PROFESSIONAL LEARNING FOR TEACHERS: ALIGNING NEEDS & VISION AT AN INDEPENDENT SCHOOL

Lauren M. Holthaus July 2020

In partial fulfillment of the requirements for the degree of Doctor of Education in Leadership and Learning in Organizations Peabody College of Education and Human Development, Vanderbilt University 3E

ACKNOWLEDGEMENTS AND GRATITUDE

Nothing is achieved in a vacuum. This work, and this degree, is the result of many who have lifted me up and paved the way and the resulting credential truly belongs to more than just me.

Thank you to my LLO Cohort 1 colleagues: you know.

Thank you to the faculty and staff at Peabody College who never let us lose sight of the fact that we could be scholar practitioners.

Thank you to my friends and family and co-workers who have been patient, supportive, and kept me believing I could do this over the past three years

Thank you to every great educator I have had or worked alongside: thank you for your neverending quests to make the world a better place through the transformative power of education. Miraculously, there are far too many of you to name.

Thank you to the women who came before me and fought all of the important fights to allow me to be here. I pledge to always bring along the next woman.

For my grandmother: the strongest Navy spouse I knew, who left Kansas with her babies in the 1940s and followed her husband to Guam, raised her babies up, and then went back to work. She spent her career as an educator, and never stopped pursuing her own education.

For my father-in-law: I took your youngest son's name four days after my 22^{nd} birthday. I hope you'd be proud that I can now be called Dr. Holthaus.

For my sister: our journeys have been so different, but there is not a doubt in my mind that we are cut from the same tattered and beautiful cloth.

For my dad: who always says yes when I need him and who never misses an opportunity to remind me of the possibility of dangerous weather, both literally and figuratively.

For my mom: who has always 'stood in the gaps' to make my life possible and showed me day in and day out that you can do it all--raise kids, be an educator, be a student, and still be kind (albeit tired).

For my husband: who never stops believing in the good and the possible and me and whose unyielding belief that leadership is service humbles me.

For my son, Jack: you are my treasure beyond measure. I hope that in time you will come to believe, as I do, that to whom much is given, much is expected. I'm so excited to have so much more time together. XO forever.

TABLE OF CONTENTS

Executive Summary	
Introduction	7
Context	
Research Questions and Conceptual Framework	10
Methods	
Findings	
Discussion and Limitations	
Recommendations	
Conclusion	48
References	49
Appendices Appendix A: School Leader Interview Guide	51
Appendix B: Principal Interview Thematic Coding	52
Appendix C: Survey Instrument	54
Appendix D: Instructional Staff Interview Guide	57
Appendix E: Master Matrix	58

EXECUTIVE SUMMARY

The context examined in this work is a PK-8, independent, religiously affiliated school in the suburbs of a major metropolitan area. Northern Vista School (NVS) serves approximately 450 students with just over 50 staff members. NVS is under new leadership; the principal recently completed her second year in the role. The school is facing the challenge of developing a professional learning program for staff that is aligned with a newly forming vision for the school This is important because the school is under increasing pressure to maintain full-enrollment given the competition from academically rigorous and high performing local public schools and the emergent threat posed by the changing educational delivery models as a result of COVID-19. Running in parallel to the newly forming vision for rigorous, STEM focused academic instruction, and comprehensive literacy instruction is a growing emphasis on differentiated instructional support to meet the needs of all enrolled learners.

These challenges and the current status of the organization led to the literature on the qualities of effective professional development as well as evaluation levels for professional development and mechanisms for establishing improvement systems within schools. To frame an understanding of the qualities of professional development, the work of Darling-Hammond, Hyler, and Gardner (2017) was drawn upon. Specifically, the results of this meta-analysis were chosen as the researchers qualified effective professional development as that which resulted in improved student outcomes. Likewise, work done by Guskey (2002, 2007, 2016) in defining the levels of professional development evaluation was used to frame aspects of the analysis for the same reason: a focus on the necessary outcome of improving student indicators. Finally, the work of Bryk et al (2017) is used to give context to the principles that can be helpful in thinking of how to improve schools.

Putting together the context, problem, literature and framework, two research questions were established. First, how do teachers at this school perceive professional learning? Second, how does leadership at a small, independent school develop a professional development plan that meets the perceived needs of all teachers?

To investigate these questions at this site, a sequential, exploratory mixed method approach was used. The initial data collection was a qualitative interview with the school principal. Thematic coding was used to pull out ideas for further probing in the second phase of data collection. To collect both quantitative and qualitative data, a survey was developed that included a variety of response types, including open ended responses. Survey data analysis was followed by convenience sample interviews of teachers and as well as an interview with the assistant principal of the school. All interviews took place via online meeting platforms due to physical distancing requirements related to COVID-19. Finding 1: Overall, teachers are satisfied with their professional development, however, teachers value self-selected and collaborative professional learning over schoolwide PD.

Results show that the answer to the first research questions is that teachers perceive their experiences as largely positive, but that there is still room for improving the aligning individual needs of teachers in varying roles. Additionally, teachers indicated that they would like more time spent on certain professional learning pathways: collaborative activities and individually selected professional development and support.

Finding 2: Despite the school focusing on differentiated instruction in their PD, teachers are not fully confident in their ability to enact differentiated instruction or assessment.

Though not anticipated in these research questions, results revealed that staff felt that their skills in the areas of differentiated instruction and assessment were not strong. This is notable as differentiation was an area of focus for professional learning over the past school year. Staff indicated that they understood differentiation, but both quantitative and qualitative data showed a desire for more learning in these areas.

Finding 3: Teachers see the vision and direction provided by the school leaders.

Data collection did not center on deeply understanding how teachers themselves were working to enact the vision of the school leaders, however, the results indicated that teachers saw and understood the current vision for their school.

Finding 4: Professional development planning is not consistently tied to measurable student outcomes.

With respect to the question of the leadership's development of a school-wide plan, results revealed the need for a more comprehensive process to planning effective professional learning that has alignment to measurable student outcomes.

Based on these four primary findings, three recommendations are made for Northern Vista School to improve the planning and implementation of professional development at this site.

Recommendation 1: Formalize the vision for professional learning and its connection to improvement through the development of a Schoolwide Professional Learning Plan (PLP) that is based on evaluation of increasing student achievement.

This recommendation stems primarily from the lacking of a current schoolwide plan, but is buoyed by the absence of measurable student achievement in the conversations related to teacher perceptions of professional development. Teachers spoke largely of what they want to see or appreciate in their own learning, but did not directly tie their own learning to their ability to increase outcomes for their students. Similarly, the administrators at the school spoke of the lack of direction they received from their own overseeing body, the diocese, but did not indicate how they identified or provided direction for their staff.

It is recommended that the development of this plan incorporate a focus on student achievement outcomes, as the ultimate goal of professional learning as clarified by Darling-Hammond, Hyler, and Gardner and Guskey, and incorporate methods for regular evaluation of impact as indicated by Bryk et al.

Recommendation 2: Implement a coaching model to support instructional staff.

Data revealed that staff wanted to spend more time receiving individual feedback and that they were not only open to, but desired more time observing in other classrooms. Northern Vista School is uniquely positioned to offer coaching support as they do have resource teaching staff who could provide instructional expertise. Additionally, given that there is a desire for more collaboration and time in other classrooms, the school could explore an instructional partnership model to develop peer coaching skills as well.

Recommendation 3: Incorporate teacher choice in an 'official' capacity by codeveloping individual professional learning plans (PLPs) for teachers.

Teachers indicated that they felt general support for the individualized learning that they wanted to take on. This sentiment was echoed by the school administrators who shared that they had no philosophical or financial difficulties sending staff off site to gain individual skills as requested. Some responses indicated that these sessions were related to schoolwide initiatives or programs, while others were based on interest or the scarcity of opportunity to collaborate on site due to the individual being the only teacher of a particular subject. These rationales for individual learnings did not flow directly from a student outcome improvement, and could be better aligned to such through the creation of individual professional learning plans that were derived from a larger schoolwide plan.

Like all research, this project has limitations, including a low number of respondents to the qualitative portion of the data collection. However, it can still be suggested with some degree of confidence, and through connecting these results to the literature, that the organization should enact several systematic recommendations including the generation of a schoolwide professional learning plan, individual teacher professional learning plans, and a coaching model, and that each recommendation should include an evaluation component that seeks to align professional development efforts with improvements in student outcomes.

INTRODUCTION

Professional development of teachers is widely viewed as a lever of change when schools, districts, and educational organizations seek to improve student outcomes or institute change. Training and education programs are often selected as the first, or only, choice when improvements in student outcomes are needed, yet the links between the efficacy of this selection is not widely established (Yoon et al, 2007). Additionally, professional development is a costly enterprise. A 2015 study estimated that over 8 billion dollars is spent annually on teacher professional development (Layton, 2015).

This project seeks to understand both teacher and administrator perceptions of and needs for professional development at their particular site and recommend ways to improve the learning of staff to reflect the changing vision for the school under new leadership. Secondary to unpacking stakeholder groups' perceptions of the value of professional development at this school site in order to make organizational recommendations, this project aims to provide a framework that can be used to manage and evaluate professional learning through the targeted use of school improvement planning that activates improvement cycles and integrates the lens of Guskey's Five Levels of Evaluation (2002, 2007, 2016).

Despite the limitation in the ability to directly connect teacher professional development to student achievement outcomes, and the high cost for something that is not proven to consistently have an impact on student outcomes, there does exist a framework that defines effective professional development (Darling-Hammond, Hyler, and Gardner, 2017). This research team's meta-analysis found seven features that were common across a review of the literature where a positive link was found between professional development and student learning outcomes. In their report sharing these features, one policy recommendation made is that schools "conduct needs assessments" to identify areas that educators themselves perceive to be necessary in order for them to improve their practice. This recommendation became central to the development of this project as the initial phase of data collection centered around understanding the needs of the school from the perspective of the school principal.

CONTEXT

The organizational context for this mixed-method quality improvement project is an independent, religiously affiliated PK-8 school in an affluent suburb of a major east coast city in the United States. Throughout this work the pseudonym "Northern Vista School" (NVS) will be used. The organization appreciated the opportunity to remain anonymized as the school market in this metropolitan area is highly competitive and given this, the school wanted to be able to digest the findings first before making them public.

Northern Vista School serves approximately 450 students in prekindergarten through 8th grade. Although not a requirement for attendance, over 95% of families identify as Catholic. Racially, the school is not as diverse as the surrounding county, with 80% of the students identifying as white and the remaining 20% identifying as Hispanic, African American, or Asian. The school does not break down the racial and ethnic data of enrolled students further. Census data for 2019 indicate that 64% of the population of the surrounding county identifies as white with other racial groups making up the remaining 36% (including: 9.6% Asian and 8.2% Black) (U.S. Census Bureau, 2019).

Located in an affluent suburb where the median household income is roughly \$117,000 (U.S. Census Bureau, 2019) a year and private schools can cost easily over \$20,000 a year for elementary school, Northern Vista School represents a value at just approximately \$11,500 a year. Tuition assistance is available for families who request consideration and as a Catholic school, there is a built in subsidy for students whose families are Catholic. Families who are registered members of the parish affiliated with the school receive an approximately \$4,000 tuition discount, bringing their annual cost down to around \$7,500 a year for the 2019-20 school year. During the 2019-20 school year, the school reports 99% enrollment. Spaces were not available at all grade levels at the school that also boasts the status of National Blue Ribbon School.

Over 50 staff members in roles as varied as school nurse, resource teachers, and Spanish teachers support the students and are often serving in dual roles as parents of current students, parents of alumni, or members of the congregation. The instructional faculty, which consists of 7 "specials" teachers and 26 "classroom" teachers as well as 3 resource teachers, are all required to hold an active license from one of two credentialing organizations: the State Department of Education or the State Catholic Education Association. In addition, the organization reports that 70% of their instructional faculty hold post-graduate degrees.

The school touts an active and engaged Parent-Teacher Organization. The PTO serves primarily to fundraise for the needs of the school that are not covered by tuition or by

the support of the diocese and the parish that the school is affiliated with. Notably, the PTO fundraising is the primary source for the funding that is used to provide teachers with school-wide professional development activities as well as self-selected, individually requested professional learning opportunities off-site.

