and respect
- expresses confidence in people’s abilities
- supports stakeholders by providing guidance and reflection
- supports stakeholders when they face challenges
- actively listens to diverse points of view and takes appropriate action
- creates an environment where people feel safe and can take risks
- develops cohesion and improves the understanding of goals, including implicit ones
- establishes systems and procedures
- supports teams in developing comprehensive and supportive work environments

The list of leadership practices highlights the importance of implementing them so the translation of vision for this level could be effective in all the divisions.

Level 2: Effective Teaching in Every Classroom

Level 2 of the HRS model (Marzano et al., 2014) covers overarching vision, pedagogy, and professional learning. As per the HRS model, school leaders articulated a schoolwide approach to instruction and communicated a clear vision of how to address instruction. The faculty members understood the major components of the schoolwide approach to instruction and used a common language to talk about teaching and instruction. New faculty members are all oriented toward the school's approach to instruction. Predominant instructional practices are well-known and monitored in the school. The school leaders can describe how those practices support student-centered learning. They can give clear and forthright feedback on practices. Leaders can also provide faculty members with a clear, ongoing evaluation of their pedagogical strengths and weaknesses using multiple data sources. Teachers can also be provided support to enhance their pedagogical skills through professional growth plans. Providing faculty members with job-embedded professional development directly related to their instructional growth goals is recommended. Also, providing opportunities for faculty to observe and discuss effective teaching and, thus, improve their practice is warranted. In a HELP school, with the PLC process, collaborative analysis of student learning data, and the process of collective inquiry into teaching practices and action research improved teaching. The result was a culture of continuous improvement of teaching practices (Eaker & Marzano, 2020).

Vision

The survey data indicated the vision was *highly reflective* in both elementary and middle school divisions and it was *mostly reflective* in the high school division. Two aspects became clear in the interviews with faculty members. New teacher orientation and prioritizing the

initiatives to focus on the schoolwide approach to instruction were areas of concern, specifically in the middle and high school divisions.

The vision was very clear in elementary school. There was a high congruence between the leadership and faculty on how the vision played out in the classroom. A high level of effort has brought this congruence to the elementary school. DuFour et al. (2021) pointed out the principals in a PLC recognized the collective effort needed to ensure all students learn at high levels, and they fostered a collaborative culture and widely dispersed leadership. Their intense focus on student learning and insistence on teams gathering and acting on evidence of that learning contributed to the clarity and coherence.

The purpose-built space and supportive and collaborative culture in the elementary school supported the vision. The vision translated into practice well, and the PLC structures supported them. The elementary school faced some challenges, but a collaborative effort and teamwork overcame them. The leadership prioritized what was important and laser-focused on the vision. The clarity of expectations, clear support structures, frequent observation, and feedback helped the division put the vision into practice. This practice was completely in line with the literature. Eaker et al. (2020) pointed out that “monitoring instruction provides the data for a cycle of inquiry informing actions throughout the school. Transparency is crucial so leaders and teachers understand their current reality” (p. 91). The leadership and faculty aligned with the vision and how it was put into practice.

In the middle school, the schoolwide vision was understood well but lacked clarity on how it was implemented in the division. This lack of clarity created confusion among the faculty. The faculty felt there were some inconsistencies in the implementation and the synergy needed was missing. Intentional training for new faculty was missing. The leadership did not prioritize

the initiatives and created more confusion than clarity by allowing additional initiatives. Eaker et al. (2020) pointed out that introducing new initiatives every year leads to initiative fatigue for the staff members and leads staff to find it hard to commit to anything.

In the high school, faculty felt the way the leadership presented the vision did not go well, and it was not enthusiastically followed. The leadership pushed the vision strongly but did not support the faculty or mentor them well. The IB diploma program in the high school was not helping the implementation either, so the faculty felt that the high school did not change much. Prioritization was missing, and too many initiatives were implemented, resulting in superficial outcomes. In one of the high school's faculty's words: "Leadership either was not leading any sort of change, or the faculty had no idea what was going on." The literature has insisted that when leaders said that the purpose of the school was to ensure high-quality learning for all students and then allowed faculty to opt out of the effective practices that promote learning, they failed in their leadership by not fulfilling their responsibility (DuFour et al., 2021). Clearly, these were leadership-related issues and needed addressing.

Pedagogy and Professional Learning

Regarding pedagogy and professional learning, the elementary division reported that they were *highly reflective*, and the middle school and high school divisions reported *mostly reflective* as per the survey data. The interview data confirmed this and highlighted certain issues.

In the elementary school, the PLC approaches supported the pedagogy. PLC approaches included the four critical questions that PLC teams always ask themselves (DuFour et al., 2016).

They are:

1. What do we want students to learn? (Curriculum)
2. How will we know if students are learning? (Assessment)

3. How will we respond when students do not learn? (Intervention)
4. How will we extend learning for students who are already proficient? (Extension)

These four critical questions of the PLC provided a structure to examine the practice and student performance. The hub model provided the needed support and cohesion for bringing synergy to the instructional process. Though the pedagogical practices varied between hubs, the fact that these were varied brought dissatisfaction among the faculty and an urge to move toward innovative practices. The leadership worked to improve the practices by arranging Research and Development (R&D) visits to other innovative schools. The leadership team worked closely with the faculty and provided developmental support through a coaching model. The leadership team provided a rubric that the faculty used to reflect upon their practices and measure progress. Eaker et al. (2020) highlighted that monitoring instructional practices at the team level was key to informing the team's theory of action. This reflection process served as a professional evaluation while the school's leadership was developing a new evaluation system.

The middle school also used the PLC approaches to structure its pedagogical practices. The teachers used those practices to identify the learning targets and assessments and used them to identify students who needed intervention and extension. The middle school piloted hubs in math and humanities, and the hubs helped translate the school's vision into practice to a greater extent. The faculty developed the hubs with minimal support or guidance from the leadership. The faculty also felt leadership did not involve themselves at the classroom level to get to know what was happening, so they did not know the ground reality of the division very much. The teacher evaluation was completed using the existing system that the whole school leadership was trying to replace, which did not provide the needed guidance or feedback either. The informal visits also did not happen, so the faculty felt less supported.

The high school also followed the PLC approaches, but because of the nature of specialized subject areas, only a few departmental teams, like math and foreign languages, could collaborate. The faculty felt they did not get much support from the leadership in terms of guidance or mentoring, so the practices did not change much. In terms of professional evaluation, the high school followed the existing system of providing formal feedback, which was given 2 or 3 times a year. The faculty felt some people got more scrutiny than others based on whether they were on the radar of the leadership for good or bad reasons. The informal short visits to the classroom by leadership did not happen either, so the faculty felt the leadership was completely out of sync with reality.

In the elementary division, the leadership team was able to provide constant feedback and was constantly supporting the faculty. On the other hand, in middle and high school divisions, the faculty said they did not receive any impromptu feedback or support. The faculty said that their leadership never had a hand on the pulse of their division, so they did not feel well supported. This type of leadership behavior is a key leadership issue. Eaker et al. (2020) pointed out that school leaders must build feedback systems for their collaborative teams to ensure effectiveness. The leaders must be in touch with the ground reality and provide feedback or support when needed.

Regarding professional evaluation, the elementary school used a reflection protocol, and leadership provided feedback based on a list of criteria. However, in middle and high school divisions, though they had an evaluation procedure, it was not as effective as it was not framed based on the criteria. This feedback process based on a list of criteria is an important criterion as per the HRS model. The teachers need to know exactly where their issues are and how to improve them. In high school, the faculty also felt the evaluation was uneven, and teachers who

were on the principal's radar for negative reasons received more scrutiny than those on the principal's radar for positive reasons.

In the elementary school, professional learning was key in implementing the vision. The leadership was laser-focused on translating the vision into practice, and they constantly reflected with the faculty to understand their needs and concerns and tailor their professional learning toward that. The elementary school used the schoolwide concept-based approach professional development to create transdisciplinary units and personalize student learning. Similarly, the teams also focused on responsive classroom practices and other focused professional learning toward helping teachers improve their practices and collaborative work culture. The elementary school organized R&D trips to like-minded innovative schools to share practices and learn new ones. The middle school faculty felt they had professional learning opportunities but were not in alignment with the vision. There were mixed feelings about the focus of professional learning in middle school. The faculty felt the leadership lacked clarity on approaching the schoolwide concept-based professional development, resulting in confusion among the faculty. Eaker et al. (2020) pointed out that "leadership is critical to building an intentional professional development program, rather than providing a random menu of activities" (p. 97). The middle school leadership decided to adopt the international baccalaureate middle years program, and the energy was focused on that, resulting in a lesser focus on the vision. The high school faculty felt the concept-based professional development helped them somewhat. In general, the professional approaches were not in alignment with the vision. The professional development funding for specific subject areas met the faculty's needs, but leadership did not make any concerted effort to use professional learning toward the vision. This leadership behavior was again a leadership issue on the part of middle and high school divisional leadership.

Leadership Practices

Leadership has an important role to play, and the differences in the ratings indicating the varied levels of development of characteristics identified for this level among the divisions seemed to have a strong connection to the presence or absence of effective leadership. The leadership practices such as clear communication of the vision, cohesive approaches, and if there is a change in the approach, clear communication of that change, goal-oriented support in terms of professional development and other resources, prioritization of initiatives and training toward the goal, providing clear structures and expectations, modeling values in action, closely working with the faculty and students to understand the ground reality, constant feedback and holding people accountable for their commitments would have helped the divisions to narrow their differences between them in implementing the vision. When the faculty and leadership reflected on the leadership practices that enhanced or could have enhanced this level, they appreciated the leaders who engaged in the following practices:

- reminds the vision periodically
- prioritizes the key initiatives and implements them effectively
- provides a clear timeline, standards, and expectations
- identifies measurable milestones that keep moving the projects forward
- establishes checks and balances within leadership
- provides clarity of purpose, clarity of path, and clarity of responsibility
- finds the right fit for implementing the vision
- provides constant feedback to stakeholders on their work
- feels the pulse of the environment and provides feedback constantly
- develops specific skills among the stakeholders to implement the vision

- leadership makes sure that there is learning that is happening among the teams and from outside the teams
- personalizes teacher professional development
- trusts and respects stakeholders
- provides feedback to strengthen practice
- models reflective practice and coaches teams and individuals through constructive feedback

The list of leadership practices highlights the importance of implementing them so the translation of vision for this level could be effective in all the divisions.

Level 3: Guaranteed and Viable Curriculum

The basic premise of a HELP environment is that when faculty are collectively responsible for the success of all students, then all students can learn at high levels (Stuart et al., 2018). Level 3 is the most powerful level among the five levels, according to Marzano (2003), as it combines the opportunities to learn with the time to learn (Hoegh, 2020). The school curriculum adheres to specific standards in a reliable school as per the HRS model (Marzano et al., 2014). In terms of guaranteed curriculum, clear and measurable goals focus on improving overall student achievement at the school level. Progress toward those goals is monitored using data and appropriate programs, and practices are in place to support individual students in achieving their goals if data shows interventions are needed. In terms of a viable curriculum, the school curriculum is focused enough to be addressed effectively within the time available in a school year, and all students can learn the critical content of the curriculum. In a HELP environment, teacher teams engage in the PLC process, where they collaboratively prioritize

standards for providing more time to the most essential skills and knowledge. According to Eaker and Marzano (2020):

In a PLC, this collaborative activity results in a guaranteed and viable curriculum.

