





Data-driven & Classroom-focused

Table of Contents

About the Authors	3
Introduction	5
A Visit to Greece, New York	8
The Journey to Data-driven	10
Understanding Classroom-focused	16
The Future of Professional Learning	19

About the Authors

Elizabeth Combs

is Managing Director of the Frontline Research & Learning Institute. She began her career as an elementary school teacher and Director of Administrative and Instructional Technology at Patchogue-Medford School District before moving to Imperial Software Systems, a professional learning services company, where she eventually served as President. She then held positions at My Learning Plan, Inc. as President and Chief Strategy Officer. Her professional affiliations include memberships with Learning Forward and the Association for Supervision and Curriculum Development. Ms. Combs holds a Bachelor of Arts in Elementary Education as well as a Bachelor of Arts in Psychology from State University of New York at Geneseo, a Master of Arts in Technology in Education from Teachers College, Columbia University and a professional diploma in Education Administration from Hofstra University. She also holds certifications and licenses to serve as a teacher, school administrator and supervisor.

Sarah Silverman

is Vice President at Whiteboard Advisors where she advises on education, workforce and wellness policy. She has assisted with development of state policies that transform teacher and leader preparation, evaluation and training; led development of a national birth-through-workforce data dashboard and facilitated coalitions to advance bipartisan policy solutions. Her prior work includes managing the Pre-K-12 education portfolio at National Governors Association Education and consulting with states and districts on performance management and teacher evaluation policy reform at TNTP as well as serving as the Director of Evaluation & Assessment and Chief Information Officer for See Forever Foundation. Dr. Silverman holds a master's degree in educational psychology and a doctorate in educational policy and leadership from The Ohio State University. Her research and writing have focused on the impact of state and national policy on social justice activism, teacher beliefs and ethics of education.

About the Institute



The Frontline Research & Learning Institute generates data-driven research, resources and observations to support and advance the education community. The Institute's research is powered by Frontline Education's data and analytic capabilities in partnership with over 9,500 K-12 organizations and several million users nationwide. The Institute's research reports and analysis are designed to provide practical insights for teachers and leaders as well as benchmarks to inform strategic decision-making within their organizations.

Research, writing and design of this report was sponsored by the Frontline Research & Learning Institute.

With Gratitude

The authors wish to thank members of the Frontline Research & Learning Institute Advisory Council, the review team at the Johns Hopkins University Center for Research and Reform in Education and our respective teams at Frontline Education and Whiteboard Advisors for their expertise, insight and review of *Bridging the Gap*.

Introduction

Bridging the Gap Part 4 — the final installment in a series exploring the new federal definition of professional development — uses the framework of a school district's transition over the last decade and a half to help make meaning of professional learning data gathered from a representative sample of 203 school districts over five years across the United States. Whereas previous reports in the series have delved deeply into unpacking the definitions of each of the six professional learning quality criteria outlined in the Every Student Succeeds Act, this fourth installment will follow the exemplar of Greece Central School District and examine its efforts to make meaning out of a crowded and often confusing marketplace for professional learning opportunities. Although this report addresses ways that all six quality indicators work together in Greece, we focus here on the ways the district frames classroom-focused and data-driven aspects of its professional learning program.

Representative data... reflect an education segment in transition, and one where on-going analysis over the last thirty years has led to **confusion at best and improvement paralysis at worst.**

Representative data we use through the series demonstrate the current state of professional learning across the nation. They reflect an education segment in transition, and one where on-going analysis over the last thirty years has led to confusion at best and improvement paralysis at worst. By many metrics, U.S. education systems are improving. Yet by international standards, it's simply not keeping pace with what's possible. Students in the United States, more than nearly any other first-world

nation, are likely to face dramatically different educational experiences based upon their socioeconomic status and race. Over the last decade, the nation has increasingly shifted focus toward teachers and school leaders as essential influencers at the front lines of education. School systems have grown more sophisticated in their evaluation of teaching and learning, and standards and assessments have become core components for setting expectations and measuring progress.