Northern Vista School is led in its daily operations by a full- time administrative team of a principal and an assistant principal. At the time of this research, the principal was completing her second year in the role. Prior to that role, she served as the school's assistant principal for a number of years, and before that was a classroom teacher with experience teaching in both a Catholic school as well as a local public school. The assistant principal was hired by the principal upon her promotion and the two had an existing collegial relationship as they were both assistant principals in the local diocese at the same time.

The transition to a new leadership team has meant that the school is in the process of reestablishing an instructional vision. When approached to serve as a research site for work around the topic of professional development, the principal excitedly agreed. The initial interview that occurred with the principal early in the partnership established her desire to improve student outcomes both to meet the needs of the students served at the school currently, but also to highlight the effectiveness of the vision that she was curating for the school. She indicated a desire to better understand the perceptions of professional development at her school and a seemingly genuine desire to improve.

An additional, unexpected, but important aspect of the context is the external factor of the COVID-19 pandemic. Northern Vista School is located in a state which, during the time of the data collection for this project, had already announced the mandated closure of public and private school buildings for the remainder of the academic school year. School staff at NVS scrambled to continue instruction remotely and were actively involved in learning many new systems and programs during this unprecedented event.

RESEARCH QUESTIONS AND CONCEPTUAL FRAMEWORK

Two research questions were established to guide the investigation into professional development at this site. Each question was developed as an individual query, however, there is a significant overlap in the concepts that underpin the investigation of each. Table 1 shows each research question, the concepts/variables and their alignment to the questions as well as their overlap (bolded).

The first research question seeks to understand teacher perceptions of the professional learning that they have participated in over the past year while employed at this school. The second research question explores the specific ways that the school leaders at this school develop and manage professional learning for the staff. Embedded within each of these questions are key concepts that converge at times.

Table 1

Research Question	Concept/Variable	Method of Data Collection
How do teachers at this school perceive professional development as impacting their practice?	 Qualities of Effective Professional Development Evaluation of Professional Development 	-Teacher interviews -Teacher surveys
How does leadership at a small, independent school develop a professional development plan that meets the perceived needs of all teachers?	 Qualities of Effective Professional Development Evaluation of Professional Development Systematic Improvement 	-Document review -Leadership interviews -Teacher surveys

Research Question Alignment to Concepts and Data Collection Methods

Three key concepts form the framework for this investigation. First, the understanding of what makes professional development effective is a necessary prerequisite for understanding the qualities of learning that are taking place. Second, a framework for evaluating professional learning is necessary as the research questions that are posed are inherently evaluative. Finally, it is necessary to have a system for improving outcomes once an understanding of the overall status of professional learning, as perceived by teachers and administrators, at the site is established



Qualities of Effective Professional Development

To investigate each of these research questions, there must first be a framework for understanding the concept of effective professional development. Though "effective" could be defined in a variety of ways and on a series of levels, for the purposes of this investigation, effective professional development will be defined as that which impacts student outcomes in a positive manner. In their work, Effective Teacher Professional Development, Darling-Hammond, Hyler, and Gardner (2017) sought to find common features of professional development that demonstrated positive impacts on student learning outcomes. Their report describes seven features that were common in a thematic analysis of research studies that indicated an impact on student learning as a result of teacher professional development. Not every professional development activity or program reviewed in their analysis incorporated every feature, however, each study did incorporate a simple majority of the identified features. Their work gives an understanding of the qualities that are present in professional learning activities that resulted in the ultimate aim of professional learning that they identified: improved student learning outcomes. The seven features (content focus, incorporation of active l learning, supports collaboration, models effective practice, provides coaching, offers feedback, and of sustained duration) read almost as a summary of effective classroom

teaching practices. In Table 2, the full feature categorization and a description each is provided.

Table 2

Darling-Hammond, Hyler, Gardner's Features of Effective Teacher Professional
Development

Feature	Description
Is content focused	PD that focuses on teaching strategies associated with specific curriculum content supports teacher learning within teachers' classroom contexts. This element includes an intention focus on discipline-specific curriculum development and pedagogies in areas such as mathematics, science, or literacy.
Incorporates active learning	Active learning engages teachers directly in designing and trying out teaching strategies, providing them an opportunity to engage in the same style of learning they are designing for their students. Such PD uses authentic artifacts, interactive activities, and other strategies to provide deeply embedded, highly contextualized professional learning. This approach moves away from traditional learning models and environments that are lecture based and have no direct connections to teachers' classrooms and students.
Supports collaboration	High-quality PD creates space for teachers to share ideas and collaborate in their learning, often in job-embedded contexts. By working collaboratively, teachers can create communities that positively change the culture and instruction of their entire grade level, department, school and/or district.
Uses models of effective practice	Curricular models and modeling of instruction provide teachers with a clear vision of what best practices look like. Teachers may view models that include lesson plans, unit plans, sample student work, observations of peer teaching, and videos or written cases of teaching.
Provides coaching and expert support	Coaching and expert support involve the sharing of expertise about content and evidence-based practices, focused directly on teachers' individual needs.
Offers feedback and reflection	High-quality professional learning frequently provides built-in time for reflection for teachers to think about, receive input on, and makes changes to their practice by facilitating reflection and soliciting feedback. Feedback and reflection both help teachers to thoughtfully move toward the expert visions of practice.
Is of sustained duration	Effective PD provides teachers with adequate time to learn, practice, implement, and reflect upon new strategies that facilitate changes in their practice. L., Hyler, M.E., Gardner, M. (2017). <i>Effective Teacher</i>

Reproduced from: Darling-Hammond, L., Hyler, M.E., Gardner, M. (2017). *Effective Teacher Professional Development*. Palo Alto, CA: Learning Policy Institute.

In addition to setting forth what features of effective professional development would frame this investigation, a method for establishing the meaningful categorization of professional development activities was sought to support the development of the instrumentation. For this study, the framework selected to define these modes were the pathways of professional learning as defined or "bucketed" on the 2018 and 2019 Professional Learning Teacher Module of the Tennessee Educator Survey. This survey tool has been administered in varying forms since 2015. The evolution of the survey can be viewed as the modes are progressively defined into buckets with increasing clarity until 2018 when the pathways are established as follows: formal professional development opportunities, individual support, and collaborative activities. Sample activities that the survey suggests would fall into each pathway are shown in Table 3. These pathways, or 'buckets' would be used to frame thinking about the types of professional development teachers preferred or reported to find most helpful to their daily practice.

Table 3

Pathway	Sample Activities
Formal professional development opportunities	Workshops Webinars Conferences Graduate or continuing education classes
Individual support	Mentoring (as mentor or mentee) Working with an instructional coach, administrator or teacher leader Peer observation and feedback
Collaborative activities	Professional learning communities (PLCs) with grade level or subject team Collaborative planning on curriculum, materials, or specific lessons Working together on classroom management or discipline issues

Tennessee Educator Teacher Survey Professional Learning Pathways

Recreated from: 2019 TN Educator Survey. (2019). From https://www.tn.gov/education/data/educator-survey/2019-tn-educator-survey.html.

Evaluation of Professional Learning

It is not enough to know what makes professional development effective with respect to its impact on student learning outcomes as has been investigated and described by Darling-Hamond, Hyler, and Gardner (2017). Once a school, district, or other organization begins explicitly using professional development as a tool for improving student outcomes, there must be a level of evaluation that takes place to know if the impact is occurring as expected.

The evaluation of professional learning and its effectiveness can take place for a variety of reasons, but is often a missed aspect of planning for professional development. This improvement project sought to understand teacher perceptions of professional development that they had experienced through their workplace, an exercise that is inherently evaluative. Additionally, the process of planning for these learning opportunities involves aspects of evaluation, even if not recognized, on the part of school leadership.

In an effort to level the reasons for evaluating professional development into a cohesive evaluation framework, and to argue for the necessity of evaluating PD, Thomas Guskey developed a leveled approach to evaluation of professional development. Guskey (2002) begins with the evaluation level of the participants' reactions which he calls "Level 1". Similar to the Kirkpatrick model upon which the framework is based and expands upon (Kirkpatrick, 1998), the participants' reactions are considered at the first level when evaluating professional learning. At the second level of evaluation, the question of whether participants acquired the intended skills or knowledge is raised. At this level, the evaluation is not focused on the use of the intended learning, rather just that the participants learned. The third level of evaluation is the level that differs most significantly from the Kirkpatrick model as it seeks to evaluate the organizational context and support for the implementation of the learning. Guskey (2002) notes that "lack of organization support and change can sabotage any professional development effort, even when all the individual aspects of professional development are done right." At the fourth level of evaluation, Guskey moves from the participants learning to their application and use of this learning. At this level, the evaluation takes into consideration the degree and quality of the implementation, but remains focused on the actions and of the adult learner. At the fifth and final level, student outcomes are the area of evaluation. While this area is the most difficult to evaluate due to the difficulty in isolating professional development as the sole factor in improving student outcomes, Guskey encourages school and district leaders to look for "evidence, not proof" in their quest to understand the relationship between adult learning and student learning outcomes as they plan for and evaluate professional development. Table 4 gives a more in-depth look at the evaluation levels, the questions addressed, the methods that information is collected, what is measured and the overall aim of evaluation at that level.

It is important to note that in each of the 35 studies that Darling-Hammond, Hyler, and Gardner (2017) included in the analysis that led to the generation of the seven features of effective professional development, the fifth and highest level of Guskey's evaluation framework was the critical factor for inclusion in their meta-analysis: "a positive link between teacher professional development, reaching practices, and student outcomes."

Table 4

Evaluation Level	What Questions are Addressed?	How Will the Information Be Gathered	What is Measured or Assessed?	How Will Information Be Used?
1. Participants' Reactions	Did they like it? Was their time well spent? Did the material make sense? Will it be useful? Were the refreshments fresh and tasty? Was the room the right temperature? Were the chairs comfortable?	Questionnaire administered at the end of the session	Initial satisfaction with the experience	To improve program design and delivery
2. Participants' Learning	Did the participants acquire the intended knowledge and skills?	Paper-and-pencil instruments Simulations Demonstrations Participant reflections (oral and/or written) Participant portfolios	New knowledge and skills of participants	To improve program content, format, and organization
3. Organization Support & Change	Was implementation advocated, facilitated, and supported? Was the support public and overt? Were problems	District and school records Minutes from follow-up meetings Questionnaires	The organization's advocacy, support, accommodation, facilitation, and recognition	The document and improve organization support To inform future change efforts

Guskey's Five Critical Levels of Professional Development Evaluation

	1	1	FIDIESSIDIIAI	Learning for Teachers
4. Participants'	addressed quickly and efficiently? Were sufficient resources made available? Were successes recognized and shared? What was the impact on the organization? Did it affect the organization's climate and procedures Did participants	Structured interviews with participants and district or school administrators Participant portfolios	Degree and	To document and
Use of New Knowledge and Skills	effectively apply the new knowledge and skills?	Structures interviews with participants and their supervisors Participant reflections (oral and/or written) Participant portfolios Direct observation Video or audio tapes	quality of implementation	improve the implementation of program content
5. Student Learning Outcomes	What was the impact on students? Did it affect student performance or achievement? Did it influence students' physical or emotional well- being? Are students more confident as learners? Is student attendance improving?	Student records School records Structured interviews with students, parents, teachers, and/or administrators Participant portfolios	Student learning outcomes: -Cognitive (Performance & Achievement) -Affective (Attitude & Dispositions) -Psychomotor (Skills & Behavior)	To focus and improve all aspects of program design, implementation, and follow-up To demonstrate the overall impact of professional development

Reproduced from: Guskey, T.R. (2002). Does it make a difference? Evaluating professional development. Educational Leadership, 59(6), 45-51.