Importantly, teams use this approach to unpack the standards into learning targets and determine what each target should look like in student work if students demonstrate proficiency. (p. 22)

The survey data revealed that elementary and middle school divisions reported being *highly reflective* of guaranteed and viable curriculum, and the high school reported *mostly reflective* for both. As per the interview data, the elementary school focused on conceptual and transdisciplinary understandings and identified appropriate resources to support a guaranteed curriculum. There was a clear understanding across the division of what was needed and expected. There was a clear curricular framework aligned with the school philosophy. The elementary school faculty teams, and their leadership, met at the beginning of the year and decided the division-wide curricular goals for the year. Then, they met daily for about 45 minutes to tailor the learning experiences, assessments, interventions, and extension activities. They started with the baseline data at the beginning of the year and collected more data on student learning as they went through the year. Support teams provided language and learning support for students in each learning hub. The faculty teams met as PLCs and used the four critical questions as their structure to address student learning. As Eaker et al. (2020) pointed out, in PLCs, meaningful collaboration about effective teaching serves as the engine for school improvement. The learning hubs provided opportunities for them to provide intervention and extension needed for the students. Student support was also available for students in the hubs.

This approach provided students with the agency to decide what they needed and to advocate for themselves.

The middle school focused on its power standards, which were aligned within the division. The faculty teams worked with the curriculum coordinator and identified the power standards. The teachers had complete freedom to design their lessons within the framework of the power standards. Common assessments served as data points to assess student understanding and analyze instructional practice. The common assessments are important, and their most important use is the ability to track student learning skill by skill (DuFour et al., 2021). Support teams provided language and learning support for students. The PLC approaches were used to analyze student needs and to provide support. The hubs provided opportunities for students to personalize their pace, especially in math and humanities. The other classes without hubs worked to provide opportunities wherever possible. The high school used power standards, and the individual departments decided their yearly curricular goals with the support of the curriculum coordinator. The faculty had common planning time, and it worked for department teams rather than for singleton teachers. They used the PLC approaches to support student needs. The math and foreign language departments were piloting hubs, providing personalization opportunities.

Other classes functioned traditionally, except the teachers offered support and pacing wherever possible. The high school offered a discipline-focused IB diploma program, which hindered the school's vision of providing trans-disciplinary skills. Student support was minimal, even though they had students who needed it. Tracking systems were mainly teacher generated and were not available division wide. This differentiated the high school division from the other two divisions. Data tracked student progress in all divisions but at varied levels. Schoolwide

vertical alignment of the curriculum was not complete yet, and the school was trying to align them conceptually, which was a work in progress.

Leadership Practices

Here again, the divisional differences were key leadership practices missing in divisional leadership. Developing cohesion among the teams, developing a clear understanding of the goals, providing autonomy for faculty within the laid-out boundaries (i.e., bounded autonomy), and providing strong systems and structures were some practices that would have helped the divisions move forward. When the faculty reflected on the leadership practices that would help enhance this level, they came up with the following practices:

- engaging in dialectical thinking
- making certain that people adhere to the principles and standards that have been agreed upon
- building the consensus around organizational values
- feeling the pulse of what is happening in the school constantly
- being data literate and keeping data central to our work
- being someone who truly believes in that vision and provides that support and guidance
- finding new ways of doing things
- being a risk taker (not afraid to take risks)

The list of leadership practices highlights the importance of implementing them, so the translation of vision for this level could be effective in all the divisions.

Level 4: Standards-Referenced Reporting

Level 4 focuses on clear and measurable goals related to improving the achievement of individual students within the school. Also, it focuses on the monitoring of progress on those achievement goals using data according to the HRS model (Marzano et al., 2014). The PLC structure clarifies these aspects. The PLC process uses the four critical questions mentioned before in this chapter. The standards-referenced reporting is quite different from traditional reporting. As per the HRS model, the school clearly needs to identify their learning targets (i.e., standards) and assess the students on those standards so the teacher, student, and parent are clear on where the student is in terms of his/her proficiency. During each unit of instruction in a HELP school, teams, as part of the PLC process, frequently monitor each student's learning on a timely basis, using collaboratively developed common formative assessments. In these assessments, the emphasis is placed on highly essential skills and concepts that all students must acquire. In the PLC process and the HRS model, "the emphasis is on clarity and specificity regarding what students should learn and alignment with the standards and assessments" (Eaker & Marzano, 2020, p. 23).

The survey data indicated the elementary division reported *highly reflective* for clear and measurable goals (i.e., curriculum and assessment) and monitoring progress using data (i.e., intervention and extension). The middle school reported mostly reflective for the first part and *highly reflective* for the second part. The high school reported mostly reflective for both. The interview data clarified the differences between the divisions. In elementary school, the primary years' program (PYP) units of inquiry formed the overarching basis, and the team clarified the conceptual trans-disciplinary outcomes for those units of inquiry. The Measure of Academic Progress (MAP), an external assessment, served as the standard reference for math and literacy.

The developmental continuum for early learners is used in the early years. Regarding assessment, they used narrative-based reporting, where the standards served as the basis for reflection. The elementary school also worked with their teachers to report objectively. The faculty used the structure of observed learning outcomes (SOLO) taxonomy to identify the conceptual outcomes measured for each unit. SOLO taxonomy offers a structured outline for the learners to use to build their learning and thinking (Biggs, n.d.). This was in line with the literature, where DuFour et al. (2021) pointed out, “Highly effective collaborative teams work relentlessly to align the instructional practices with what student work looks like if students demonstrate proficiency” (p. 158). The elementary teams worked in PLC groups and used the four critical questions to identify the students’ learning and needs. This data was used to monitor progress and provide intervention and extension, though the elementary team had identified extension as an area for growth.

In middle school, the power standards served as the learning goals, and the faculty assessed students on those power standards. The reporting reflected the power standards. The middle school was working on moving toward conceptual understandings from power standards, so they were in a transition phase, which caused some confusion in setting curricular goals. The faculty teams worked in PLC groups, identified student needs using the four critical questions, and provided specific feedback to students. This specific feedback approach was in line with what Eaker et al. (2020) who said this about teacher feedback: “The feedback teachers provide must help students reflect on the specific content and skills they are working on, and also how to improve their learning” (p. 237). Individual departments used this data to monitor student progress and to provide intervention and extension. MAP served as an external reference for

math and literacy. The power standards, which aligned within the division and not schoolwide, served as the teaching, assessment, and reporting standards.

In high school, the power standards served as the learning goals, and the faculty assessed students on those power standards. The high school division lacked clarity on assessment policy, so the assessment depended on the individual teachers instead of a division wide approach. The PLC approaches were used collaboratively in certain departments where it worked well. In contrast, singleton teachers and some departments where common curricular standards were not possible used them wherever it worked for them. Individual departments used the assessment data to monitor progress despite no division wide common approach to data use. Assessments can help students clarify and compare where they are to where they should be and what they need to do to get there (Stiggins, 2007). Despite using the data to provide intervention and extension, there was no clarity on reassessment or reteaching, and it was entirely teacher dependent. These factors contributed to the divisional differences.

Leadership Practices

At this level, too, the divisional differences pointed to the presence or absence of leadership in those divisions. Establishing clear policies and procedures, a deeper understanding of the vision on the part of leadership, providing guidance, and focused professional development on specific approaches used could have helped the divisions overcome their differences. When the faculty and leadership reflected on the leadership practices that really enabled or could have enabled this level, they came up with the following practices:

- providing clarity to the vision by establishing key definitions
- articulating clarity of the vision and leads people through it
- following through to make sure the vision is implemented

- setting a personal example of what is expected
- establishing systems and procedures
- establishing clear policies with respect to assessment, grading scales, and retake
- providing proper staffing for student support
- integrating external data (MAP, PSAT) with internal data to use effectively
- searching actively for innovative ways to improve what we do
- ensuring data remains central to our work
- supporting the division to have PLC meetings effectively across the division
- promoting risk-taking
- modeling flexibility

The list of leadership practices highlights the importance of implementing them so the translation of vision for this level could be effective in all the divisions.

Level 5: Competency-Based Education and Personalization

Level 5 represents competency-based education and personalization. It covers four aspects: competence, pacing, extension, and personalization. In such an environment, according to the HRS model (Marzano et al., 2014), students move on to the next level of the curriculum once they show competence at the previous level. Then, the school provides opportunities to begin work on advanced content or the student's areas of interest. The school has provisions that allow students to move at their own pace depending on their interests or needs. In addition, a HELP school allows for personalizing learning by providing students with voice, choice, and agency. Stuart et al. (2018) also pointed out that HELP schools teach students to learn skills, provide students with choice and voice, and cultivate dispositions like grit and a growth mindset.

In addition, the schools teach students to personalize their learning by allowing the pace to complete their learning targets and allowing for choice in demonstrating mastery.

The survey data pointed out that the elementary school reported *highly reflective* in competence, pacing, extension, and personalization aspects of Level 5, and the middle school reported being *highly reflective* on extension and personalization and *mostly reflective* on competence and pacing. The high school reported *highly reflective* on personalization and *mostly reflective* on the other three aspects. The interview data provided clarity for those differences in the divisions.

The elementary division had continuously worked on defining their proficiency scale, leading to establishing competency for their standards. The conceptual understandings served as the standards for showing competence. Stuart et al. (2018) pointed out that the teacher authenticates student work using the proficiency criteria to validate and provide feedback. The units of inquiry allowed for personalization, where students could develop their lines of inquiry. The learning hubs contributed to providing pacing and allowed students to pursue learning at their own appropriate pace. Given the learning structure of elementary school, the students spent most of their time in their learning hubs, which helped with scheduling flexibility. Also, the learning hubs helped provide extensions and personalization, helping students to own their learning. The student support teachers were also available in the hubs to support personalized pacing and support. Stuart et al. (2018) pointed out that “if schools desired personalized learning as an outcome, they must shift to learning hubs” (p. 88). The elementary team collaboratively defined these processes and made them systematic. The elementary teams also offered Global Wednesdays for students to specifically work on self-interest and curiosity projects with the support of faculty mentors.

The middle school division had learning hubs for math and humanities, but other subject areas followed a regular classroom model. The pacing was possible within the scheduled periods but was restrictive. The division provided interventions and extensions well. They also provided personalization through personalized learning experiences (PLEx) and in subject areas through learning hubs. The faculty in learning hubs could frontload the learning experiences and sequence them so the students could have their own pace. The collaborative teams and student support specialists supported the students in hubs and trained students to advocate for themselves and develop learning-to-learning skills. By integrating PLEx into the academic year, the students were involved in personal interest and service-learning projects on two Wednesdays every month throughout the school year.