Even in cases where quality is high and learning outcomes are excellent, we keep focused on the necessity to maximize our effort to ensure our teachers and students receive world-class education and support.

These efforts, while still early in their implementation, are clearly not sufficient to ensure educators have the skills and tools they need to ensure every student succeeds. We undertook this report series using data from professional learning management systems to critically examine the state of play in professional learning as a means of establishing clarity and initiating a critical conversation about how to improve teachers' access to quality professional learning that takes the data from a variety of sources related to teachers and their students and sets a clear, actionable pathway toward improvement. Even in cases where quality is high and learning outcomes are excellent, we keep focused on the necessity to maximize our effort to ensure our teachers and students receive world-class education and support.

The first report, Bridging the Gap: Paving the Pathway from Current

Practice to Exemplary Professional Learning, established specific definitions of each of six criteria for quality set forth in the Every Student Succeeds Act, including sustained, intensive, collaborative, jobembedded, data-driven and classroom-focused. Findings from the initial report made clear that professional learning across the nation needs tremendous improvement to be effective. This report will build upon the first three reports by adding dimensionality from a real-world exemplar.

This series of reports has broken apart each of the six quality criteria to address them independently, but professional learning should incorporate all six criteria to be most valuable and effective. Our examination of the efforts in the Greece Central School District helps demonstrate both how parts of the quality system look independently while also reflecting the ways in which they are inseparable. Leaders in other districts should observe that change may need to be incremental, but connecting all six quality improvement efforts over time will be essential. We begin by exploring specific efforts to improve the data-driven and classroom-focused qualities of professional learning and conclude with an exploration of the progress across the entirety of the system.

Change may need to be incremental, but connecting all six quality improvement efforts over time will be essential.

A Visit to Greece, New York

In many ways, the eighth largest school district in New York state is like the average U.S. school district. Greece Central sits on Lake Ontario, to the northwest of Rochester, New York. It serves just over 10,000 students in the suburban town of about 100,000. The student population comprises about 65% White students; 14% are Black and 13% are Latino. 42% of enrolled students are eligible for free or reduced price lunch. Students' state test scores track with the state's average proficiency rates — about 30-40% in ELA and about 40-50% in mathematics. Also like many school districts across the United States, Greece Central is led by a group of educators who aspire to be more than just average.

When the **No Child Left Behind Act** was ceremoniously signed into law and lauded by a broad bipartisan coalition, it set the nation's education system on a new course. For Greece, some argue, it helped create the platform for the district's leaders to reimagine teaching and learning with an emphasis on increasing students' achievement by focusing on excellent instruction. In 2001, that meant taking a hard look at how systems and processes in place in the district and across its 17 schools were supporting teachers and instruction. That process has continued to evolve and grow over time through thoughtful, deliberate planning and engagement from staff both in the central office and in schools and classrooms. Greece Central School District has developed a comprehensive approach to integrating its educator support systems with demonstrated student and teacher needs as well as meeting quality criteria that have been widely adopted within the education community — namely, they aim for professional learning that is sustained, intensive, job-embedded, collaborative, data-driven and classroom-focused.

Figure 1:

Definitions of Key Professional Learning Terms























Data-driven

\ dei.tə driv. n\ adjective;

based upon and responsive to real time information about the needs of participants and their students.



KEY METRIC:

Activities offered aligned to a data-driven format

finding:



The Journey to Data-driven

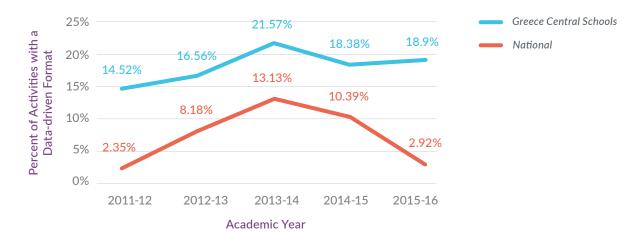
Collaboration in the context of professional learning is about people working together to achieve a shared understanding of a concept or to develop the same skillset.