Systematic Improvement

The final piece of the overall conceptual framework that guides this investigation centers on the idea of improvement. One key assumption that undergirds this whole project, is that the purpose of professional development is to cause or create improvement. Underlying the work of both Guskey and Darling-Hammond, Hyler, and Gardner is that the specific improvement aim of professional development is to improve outcomes for students by increasing or enhancing teacher capacity. Once it is understood how teachers at this particular site are perceiving professional development and how administrators there are planning and managing professional development, it will be necessary to have a systematic way to think about and frame the improvement of professional learning practices in order to achieve positive student learning outcomes. Bryk et al (2017) sought to propose a series of six core principles that schools and school systems could draw upon to increase their performance and effectively improve outcomes. These six principles are not necessarily unique to Bryk and his coauthors, but when activated as part of systemic change efforts, can position an organization to make pointed recommendations based on deep understanding of the problem at hand and prepare the organization to make swift and purposeful changes as they regularly assess the effectiveness of their efforts.

These six "core principles" will be relevant in proposing ways for Northern Vista School to improve outcomes as a result of the findings of this research. The model of "Improvement Science" was selected for inclusion as part of the conceptual framing for this research project due to the fact that these ideas are synchronized in a way that is prescriptive only of the processes and does not make presumptions about what will work for any particular site or organization.

Six Core Principles of Improvement

- **1.** Make the work problem-specific and user-centered
- 2. Variation in performance is the core problem to address
- 3. See the system that produces the current outcomes
- 4. We cannot improve at scale what we can not measure
- 5. Anchor practice improvement to disciplined inquiry
- 6. Accelerate improvements through networked communities

Recreated from: Bryk, A. S., Gomez, L. M., Grunow, A., & LeMahieu, P. G. (2017). *Learning to improve: How America's schools can get better at getting better*. Cambridge, MA: Harvard Education Press.

METHODS

Preparing to answer these two research questions, this study sought to use an exploratory sequential mixed methods design. Creswell and Plano Clark (2018) describe the use of this methodology as impactful when the first phase of data collection and analysis is necessary to formulate and refine the instrumentation used to define the critical variables to be measured or understood. Given the small size of the administrative team at the school (principal and one assistant principal), individually interviewing each administrator allowed for maximum flexibility in information gathering from one administrator that would inform the creation of quantitative data instruments and then, following up with the other administrator after the survey data collection from teachers was complete. It was anticipated that there would be limited interest from teachers in completing qualitative interviews following the survey, even remotely, given the widespread impacts of the COVID-19 school building closure. Therefore, teachers were given the opportunity to provide extended responses in the form of an open-ended survey question in addition to an invitation to participate in individual interviews after completing the survey.

Phase One: Qualitative

Initial data collection centered on qualitative information received through an interview with the school principal. Instruments selected to query her perspectives were open ended and broad, with a goal of gathering baseline information necessary to make determinations related to survey target audience and item development. An interview guide (Appendix A) was developed to frame the conversation and sample questions were developed to gain an understanding of the makeup of the staff, her vision for professional learning at the site, as well as her overall vision for the school.

After conducting this initial interview, inductive thematic coding was used to find topical trends to inform the selection and refinement of survey questions. Table 5 provides the statements that were used as a basis for coding and the thematic codes assigned. During this interview, the principal shared a variety of professional learning topics that had been the subject of focus over the previous two years of her leadership as principal: differentiation, a specific phonics instructional methodology, and a variety of project based learning and STEM topics. Differentiation was a word and topic she used several times throughout that became the basis for one of the question clusters on the survey. This specific professional learning topic was selected for further query from staff over others for two key reasons. First, the larger topic of differentiation offers an umbrella under which other topics that were referenced can fall (interventions, RtI, Tier 2 and 3 instruction). Second, the principal's reference to the unique nature of having a

three-person resource team focused on specializing instructional support at a Catholic school seems critically important in her new vision for the school site.

In Table 5, a full list of thematic codes that emerged from the qualitative coding. Specific responses and the corresponding coding can be found in Appendix B.

Table 5

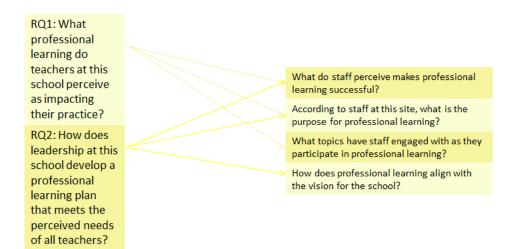
Principal Interview Coding Themes

School-wide PD
Differentiation
Balance
Alignment
Diocesean PD
Teacher selected PD
New vision
Professional collaboration
Academic excellence
Academic interventions (for students)
Coaching
Peer modeling
Trust

The research questions that guided this work were developed in order to frame analysis that could have application beyond this site. Yet, as the initial qualitative phase of the research concluded, three additional questions that, in addition to the themes that arose through inductive coding, would also inform the creation of the survey and teacher interview guides became clear. Figure 1 shows the research questions and the connections to the additional questions that guided the development of the quantitative phase of the data collection.

Figure 1

Research Questions Connected to Framing Questions



Phase 2 Quantitative

Northern Vista School staff numbers 51 members who serve the school in a variety of roles. The target population for the survey was full-time instructional staff. Of the 51 staff members at the school, 36 staff members fit this category. The remaining staff fulfill support or administrative roles as seen in Table 6.

Table 6

Categorical Breakdown	of Number o	f Staff at Northern	Vista School
		<i>j</i> = <i>jj</i> =	

Staff Category	Number of Staff
Instructional Staff	36
Instructional Aides	8
Office Staff	2
Student Health Staff (Nurses/Counselors)	3
Administrators	2
Total	51

Survey development was based on a combination of factors. As noted, several specific instruments were either taken from or adapted from the 2019 Tennessee Educator Survey Teacher Core or the 2019 Tennessee Educator Survey Professional Learning Teacher Module. These instruments have been used since 2017 and each year, tens of thousands of educators respond (TN Educator Survey, 2019), thus they have a proven utility as tools to query educators on topics related to this investigation, including leadership and professional learning.

Additionally, survey items were developed to reflect the range of thematic codes that arose in the interview with the principal. Her responses revealed themes (see Table 5) that were tied to questions as shown in Table 7. Lastly, questions were developed to reflect, as much as feasible given the limitations of retrospective self-reporting, the levels of evaluation as described by Guskey (2002). A full version of the survey instrument is available in Appendix B.

Table 7

Survey Question	Purpose/Connection to	Level of Evaluation
· ~	Phase 1	(Guskey, 2002)
Q1 - Which primarily describes your role at Northern Vista School?	Demographic information used to determine level of representation reported in data set	N/A
Q2 - How long have you been employed at Northern Vista School in your current role?	Demographic information	N/A
Q3 - The following questions ask about the professional learning opportunities you had from this past summer (2019) to this point in the school year. Please take a moment to think back about all of the professional learning in which you participated over this school year (including summer 2019). You are invited to use the text box below as a "scratchpad" to note your experiences. Think about Professional Learning/Professional Development that falls into each of these "buckets": formal professional development opportunities,	Moment to reflect and prepare to respond to remaining items Question selected from <i>Tennessee Educator Professional</i> <i>Learning Module Survey (2019)</i>	N/A

Development of Survey Questions as Connected to Phase 1 and Guskey's Levels of Evaluation

		Professional Learning for react
individual support, and collaborative activities.		
Q5 - Please indicate your level of	Individualized PD (Coding	How do teachers perceive
agreement with each statement regarding professional learning at your school. -I have received specific	from qualitative data collection in phase 1)	their own learning of skills and knowledge relative to their needs? (Level 2) How effective do teachers
professional learning suggestions that are tailored to my needs. -My professional learning has been closely aligned to the instructional materials I use in class. -In general, the professional learning I have received this year has led to improvements in my teaching. -I am able to select professional development opportunities I feel will increase my professional capacity. Q6 - Please indicate your level of	Differentiation (Coding from	report that their professional learning has been in changing student outcomes? (Level 5) How do teachers report that
 good fields indicate your reversional agreement with each statement related to assessment and differentiation. -I am able to use assessments and tasks provided by curriculum/instructional materials without having to modify or develop my own. -I know how to differentiate instruction to meet the needs of all the learners in my classroom. -I know how to differentiate assessment to meet the needs of all the learners in my classroom. -I would like more professional learning time to learn about differentiation of instruction and/or assessment. -I would like more professional learning time to prepare to differentiate instruction and/or assessment. 	qualitative data collection in phase 1) Question modified from <i>Tennessee Educator Survey</i> <i>Teacher Core (2019)</i>	they are able to enact professional learning around differentiation? (Level 2)
Q7a - To what extent have each of these activities improved your professional abilities over the past year? Q7b - Indicate your perception of the time devoted to each category during the past school year. -School-wide professional development (required for all) -Professional development that took place outside of school	Individualized PD, School- wide PD, collaboration, coaching (Coding from qualitative data collection in phase 1) Question modified from <i>Tennessee Educator Survey</i> <i>Professional Learning Teacher</i> <i>Module</i> (2019)	How effective do teachers report that their professional learning has been in changing student outcomes? (Level 5) Were teachers satisfied with the time spent on these professional learning activities? (Level 1)

Professional Learning for Teachers

		Professional Learning for Teache
-Professional collaboration time -Individual support or coaching -Observing another teacher's		
classroom		
Q8 - Please indicate the extent to which you agree or disagree with the following statements regarding leadership and vision at your school. -The leadership at my school communicate a clear vision for this school. -I see how my professional learning opportunities are aligned with the vision for my school. -The leadership at my school regularly give feedback regarding my instruction. -The leadership at my school know my instructional strengths and areas of growth.	Vision, trust, alignment, balance (Coding from qualitative data collection in phase 1) Question modified from <i>Tennessee Educator Survey</i> <i>Teacher Core (2019)</i>	How do teachers report that their leaders are aligning the expectations with the professional learning? (Level 3)
Q9 - Consider all the professional learning you participated in this year. Which were the most valuable? What aspects of the training made these activities valuable to you?	Open ended responses to supplement interview responses	N/A

The survey was distributed to all 36 instructional staff members at Northern Vista School via their school-affiliated email with a fourteen-day response period opened. The return rate of 17 respondents who fully completed the 8-question survey represents a 47.2% return rate.

Full-time instructional staff were selected as the target population for the survey as they are the primary recipients of all categories of professional learning at the school as defined in the first qualitative interview with the principal. Full-time instructional staff are expected to participate in diocesan professional development day, school-wide professional development each week, and are able to choose additional, individual professional development that they can request funding from the school to complete. As noted, the overall response rate was fairly high at 47.2%. The rates by self-reported categories varied from as high as 75% in the category of pre-kindergarten teachers to as low as 33.3% for both teachers in grades 3-5 and the category of 'other', which consists of full-time resource teaching staff. Full distribution of responses by category are shown in Table 8. While the percentage of respondents per instructional grade level/category varies quite dramatically, the fairly low total number of staff employed within each category can explain this variance. Each category is represented by at least 33.3% of the employees in that category.

Professional Learning for Teachers

Table 8

Instructional Staff Sub-Category	Number of Staff Surveyed	Number of Staff Responses to Survey (Self-Reported Categories)	Responses as a Percentage of Staff in Category
Pre-K Teachers	4	3	75.0%
K-2 Teachers	6	4	66.6%
3-5 Teachers	6	2	33.3%
6-8 Teachers	10	4	40.0%
Specials Teachers	7	3	42.9%
Other	3	1	33.3%
Total	36	17	47.2%

Distribution of Survey Responses by Self-Reported Instructional Staff Sub-Category

Respondents were also asked to report the length of time that they have been employed in their current role at the school. A large majority (65%) of respondents indicated that they had been employed in their current roles for five or more years. Overall population data with respect to years of employment was not collected, thus it is not known if this represents the spread of experience at the school, however, 76% of respondents indicated that they had been employed at the school for at least 3 years. This is important as it means that these staff members had been employed at the site both before and since the current principal assumed her role two years prior, therefore giving them the opportunity to see her vision for the school as it has developed.

Phase 3: Qualitative

The final phase of data collection again returned to qualitative interviewing. All instructional staff who received the survey completion link were afforded the opportunity to participate in an interview to further share their perspectives on professional learning at their school. Those who elected to participate did represent a variety of the instructional sub-categories, but by self-selecting into participation, this sample was neither purposefully randomized nor sufficiently large to be expected to reflect the full range of viewpoints at the school. Two K-2 teachers who work in different grade levels, one teacher in grades 3-5, and one "specials" teacher who teaches all grade levels of students were interview participants. Interviews were scheduled based on the availability of participants and occurred via Zoom (online meeting platform). Interviews followed a loose guide (see Appendix B) developed to provide

open-ended questions that would result in teachers sharing their perspectives on professional development at the school, leadership vision for the school, qualities of professional learning that make it 'high quality' and the interactions between these topics.