The high school division introduced Inception, a personalized learning model for students to pursue their subjects of interest and get a high school diploma. The high school implemented PLEx for Grades 9–11. The high school piloted learning hubs in math, which worked well for students to have pacing and personalization. The division also provided flexible study hall blocks for students to connect with their teachers to pursue their interests and have additional time with the teachers to pace. This approach was in line with what Stuart et al. (2018) said about structured time in HELP schools: “Highly effective and learning-progressive schools incorporate time for students to engage in self-determined learning” (p. 89). However, failing to train students to use the time effectively resulted in students having free time. The other classes happened in subject area siloes, limiting the implementation of personalization aspects in the division. The high school also offered an IB diploma, a rigorous paper-based exam-focused model that prevented these aspects in the division.

Leadership Practices

The leadership practices and attitudes that could have helped narrow the divisional differences would be aligning the professional development with the vision to prepare all faculty to implement the vision, organizing R&D trips with like-minded innovative schools to learn from them, hashing/rehashing ideas and thoughts constantly to meet the changing needs, constant reflection and action, developing an out of the box thinking to provide better solutions to overcome barriers created by traditional learning structures and providing faculty to try different approaches in their classrooms to understand what strategies work better, apart from providing structures and resources. When the faculty and leadership reflected on the leadership practices for enhancing this level, they came up with the following:

- developing a shared understanding of the vision
- challenging people to try new approaches
- bringing expertise and experience to the vision
- establishing cooperative relationships and organizing R&D visits for teachers to learn from other schools
- identifying the boundaries and providing autonomy within the boundaries (i.e., bounded autonomy)
- personalizing teacher professional development
- supporting stakeholders by providing guidance and reflection
- aligning the leadership and stakeholders' perceptions toward the vision
- promoting risk-taking and experimentation
- ensuring data remains central to our work

The list of leadership practices highlights the importance of putting them into practice, so the translation of vision for this level could be effective in all the divisions.

Limitations and Significance of the Study

This study's original purpose was to begin filling the gap in the literature and to capture the leadership practices that enable international schools to become HELP environments through this case study. Unfortunately, no specific instrument was available to measure all aspects of a HELP school. Because I wanted to avoid developing my own instrument without developed psychometric properties, I used an instrument that assesses a HELP school based on the HRS framework. This study explored the effectiveness of a single school in-depth using the HRS framework but intended to produce knowledge that could be helpful for schools to implement this initiative in their schools. This study is part of a research tradition Neuman (2011) called interpretivist social science but does not completely reject the goals associated with what Neuman called positivist social science.

At the same time, I am not assuming that this initiative is replicable exactly as it is in other schools, as this study has its limitations and significance. This study, in short, has all the limitations of single case studies. The findings are not generalizable in a traditional social science sense. However, they can be transferred to similar contexts if generalizability is considered in terms of the transferability idea discussed by Lincoln and Guba (1993). Lincoln and Guba argued that the only people who can determine whether findings are likely to apply to a particular context are the consumers rather than the producers of research. With all the information detailed in the study, the findings of this study can be treated as working hypotheses and applied to a similar context to do action research by the consumers to check if these findings can apply to their context. In addition, Donmoyer (2011) demonstrated using schema theory that

generalization can be reconceptualized more psychologically and suggested that well-written case studies can expand the cognitive structures of leaders and make leaders more informed and thoughtful decision-makers.

Glesne (2015) referred to this type of study as “backyard research.” I was an internal investigator, providing me with many advantages related to accessing the site or the program. If an external investigator had done the study, they might not have had access to the extent that I had. On the other hand, being an internal investigator has its disadvantages. One of the disadvantages could be the “dog that did not bark” (Lessenich et al., 2018, p. 67) problem. I might have missed some characteristics due to my cultural affinity to the site, as I was part of the school culture. In addition, because of being an internal member, the participants might have given a more positive picture without exposing the real issues. If external investigators had done this study, they would not have had these problems. I also had an advantage in this case because I left the case study school halfway through my study. I did the interviews after leaving the school so that the participants might have been more open to me then.

This study used a mixed-methods explanatory sequential design, where a quantitative survey preceded the qualitative interviews. During interviews, I presented the survey data to ask questions about various aspects of a HELP school. Though the interview environment was open and respondents had the opportunity to contradict the survey outcomes, the possibility of the survey data influencing the respondents’ answers during interviews is not ruled out. This case study captured the characteristics of the case in a particular moment of its history, so the characteristics, practices, and outcomes should be seen within that context.

Implications for the Future

This study raised several opportunities for future research. The reported quantitative data were survey results, and qualitative data were in the form of focus groups and individual interviews. Future studies should use various methods to document the functioning and leadership practices of HELP environments and their impact. Some of those could be as follows:

- Longitudinal observational studies that document changes in teacher practice as they work in HELP environments.
- In-depth case studies on the impact of HELP environments on student learning for a specific group of schools implementing HELP environments.
- Effect of leadership transition on the HELP environment in international schools.

Final Words and Reflection

This study aimed to explore the leadership practices that enabled an international school to implement the HELP environment from an HRS perspective. The survey results, when analyzed using regression, showed statistical significance only for the demographic variable division, which affected faculty's perceptions of the effectiveness of their environment. All other variables such as gender, experience in education, number of international schools worked at, role, and experience in the case study school seem to have no significance on the perception of effectiveness. This lack of significance is an interesting finding. The reason could be because this concept of HELP environments is new, and any factors such as experience in education, number of international schools worked at, and experience in the case study school did not influence the respondents' thought processes, so there is no impact on the perception. However, the fact that the variables of gender and role also did not impact the perception seems significant. It could be that the HELP environment is more inclusive, responsive, and empowers all stakeholders,

regardless of gender. Regarding role, it could be that the HELP environment is highly collaborative, so the distinctions between roles are blurred and did not impact the perception. However, these aspects need further exploration.

The case study school provided an interesting opportunity to explore leadership practices in their full scope. The school had a robust schoolwide leadership, which provided the vision, a compelling image of achieving it, and all the needed support and resources. In terms of translating the vision into practice, the divisional leadership of the three divisions exhibited a varied range of leadership styles, resulting in various ways that the vision translated into reality. The elementary division worked cohesively to implement the vision, which helped show what good leadership practices can produce. On the other hand, the high school division presented a model of what could happen if leadership failed to bring all the stakeholders together toward the vision. With the middle school in between, the cross-case analysis provided a wealth of information to understand leadership practices better.

DuFour et al. (2021) stated that by implementing the PLC at work model worldwide, their belief was strengthened that effective leadership was the most indispensable reason for school transformation. This study also highlighted the importance of effective leadership to effect change. The survey data and the interview data showed that the elementary division was *highly reflective* in all aspects, while the high school division was *mostly reflective* in those aspects. Other than the divisional differences in their learning environments, one key aspect that emerged was how the leadership handled the implementation. This aspect highlighted the need for effective leadership. During the process, the faculty reflected on the leadership practices that helped to move the dial on one end. At the same time, if something did not work well in their division, they were asked to reflect on the leadership practices that could have helped to move it

in a positive direction. The outcome of these analyses is the set of leadership practices that are listed under each level.

If at all, there is one thing that this case study has highlighted, it is the importance of the leadership practices associated with Level 1: safe, supportive, and collaborative culture. Those practices build the foundation for setting up the other levels in a school. Again, according to the survey and interview data, the differences between the elementary and high school divisions were characterized by a lack of transparency, openness, and the absence of support in the high school division. These characteristics are associated with Level 1. Establishing a safe environment where all stakeholders feel safe and secure is primary. Another important aspect is maintaining a supportive environment where stakeholders can express themselves freely without the fear of retribution and a sense of support when they fall back or fall forward is another important aspect. The supportive environment allows stakeholders to take risks without worrying about failures and provides a space to ask for help when they are lost. Building a collaborative culture where stakeholders feel welcome and connected to the team is key. Trust is an expressed value in teams within this culture, and strong relationships are built. This level formed the foundation upon which all other levels are built. The difference in effecting change between elementary and high school clearly showed the level's importance. The high school had good initiatives like Inception but could not implement them effectively because of a lack of supportive and collaborative culture. According to the survey and interview data, the faculty did not feel comfortable expressing themselves, and there was a lack of transparency and openness in the division, because of which there was a breakdown in communication between the leadership and faculty. This lack of openness led to mistrust, and the high school faculty did not subscribe to the new initiatives. The importance to these aspects aligned with what Marzano et

al. (2018) said about this level—a safe, supportive, and collaborative culture. Marzano et al. said that if the faculty and the stakeholders did not believe the school was safe, supportive, and collaborative, they would spend their energy trying to meet these needs and not focus on student learning.

Coherent leadership models the values in action and builds cohesive teams. This practice is another key aspect of those leadership practices. Those leadership practices build a collaborative culture and high-functioning teams where the HELP environment can be successfully enabled. This case study showed how those practices effectively translated the vision into reality in the elementary division and how the absence of those practices could not help the high school division move forward. This aspect was well expressed in the literature by Dagen et al. (2020). According to Dagen et al. (2020), “Creating a collaborative culture is not easy; It requires excellent leadership on the part of the principal and recognition that the difficult challenges in schools today require a new style of leadership” (p. 14). This study also showed the need for a new leadership style to effect change in 21st-century schools. The leadership needed to be hands-on, feeling the pulse of the environment all the time and providing support when needed. They needed to be part of the process, hashing and rehashing ideas and providing input and feedback regularly. This approach was very different from the way schools were led previously.

International schools are highly transient, both in terms of people and vision. When leadership, specifically heads of schools, change, the vision also gets transitioned, and the new head brings in a new vision. Very few international schools have succeeded in maintaining their vision, irrespective of leadership transition. This study attempted to define leadership practices that may help provide consistency during a leadership transition. Using these practices, the

leaders new to an environment similar to the case-study school can understand how to approach their work with the stakeholders.

Enabling international schools to become HELP environments requires a fundamental paradigm shift in how we operate as schools and presents a transformational change in mindset among educators and leaders. Also, the change that we want to effect in schools needs a completely different leadership style than the traditional one. These aspects are important to prepare students with future-ready skills to face the challenges of tomorrow. Not only that, but it will also help fulfill our commitment as educators to support students in achieving their fullest potential. Schools attempting to implement a reliable HELP environment may also use this study as a marker to align their leadership practices, especially from a high-reliability perspective. Hopefully, these insights will positively impact school leadership's ability to prepare students for their future.

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APPENDIX A
SURVEY INSTRUMENT

Demographical Information

This survey intends to capture the Highly Effective & Learning Progressive (HELP) characteristics present in our school. The survey is based on Robert Marzano's High-Reliability Schools Framework and it has 5 levels. Each level has 5 questions on average. The survey may take about 20-25 minutes to complete. Thank you for your input on this survey!