Professional learning in many school districts by the early 2000s could be characterized as a system that relied largely on philosophy training rather than immediate, practical problem solving. For Greece Central, that was evident in the extent to which district leaders relied heavily upon researchers and theorists who visited the district for short periods to educate teachers about their approaches to issues like classroom management, pedagogy or new curriculum. The driving theory of action behind inviting individuals with strong education reputations to provide professional learning was that exposing educators to their work would develop teachers' understanding of new advances in education, which in turn would help more students to learn material better or more efficiently. That theory mirrors an approach commonly applied in medicine, where practitioners attend seminars to learn about advancements to procedures, newly developed medications or changes in policy with which they must comply. Teaching, however, does not appear to be analogous to the practice of medicine when it comes to continuing education.

Analyses of the effectiveness of professional learning for teachers over the past few decades have consistently demonstrated that, with very few exceptions, it does not have a measurable impact on teacher efficacy or student outcomes. In *Bridging the Gap Part 1*, we discussed these data and analyses in light of the *Every Student Succeeds Act's* new definition of quality. Based upon the experience at Greece Central School District, we can proffer a specific hypothesis for the apparently low return on investment: a broken theory of action. Bringing well-known researchers and theorists to the district may help inform educators about new and interesting ideas in education, but it does not lend itself to easy application in the classroom. Rather than approaching professional

learning as an opportunity to influence educators' philosophies or procedural awareness, leaders in the district learned, professional learning needed to influence specific practices related to activities and challenges teachers were facing in their day-to-day experiences with students. To understand these challenges, they needed to gather data. Figure 2 below summarizes their findings on one metric, data-driven professional learning, versus the national average over five years.

Figure 2:Greece Central School District data-driven professional learning versus the national average between 2011 and 2016.



Data-driven professional learning is based upon and responsive to demonstrated needs of teachers and students. To align professional learning with teacher and student needs, it is critical to first understand what those needs might be. In our analysis of professional development offered across the U.S. over the last five years, we found that just 8% of offerings met this basic criterion. In an era when education is replete with assessments of students' knowledge and skills, there is little reason not to examine the aggregated findings from those assessments to identify trends in students' needs and potential gaps in teachers' skills. Leaders who wish to assess the extent to which their professional

learning activities are data-driven can begin by comparing the content of enrolled activities with data from now readily available sources.

Table 1 on the following page highlights example data sources to drive professional learning.

Table 1: Readily available sources of data to drive professional learning.

Available Data Source	Professional Learning Opportunity
Summative assessments of students' knowledge and skills	Focus on learning or practice in areas where many students are consistently low-performing
Observations of teacher practice	Focus on learning or practice in areas where many educators struggle to convey content or keep students on track
Progress toward student learning goals (Student Learning Objectives, Student Learning Goals, etc.)	Focus on learning or practice in areas where many teachers struggle to set meaningful goals, gather actionable data or are off-track to meet goals
Surveys of educators, evaluators, students, parents	Focus on learning or practice in areas where educators or others identify a gap between actual practice and ideal practice
Outcomes notes from professional learning communities	Focus on learning or practice that addresses consistent challenges facing many educators in their regular learning practices

Many school districts have been hard at work over the last decade curating available data and organizing it within databases that enable easier reporting and dashboard functions. One potential approach to assessing the data-driven nature of professional learning to date is to develop a comparative report or dashboard that aggregates standards and skills on which educators consistently demonstrate a need for growth and also aggregates the standards to which professional learning activities are aligned, then review the report regularly with the aim of reducing discrepancies between the two over time. The same report could be generated to compare student learning gaps with educators' access to content knowledge development, or to include all of these components. However data systems are leveraged, leaders should be asking two essential questions:

- 1. To what extent are professional learning activities that teachers are participating in selected based on rationale that includes data on their own or their students' needs?
- **2.** To what extent is the data being used to select professional learning related to daily teaching activities and/or specific student learning outcomes?