The limited number of participants was not unexpected, however, given the additional stressors placed on teachers who were managing new instructional delivery methods, technology challenges, increased parent communication, and finding balance between personal and professional time constraints. Therefore, in anticipation of a lower response-rate to the interview request, an open-ended response item was added to the survey before distribution. The purpose of inclusion was to further probe teachers' perceptions in a qualitative format. The potential impact of a small number of interviews on findings is addressed further in the discussions and limitations section and recommendations take this limitation into account.

FINDINGS

Research Question 1

The first question posed was how teachers perceived professional learning at their specific site. Two major findings emerged in response to this question.

Finding 1: Overall, teachers are satisfied with their professional development, however, teachers value self-selected and collaborative professional learning over schoolwide PD.

The finding that staff are generally satisfied with their professional development is a result at the first level of Guskey's evaluation framework. While this is the 'lowest' level of evaluation, as Guskey notes (2006), "...positive reactions from participants are usually a necessary prerequisite to higher-level evaluation results."

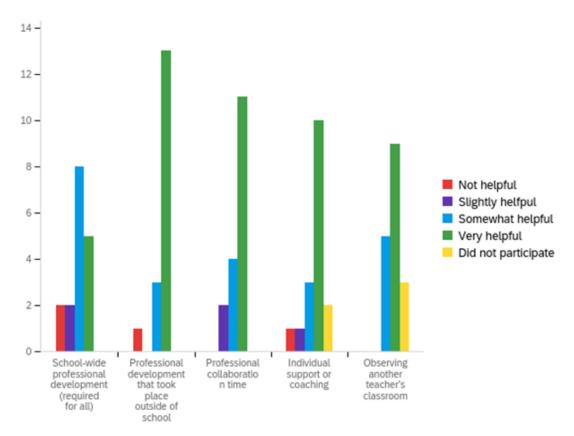
The survey instrument attempted to probe teachers' perceptions of the impact of their professional development. Instructional staff were asked to indicate their agreement with the statement, "*In general, the professional learning I have received this year has led to improvements in my teaching.*" While not a clear proxy for evaluation at Guskey's second level, the question sought to gain an understanding of whether professional development practices at their site were helpful to their learning and probe instructional staff's perceptions of the impact of their learning on student outcomes. The data showed that the vast majority, 94% of respondents, indicated at least some agreement that the professional learning that they had participated in over the past school year had led to improvements in their teaching.

In reviewing the data from further questions, designed to probe the areas of professional development that were most helpful, there is further support for the idea that staff generally find their professional development helpful. Depending on the form of professional learning indicated, between 29% and 72% of respondents indicated that the experience was very helpful.

While the overall perception of professional development appears positive, it does appear that teachers value self-selected learning that occurs outside of school more than schoolwide professional learning. Schoolwide professional learning had the lowest rate of very helpful endorsement (29%) as compared to self-selected professional learning which was indicated as very helpful by 76% of instructional staff who responded to the survey. This is echoed in the sentiments expressed in the open ended responses for question nine as well as responses from three of the four teaching staff members interviewed. While there is no data that suggests widespread disdain or dislike for schoolwide professional learning, there does appear to be more value placed on the learning that teachers select themselves (Figure 2). This could be due in part to the one of the features of selfselected professional learning that is a features of effective professional learning as described by Darling Hammond, Hyler, and Gardner (2017): self-selected PD allows for content directed learning that cannot be provided when the session is geared towards a PK-8 staff whose instructional areas are varied to include all academic content areas as well as physical education, area, and music.

Figure 2





When looking at the results of what survey respondents found 'very helpful', two other areas that outperformed schoolwide professional development were professional collaboration time and individual support or coaching. Again, the features of effective professional development as described by Darling-Hammond, Gardner, and Hyler (2017) are seen. Collaboration is highlighted as its own characteristic in the features the authors describe and individual coaching and support is also a noted feature of effective professional development that impacts student outcomes positively.

The finding that professional development activities that were collaborative and/or self-selected were more helpful in improving teacher practices was corroborated by responses from three of the four instructional staff interviewed when queried about the factors that make professional learning high quality or relevant to them. One teacher said, "I like it when PD is on a topic I'm interested in or something I want to learn about." Another referred to a specific National Conference she had attended for her field that was helpful because it addressed exactly the content from her instructional area, and a third teacher commented, "There are teachers there who work with kids on my grade level and we can work together."

Responses to the open-ended survey question that allowed teachers to state which professional development was most helpful to them and why also supported the finding that teachers value self-selected and collaboration-based professional learning to enhance their practice. One response was direct and to the point that self-selected professional learning was what made professional development effective for them, "I prefer finding my own professional development seminars only because it is geared towards my line of work which is not the majority of a school wide professional development". Another respondent gave a similarly themed answer: "Being able to attend and pick out my own professional development classes at a conference is very helpful. When it is done with the entire school it is more generic so everyone can benifit [sic] but never gets in depth." A third open ended response indicated that the collaborative and ongoing nature of professional learning was a factor that increased its utility for them, "The training was very detailed, easy to apply. The instructors are available to answer questions, their social media network is so valuable and the teachers who connect through social media are very helpful." Finally, another respondent indicated, "I like individual coaching and small group collaboration that help each other figure out the best way to teach that years [sic] class."

Survey results revealed teachers' overall opinion on types of professional learning that they wanted more or less of as well. This data reveals support for the finding that staff are generally happy with professional development. However, schoolwide professional development is the area respondents were less likely to want more of, and coaching, collaboration, and individualized support were all areas that staff desire more time for. As seen in Table 9, only 29% of respondents indicated that they wanted more schoolwide professional development and 18% indicated that they wanted less time devoted to these types of activities. Every other area had a higher percentage of respondents indicating that they would like more time devoted to that category of professional development. Notably, each area had a relatively low number of respondents who wanted less of that activity. This supports the idea that instructional

staff who responded are, by and large, not dissatisfied with the professional development. In fact, staff appear to want more.

Table 9

Perceptions of the amount of time devoted to each type of Professional Development over the past school year (Northern Vista School Instructional Staff Survey of Professional Learning)

Question	I would like more of this activity.		The amount of time for this activity is just right.		I would like to do less of this activity.		Total
School-wide professional development (required for all)	29.41%	5	52.94%	9	17.65%	3	17
Professional development that took place outside of school	46.67%	7	46.67%	7	6.67%	1	15
Professional collaboration time	41.18%	7	52.94%	9	5.88%	1	17
Individual support or coaching	62.50%	10	37.50%	6	0.00%	0	16
Observing another teacher's classroom	52.94%	9	41.18%	7	5.88%	1	17

Backwards mapping an evaluation of professional development through retrospective, self-reporting may not be sufficient to know if student learning outcomes are positively impacted by the professional learning of staff. Yet, this does provide an opportunity to dig into the qualities of these PDs through analysis of responses. In doing this, it was clear that the features of effective professional development as described by Darling-Hammond, Hyler, and Gardner (2017) were valued by the instructional staff at Northern Vista School. Not all responses were reflecting professional development that the staff had participated in; rather, some responses were aspirational, a feature of an ideal professional learning opportunity they might have while others were counter-definitions of what doesn't work that can be read as indicating what would.

Table 10

Darling-Hammond, Hyler, Gardner's Features of Effective Teacher Professional Development Aligned with Stated Factors that Make PD "High Quality" for Instructional Staff at Northern Vista School (NVS)

Feature	Response Alignment					
Is content focused	Teacher Interview (TI): There are teachers there who work with kids on my grade level and we can work together. It's hard when we are all spread out.					
	TI: They were valuable because I was able to choose topics that were applicable to me.					
	Teacher Open Ended Survey Response (TO): Receiving Orton Gillingham training has allowed me to better understand phonics and spelling at an early childhood level. It has helped me grow in my knowledge of reading/english.					
Incorporates active learning	TI: Practical application and something I can use right away.					
Supports collaboration	TI: We meet as a grade level and we talk about what the next lessons are going to be and also with the whole primary team, K-3, will meet to talk about guided math.					
	TI: So we do meet as a fourth and fifth grade math team and we do a lot of vertical conversation.					
Uses models of effective practice	TI: I want to know, "If I have a student who is dyslexic, these are the ways I have to teach them. This is what you do."					
Provides coaching and expert support	TO: I like individual coaching and small group collaboration that help each other figure out the best way to teach that years <i>[sic]</i> class. Every year it is so different.					
Offers feedback and reflection	TI: I would like to have more of the same. Some follow up and not one and done.					
Is of sustained duration	TI: We need time. We get a week of professional development at the beginning of the year, but we are so focused on getting things set up so it's not enough.					
	TI: I would like to have more of the same. Some follow up and not one and done.					

Finding 2: Despite the school focusing on differentiated instruction in their PD, teachers are not fully confident in their ability to enact differentiated instruction or assessment.

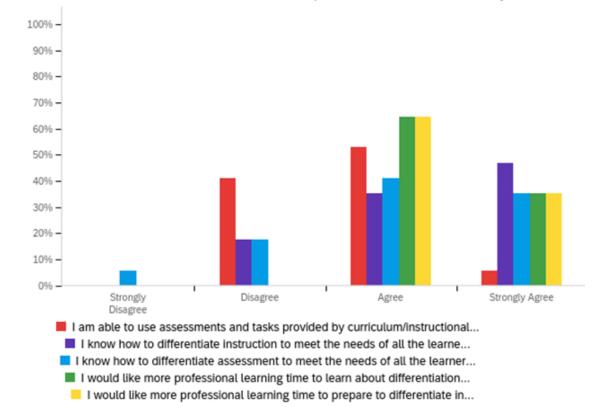
Differentiation of instruction and assessment has been a significant area of instructional focus at this site since the current principal was promoted to the role. Understanding if differentiation improves learning outcomes for students was not within the scope of my research at this site. However, leadership has made this an area of focus for professional development at the site, so understanding teacher perceptions of their ability to enact differentiated instruction was probed within the instructional staff survey. When staff were queried about skills related to differentiating instruction and assessments on the survey, the majority of teachers did agree or strongly agree with statements related to self-reporting of their abilities in these areas. As shown in Figure 3 and Table 11, 17.7% of respondents did disagree with each of the statements: "I know how to differentiate to meet the needs of all the learners in my classroom". 23.6% (4) of respondents disagreed or strongly disagreed with the statement "I know how to differentiate assessment". During qualitative interviews of all four instructional staff members, each indicated a need for further training and practice related to the skill of differentiating instruction and assessment when asked what they would like the school to provide more training on in the coming year. This, coupled with the 100% agreement or strong agreement with the statements, "I would like more professional learning time to learn about differentiation of instruction and/or assessment" and "I would like more professional learning time to prepare to differentiate instruction and/or assessment" does seem to suggest that there is some ambivalence of staff to wholeheartedly endorse their skills as instructional differentiators.

> Differentiation is something we to have do a lot of and is a big push in education. If you aren't 'teacher trained' it's a huge area of need to learn how to do that. I want to know, if I have a student who is dyslexic, 'These are the ways I have to teach them. This is what you do.'"

> > Fifth Grade— Teacher, Northern Vista School

These results suggest that the site is not yet achieving effective professional development "success" at the third, fourth, and fifth evaluative levels as described by Guskey. Respondents reported, generally, that they know and have learned about differentiation of instruction and assessment (Level 2). Despite staff reporting that they have learned about differentiation, they are not confident in how to differentiate instruction and assessment as indicated by the request for more learning in the area. The principal and assistant principal of the school do believe in the need for staff to increase their capacity in this instructional area. When asked about what areas the staff have focused, but that need additional support, the principal of the school responded, "Differentiation! Such a big one. Making accommodations for kids isn't just the only part of that. We have to push it farther." Yet their stated support for this need is not sufficient to determine if the professional development at the site has organizational support as described by Guskey and thus the lack of confidence could be due to limited levels of organizational support for actually enacting the practices related to differentiation (Level 3). While the school leaders are expressing that they are in support of differentiated instruction, it appears that the learning opportunities haven't quite gotten teachers to the nuanced implementation of differentiated instruction and assessment (Level 4). Statements by staff, when discussing differentiation and why it is important, included an allusion to the ultimate beneficiary of differentiation: the student, and yet agreement with these statements or a belief that differentiation matters does not give any mechanism to measure student outcomes and whether they have been positively impacted by teacher actions (Level 5).