***Identify the Division that you work mostly with**

Elementary School Middle School High School Whole School

***What is your role?**

Teacher Educational Assistant Teacher Leader Administrator

Gender

Male Female

***Years of experience in Education (by the end of this school year)**

2 years or fewer 3-5 years 6-10 years
11-20 years 20+ years

***How many international schools have you worked at?**

One School 2-3 Schools 4-6 Schools
6+ Schools

***Years of experience at ICS (by the end of this school year)**

2 years or fewer 3-5 years 6-10 years
11-20 years 20+ years

LEVEL 1: SAFE, SUPPORTIVE AND COLLABORATIVE CULTURE

In this survey, you will be rating the statement in the question using the criteria given below the statement. The rating ranges from 1 (low) to 4 (high). If based on the criteria, you feel that the statement reflects what happens in our school, you can give "Highly Reflective" or "Mostly Reflective." If not, you can give "Partially Reflective." If it is not happening at our school, then give "Non-Reflective." If you do not know or are not applicable, give "Not Known/Not applicable." Though some questions pertain to schoolwide approaches, please bear in mind that you are rating these statements from your divisional point of view.

***Safe Culture**

1.1 The staff members perceive the school environment as safe.

Criteria

- *Our school is a safe place.*
- *Our school has safety systems in place.*
- *Our school has clear and specific rules and procedures in place.*

Non Reflective	Partially Reflective	Mostly Reflective	Highly Reflective	Not Known/Not Applicable
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***1.2 The staff members perceive the school environment as orderly.**

Criteria

- *Faculty knows the emergency management procedures for our school.*
- *Students and Faculty regularly practice implementing emergency management procedures for specific incidents*
- *Our school's emergency management procedures are updated on a regular basis.*

Non Reflective	Partially Reflective	Mostly Reflective	Highly Reflective	Not Known/Not Applicable
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***1.3 The stakeholders perceive the school environment as safe.**

Criteria

- *Our stakeholders (students and their parents) describe our school as a safe place.*
- *Our stakeholders (students and their parents) feel that our school has systems in place.*
- *Our stakeholders (students and their parents) are aware of the rules and procedures in place at our school.*

Non Reflective	Partially Reflective	Mostly Reflective	Highly Reflective	Not Known/Not Applicable
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***1.4 The stakeholders perceive the school environment as orderly.**

Criteria

- *Our school has a system that allows school leaders to communicate with parents about issues regarding school safety (for example, a school email system).*
- *School leaders coordinate with local law enforcement agencies regarding school safety issues.*
- *School leaders engage parents and the community regarding school safety issues.*

Non Reflective	Partially Reflective	Mostly Reflective	Highly Reflective	Not Known/Not Applicable
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***Collaborative Culture**

1.5 Teachers have input in the decision-making process regarding school initiatives.

Criteria

- *It is clear which types of decisions will be made with direct teacher input.*
- *Systems are in place to collect data and information from teachers on a regular basis.*
- *Electronic tools (for example, online survey tools) are used to collect teachers' opinions regarding specific decisions.*
- *Groups of teachers are targeted to provide input regarding specific decisions.*

Non Reflective	Partially Reflective	Mostly Reflective	Highly Reflective	Not Known/Not Applicable
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***1.6 Collaborative faculty teams regularly interact to address common issues regarding curriculum, assessment, instruction, and the achievement of all students.**

Criteria

- *A professional learning community (PLC) process is in place in our school.*
- *Our school's PLC collaborative teams have specific goals.*
- *School leaders regularly examine PLC collaborative teams' progress toward their goals.*
- *Our school's PLC collaborative teams create common assessments.*
- *Our school's PLC collaborative teams analyze student achievement and growth.*

Non Reflective	Partially Reflective	Mostly Reflective	Highly Reflective	Not Known/Not Applicable
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***1.7 Data is used to make decisions related to curriculum, assessment, instruction and student achievement.**

Criteria

- *Data teams are in place in our school.*
- *Our school's data teams have specific goals.*
- *School leaders regularly examine data teams' progress toward their goals.*
- *School leaders collect and review minutes and notes from PLC collaborative team and data team meetings to ensure that teams are focusing on student achievement.*

Non Reflective	Partially Reflective	Mostly Reflective	Highly Reflective	Not Known/Not Applicable
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***1.8 The staff members have formal ways to provide input regarding the optimal functioning of the school.**

Criteria

- *Data collection systems are in place to collect opinion data from staff members (teachers and staff) regarding the optimal functioning of our school.*
- *Opinion data collected from staff members (teachers and staff) are archived.*
- *Reports of opinion data from staff members (teachers and staff) are regularly generated.*
- *The way opinion data from staff members (teachers and staff) are used is transparent.*
- *Our school improvement team regularly provides input and feedback about our school's improvement plan*

Non Reflective	Partially Reflective	Mostly Reflective	Highly Reflective	Not Known/Not Applicable
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***1.9 The stakeholders have formal ways to provide input regarding the optimal functioning of the school.**

Criteria

- *Data collection systems are in place to collect opinion data from stakeholders (students, and parents) regarding the optimal functioning of our school.*
- *Opinion data collected from stakeholders (students, and parents) are archived.*
- *Reports of opinion data from stakeholders (students, and parents) are regularly generated.*
- *The way opinion data from stakeholders (students, and parents) are used is transparent.*
- *Our school has a communication platform for stakeholders (students, and parents) to express their opinion/feedback.*
- *School leaders host town hall meetings.*
- *School leaders conduct focus group meetings with stakeholders (students, and parents).*
- *School leaders host or speak at community luncheons.*

Non Reflective	Partially Reflective	Mostly Reflective	Highly Reflective	Not Known/Not Applicable
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***Supportive Environment**

1.10 Our school's accomplishments have been appropriately acknowledged.

Criteria

- *School leaders acknowledge and celebrate individual accomplishments, teacher-team or department accomplishments, and whole-school accomplishments in a variety of ways (for example, through faculty celebrations, newsletters to parents, announcements, the school website, or social media).*
- *School leaders regularly celebrate the successes of individuals in a variety of positions in the school (such as teachers or support staff).*

Non Reflective	Partially Reflective	Mostly Reflective	Highly Reflective	Not Known/Not Applicable
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***1.11 The resources of the school (fiscal, operational, and technological) are managed in a way that directly supports teachers.**

Criteria

- *Faculty has adequate materials to teach effectively.*
- *Faculty has adequate time to teach effectively.*
- *School leaders develop, submit, and implement detailed budgets.*
- *School leaders successfully access and leverage a variety of fiscal resources (such as grants).*

- *School leaders manage time to maximize a focus on instruction.*
- *School leaders direct the use of technology to improve teaching and learning.*
- *School leaders provide adequate training for the instructional technology teachers are expected to use.*

Non Reflective	Partially Reflective	Mostly Reflective	Highly Reflective	Not Known/Not Applicable
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LEVEL 2: EFFECTIVE TEACHING IN EVERY CLASSROOM

In this survey, you will be rating the statement in the question using the criteria given below the statement. The rating ranges from 1 (low) to 4 (high). If based on the criteria, you feel that the statement reflects what happens in our school, you can give “Highly Reflective” or “Mostly Reflective.” If not, you can give “Partially Reflective.” If it is not happening at our school, then give “Non-Reflective.” If you do not know or are not applicable, give “Not Known/Not applicable.” Though some questions pertain to schoolwide approaches, please bear in mind that you are rating these statements from your divisional point of view.

***Vision**

2.1 The school leader communicates a clear vision as to how instruction should be addressed in the school.

Criteria

- *School leaders have articulated our schoolwide approach to instruction.*
- *New teachers have professional development opportunities to learn about our schoolwide approach to instruction.*
- *Faculty can describe the major components of our schoolwide approach to instruction.*
- *School leaders limit the number of new initiatives, prioritizing those related to our schoolwide approach to instruction.*
- *Our school has a common language for talking about teaching and instruction*

Non Reflective	Partially Reflective	Mostly Reflective	Highly Reflective	Not Known/Not Applicable
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***Pedagogy**

2.2 Support is provided to teachers to continually enhance their pedagogical skills through professional growth plans.

Criteria

- *School leaders meet with me to discuss my instructional growth goals.*
- *Faculty can describe their progress on their instructional growth goals.*
- *School leaders hire effective teachers.*
- *School leaders have a system in place to evaluate the hiring and selection process for new teachers*
- *Our school has a new teacher induction program.*
- *School leaders have a system in place to evaluate and revise our new-teacher induction program.*
- *School leaders retain effective teachers.*
- *School leaders can provide evaluation results, growth plans, and evidence of support for any struggling teachers.*

Non Reflective	Partially Reflective	Mostly Reflective	Highly Reflective	Not Known/Not Applicable
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***2.3 Predominant instructional practices throughout the school are known and monitored.**

Criteria

- *School leaders can describe our school's predominant instructional practices.*
- *Faculty can describe our school's predominant instructional practices.*
- *School leaders give me forthright feedback about my instructional practices.*
- *School leaders can describe effective practices and problems of practice in our school.*
- *Data from walkthroughs at our school are aggregated to show our school's predominant instructional practices.*

Non Reflective	Partially Reflective	Mostly Reflective	Highly Reflective	Not Known/Not Applicable
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***2.4 Teachers are provided with clear, ongoing evaluations of their pedagogical strengths and weaknesses that are based on multiple sources of data.**

Criteria

- *School leaders use highly specific rubrics to give me accurate feedback about my pedagogical strengths and weaknesses.*
- *School leaders use multiple sources of information to give me feedback and evaluate me, including direct observation, teacher self-reports, video analysis, student reports, and peer feedback from other teachers.*
- *School leaders regularly talk to me about the evaluation data they have collected for me.*
- *School leaders observe me frequently.*
- *School leaders give me feedback frequently.*
- *Faculty can explain which of their instructional strategies have the strongest and weakest relationships to student achievement.*

Non Reflective	Partially Reflective	Mostly Reflective	Highly Reflective	Not Known/Not Applicable
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***Professional Learning**

2.5 Teachers are provided with job-embedded professional development that is directly related to their instructional growth goals.

Criteria

- *Online professional development courses and resources that are relevant to my instructional growth goals are available to me.*
- *Teacher-led professional development that is relevant to my instructional growth goals is available to me.*
- *Instructional coaching relevant to my instructional growth goals is available to me.*
- *School leaders collect data about how effective professional development is in improving teacher practices.*
- *Faculty can describe how the available professional development supports the achievement of their instructional growth goals.*

Non Reflective	Partially Reflective	Mostly Reflective	Highly Reflective	Not Known/Not Applicable
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*2.6 Teachers have opportunities to observe and discuss effective teaching.

Criteria

- *Faculty has opportunities to engage in instructional rounds or learning walks to observe instructional practice.*
- *Faculty has opportunities to view and discuss video examples of effective teaching.*
- *Faculty has regular times to meet with other faculty members to discuss effective instructional practices.*
- *Faculty has opportunities to observe and discuss effective teaching via technology (for example, virtual coaching or online discussions).*
- *Faculty regularly discusses instructional practices at faculty and department meetings.*
- *Faculty regularly views and discusses video examples of effective teaching at faculty and department meetings.*
- *School leaders have information available about teachers' participation in opportunities to observe and discuss effective teaching.*
- *School leaders have information available about teachers' participation in virtual discussions on effective teaching.*

Non Reflective	Partially Reflective	Mostly Reflective	Highly Reflective	Not Known/Not Applicable
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LEVEL 3: GUARANTEED AND VIABLE CURRICULUM

In this survey, you will be rating the statement in the question using the criteria given below the statement. The rating ranges from 1 (low) to 4 (high). If based on the criteria, you feel that the statement reflects what happens in our school, you can give "Highly Reflective" or "Mostly Reflective." If not, you can give "Partially Reflective." If it is not happening at our school, then give "Non-Reflective." If you do not know or are not applicable, give "Not Known/Not applicable." Though some questions pertain to schoolwide approaches, please bear in mind that you are rating these statements from your divisional point of view.