Leaders at Greece Central schools take these questions — and their use of data — a step further. The Director of Professional Learning, Marguerite Dimgba, starts from a commitment to ensuring all professional learning is fundamentally job-embedded or integrated in day-to-day professional practice. As a result, learning that is not directly related to what educators are doing regularly or that isn't connected with student learning needs just doesn't make sense. Built into the job-embedded framework is the assumption that learning activities will help ensure educators feel satisfied that they are making appropriate progress toward continuous improvement. It is difficult and perhaps impossible to make progress without clarity about what progress is needed.

To address the need for information about what educators are doing regularly, where they perceive opportunities for growth and time for review of student data, Greece Central has developed a Teacher Center Policy Board, led by Ms. Dimgba consisting of 26 educators from across schools and programs. The educators meet regularly to surface and discuss data, including surveys of fellow educators on their assessments of the value of the professional development they have received to date and identified needs for future learning opportunities. Based upon the group's analysis of needs, the district provides grants to pursue professional learning that directly meets with educators' demonstrated needs. They also evaluate the efficacy of professional learning using targeted surveys immediately after professional learning experiences and then again after educators have had time to integrate it into their practices. The council analyzes other data sources, such as lesson plans, to assess changes in practice over time. These changes can be mapped to trends in student learning outcomes as well.

Using data to drive decisions has not been transformative by itself, however.

Greece Central School District is still early in its journey toward professional learning that fully data-driven, but it has adopted several highly promising practices. Leaders' efforts to turn away from outside experts who are invited to share their philosophies of learning and instruction and toward learning experiences that are integrated into educators' day-to-day responsibilities has already yielded a decline in new teacher turnover, which fell from 22% in 2014 to 18% last year. Using data to drive decisions has not been transformative by itself, however. The district has also been rigorous about addressing other key quality criteria. We turn next to their efforts to create classroom-focused learning opportunities for every teacher in the district.

Figure 3:

Definitions of Key Professional Learning Terms





























Classroom-focused:

\'klas room, 'foʊkəst\ adjective;

related to the practices taking place during the teaching process and relevant to instructional process.

KEY METRIC:

Activities aligned with classroom-focused InTASC standards.

finding:





Understanding Classroom-Focused

Of the six criteria we examined using data from our 203 participating school districts, classroomfocused was by far the strongest criterion. Of the six criteria we examined using data from our 203 participating school districts, classroom-focused was by far the strongest criterion. Across enrollments, nearly 85% were aligned to at least one InTASC teaching standard. We still choose to dig into what it means to achieve classroom-focused professional learning because it is worthwhile to understand how so much professional learning across school districts has achieved a strong classroom focus, but also because it is helpful to unpack the ways data organization can actually help improve quality. Professional learning taking place in Greece Central over the last five years has tracked almost exactly with the national average, so their story is particularly instructive.

Leaders in Greece approached professional learning reforms from the central tenet that they should be fundamentally job-embedded (integrated into day-to-day professional practice). For professional learning to be job-embedded, it should be experienced and practiced simultaneously with carrying out the responsibilities of teaching. Further, the responsibilities of teaching have been clearly defined by the New York State Teaching Standards. Although our analysis relied upon alignment with the InTASC model teaching standards, we can observe from a crosswalk between New York's standards and the model standards that there is strong alignment between the two sets of standards. Greece Central has also tagged professional learning activities with InTASC standards within their human capital database where relevant. The work of establishing specific standards of practice has had a clear and decisive impact on the extent to which professional learning activities meet with the quality criterion; because we know what the expectations are and collectively agree upon them, we can easily understand whether professional learning activities align. The classroom-focused criterion is unique among the criteria because it enjoys pre-existing standards — and that is a clear benefit.

Standards for teaching practice also create a built-in benefit for organization in a professional learning database. The explicit connection between a professional learning activity and the standard of practice to which it is aligned helps clarify the nature of the activity, but it also requires the discipline to articulate the purpose of the activity. Without that discipline, classroom-focused might suffer from the same low alignment that most of the other criteria face. In fact, some other criteria may be more aligned with the quality criteria than it appears but we simply do not know because of the ways activities have been cataloged. The key lesson goes beyond the adage that putting good data into a system is the only way to get good information out; it points to the utility of purposefully tracking information about professional learning activities in ways that not only help monitor improvements over time but also help drive that improvement. If a database requires or encourages identification of the data source behind a learning activity, for example, activities are likely to become more data-driven over time.