Figure 3



Level of agreement with each statement related to assessment and differentiation (Northern Vista School Instructional Staff Survey of Professional Learning)

Table 11

Level of agreement with each statement related to assessment and differentiation (Northern Vista School Instructional Staff Survey of Professional Learning)

#	Question	Strongly Disagree		Disagree		Agree		Strongly Agree		Total
1	I am able to use assessments and tasks provided by curriculum/instructional materials without having to modify or develop my own.	0.00%	0	41.18%	7	52.94%	9	5.88%	1	17
2	I know how to differentiate instruction to meet the needs of all the learners in my classroom.	0.00%	0	17.65%	3	35.29%	6	47.06%	8	17
3	I know how to differentiate assessment to meet the needs of all the learners in my classroom.	5.88%	1	17.65%	3	41.18%	7	35.29%	6	17
4	I would like more professional learning time to learn about differentiation of instruction and/or assessment.	0.00%	0	0.00%	0	64.71%	11	35.29%	6	17
5	I would like more professional learning time to prepare to differentiate instruction and/or assessment.	0.00%	0	0.00%	0	64.71%	11	35.29%	6	17

Research Question 2

The second question posed at the beginning of this investigation was intended to determine how leadership at this site planned for professional learning that met the needs of all instructional staff as they re-establish a vision for the school. Two major findings emerged in response to this question.

Finding 3: Teachers see the vision and direction provided by the school leaders

Importantly, the instructional staff at this school are, by and large, able to see the vision as it is being developed for their site. 94.1% (16 out of 17 respondents) agreed or strongly agreed with the statement, *"The leadership at my school communicate a clear vision for this school."* Only one respondent disagreed, indicating that the large majority of the instructional staff surveyed do see the vision for the school as it is expressed by current leadership. Additionally, while there were fewer staff who strongly agreed, the majority of the staff (again 94.1%) agreed with the statement, *"I see how my professional learning opportunities are aligned with the vision for the school."* It is important to note here that 76% of respondents to this survey indicated that they had been at the school for at least three years and therefore had the opportunity to see the vision of the role.

You know I wanted this job for so long. I wanted a vision. This place was a talent show. Not collaborative at all. We are working on working smarter now."

> —Principal, Northern Vista School

Qualitative results indicated staff agreement with the leadership's specific vision for a comprehensive early literacy program at the site. During her interview, the principal shared that in her experience at a neighboring public-school district, early literacy was a major instructional emphasis. She cited this experience as influential in her decision to

invest in training and implementation of the Orton-Gillingham method of reading instruction for all pre-kindergarten through third grade classrooms. "Our kids come with great school readiness in that area, but we have to have some consistency in how we move them. How we push them. How we teach them." In responding to the openended survey question of what professional development was most helpful to them, multiple teachers referred to this training and experience. One respondent indicated, "Receiving Orton Gillingham training has allowed me to better understand phonics and spelling at an early childhood level. It has helped me grow in my knowledge of reading/english." Another stated, "The OG training I completed this year was very helpful. It also gave all the PreK teachers the same basics to teach in class. The training was very detailed, easy to apply." While these statements were in response to a question about what professional development had been the most helpful to them, their unprompted statements these specific trainings were helpful in improving their practice does give support to the idea that they do agree with the vision for a cohesive early literacy program.

This synchronicity is also evident in the 94% agreement in response to the survey statement, "I see how my professional learning opportunities are aligned with the vision for the school." It should be noted that perception of alignment of professional learning with the school vision does not equal endorsement of the vision. However, in these statements of survey respondents, there is evidence that professional learning was successful at the first and second levels of evaluation as described by Guskey (2016).

Developing an early literacy program and providing access to and support for the professional learning that gives teachers the skill set necessary to enact this program is but one aspect of instructional vision, however, the alignment between leadership's stated vision for professional development in this area and teachers' stated appreciation for their learning as a result does provide some support for an appreciation of the vision beyond just a simple understanding.

Table 12

Level of agreement with each statement related leadership and vision (Northern Vista School Instructional Staff Survey of Professional Learning)

#	Question	Strongly disagree		Disagree		Agree		Strongly Agree		Total
1	The leadership at my school communicate a clear vision for this school.	0.00%	0	5.88%	1	29.41%	5	64.71%	11	17
2	I see how my professional learning opportunities are aligned with the vision for my school.	0.00%	0	5.88%	1	64.71%	11	29.41%	5	17
3	The leadership at my school regularly give feedback regarding my instruction.	0.00%	0	0.00%	0	70.59%	12	29.41%	5	17
4	The leadership at my school know my instructional strengths and areas of growth.	0.00%	0	0.00%	0	52.94%	9	47.06%	8	17

Finding 4: Professional development planning is not consistently tied to measurable student outcomes or a schoolwide vision.

Interviews with both administrators at the school revealed a common theme: without clear direction on professional learning and expected instructional practices from their diocese, the administrators were left to create all of the framework for professional development themselves. The principal said, "we have to decide it here. There is like no vision from the Office of Catholic Schools. They will set stuff up for the PD days for the diocese but that's it. We're going blind. There's autonomy, but there's no vision." When asked further for detail regarding her vision for the school, the principal indicated that providing a high quality, Catholic education that included STEM and individualized interventions and supports. On how this vision gets enacted, "We have to set this up. You know, it's all on purpose to try to make this place a real competitor for the public schools. STEM, special ed, Tier 2 and 3 supports, we've got to have it and make sure they [teachers] know it." The assistant principal indicated similar tension, "We do try to plan ahead. There isn't necessarily a requirement for what professional development looks like." These statements related to an aspirational vision of the school that did align to its religious toned-mission, but no threads were tying it all together to a cohesive planning process that centered on student achievement.

While staff are, as indicated in the previous finding, aware of the vision, they do not appear to use it to make requests for their own learning. As the administrative team works to counter a "talent show" culture, it would follow that staff do appreciate and expect to have the opportunities to attend self-selected professional learning.

However, indications that teachers did want more opportunities to collaborate and to experience direct coaching and support run counter to this assertion that teachers prefer individual learning experiences and establish a baseline for these administrators to develop their own model for balancing professional development across three areas: diocesan professional development; school-wide professional development; and collaborative, staff-selected professional development that reflects the learning needs for individuals and with all professional learning geared towards the improvement in student learning outcomes.

Professional development is planned by administrators for the school based on wholeschool initiatives or instructional methods training for grade level bands within the school (Orton-Gillingham for all PK-3rd grade teachers; primary source training for teachers in grades 6-8 and specials teachers). Individual staff are able to seek their own training, and value doing so, yet these training opportunities do not appear to be tied back to larger school-wide or student learning goals. In an effort to tie the leadership vision of the school to the direct support and needs of individual teachers, two other statements were posed for consideration on the instructional staff survey. For each of these statements, *"The leadership at my school regularly give feedback regarding my instruction"* and *"The leadership at my school know my instructional strengths and areas of growth"* staff agreement (agree or strongly agree) was 100%. While the agreement with these statements could indicate a generally positive sentiment towards administrators from teaching staff, it does not indicate that balancing individual teacher requests for professional development with the need for a holistic vision does not appear to be taking place in a meaningful fashion.

Review of the publicly facing school documents shows a mission that does indicate the outcome desired for students, but given the religious nature of the school, the mission does not lend itself to measuring student academic achievement. It is hard to measure the school's success at enacting the stated mission that their students will become loving Christians and strong servants of God. Additionally, with one expectation, none of the professional development that was referenced in any data collection method (interviews with teachers, interviews with administrators, or open-ended survey questions) referred to improvements in the teachers' ability to support students' religious education. The only response that partially indicated that a religious professional development was helpful was an open-ended survey response which included the statement, "An insight into the past, present future of Catholic schools as well as the Catholic identity and the spiritual role of the leadership was valuable."

DISCUSSION AND LIMITATIONS

By and large, the data collected from teachers at Northern Vista School through survey and interview indicated satisfaction with their professional learning experiences. However, as is shown in Guskey's model, participants' reactions are the lowest level of evaluation of professional learning. While participants did indicate overall satisfaction, they did qualify "self-selected" professional learning as more helpful than required, whole-school professional development (3.65 mean response versus 2.88 mean response). Measuring organizational support for professional learning, and digging into Guskey's third level, it does appear that staff feel that the administrators at the school both express the larger vision for the school and are aware of and provide feedback to staff with respect to their individual instructional practices. And yet, staff had expressed a need for further learning and support for differentiation of instruction and assessment. While the stated support and vision for these practices exists, staff are challenged to enact instruction that meets their understanding of the principles of differentiation. This disconnect suggests that further evaluation of organizational support for this instructional practice may be warranted.

The survey and interview methods of data collection, by themselves and without data collected to indicate student outcomes, means that the professional learning that teachers at this site engage in was not truly evaluated at the fifth level of Guskey's model. While there were questions designed to tap into teachers' perceptions of their impact as a result of their professional development experiences, these data are self-reported, past reflections on the impact of teacher practice. These data are not without use, however. Understanding that the majority of staff perceive that their practice and student outcomes are both positively impacted by the professional learning undertaken at this site could be the basis for establishing buy-in to programmatic changes that set evaluation of student learning as part of an improvement process.

Backwards mapping an evaluation of professional development through retrospective, self-reporting may not be sufficient to know if student learning outcomes are positively impacted by the professional learning of staff, but, there is an opportunity to dig into the qualities of these professional development sessions and activities through analysis of responses. In doing this, it was clear that the features of effective professional development as described by Darling-Hammond, Hyler, and Gardner (2017) were valued by the instructional staff at Northern Vista School. Not all responses were reflecting professional development that the staff had participated in; rather, some responses were aspirational, a feature of an ideal professional learning opportunity they might have while others were counter-definitions of what doesn't work that can be read as indicating what would.

Finding 1 showed that the features of high-quality professional development as defined by Darling-Hammond, Hyler, and Gardner (2017) were reflected in the responses of what NVS Staff perceive as factors that make professional development high quality, even when they were not asked to evaluate them as high quality with respect to Guskey's fifth level of evaluation, student learning outcomes, is a promising result that suggests that recommendations for framing future professional learning at this site would be wise to attempt to maximally incorporate these features. While this work did not seek to investigate or propose solutions for a specific problem of practice related to student achievement, the implementation of systems designed to consider how adult professional development can lead to improvements in student outcomes would be applicable for any problem of practice that the organization faces now or in the future. The fourth finding shows that developing a stated vision with respect to the outcomes of professional development may be a necessary consideration for planning effective professional development. Given the context of the current COVID-19 pandemic and the re-envisioning of school that is taking place at this site and across the country, these systems improvements could result in increases in the connections between actions and intended outcomes and the development of systems to measure impact.

Limitations

While all instructional staff at this school were afforded the opportunity to participate in the survey and/or be interviewed, neither 100% of staff nor a representative sample of all demographic or employment categories was sought nor can be verified.

Interviews were conducted via Zoom, an online meeting platform, as data collection was interrupted by mandated school closures due to COVID-19. As a result, staff surveyed were not in school during these interviews. To minimize this impact, participants were able to select a time that was convenient for them; however, interruptions or competing home and family priorities were less controllable by the researcher than if the interviews had taken place in the school environment.

The survey was administered during the last month of the school year in a year when staff had been asked to do so much more than ever before and yet the responses to many of these survey items are largely positive. This could be due to the fact that teachers who would have given less than favorable responses simply did not respond for a variety of reasons: did not want to provide feedback that could improve their school or were too tired or too drained from weeks of virtual, distance learning and the increased amount of informal professional learning that they had to engage in during the weeks prior to this survey administration and the scheduling of interviews. This is a major limitation of these findings as these may have been the very respondents whose voices were critical to hear in order to fully understand the perception of professional development by teachers at this site. However, the recommendations that result from these findings are oriented towards the development and implementation of processes and systems that would be individualized and continually monitor need and thus capture these non-respondents' perspectives more effectively. By including regular evaluation processes, staff who are experiencing professional development in real time would have the ability to provide feedback, rather than only those who chose or were available to do so after the fact.