***Guaranteed Curriculum**

3.1 The school curriculum adheres to specific standards.

Criteria

- *Our school's written curriculum has been analyzed to ensure that it correlates with chosen standards (for example, the Common Core State Standards [CCSS]).*
- *Our school's curriculum adequately addresses important 21st-century skills.*
- *Our school's taught curriculum (that is, what is taught in classrooms) has been analyzed to ensure that it correlates with the written curriculum.*

- *Our school's assessments have been analyzed to ensure that they accurately measure the written and taught curriculum.*
- *School teams meet regularly to analyze the relationship between our school's written curriculum, our school's taught curriculum and our school's assessments.*
- *Faculty can describe the essential content and standards for the subject areas and grade levels that they teach.*

Non Reflective	Partially Reflective	Mostly Reflective	Highly Reflective	Not Known/Not Applicable
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***3.2 Clear and measurable goals are in place that focus on improving overall student achievement at the school level.**

Criteria

- *Our school has set goals to eliminate the achievement gap for all students.*
- *Our school has set goals to eliminate differences in achievement for English learners.*
- *Our school has set goals to eliminate differences in achievement for students with special needs.*
- *Our school's goals for student achievement are discussed regularly at faculty meetings.*
- *Various departments and faculty members are responsible for specific improvement goals.*
- *Our school's goals address our school's most critical and severe deficiencies.*

Non Reflective	Partially Reflective	Mostly Reflective	Highly Reflective	Not Known/Not Applicable
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***3.3 Data is used to regularly monitor progress toward school achievement goals.**

Criteria

- *Overall student achievement is analyzed regularly at our school.*
- *Student achievement data are regularly examined from a value-added results perspective.*
- *Faculty regularly reports and uses results from multiple types of assessments (for example, benchmark assessments and common assessments).*
- *Faculty can describe the different types of student data reports available to them..*
- *Student data reports (including graphs and charts) are updated regularly to track growth in student achievement.*
- *Our school's leadership team regularly analyzes student growth data.*

- *Data briefings are conducted regularly at faculty meetings.*

Non Reflective	Partially Reflective	Mostly Reflective	Highly Reflective	Not Known/Not Applicable
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***3.4 Appropriate programs and practices are in place to help students meet individual achievement goals when data indicate interventions are needed.**

Criteria

- *Our school has after-school programs in place.*
- *Our school schedule is designed to allow students to receive academic help while in school.*
- *Students' completion of programs designed to improve their academic achievement (such as gifted and talented education; advanced placement; and science, technology, engineering, and mathematics [STEM]) is monitored.*
- *Our school has Response to Intervention (RTI) measures and programs in place.*
- *Our school has enrichment programs in place.*

Non Reflective	Partially Reflective	Mostly Reflective	Highly Reflective	Not Known/Not Applicable
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***Viable Curriculum**

3.5 The school curriculum is focused enough that it can be adequately addressed in the time available to teachers.

Criteria

- *The essential elements of the content taught in our school have been identified.*
- *The amount of time needed to adequately address the essential elements of the content taught in our school has been examined.*
- *School teams meet regularly to discuss and revise (as necessary) documents that articulate essential content and the time needed to teach that content (for example, pacing guides and curriculum maps).*
- *Essential support is available for Tiers 1, 2, and 3 interventions.*

Non Reflective	Partially Reflective	Mostly Reflective	Highly Reflective	Not Known/Not Applicable
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***3.6 All students have the opportunity to learn the critical content of the curriculum.**

Criteria

- *Tracking systems at our school are used to examine each student's access to the essential elements of the curriculum.*
- *Parents at our school are aware of their child's current access to the essential elements of the curriculum.*
- *All students at our school have access to advanced placement courses.*
- *The extent to which all students have access to necessary courses has been analyzed.*
- *Faculty has completed appropriate content training in my subject-area courses.*
- *Direct vocabulary instruction for various tier terms is provided to those students who need it.*

Non Reflective	Partially Reflective	Mostly Reflective	Highly Reflective	Not Known/Not Applicable
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LEVEL 4: STANDARDS-REFERENCED REPORTING

In this survey, you will be rating the statement in the question using the criteria given below the statement. The rating ranges from 1 (low) to 4 (high). If based on the criteria, you feel that the statement reflects what happens in our school, you can give "Highly Reflective" or "Mostly Reflective." If not, you can give "Partially Reflective." If it is not happening at our school, then give "Non-Reflective." If you do not know or are not applicable, give "Not Known/Not applicable." Though some questions pertain to schoolwide approaches, please bear in mind that you are rating these statements from your divisional point of view.

***4.1 Clear and measurable goals are in place that is focused on improving the achievement of individual students within the school.**

Criteria

- *Our school has articulated the essential elements for each subject area in the form of clear learning goals.*
- *Our school has created a proficiency scale for each essential element for each subject area.*
- *Our school has set goals for each student's knowledge gain on each proficiency scale.*

- *Each of my students tracks his or her progress on individual goals.*
- *The parents of each of my students are aware of their child's individual goals.*
- *During student-led conferences, faculty focuses on the student's individual goals.*
- *During parent-teacher conferences, faculty focuses on the student's individual goals.*
- *Our students perceive that their individual goals are academically challenging.*

Non Reflective	Partially Reflective	Mostly Reflective	Highly Reflective	Not Known/Not Applicable
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***4.2 Data is used to regularly monitor progress toward achievement goals for individual students.**

Criteria

- *Faculty regularly analyzes the status and growth of each of their students.*
- *Students and their parents can describe the student's achievement status and growth status for each of the student's goals.*
- *Faculty examines the individual achievement of their students from a value-added perspective.*
- *Faculty report their students' results from multiple types of assessments to our school's leaders (for example, benchmark assessments or common assessments).*
- *Faculty can describe the different types of individual student reports that are available to them.*
- *Someone in our school regularly updates student reports, graphs, and charts to track student achievement growth.*
- *Faculty teams regularly analyze individual students' performance.*

Non Reflective	Partially Reflective	Mostly Reflective	Highly Reflective	Not Known/Not Applicable
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LEVEL 5: COMPETENCY-BASED EDUCATION AND PERSONALIZATION

In this survey, you will be rating the statement in the question using the criteria given below the statement. The rating ranges from 1 (low) to 4 (high). If based on the criteria, you feel that the statement reflects what happens in our school, you can give "Highly Reflective" or "Mostly Reflective." If not, you can give "Partially Reflective." If it is not happening at our school, then give "Non-Reflective." If you do not know or are not applicable, give "Not Known/Not applicable." Though some questions pertain to schoolwide approaches, please bear in mind that you are rating these statements from your divisional point of view.

***5.1 Students move on to the next level of the curriculum for any subject area only after they have demonstrated competence at the previous level.**

Criteria

- *Our school has established minimum scores (criterion scores) that students must meet to demonstrate competence for each essential element of the curriculum.*
- *Our school has a system in place to track each student's status on each essential element in each subject area.*
- *Faculty continually monitors each of their students' status for each essential element in the subject areas they teach.*
- *When a student reaches the criterion score for all essential elements at a particular level in a subject area, he or she immediately starts working on elements at the next level.*

Non Reflective	Partially Reflective	Mostly Reflective	Highly Reflective	Not Known/Not Applicable
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***5.2 The school schedule is designed to accommodate students moving at a pace appropriate to their situation and needs.**

Criteria

- *Our school has replaced grade levels with competency levels or allows students to work at different grade levels for different subject areas.*
- *Our school has multiple venues simultaneously available where students can learn the essential elements for each level of each subject area.*
- *Our school has multiple venues simultaneously available where students can demonstrate competency with the essential elements for each level of each subject area.*
- *Online competency-based instruction and assessment are available at our school for each essential element at each level in each subject area.*
- *Someone at our school constantly monitors how long it takes each student to move through the levels of each subject area.*

Non Reflective	Partially Reflective	Mostly Reflective	Highly Reflective	Not Known/Not Applicable
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***5.3 Students who have demonstrated competency at levels articulated in the system are provided immediate opportunities to begin work on advanced content and/ or areas of interest.**

Criteria

- *Any student who has demonstrated the highest level of competence in a subject area has opportunities for advanced study in that subject area.*
- *Any student who has demonstrated competence adequate for high school graduation can begin working on and receive credit for college-level work.*
- *Any student who has demonstrated competence adequate for high school graduation can begin working on and receive credit for work toward a trade or career area of interest to him or her.*

Non Reflective	Partially Reflective	Mostly Reflective	Highly Reflective	Not Known/Not Applicable
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***5.4 The school provides opportunities for students to personalize their learning.**

Criteria

- *Students have multiple opportunities and ways to learn specific content*
- *Students have multiple opportunities and ways to demonstrate proficiency with specific content*
- *Students have opportunities to learn how to learn (agency being the central focus in addition to proficiency with academic content) • Students have a voice in the teaching and learning process*
- *Students have a choice in the teaching and learning process*
- *Students have opportunities to pursue their passion projects*

Non Reflective	Partially Reflective	Mostly Reflective	Highly Reflective	Not Known/Not Applicable
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Any other comments that you wish to make (Optional)

APPENDIX B INTERVIEW GUIDE

Introduction

My dissertation study focuses on “Leadership practices that enable international schools to become Highly Effective and Learning Progressive (HELP) Environments.” I will be doing some interviews through Zoom with teachers and administrators, who worked in developing the HELP environment at ICS.

- In this interview, you will be asked to provide your perceptions on the characteristics of the HELP environment and the leadership practices that enabled them in your division/school.
- The duration will be approximately 90 minutes.
- I will be recording this Zoom interview (both audio and video).
- There will be no compensation for providing this interview.
- Participation in this study is entirely voluntary. You do not have to do this, and you can refuse to answer any question or quit at any time. Deciding not to participate or not answering any of the questions will have no effect on any benefits you’re entitled to, like your health care, your employment, or grades. You can withdraw from this study at any time without penalty.
- **If you have any questions about this research, you may contact either me or my supervisor**
- My contact email id is xxxxx@sandiego.edu.
- My supervisor is Dr. Fred Galloway and his email id is xxxxx@sandiego.edu.
- I have provided you with a consent form - please read it completely and if you have any questions, let me know. Once you give your consent by signing this form, I will start my interview. Thank you.

Interview Questions

- What do you consider to be the key characteristics of a Highly Effective and Learning Progressive (HELP) environment?
- I shared with you the HELP survey. Do the survey items capture the key characteristics of your environment?
- What specific characteristics of a HELP environment have you accomplished as a school?