RECOMMENDATIONS

As with most work, this research started with broad questions that led to more specific queries, but was generally focused on teacher perceptions on their own professional learning and school leaders' management of instructional staff professional learning.

Throughout this research project, there were questions posed of staff that aimed to understand professional learning at Guskey's levels one through five. However, as the professional learning in question had already occurred, the primary investigation was around teacher perceptions which falls in a level one evaluation. Therefore, recommendations on improving professional learning at this site reflect the need for the organization to move through the levels of evaluation to get to a place where the impact of the professional development on students is paramount. In order to make this happen, there must be purposeful design and planning of professional development at the organizational level and backwards planning of learning experiences that are necessary to give teachers the skills and knowledge to support targeted student outcomes.

Recommendations should not be based on a problem that is not fully understood. In their book, "Learning to Improve", Bryk et al espouse the need for improvement to flow from a well-articulated problem of practice. While it is clear that there are spaces for improving professional development systems and evaluation at this site, there has not been a measurable student learning outcome that has been stated as an area in need of improvement.

Therefore, the recommendations that follow are changes to systems that would need to be developed and framed fully to align with a problem of practice as defined by the organization itself as it seeks to enhance and improve specific student learning outcomes by providing opportunities for effective PD for staff.

Recommendation 1: Formalize the vision for professional learning and its connection to desired student outcomes through the development of a Schoolwide Professional Learning Plan (PLP).

Finding 2 showed that the instructional staff at Northern Vista School who responded to the survey indicated that they see the vision that the school leadership has for the school. In finding one, it is indicated that the staff value professional learning that incorporates the features that Darling-Hammond, Hyler, and Gardner (2017) indicate are indicators of effective professional development. With these two findings in mind, school leadership can begin crafting a plan to formalize their vision for the professional learning of the staff with respect to their overall vision for the school as a whole. This process should take into account the principles of improvement science as described by Bryk et al (2017).

Table 13

Aligning Improvement Principles (Bryk et al, 2017) with Process for Creating a Schoolwide Professional Learning Plan (PLP)

Improvement Principle (Bryk et al, 2017)	Recommended Application
Make the work problem-specific and user- centered.	Leadership can begin by collaboratively defining a clear problem of practice that school staff can work to address together. Connect this problem to a targeted student learning outcome so that further evaluation of professional development can be viewed through all five of the levels described by Guskey (2002).
<i>Variation in performance is the core problem to address.</i>	Develop a theory of action to address this problem of practice within this particular site.
See the system that produces the current outcomes.	Seek to understand the system. Sherer et al (2020) suggest the tools of Empathy Interviews and Systems Maps to fully explore stakeholder perspective and system interconnectedness.
We cannot improve at scale what we cannot measure.	Determine effective measures for the student learning outcomes. Leverage existing data sets to address understanding of the outcome measure and broaden what outcomes are measured to reflect a differentiated approach.
Anchor practice improvement in disciplined inquiry.	Incorporate Plan Do Study Act (PDSA) cycles into regular practice as the theory of action is implemented.
Accelerate improvements through networked communities.	Connect staff across the building who are seeking to improve student outcomes in the same ways or have similar areas identified for their own learning (see recommendation 3) through coaching or other partnerships (see recommendation 2).

Each improvement principle above has an associated, recommended action step. Embedded in these action steps are suggested uses for three tools to support the creation of a schoolwide professional learning plan that is focused on improving student learning outcomes. While these three tools (Empathy Interviews, Systems Maps, and PDSA cycles) are recommended by Bryk et al (2017) and Scherer et al (2020), they are not unique to these authors. All are widely recommended by design thinkers and improvement science advocates. In fact, the PDSA has existed in various forms since at least 1950 when Dr. W. Edwards Deming recast Dr. Walter Shewart's design cycle to more closely match what we know today (Moen, 2009).

In recommending the activation of improvement science principles in creating a schoolwide professional learning plan, it should be noted that the use of these tools should not be taken on in isolation. Rather, it is through the purposeful and scaffolded use of these tools that real improvement in aligning the schoolwide professional learning program with the vision for academic excellence for all students can be achieved.

Here, the organization is advised to broaden its ideas about what would advance the learning of their instructional staff in order to reach the goals for student achievement that they set forth. Specifically, this recommendation comes from the finding that staff are largely happy, but that they desire more of certain activities (collaboration, individual coaching, peer observation) and also that staff see this vision for the school that the leaders are developing, but that there is not a cohesive framework for planning a collection of learning activities to meet a goal. Recall, the school is situated in an area with competition from high performing public schools. In order to continue to maintain enrollment during a pandemic and potential additional distance learning, it will likely become of increasing importance for the school to be able to point directly to their students' achievement and their teachers' training in order to get there. In creating a schoolwide Professional Learning Plan, Northern Vista School may consider that a student achievement goal is not necessarily a one-size fits all model. In keeping with the vision for a differentiated, individualized learning experience, NVS has the opportunity here to differentiate high achievement goals so that equity is at the core, and the evaluation measures selected are such that each child's success is considered individually and not in the aggregate.

Once developed, this plan would directly address the finding that leadership is not cohesively planning for professional development and feed into a larger improvement cycle that includes the development of individual staff professional learning plans and is regularly assessed to determine if student achievement data supports the action steps identified and enacted. The interconnectedness of each of the elements of the larger improvement cycle is shown in Figure 4.

Recommendation 2: Implement a coaching model to support instructional staff.

Showers and Joyce (1996) point to the lack of effective implementation of professional development as a major factor in their initial proposal that coaching could be an effective mechanism to support teachers and the reason that they began to test this hypothesis. Their results showed promising support for the practice and recognize that teachers who receive coaching support are more likely to both utilize the skills and knowledge from professional development sessions and to do so in the intended manner. Since the work of Showers and Joyce, instructional coaching has dramatically increased as a professional learning tool. Kraft, Blazer, and Hogan (2018) sought to evaluate the impact of coaching models on teacher instruction and student achievement as well as explicate some of the causal mechanisms that result in improved outcomes following coaching. Among their findings was that there appeared to be greater impact when there was shared knowledge acquisition followed by coached implementation of skills. Given that there is an existing baseline of shared professional development that has occurred on the topic of differentiation, this could prove to be a starting point for coaching instruction.

Incorporating a coaching model into the program of instructional support and professional learning at Northern Vista School could bridge the knowing-doing gap that the findings showed existed with respect to differentiated instruction. Scaffolded coaching, provided by the existing resource team with the support of school administration, could begin to improve staff understanding and skills in implementing differentiated instruction and assessment. Once established, this structure could be activated to support many more areas of professional learning as needs are identified school-wide and for individual instructional staff members.

Within survey data, instructional staff who responded to the question indicating their perception of the amount of time spent on each area of professional development endorsed "I would like more of this activity" for "individual support and coaching" 63% of the time. This is a potential indicator that a coaching program would have staff buy-in at this site.

Incorporating a peer coaching model could also, in part, address the first finding that teachers at Northern Vista School value self-selected professional learning that is collaborative in nature. It is difficult to imagine a successful coaching relationship that is not collaborative. As they describe features of a peer coaching model, Showers and Joyce (1996) highlight the need for there to be time for collaborative planning, refining, and relearning instructional practices when peers work together to coach each other through the implementation of new learning.

Unsurprisingly, professional development that provides peer coaching and expert support is a feature of effective PD as described by Darling-Hammond, Hyler, and Gardner (2017). The work of Powell et al (2010), included for review by Darling-Hammond, Hyler, and Gardner, showed positive student outcomes tied to professional development for early childhood literacy educators. The model offers a framework that could be the basis for establishing a similar program at Northern Vista School. The program studied by Powell et al (2010) followed the implementation of a model that began with co-learning on the topic of early literacy as well as relationship building between the coaches and the teaching staff. Following this initial two-day session, coaches provided feedback every two weeks either in person or remotely. Importantly, the feedback was provided regularly and following each observed instructional session. After two years, their results indicated that teachers who had been coached were showing higher levels of implementation of the specific instructional methodologies and their students outperformed peers whose teachers had not participated in the coaching model.

Coaching could have broad areas of focus, but could also be useful to address the specific finding that teachers did not feel confident enacting differentiated instruction and assessment. This coaching support could come from the existing resource staff and school administrators, or could be modeled after a peer-partnership design. One such design that shows promise is the "Instructional Partnership Initiative", a program developed and used in some public schools in Tennessee (TN Dept of Education, 2016). Partnerships are formed between teachers who are paired for the duration of a school year to develop trust, set goals, provide non-evaluative feedback, and collaborate professionally. This model could be incorporated to provide coaching support from peers, but also could be individualized by teachers as needed to address their individual or collective needs. Survey data indicated that 53% of respondents wanted more time observing in other teachers' classrooms, a data point that suggests there could be support for this version of a coaching model.

Recommendation 3: Incorporate teacher choice in an 'official' capacity by codeveloping individual professional learning plans (PLPs) for teachers.

Two findings from this work are combined to form the basis for supporting the third and final recommendation. Administrators at Northern Vista School indicated there is not a cohesive, outcome-focused process for planning and managing professional development. Additionally, while teachers are satisfied with their professional development, they do value individualized learning opportunities that match their specific needs, instructional areas, and interests.

In order to address these findings, the recommendation is to begin having teachers create a professional learning plan at the beginning of each school year. These plans could be individualized to allow for teachers to participate in a variety of learning opportunities in an effort to reach both schoolwide and individual goals for student improvement. One method for providing a wide variety of professional development opportunities could be to connect these plans to an online delivery platforms and libraries of coursework. Shaha and Ellsworth (2013) found that schools that had higher rates of participation with online professional development programs significantly outperformed schools with lower rates of participation with respect to student achievement in math. Given the current environmental context at the time of this report, and the lack of clarity on when teachers and students may be able to return to in person instruction and professional learning, this is a particularly important result that shows that there is the potential to gain positive impacts on student learning outcomes even without in person professional learning.

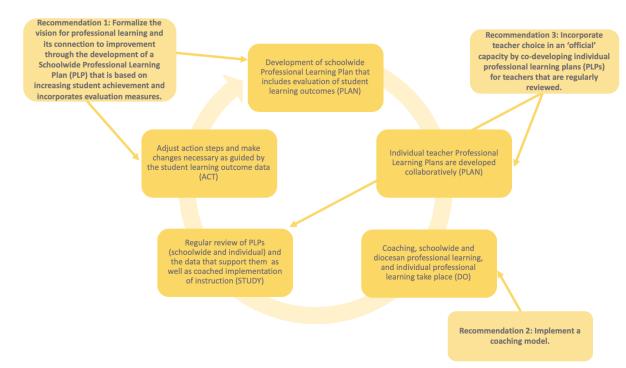
Individual teacher professional learning plans should be co-developed by the teacher in consultation with the school administrative team and the teams on which the teacher serves. Cole (2012) cites ways to improve individual teacher learning plans by making their creation and refinement collaborative as well as iterative, meaning that they are developed with respect to the overall school vision and are not only reviewed once or twice a year. These plan characteristics link clearly to the features of effective professional development as described by Darling-Hammond, Hyler, and Gardner (2017) and reflect the cycles of learning described as necessary components of improvement by Bryk et al (2017).

The work of Shaha and Ellsworth (2013) suggest that one mechanism to connect the wide range of teachers at Northern Vista School with meaningful professional development could be the use of an on-demand professional development platforms online. Their work showed improvements in student outcomes were greater based on the amount of professional learning that teachers accessed on these platforms.