- What changes did you make in your school in terms of structures, practices and agency to enable it to be a HELP environment?
- What types of issues or problems did you encounter in moving your school into a HELP environment?
- What did you or your leaders do to address those problems?
- What common leadership practices that really helped to overcome the problems and moved the school in the HELP direction?
- What did leaders do and continue to do to encourage embracing the highly effective and learning progressive approaches to education?
- How do the faculty perceive these leadership practices and act upon them to embrace/enable the HELP approaches?
- I shared the Leadership Practices Inventory with you and the top leadership practices identified by your division. Do you agree with the list of practices identified by the group?
- If not, what would you add from the LPI that promoted the different characteristics of the HELP environment?
- In the inferential analysis, the divisional data is statistically significant. There are some clear differences between divisions in certain areas. I am going to ask questions related to that and your replies pertain to your division:
- Level 1 is about safe culture, collaborative culture and supporting environment.
 - What are your thoughts on collaborative culture and supportive environment?
 - How did school leaders support collaboration among teachers and how did they evaluate it?

- Do school leaders acknowledge and celebrate individual, department and school's successes?
- What leadership practices really enabled what you said now? What leadership practices could have enabled what you said now?
- Level 2 is about Effective Teaching in Every Classroom
 - Was there a clear vision?
 - Did the vision translate into practice to support pedagogy and professional learning?
 - What did school leaders do to prioritize school's approach to instruction?
 - How did school leaders evaluate teacher practice and provide feedback?
 - What leadership practices really enabled what you said now? What leadership practices could have enabled what you said now?
- Level 3 is about Guaranteed and Viable curriculum
 - How are the teachers involved in setting school wide goals?
 - How is data used to monitor and measure progress towards school's achievement goals?
 - What types of programs and practices are in place to support individual student's growth and achievement?
 - How often school teams meet to discuss and articulate the essential content that is taught and the time taken to accomplish it?
 - How do teachers support students to learn at high levels?
 - What leadership practices really enabled what you said now? What leadership practices could have enabled what you said now?

- Level 4 is about Standards referenced reporting
 - How does the standards referenced reporting help measure individual student achievement?
 - How do individual teachers and teacher teams use data to inform their instruction and/or to evaluate and support student performance?
 - What leadership practices really enabled what you said now? What leadership practices could have enabled what you said now?
 -
- Level 5 is about Competency-based education and Personalization
 - What type of structures and practices are used to support personalization?
 - How do the existing schooling structures affect this move and how are you overcoming them?
 - How are teachers trained and oriented toward the learning progressive approaches?
 - What leadership practices really enabled what you said now? What leadership practices could have enabled what you said now?
- If there are certain key leadership practices that enabled ICS to become a HELP environment, what are they? Why?

Some of the questions will be generated based on the results of the inferential analysis of the survey to understand the outcomes better.

APPENDIX C

TABLES

Table C1 displays the perception of Level 1: safe, supportive, and collaborative culture by faculty disaggregated by various demographic variables.

Table C1

Demographic Variables vs. Level 1: Safe, Supportive, and Collaborative Culture

Variables	Responses	Nonreflective	Partially reflective	Mostly reflective	Highly reflective
Identify the division you mostly work with	Elementary school	0 (0.0%)	0 (0.0%)	15 (30.0%)	35 (70.0%)
	Middle school	0 (0.0%)	1 (3.1%)	20 (62.5%)	11 (34.4%)
	High school	0 (0.0%)	5 (15.6%)	22 (68.8%)	5 (15.6%)
	Whole school	0 (0.0%)	0 (0.0%)	3 (50.0%)	3 (50.0%)
What is your role	Teacher	0 (0.0%)	5 (7.6%)	36 (54.5%)	25 (37.9%)
	Educational Assistant	0 (0.0%)	0 (0.0%)	17 (39.5%)	26 (60.5%)
	Teacher leader	0 (0.0%)	1 (14.3%)	3 (42.9%)	3 (42.9%)
	Administrator	0 (0.0%)	0 (0.0%)	4 (100%)	0 (0.0%)
Gender	Male	0 (0.0%)	5 (10.2%)	19 (38.8%)	25 (51.0%)
	Female	0 (0.0%)	1 (1.4%)	41 (57.7%)	29 (40.8%)

Variables	Responses	Nonreflective	Partially reflective	Mostly reflective	Highly reflective
Years of experience in education	2 years or fewer	0 (0.0%)	0 (0.0%)	4 (80.0%)	1 (20.0%)
	3–5 years	0 (0.0%)	0 (0.0%)	8 (57.1%)	6 (42.9%)
	6–10 years	0 (0.0%)	1 (4.8%)	7 (33.3%)	13 (61.9%)
	11–20 years	0 (0.0%)	3 (5.3%)	27 (47.4%)	27 (47.4%)
	20+ years	0 (0.0%)	2 (8.7%)	14 (60.9%)	7 (30.4%)
How many international schools have you worked at	1 school	0 (0.0%)	1 (1.9%)	25 (47.2%)	27 (50.9%)
	2–3 schools	0 (0.0%)	3 (6.1%)	23 (46.9%)	23 (46.9%)
	4–6 schools	0 (0.0%)	2 (12.5%)	10 (62.5%)	4 (25.0%)
	6+ schools	0 (0.0%)	0 (0.0%)	2 (100.0%)	0 (0.0%)
Years of experience at the case study school	2 years or fewer	0 (0.0%)	0 (0.0%)	15 (55.6%)	12 (44.4%)
	3–5 years	0 (0.0%)	6 (15.8%)	20 (52.6%)	12 (31.6%)
	6–10 years	0 (0.0%)	0 (0.0%)	13 (41.9%)	18 (58.1%)
	11–20 years	0 (0.0%)	0 (0.0%)	10 (50.0%)	10 (50.0%)
	20+ years	0 (0.0%)	0 (0.0%)	2 (50.0%)	2 (50.0%)

Note: *Although the Not Applicable/ Not Known option was provided, no one chose it.

Table C2 displays the perception of Level 2: effective teaching in every classroom by faculty disaggregated by various demographic variables.

Table C2

Demographic Variables Versus Level 2: Effective Teaching in Every Classroom

Variables	Responses	Nonreflective	Partially reflective	Mostly reflective	Highly reflective	Not applicable
Identify the division you mostly work with	Elementary School	0 (0.0%)	0 (0.0%)	16 (32.0%)	33 (66.0%)	1 (2.0%)
	Middle School	0 (0.0%)	7 (21.9%)	14 (43.8%)	10 (31.3%)	1 (3.1%)
	High School	0 (0.0%)	7 (21.9%)	21 (65.6%)	4 (12.5%)	0 (0.0%)
	Whole School	0 (0.0%)	0 (0.0%)	2 (33.3%)	4 (66.7%)	0 (0.0%)
What is your role	Teacher	0 (0.0%)	10 (15.2%)	34 (51.5%)	22 (33.3%)	0 (0.0%)
	Educational Assistant	0 (0.0%)	2 (4.7%)	13 (30.2%)	26 (60.5%)	2 (4.7%)
	Teacher Leader	0 (0.0%)	2 (28.6%)	2 (28.6%)	3 (42.9%)	0 (0.0%)
	Administrator	0 (0.0%)	0 (0.0%)	4 (100%)	0 (0.0%)	0 (0.0%)
Gender	Male	0 (0.0%)	7 (14.3%)	19 (38.8%)	22 (44.9%)	1 (2.0%)
	Female	0 (0.0%)	7 (9.9%)	34 (47.9%)	29 (40.8%)	1 (1.4%)

Variables	Responses Nonreflective	Partially reflective	Mostly reflective	Highly reflective	Not applicable		
Years of experience in education	2 years or fewer	0 (0.0%)		1 (20.0%)	1 (20.0%)	3 (60.0%)	0 (0.0%)
	3-5 years	0 (0.0%)		0 (0.0%)	7 (50.0%)	7 (50.0%)	0 (0.0%)
	6-10 years	0 (0.0%)		1 (4.8%)	6 (28.6%)	13 (61.9%)	1 (4.8%)
	11-20 years	0 (0.0%)		9 (15.8%)	22 (38.6%)	25 (43.9%)	1 (1.8%)
	20+ years	0 (0.0%)		3 (13.0%)	17 (73.9%)	3 (13.0%)	0 (0.0%)
How many international schools have you worked at	One school	0 (0.0%)		3 (5.7%)	22 (41.5%)	28 (52.8%)	0 (0.0%)
	2-3 schools	0 (0.0%)		5 (10.2%)	22 (44.9%)	20 (40.8%)	2 (4.1%)
	4-6 schools	0 (0.0%)		5 (31.3%)	8 (50.0%)	3 (18.8%)	0 (0.0%)
	6+ schools	0 (0.0%)		1 (50.0%)	1 (50.0%)	0 (0.0%)	0 (0.0%)
Years of experience at the case study school	2 years or fewer	0 (0.0%)		3 (11.1%)	13 (48.1%)	10 (37.0%)	1 (3.7%)
	3-5 years	0 (0.0%)		9 (23.7%)	17 (44.7%)	12 (31.6%)	0 (0.0%)
	6-10 years	0 (0.0%)		1 (3.2%)	11 (35.5%)	19 (61.3%)	0 (0.0%)
	11-20 years	0 (0.0%)		1 (5.0%)	9 (45.0%)	9 (45.0%)	1 (5.0%)
	20+ years	0 (0.0%)		0 (0.0%)	3 (75.0%)	1 (25.0%)	0 (0.0%)

Table C3 displays the perception of Level 3: guaranteed and viable curriculum by faculty disaggregated by various demographic variables.

Table C3*Demographic Variables vs. Level 3: Guaranteed and Viable Curriculum*

Variables	Responses	Nonreflective	Partially reflective	Mostly reflective	Highly reflective	Not applicable
Identify the division you mostly work with	Elementary School	0 (0.0%)	0 (0.0%)	6 (12.0%)	44 (88.0%)	0 (0.0%)
	Middle School	0 (0.0%)	1 (3.1%)	12 (37.5%)	19 (59.4%)	0 (0.0%)
	High School	0 (0.0%)	5 (15.6%)	17 (53.1%)	10 (31.3%)	0 (0.0%)
What is your role	Whole School	0 (0.0%)	0 (0.0%)	1 (16.7%)	4 (66.7%)	1 (16.7%)
	Teacher	0 (0.0%)	4 (6.1%)	24 (36.4%)	38 (57.6%)	0 (0.0%)
	Educational Assistant	0 (0.0%)	1 (2.3%)	10 (23.3%)	31 (72.1%)	1 (2.3%)
	Teacher Leader	0 (0.0%)	1 (14.3%)	1 (14.3%)	5 (71.4%)	0 (0.0%)
	Administrator	0 (0.0%)	0 (0.0%)	1 (25.0%)	3 (75.0%)	0 (0.0%)
Gender	Male	0 (0.0%)	3 (6.1%)	14 (28.6%)	31 (63.3%)	1 (2.0%)
	Female	0 (0.0%)	3 (4.2%)	22 (31.0%)	46 (64.8%)	0 (0.0%)
Years of experience in education	2 years or fewer	0 (0.0%)	1 (20.0%)	0 (0.0%)	4 (80.0%)	0 (0.0%)
	3-5 years	0 (0.0%)	0 (0.0%)	4 (28.6%)	10 (71.4%)	0 (0.0%)
	6-10 years	0 (0.0%)	1 (4.8%)	6 (28.6%)	13 (61.9%)	1 (4.8%)
	11-20 years	0 (0.0%)	2 (3.5%)	16 (28.1%)	39 (68.4%)	0 (0.0%)
	20+ years	0 (0.0%)	2 (8.7%)	10 (43.5%)	11 (47.8%)	0 (0.0%)

Variables	Responses	Nonreflective	Partially reflective	Mostly reflective	Highly reflective	Not applicable
How many international schools have you worked at	One school	0 (0.0%)	1 (1.9%)	15 (28.3%)	36 (67.9%)	1 (1.9%)
	2-3 schools	0 (0.0%)	5 (10.2%)	14 (28.6%)	30 (61.2%)	0 (0.0%)
	4-6 schools	0 (0.0%)	0 (0.0%)	6 (37.5%)	10 (62.5%)	0 (0.0%)
	6+ schools	0 (0.0%)	0 (0.0%)	1 (50.0%)	1 (50.0%)	0 (0.0%)
Years of experience at the case study school	2 years or fewer	0 (0.0%)	1 (3.7%)	6 (22.2%)	20 (74.1%)	0 (0.0%)
	3-5 years	0 (0.0%)	3 (7.9%)	16 (42.1%)	19 (50.0%)	0 (0.0%)
	6-10 years	0 (0.0%)	1 (3.2%)	7 (22.6%)	22 (71.0%)	1 (3.2%)
	11-20 years	0 (0.0%)	1 (5.0%)	6 (30.0%)	13 (65.0%)	0 (0.0%)
	20+ years	0 (0.0%)	0 (0.0%)	1 (25.0%)	3 (75.0%)	0 (0.0%)

Table C4 displays the perception of Level 4: standards-referenced reporting by faculty disaggregated by various demographic variables.

Table C4*Demographic Variables Versus. Level 4: Standards-Referenced Reporting*

Variables	Responses	Nonreflective	Partially reflective	Mostly reflective	Highly reflective	Not applicable
Identify the division you mostly work with	Elementary School	0 (0.0%)	0 (0.0%)	19 (38.0%)	30 (60.0%)	1 (2.0%)
	Middle School	0 (0.0%)	5 (15.6%)	15 (46.9%)	12 (37.5%)	0 (0.0%)
	High School	1 (3.1%)	8 (25.0%)	16 (50.0%)	7 (21.9%)	0 (0.0%)
	Whole School	0 (0.0%)	1 (16.7%)	0 (0.0%)	5 (83.3%)	0 (0.0%)
What is your role	Teacher	0 (0.0%)	11 (16.7%)	28 (42.4%)	27 (40.9%)	0 (0.0%)
	Educational Assistant	0 (0.0%)	2 (4.7%)	17 (39.5%)	23 (53.5%)	1 (2.3%)
	Teacher Leader	1 (14.3%)	1 (14.3%)	3 (42.9%)	2 (28.6%)	0 (0.0%)
	Administrator	0 (0.0%)	0 (0.0%)	2 (50.0%)	2 (50.0%)	0 (0.0%)
Gender	Male	1 (2.0%)	4 (8.2%)	18 (36.7%)	26 (53.1%)	0 (0.0%)
	Female	0 (0.0%)	10 (14.1%)	32 (45.1%)	28 (39.4%)	1 (1.4%)
Years of experience in education	2 years or fewer	0 (0.0%)	0 (0.0%)	1 (20.0%)	4 (80.0%)	0 (0.0%)
	3-5 years	0 (0.0%)	1 (7.1%)	7 (50.0%)	5 (35.7%)	1 (7.1%)
	6-10 years	0 (0.0%)	3 (14.3%)	6 (28.6%)	12 (57.1%)	0 (0.0%)
	11-20 years	1 (1.8%)	6 (10.5%)	24 (42.1%)	26 (45.6%)	0 (0.0%)
	20+ years	0 (0.0%)	4 (17.4%)	12 (52.2%)	7 (30.4%)	0 (0.0%)

Variables	Responses	Nonreflective	Partially reflective	Mostly reflective	Highly reflective	Not applicable
How many international schools have you worked at	1 school	1 (1.9%)	3 (5.7%)	17 (32.1%)	31 (58.5%)	1 (1.9%)
	2-3 schools	0 (0.0%)	7 (14.3%)	23 (46.9%)	19 (38.8%)	0 (0.0%)
	4-6 schools	0 (0.0%)	4 (25%)	9 (56.3%)	3 (18.8%)	0 (0.0%)
	6+ schools	0 (0.0%)	0 (0.0%)	1 (50.0%)	1 (50.0%)	0 (0.0%)
Years of experience at the case study school	2 years or fewer	0 (0.0%)	2 (7.4%)	14 (51.9%)	11 (40.7%)	0 (0.0%)
	3-5 years	0 (0.0%)	7 (18.4%)	20 (52.6%)	11 (28.9%)	0 (0.0%)
	6-10 years	0 (0.0%)	3 (9.7%)	9 (29.0%)	18 (58.1%)	1 (3.2%)
	11-20 years	1 (5.0%)	2 (10.0%)	5 (25.0%)	12 (60.0%)	0 (0.0%)
	20+ years	0 (0.0%)	0 (0.0%)	2 (50.0%)	2 (50.0%)	0 (0.0%)

Table C5 displays the perception of Level 5: competency-based education and personalization by faculty disaggregated by various demographic variables.

Table C5*Demographic Variables Versus. Level 5: Competency-Based Education and Personalization*

Variables	Responses	Non reflective	Partially reflective	Mostly reflective	Highly reflective	Not applicable
Identify the division you mostly work with	Elementary School	0 (0.0%)	0 (0.0%)	17 (34.0%)	29 (58.0%)	4 (8.0%)
	Middle School	0 (0.0%)	5 (15.6%)	12 (37.5%)	15 (46.9%)	0 (0.0%)
	High School	0 (0.0%)	8 (25.0%)	18 (56.3%)	6 (18.8%)	0 (0.0%)
	Whole School	0 (0.0%)	0 (0.0%)	1 (16.7%)	5 (83.3%)	0 (0.0%)
What is your role	Teacher	0 (0.0%)	7 (10.6%)	31 (47.0%)	27 (40.9%)	1 (1.5%)
	Educational Assistant	0 (0.0%)	3 (7.0%)	11 (25.6%)	26 (60.5%)	3 (7.0%)
	Teacher Leader	0 (0.0%)	2 (28.6%)	4 (57.1%)	1 (14.3%)	0 (0.0%)
	Administrator	0 (0.0%)	1 (25.0%)	2 (50.0%)	1 (25.0%)	0 (0.0%)
Gender	Male	0 (0.0%)	6 (12.2%)	18 (36.7%)	24 (49.0%)	1 (2.0%)
	Female	0 (0.0%)	7 (9.9%)	30 (42.3%)	31 (43.7%)	3 (4.2%)
Years of experience in education	2 years or fewer	0 (0.0%)	0 (0.0%)	1 (20.0%)	4 (80.0%)	0 (0.0%)
	3-5 years	0 (0.0%)	1 (7.1%)	6 (42.9%)	6 (42.9%)	1 (7.1%)
	6-10 years	0 (0.0%)	1 (4.8%)	7 (33.3%)	12 (57.1%)	1 (4.8%)
	11-20 years	0 (0.0%)	6 (10.5%)	24 (42.1%)	26 (45.6%)	1 (1.8%)
	20+ years	0 (0.0%)	5 (21.7%)	10 (43.5%)	7 (30.4%)	1 (4.3%)

Variables	Responses	Non reflective	Partially reflective	Mostly reflective	Highly reflective	Not applicable
How many international schools have you worked at	1 school	0 (0.0%)	3 (5.7%)	17 (32.1%)	31 (58.5%)	2 (3.8%)
	2-3 schools	0 (0.0%)	5 (10.2%)	22 (44.9%)	20 (40.8%)	2 (4.1%)
	4-6 schools	0 (0.0%)	5 (31.3%)	9 (56.3%)	2 (12.5%)	0 (0.0%)
	6+ schools	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (100.0%)	0 (0.0%)
Years of experience at the case study school	2 years or fewer	0 (0.0%)	2 (7.4%)	11 (40.7%)	14 (51.9%)	0 (0.0%)
	3-5 years	0 (0.0%)	7 (18.4%)	17 (44.7%)	14 (36.8%)	0 (0.0%)
	6-10 years	0 (0.0%)	1 (3.2%)	11 (35.5%)	17 (54.8%)	2 (6.5%)
	11-20 years	0 (0.0%)	3 (15.0%)	8 (40.0%)	8 (40.0%)	1 (5.0%)
	20+ years	0 (0.0%)	0 (0.0%)	1 (25.0%)	2 (50.0%)	1 (25.0%)

Table C6 highlights that all demographic variables except division are not statistically significant for Level 1 - safe, supportive, and collaborative culture.

Table C6*Regression Results for Level 1: Safe, Supportive, and Collaborative Culture*

Variable	Beta	SE	95% CI		β	<i>p</i>
			LL	UL		
Identify the division that you mostly work with	-0.25	0.05	-0.35	-0.14	-0.4	<.001
Role	0.01	0.07	-0.12	0.14	0.013	0.88
Gender	-0.03	0.11	-0.24	0.18	-0.03	0.77
Years of experience in education	0.00	0.06	-0.11	0.12	0.003	0.98
International Schools worked in	-0.09	0.09	-0.27	0.09	-0.12	0.31
Years of experience at the case study school	0.04	0.06	-0.07	0.16	0.08	0.46

Table C7 highlights that all demographic variables except division are not statistically significant for Level 2 - effective teaching in every classroom.

Table C7*Regression Results for Level 2: Effective Teaching in Every Classroom*

Variable	Beta	SE	95% CI		β	<i>p</i>
			LL	UL		
Identify the division that you mostly work with	-0.24	0.06	-0.37	-0.11	-0.32	<.001
Role	0.07	0.08	-0.09	0.23	0.07	0.40
Gender	-0.05	0.13	-0.30	0.20	-0.03	0.72
Years of experience in education	-0.11	0.07	-0.25	0.03	-0.17	0.11
International Schools worked in	-0.11	0.11	-0.31	0.10	-0.11	0.32
Years of experience at the case study school	0.08	0.07	-0.06	0.21	0.12	0.26

Table C8 highlights that all demographic variables except division are not statistically significant for Level 3 - guaranteed and viable curriculum.

Table C8*Regression Results for Level 3: Guaranteed and Viable Curriculum*

Variable	Beta	SE	95% CI		β	<i>p</i>
			LL	UL		
Identify the division that you mostly work with	-0.22	0.06	-0.33	-0.10	-0.34	<.001
Role	0.09	0.07	-0.05	0.22	0.11	0.23
Gender	-0.07	0.11	-0.29	0.15	-0.06	0.52
Years of experience in education	-0.06	0.06	-0.18	0.06	-0.11	0.31
International Schools worked in	0.03	0.09	-0.16	0.21	0.03	0.79
Years of experience at the case study school	0.03	0.06	-0.09	0.15	0.06	0.57

Table C9 highlights that all demographic variables except division are not statistically significant for Level 4 - standards-referenced reporting.