Formalizing individual teacher professional learning plans would also solve a problem that has yet to arise, but is reasonable to expect may impact this site in the near future: funding shortages for individually-selected teacher professional development. While the Parent Teacher Organization (PTO) has been, as reported by the school administration, able to fund teacher learning requests, the economic downturn that is being faced nationwide may change this in the near future. The requirement to create individual professional learning plans would allow for some equity in the assignment of available funds as teachers would have the ability to show alignment between their proposed learning and the schoolwide plan for student achievement. The inclusion of an online platform, as referenced by Shaha and Ellsworth (2013) could also serve to reduce costs associated with travel to and from off-site professional development and would broaden the options available for inclusion in individual plans, particularly if gathering and travel restrictions related to the current pandemic persist for a lengthy period of time.

Below, figure 4 shows how all three of these recommendations coalesce to form a cohesive improvement cycle for the school to engage with as they seek to align professional learning with a larger vision for academic excellence.

Figure 4



Improvement Cycle Incorporating All Recommendations

CONCLUSION

This quality improvement project sought to understand teacher perceptions of professional learning at one school site as well as to investigate the ways that leaders at that same site designed and managed professional learning for their instructional staff. Major findings revealed that while teachers did see the developing vision for the school and were largely satisfied with the professional development they were receiving from a variety of pathways, they did not feel fully confident in their abilities to enact an instructional skill that had been an area of focus over the past school year: differentiation.

Leadership at this site was found to be attempting to provide differentiated professional learning that both addresses individual staff needs and aligns to and furthered their vision for the school. However, findings indicated that this was being done without respect to improving specific, measurable student outcomes. The work of leading a school's professional development towards improving student outcomes is not a small, nor discrete, task. Therefore, the recommendations that were developed in response to the findings related to two common themes that could cut across any desired improvement or program implementation: systems and evaluation.

Because this appears to be a case that illustrates the leadership tension that occurs when you are seeking to define a vision for your organization, training and equipping all staff to fulfill the responsibilities of their job in order to meet that vision, and also taking into account the individual differences and needs of a diverse group of employees, a systems approach to improvement makes sense. By considering all the factors of influence in an effort to "see the system" (Bryk et al, 2017), the leaders are able to better position an improvement plan that will result in the highest level of impact of professional learning as described by Guskey (2002): improvements in student learning.

Evaluation is also a key component of the recommendations. Both the schoolwide professional learning plan and the individual teacher plan recommendation include statements about evaluation and/or review. Each of these recommendations is intended to take into account the need to know how this school is effectively enacting this plan as well as respect the nonlinear nature of learning, both for students and the adults whose professional development is intended to support them.

REFERENCES

2019 TN Educator Survey. (2019). From https://www.tn.gov/education/data/educator-survey/2019-tn-educator-survey.html.

Bryk, A. S., Gomez, L. M., Grunow, A., & LeMahieu, P. G. (2017). *Learning to improve: How America's schools can get better at getting better*. Cambridge, MA: Harvard Education Press.

Creswell, J.W. & Plano Clark, V.L. (2018). *Designing and conducting mixed methods research*. Thousand Oaks, CA: SAGE.

Darling-Hammond, L., Hyler, M.E., Gardner, M. (2017). *Effective Teacher Professional Development*. Palo Alto, CA: Learning Policy Institute.

Deunk, M. I., Smale-Jacobse, A. E., Boer, H. D., Doolaard, S., & Bosker, R. J. (2018). Effective differentiation Practices: A systematic review and meta-analysis of studies on the cognitive effects of differentiation practices in primary education. *Educational Research Review*, 24, 31-54.

Guskey, T.R. (2002). Does it make a difference? Evaluating professional development. *Educational Leadership*, 59(6), 45-51.

Guskey, T.R. (2007). *Multiple sources of evidence: An analysis of stakeholders' perceptions of various indicators of student learning*. Educational Measurement: Issues and Practice, 26(1), 19-27.

Guskey, T.R. (2014). Planning professional learning. Educational Leadership, 71(8), 10-16.

Guskey, T. R. (2016). Gauge Impact with 5 Levels of Data. *Journal of Staff Development*, *37*, 32-37. Retrieved from https://tguskey.com/wp-content/uploads/Professional-Learning-1-Gauge-Impact-with-Five-Levels-of-Data.pdf.

Kirkpatrick, D.L. (1998). Evaluating training programs: The four levels (2nd ed.). San Francisco, CA: Berrett-Koehler Publishers.

Kraft, M. A., Blazar, D., & Hogan, D. (2018). The Effect of Teacher Coaching on Instruction and Achievement: A Meta-Analysis of the Causal Evidence. *Review of Educational Research*, 88(4), 547-588. doi:10.3102/0034654318759268

Joyce, B. (1993). The link is there, but where do we go from here? *Journal of Staff Development*, 14(3), 10–12.

Layton, L. (2015, August 04). Study: Billions of dollars in annual teacher training is largely a waste. From https://www.washingtonpost.com/local/education/study-billions-of-dollars-in-annual-teacher-training-is-largely-a-waste/2015/08/03/c4e1f322-39ff-11e5-9c2d-ed991d848c48_story.html.

Moen, R. (2009). *Foundation and History of the PDSA Cycle*. Retrieved from https://deming.org/uploads/paper/PDSA_History_Ron_Moen.pdf

Powell, D. R., Diamond, K. E., Burchinal, M. R., & Koehler, M. J. (2010). Effects of an early literacy professional development intervention on head start teachers and children. *Journal of Educational Psychology*, *102*(2), 299-312. doi:10.1037/a0017763

Shaha, S. H., & Ellsworth, H. (2013). Predictors of success for professional development: Linking student achievement to student and educator successes through on-demand, online professional learning. *Journal of Instructional Psychology*, 40(1-4), 19-26.

Sherer, D., Norman, J., Bryk, A. S., Peurach, D. J., Vasudeva, A., & McMahon, K. (2020). Evidence for Improvement:An Integrated Analytic Approach for Supporting Networks in Education. *Carnegie Foundation for the Advancement of Teaching*. Retrieved from https://www.carnegiefoundation.org/resources/publications/evidence-forimprovement/

Showers, B., & Joyce, B. (1996). The Evolution of Peer Coaching. *Educational Leadership*, 53(6), 12-16.

TN Dept of Education. (2016). *IPI Teacher Guidebook* (Rep.). Retrieved from IPI Teacher Guidebook (Rep.). (2016). Retrieved https://team-tn.org/wp-content/uploads/2015/11/IPI-Teacher-Guidebook-2017-18.pdf

U.S. Census Bureau QuickFacts: United States. (2019). From https://www.census.gov/quickfacts.

Yoon, K. S., Duncan, T., Lee, S. W.-Y., Scarloss, B., & Shapley, K. (2007). Reviewing the evidence on how teacher professional development affects student achievement (Issues & Answers Report, REL 2007–No. 033). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southwest. Retrieved from http://ies.ed.gov/ncee/edlabs.

Appendix A: School Leader Interview Guide

Administrator/School Leader Interview Guide

Can you describe the makeup of your staff for me? How many staff members do you have? How do you categorize them?

How would you describe [tell me about] professional learning at this site?

What areas have been focal since you became principal?

How much choice do teachers have in their professional development?

In what ways are you forming, or reforming, the vision for student learning at this site?

How does adult learning, or teacher professional development, play into enacting this vision if at all?

What would you say are three words that describe your leadership style?

Is there anything else that I didn't ask about that you would like to add?

Conversation Continuers

"Can you say/tell me a little more about that?" "So you are saying, ... [Repeat back/rephrase]?"

Appendix B: Principal Interview Coding

Principal Interview: Inductive, Thematic Coding

So we've done OG [Orton Gilllingham] for everybody, let me think? Yea, everybody now. All the teachers in pre-k through third grade. Because when I was in [names local public school district] that was such a heavy emphasis: early literacy. Our kids come with great school readiness in that area, but we have to have some consistency in how we move them. How we push them. How we teach them. Especially when it slows down and we need to do something else. I want to feel like the teachers all have those baseline skills so that they can differentiate.	Specific PD topics School-wide PD Differentiation
I would say it's a mix. It's hard to find that right balance and I do think we can be better about making sure it's all aligned so it makes sense. We do some things where all the teachers are there at our weekly meetings. One of the changes I made was to move those to Friday afternoons. It sounds crazy, but I didn't feel like the middle of the week was working. People were too focused on wanting to plan for the rest of the week. But I really think they have a lot of opportunities to do PD outside of school. The funds from the PTO are so crucial for that, but the money is usually there if they want to do something. Oh, and the diocese days. We do them twice a year. Since those are built into the calendar, we are required to do that. We usually go to [names large, local Catholic high school].	Balance Alignment School-wide PD Diocesean PD Individualized PD
That's a good question. You know I wanted this job for so long. I wanted a vision. This place was a talent show. Not collaborative at all. We are working on working smarter now. Not incredibly collaborative yet. We're working on working smarter not harder. We're getting there.	New vision Professional collaboration
You know, PD is really important to me. We have to learn to get better. And it's also so hard because we have such a wide range of teaching jobs so it's hard to find stuff that works for everyone.	School-wide PD
I'd say that one word to describe me is collaborative. I really want us to work together so we can do more for this school. There is so much talent here, but it can't just be in people's rooms all day. Another one would be humor. I try to keep it real and have fun. And I think that the last one would be that I'm a planner. One of the things I used to get frustrated was that we didn't have many systems in place here, so I've	Professional collaboration

been really trying to set those up.	
[names AP], we have to set this up. You know, it's all on purpose to try to make this place a real competitor for the public schools. STEM, special ed, Tier 2 and 3 supports, RtI: we've got to have it and make sure they [teachers] know it.	Academic excellence Specific PD topics Interventions
I think one thing that makes us kind of unique in the Catholic school world is our resource teachers. In my perfect world, [names one resource teacher] would do Tier 2 and [names another] would do Tier 3 interventions. Right now, they are doing more work with the teachers, getting them to try to do what they need to in the classrooms. I guess you could call it a loose coaching model. They do try to get the teachers in each other's rooms, but it's hard because they have to cover or be there to model it.	Coaching Interventions Peer modeling
I mean year two, ok. I've got a new AP, and it matters so much that the teachers trust us and what we are trying to do. Because if we are going to come in and say, 'that's not really differentiation'.	Trust New vision Differentiation

Appendix C: Survey Instrument

Qualtrics Survey Software

https://peabody.az1.qualtrics.com/Q/EditSection/Blocks/Ajax/GetSurvey...

Professional Learning and Leadership at Northern Vista School

Default Question Block

Which primarily describes your role at Northern Vista School?

- I am a classroom teacher who teaches pre-kindergarten.
- I am a classroom teacher who teaches in grades K-2.
- I am a classroom teacher who teaches in grades 3-5.
- I am a classroom teacher who teaches in grades 6-8.
- O I am a specials teacher.
- None of these options fit my role.

How long have you been employed at Northern Vista School in your current role?

- O Less than 1 year
- O At least one year, but less than 3 years
- At least 3 years, but less than 5 years
- O Five year or more

The following questions ask about the professional learning opportunities you had from this past summer (2019) to this point in the school year.

Please take a moment to think back about all of the professional learning in which you participated over this school year (including summer 2019). You are invited to use the text box below as a "scratchpad" to note your experiences.

Think about Professional Learning/Professional Development that falls into each of these "buckets":

formal professional development opportunities, individual support, and collaborative activities.

6/27/2020, 12:21 PM

Professional Learning for Teachers https://peabody.az1.qualtrics.com/Q/EditSection/Blocks/Ajax/GetSurvey...

r hedde indidate yda hever of dgreement with each blatement regarding profeedional learning at yda bondol.	Please indicate your level of agreement with each statement regarding professional learning at your school.	
--	---	--

	Strongly Disagree	Disagree	Agree	Strongly Agree
I have received specific professional learning suggestions that are tailored to my needs.	0	0	0	0
My professional learning has been closely aligned to the instructional materials I use in class.	0	0	0	0
In general, the professional learning I have received this year has led to improvements in my teaching.	0	0	0	0
I am able to select professional development opportunities I feel will increase my professional capacity.	0	0	0	0

Please indicate your level of agreement with each statement related to assessment and differentiation.