Table C9*Regression Results for Level 4: Standards-Referenced Reporting*

Variable	Beta	SE	95% CI		β	<i>p</i>
			LL	UL		
Identify the division that you mostly work with	-0.22	0.07	-0.36	-0.09	-0.29	0.002
Role	0.05	0.09	-0.12	0.21	0.05	0.60
Gender	-0.17	0.13	-0.43	0.10	-0.11	0.22
Years of experience in education	-0.09	0.07	-0.24	0.06	-0.13	0.23
International Schools worked in	-0.11	0.11	-0.33	0.11	-0.11	0.34
Years of experience at the case study school	0.05	0.07	-0.09	0.19	0.07	0.50

Table C10 highlights that all demographic variables except division are not statistically significant for Level 5 - competency-based education and personalization.

Table C10*Regression Results for Level 5: Competency-Based Education and Personalization*

Variable	Beta	SE	95% CI		β	<i>p</i>
			LL	UL		
Identify the division that you mostly work with	-0.23	0.07	-0.37	-0.10	-0.30	<.001
Role	-0.06	0.08	-0.22	0.11	-0.06	0.51
Gender	0.00	0.13	-0.26	0.27	0.00	0.98
Years of experience in education	-0.09	0.07	-0.23	0.06	-0.12	0.25
International Schools worked in	-0.13	0.11	-0.35	0.09	-0.13	0.25
Years of experience at the case study school	0.06	0.07	-0.08	0.20	0.09	0.40

Figure D2

Level 1 - Safe, Supportive, and Collaborative Culture Characteristics Present in the Case-Study School



Figure D3

Level 2 - Effective Teaching in the Classroom Characteristics Present in the Case-Study School

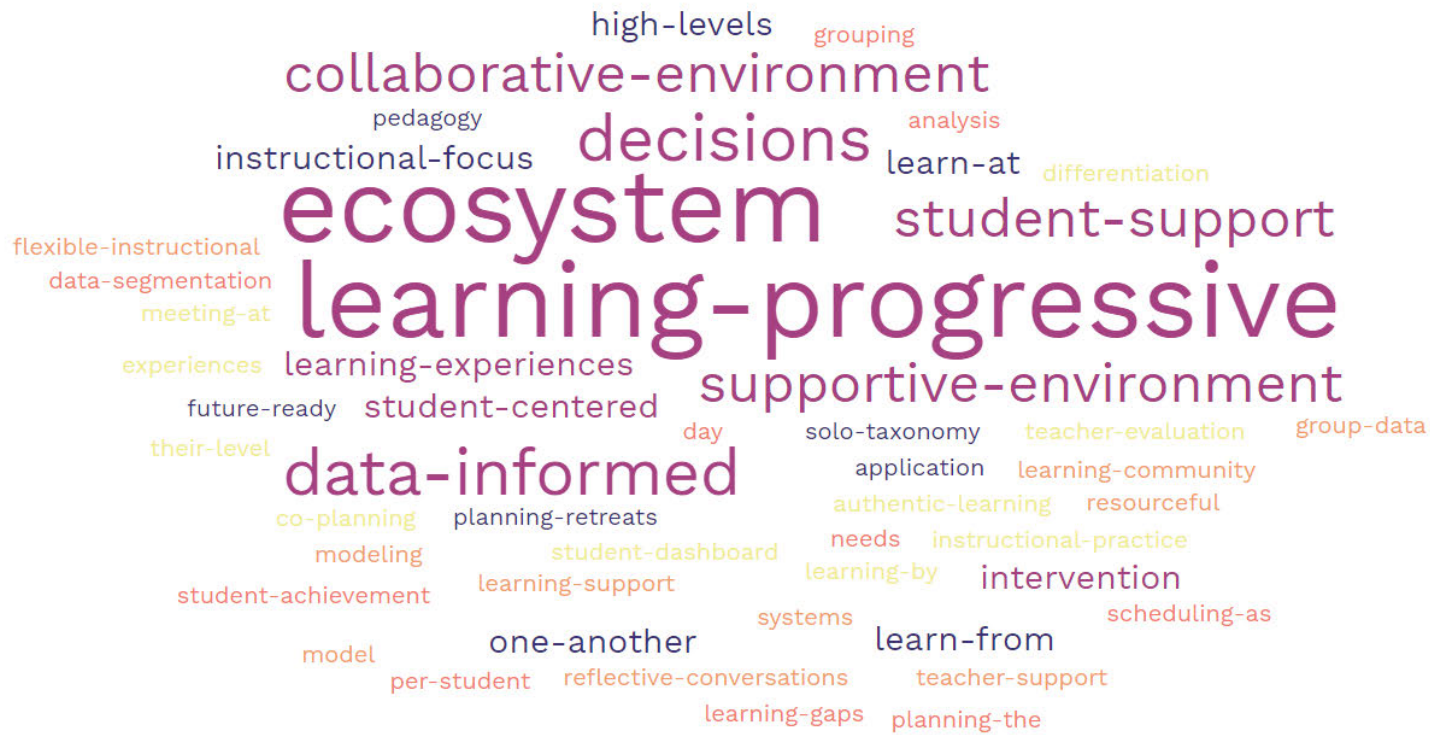
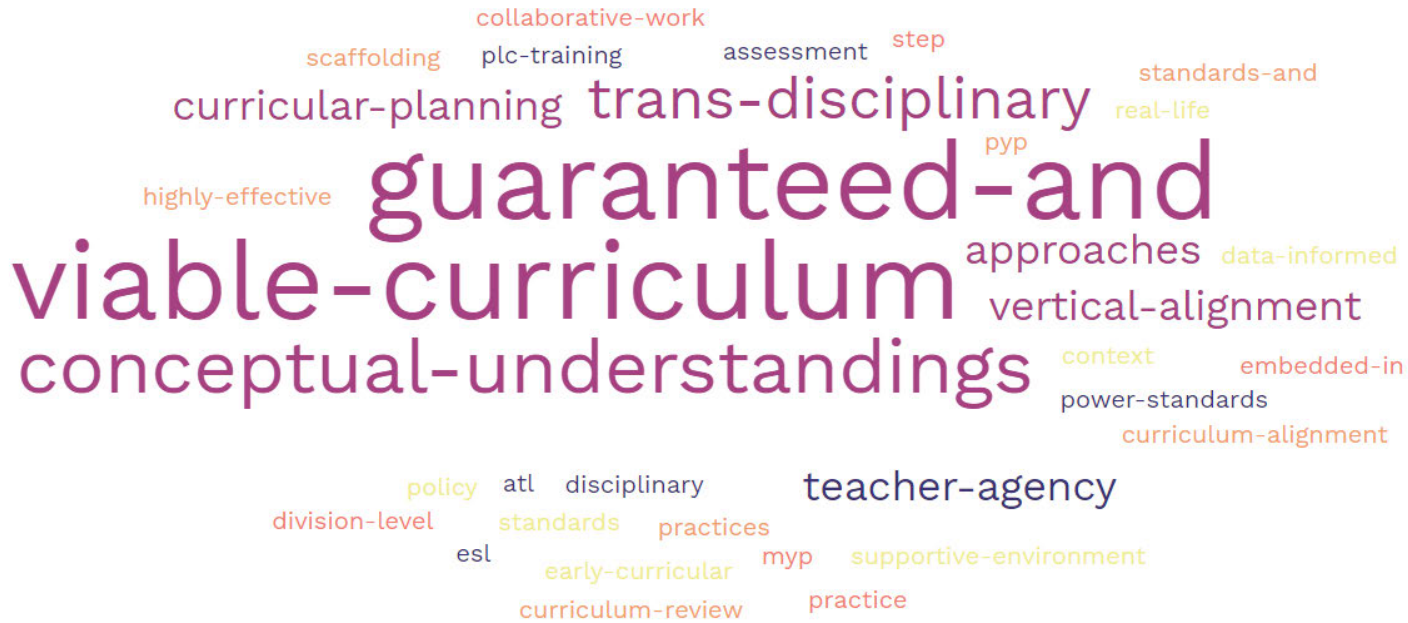


Figure D4

Level 3 - Guaranteed and Viable Curriculum Characteristics Present in the Case-Study School



APPENDIX E

PERMISSIONS



**INTERNATIONAL
COMMUNITY
SCHOOL**

20 June 2022

TO WHOMSOEVER IT MAY CONCERN

It is hereby informed that Santha Kumar Sankaranarayanan is permitted to use the Highly Effective and Learning Progressive survey and focus group data collected by ICS for his dissertation study for his Ph.D. program in Leadership Studies at the University of San Diego.

We wish him all the very best for the successful completion of his dissertation study.

Dr. Timothy Stuart
Head of School



Mauritania Rd,
Addis Ababa, Ethiopia

www.icsaddis.org
PO Box 70262



**INTERNATIONAL
COMMUNITY
SCHOOL**

Date 29 September 2022

Dear Members of the USD IRB Committee,

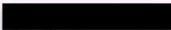
This letter is to document that Santha Kumar Sankara Narayanan from the University of San Diego has permission to conduct their research entitled An Explorative Case Study of Leadership Practices That Enable International Schools To Become Highly Effective and Learning Progressive Environments.

We have been informed of the scope of this research and have discussed the related activities of the study with Santha Kumar Sankara Narayanan including permission to use an email contact list during the recruitment process, which may commence when the PI provides evidence of IRB approval.

We understand that this site's participation will only take place during the study's active IRB approval period and that all study-related activities must cease if IRB approval expires or is suspended.

Printed Name Easi Chamberlin Title Head of School

Mauritania Rd,
Addis Ababa, Ethiopia


www.icsaddis.org
PO Box 70282



Appendix F IRB Approval

 University of San Diego

IRB-2022-527 - Initial: Expedited

Mon, Dec 5, 2022 at 1:02 PM



Dec 5, 2022 1:02:40 PM PST

Santha Kumar Sankaranarayanan
Sch of Leadership & Ed Science

Re: Expedited - Initial - IRB-2022-527, An Explorative Case Study of Leadership Practices That Enable International Schools To Become Highly Effective and Learning Progressive Environments

Dear Santha Kumar Sankaranarayanan:

The Institutional Review Board has rendered the decision below for IRB-2022-527, An Explorative Case Study of Leadership Practices That Enable International Schools To Become Highly Effective and Learning Progressive Environments.

Decision: Approved

Selected Category: 7. Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

Findings: Thank you for addressing all of the previous review feedback.

Research Notes:

Internal Notes:

*The USD IRB requires annual renewal of all active studies reviewed and approved by the IRB. Please submit an application for renewal prior to the annual anniversary date of initial study approval.
If an application for renewal is not received, the study will be administratively closed.*

Note: We send IRB correspondence regarding student research to the faculty advisor, who bears the ultimate responsibility for the conduct of the research. We request that the faculty advisor share this correspondence with the student researcher.

The next deadline for submitting project proposals to the Provost's Office for full review is N/A. You may submit a project proposal for expedited or exempt review at any time.

Sincerely,

Truc Ngo, PhD
IRB Administrator

Office of the Senior Vice President and Provost
Hughes Administration Center