	Strongly Disagree	Disagree	Agree	Strongly Agree
I am able to use assessments and tasks provided by curriculum/instructional materials without having to modify or develop my own.	0	0	0	0
l know how to differentiate instruction to meet the needs of all the learners in my classroom.	0	0	0	0
I know how to differentiate assessment to meet the needs of all the learners in my classroom.	0	0	0	0
I would like more professional learning time to learn about differentiation of instruction and/or assessment.	0	0	0	0
I would like more professional learning time to prepare to differentiate instruction and/or assessment.	0	0	0	0

To what extent have each of these activities improved your professional abilities over the past year?

6/27/2020, 12:21 PM

Qualtrics Survey Software

Professional Learning for Teachers https://peabody.az1.qualtrics.com/Q/EditSection/Blocks/Ajax/GetSurvey...

	Indicate your perception of how helpful each area of professional learning was to improving your professional practice.						e your per time devo tegory du t school y	oted to ring the
	Not helpful	Slightly helfpul	Somewhat helpful	Very helpful	Did not participate	l would like more of this activity.	The amount of time for this activity is just right.	l would like to do less of this activity.
School-wide professional development (required for all)	0	0	0	0	0	0	0	0
Professional development that took place outside of school	0	0	0	0	0	0	0	0
Professional collaboration time	0	0	0	0	0	0	0	0
Individual support or coaching	0	0	0	0	0	0	0	0
Observing another teacher's classroom	0	0	0	0	0	0	0	0

Please indicate the extent to which you agree or disagree with the following statements regarding leadership and vision at your school.

	Strongly disagree	Disagree	Agree	Strongly Agree
The leadership at my school communicate a clear vision for this school.	0	0	0	0
I see how my professional learning opportunities are aligned with the vision for my school.	0	0	0	0
The leadership at my school regularly give feedback regarding my instruction.	0	0	0	0
The leadership at my school know my instructional strengths and areas of growth.	0	0	0	0

Consider all the professional learning you participated in this year. Which were the most valuable? What aspects of the training made these activities valuable to you?

Appendix D: Instructional Staff Interview Guide

Instructional Staff Interview Guide

How long have you been at Northern Vista School? Have you always been there in the same capacity?

In your experience, what does professional learning/development look like at Northern Vista School?

Do you see this having changed with new leadership?

What are the primary areas for professional learning do you feel have been addressed this past year?

If you want to attend or participate in something outside of school, would your administration support that request?

Do you have opportunities to collaborate with others/get into other classrooms/get feedback from school administrators or others?

What, if any, connection do you see between the topics or areas of professional learning and a broader vision for NVS?

What makes Professional Learning high quality or relevant to you?

Over the next year, what topics would you like to see addressed in professional learning at NVS?

Is there anything else that I didn't ask you about that you would like to add?

Appendix E: Master Matrix

Master Matrix of Qualitative Data and Connections with Quantitative Data

- **1.** This matrix includes data collected from interviews with both teachers and administrators
- **2.** Analysis was done by reviewing interview notes and recordings and listening for specific statements that were relevant to the secondary questions raised through the initial qualitative data collection
- 3. Some statements appear within multiple question areas
- **4.** Key: TI: Teacher during interview, TO: Teacher responding to open-ended survey question, A: Administrator

Secondary Question	Quote	Quantitative Connection	Finding	Recommendation
How and why staff engage in professional learning	TI: Well sometimes they just bring it to us. Like the school pays someone to come tell us about something. TI: So we do meet as a fourth and fifth grade math team and we do a lot of vertical conversation. And we talk about differentiation and what to do. It was a big area of focus for us this year. It's so important to know what they need to know for the next year. And now I know what to expect right away with this group coming up. They need lots of small group instruction. TI: It's decided top down from the administration. Or sometimes we go to the disocean-wide days where we get together with the teachers from [names other area	Survey Q5.4: I am able to select professional development opportunities I feel will increase my professional capacity. (88.2% strongly agree, 11.8% agree).	Finding 3: Teachers see the vision and direction provided by school leaders. Finding 4: Balancing the differing reasons for professional learning is an ongoing challenge for school leadership.	Recommendation 1: Formalize the vision for professional learning and its connection to improvement through the development of a Schoolwide Professional Learning Plan that incorporates an evaluation component. Recommendation 3: Incorporate teacher choice in an 'official' capacity by co- developing individual professional learning plans for teachers.

		FIDIESSIDIIAI	Learning for Teachers
	Catholic schools] or if someone wants to do something, go out on their own, they can make it happen. The school will pay for it.		
	TI: I'm always looking to see if I can get points for it for my recertification. You need so many and it sneaks up on you.		
	TI: Sometimes they bring in someone and it's not really, like, learning. It's inspirational. We had Ron Clark one year.		
	TO: I have seen improvements in my students learning due to this style of phonics [Orton Gillingham].		
	TO: The programs that were the most valuable to me were opportunities I took outside of the school but wchih [<i>sic</i>] were funded by the school. They were valuable because I was able		
	to to choose topics that were applicable to me. I also think that we have less in- school opportunities than I though [<i>sic</i>] we would so it's helpful to go elsewhere for the		
	resources, training, and support that I need.		
What topics staff have engaged with	TI: There are generic things that everyone	Finding 1: Teachers value self-selected	Recommendation 3: Incorporate teacher choice in an 'official'

		Professional	Learning for Teachers
dif TI: bri an lik ins ha	n use, especially fferentiation. : Sometimes they ing in someone ad it's not really, ke, learning. It's spirational. We ad Ron Clark one ear.	professional development.	capacity by co- developing individual professional learning plans for teachers.
gra tal ne: go wi pri wi	: We meet as a rade level and we lk about what the ext lessons are bing to be and also ith the whole rimary team, K-3, ill meet to talk bout guided math.		
ses tes dic da an	: We did a whole ssion on Scantron sting on the ocese training ay. How to give it ad how to use the ports. It went so st.		
dic inc the thi na:	: Smokey Daniels d a thing on quiry circles with e whole faculty. I ink that was his me? I would have look it up.		
son do big ed are tra are ho wa hai is o the tea wh	: Differentiation is omething we have o a lot of and is a g push in lucation. If you en't 'teacher ained' it's a huge ea of need to learn ow to do that. I ant to know, 'If I ave a student who dyslexic, these are e ways I have to ach them. This is hat you do.'"		
	: Differentiation! ach a big one.		

	Froressional	Learning for Teachers
Making accommodations for kids isn't just the only part of that. We have to push it farther.		
A: Orton- Gillingham was a HUGE push. We needed a program that everyone was using.		
A: We did some that were just for certain groups, like the upper school and specials teachers did work on primary sources and how to use them as a resource.		
TO: Receiving Orton Gillingham training has allowed me to better understand phonics and spelling at an early childhood level. It has helped me grow in my knowledge of reading/english.		
TO: The OG training I completed this year was very helpful. It also gave all the PreK teachers the same basics to teach in class. The training was very detailed, easy to apply. The instructors are available to answer questions, their social media network is so valuable and the teachers who connect through social media are		
very helpful. The		

OG organization has done a great job of developing a useful network.Image of the property improving guided mach instruction- specifically the discussion of struction this time and activities to ernich the kids that need it.Image of the property improving the kids that need it.Image of the property improving the property improving the property improving the property improving the property improving the property improving the property of the property of the property improved property of the property of the property improved property of the property of the property of the property improved property of the property of the property of the property improved property of the property of the property of the property improved property of the property of		-		Professional	Learning for Teachers
more.29.4%, somewhat helpful: 47.1%,teachers.TI: There are teachers there whoslightly helpful, 11.7%, not helpful:teachers.	professional development	has done a great job of developing a useful network. TO: I have enjoyed learning about improving guided math instruction- specifically the discussion of struction this time and activities to enrich the kids that need it. TO: Classroom management and STEM PBL provided actual support that I can use in my classes by giving examples of how to handle specific behaviors and having me develop a lesson that I can use in my classes. TI: It addresses concerns I'm currently having, like behavior management. TI: If I need a boost. A reminder that I can do this: either emotional, psychological, or just re-energizing. TI: I like it when PD is on a topic I'm interested in or something I want to learn about. A few years back I got	the professional learning I have received this year has led to improvements in my teaching. (Strongly agree: 47.1%, agree: 47.1%, disagree, 5.8%) Q7.1: To what extent have each of these activities improved your professional abilities over the past year: School- wide professional	Finding 1: Teachers value self-selected professional development. Finding 4: Balancing the differing reasons for professional learning is an ongoing challenge for school	Incorporate a coaching model to initially address differentiation needs, but will allow for coached implementation of other areas of focus and/or needs identified in individual professional learning plans. Recommendation 3: Incorporate teacher choice in an 'official' capacity by co- developing
		really interested in			
		had done some stuff on it and I wanted more. TI: There are teachers there who	(required for all). (Very helpful: 29.4%, somewhat helpful: 47.1%, slightly helpful, 11.7%, not helpful:		learning plans for

	-	Froressional	Learning for Teachers
 my grade level and we can work together. It's hard when we are all spread out. TI: The technology can't be too much. Sometimes it takes up so much time that people are running around and it's all chaotic. TI: It's not going to take a whole bunch of time to make it. TI: We need time. We get a week of professional development at the beginning of the year, but we are so focused on getting things set up so it's not enough. TI: I would like to have more of the same. Some follow up and not one and done. TI: Practical application and something I can use right away. TI: My National Conference was right in [names nearby metropolitan area] last year. That was so good. I never get to work with other foreign language teachers besides [names other Spanish teacher at the school] and we are so different. 	Q7.1: To what extent have each of these activities improved your professional abilities over the past year: Professional development that took place outside of school (<i>Very</i> <i>helpful</i> : 76.5%, <i>somewhat helpful</i> : 17.7%, <i>not helpful</i> : 5.9%)		
	L		

		1 101035101101	Learning for	reachers
anna thing I lungue				
same thing. I know				
that some of the				
programs aren't				
able to be used at				
the same level by				
everyone, but it's				
really important to				
me that we are all				
able to 'speak the				
same language'				
about this stuff,				
especially				
differentiation.				
TO: I prefer finding				
- 0				
my own				
professional				
development				
seminars only				
because it is geared				
towards my line of				
work which is not				
the majority of a				
school wide				
professional				
development (ex:				
classroom teacher				
curriculum)				
TO: The training				
was very detailed,				
easy to apply. The				
instructors are				
available to answer				
questions, their				
social media				
network is so				
valuable and the				
teachers who				
connect through				
social media are				
very helpful. The				
OG organization				
has done a great job				
of developing a				
useful network.				
TO: Boing abla to				
TO: Being able to				
attend and pick out				
my own				
professional				
dovolorment -1				
development classes				
at a conference is				
very helpful. When				
it is done with the				
entire school it is				
entire school it is				

			Professional	Learning for Teachers
How professional learning aligns with the vision for the school	more generic so everyone can benifit [sic] but never gets in depth. TO: I like individual coaching and small group collaboration that help each other figure out the best way to teach that years [sic] class. Every year it is so different. TO: Classroom management and STEM PBL provided actual support that I can use in my classes by giving examples of how to handle specific behaviors and having me develop a lesson that I can use in my classes. TO: An insight of the past, present, future of Catholic schools as well as the Catholic identity and the spiritual role of leadership was valuable. A: I have to decide it here. There is like no vision from the Office of Catholic Schools. They will set stuff up for the PD days for the diocese but that's it. We're going blind. There's autonomy, but there's no vision. A: [names AP], we have to set this up. You know, it's all on purpose to try to make this place a real competitor for the public schools.	Q8.1: The leadership at my school communicates a clear vision for this school. (<i>Strongly agree:</i> 64.7%, <i>Agree:</i> 29.4%, <i>Disagree:</i> 5.9%) Q8.2: I see how my professional learning opportunities are aligned with the vision for my school. (<i>Strongly</i> <i>agree:</i> 29.4%, <i>Agree:</i> 64.7%, <i>Disagree:</i> 5.9%)		Recommendation 1: Formalize the vision for professional learning and its connection to improvement through the development of a Schoolwide Professional Learning Plan that incorporates an evaluation component. Recommendation 3: Incorporate teacher choice in an 'official' capacity by co- developing individual professional learning plans for teachers.

	Professional Learning for Teachers
STEM, special ed, Tier 2 and 3 supports, we've got to have it and make sure they [teachers] know it.	



Images used with attribution to Freepik.com