Greece Central School District leaders and educators have worked to make the classroom focus of professional learning activities deeper than simple alignment with the state teaching standards. They have emphasized the importance of ensuring that classroom-focused professional learning is founded on opportunities for teachers to observe each other in action. If, for example, a teacher demonstrates a need or interest in learning a pedagogical approach that a colleague has mastered, she or he can request to spend time observing the master teacher in practice, debriefing with the master teacher and an administrator or evaluator, and reflecting on integrating the practice into his or her own classroom. The district also offers access to both a schoolbased, internal catalog of activities and an external, broad-based catalog of activities so educators may find and enroll in activities that provide a diversity of experiences and approaches to teaching and content. Both catalogs tag learning opportunities to teaching standards so it remains clear that an activity speaks to the specific need of the individual educator. Teachers are also strongly encouraged to find or be mentors, a practice that helps stimulate sharing of good practice and opportunities to identify other educators that may be helpful models of great teaching.

The key lesson goes beyond the adage that putting good data into a system is the only way to get good information out; it points to the utility of purposefully tracking information about professional learning activities in ways that not only help monitor improvements over time but also help drive that improvement.

Figure 4:

Definitions of Key Professional Learning Terms



Sustained \sə-'stānd\ adjective;

taking place over an extended period; longer than one day or a one-time workshop.

Intensive \in-'ten(t)-siv\ adjective; focused on a discreet concept, practice or program.

KEY

MFTRIC:

Activity enrollments consisting of more than three meetings

finding:

KEY METRIC: •

Average length of PD activities (in hours)

finding: 4.5 hours













Job-embedded

\'jäb, im-'be-dəd\ adjective;

a part of the on-going, regular work of instruction and related to teaching and learning taking place in real time in the teaching and learning environment.



Collaborative \ka-'la-ba-,rātiv\ adjective;

involving multiple educators, educators and coaches, or set of participants grappling with the same concept or practice and in which participants work together to achieve shared understanding.

KEY METRIC:

Activities offered within the school system

finding:



KEY METRIC:

Enrollment in an activity with a collaborative format





Data-driven

\'dei.tə driv.adjective;

based upon and responsive to real time information about the needs of participants and their students.



KFY

MFTRIC: Activities offered aligned to a data-driven format

finding:



Classroom-focused:

\'klas room, 'foʊkəst\ adjective;

related to the practices taking place during the teaching process and relevant to instructional process.

KEY METRIC: Activities aligned with

classroom-focused InTASC standards.

finding:













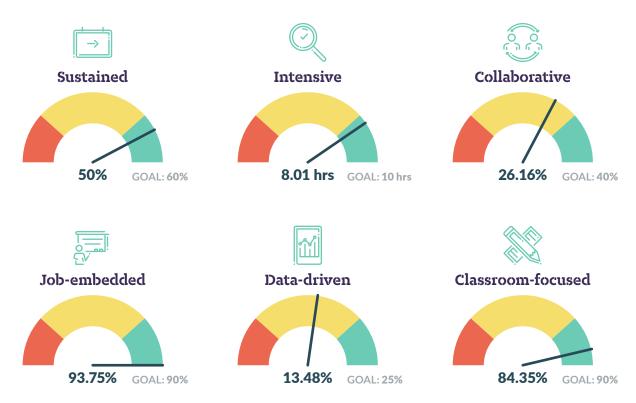


The Future of Professional Learning

Creating a rich professional learning experience requires clarity of vision for what quality means and how it applies within your own school district and community contexts.

Leaders at Greece Central School District embarked upon their journey toward improving professional learning experiences for their teachers over a decade ago and they continue to work toward that vision today. While there is still much to be done, however, Greece Central is exemplary in that they began by establishing their shared vision for quality and taking an account of the state of play in their professional learning system before charting a path toward improvement. Figure 6 on the following page summarizes the current state of Greece Central's progress versus possible improvement goals. Each of the metrics in the dashboard view reflects the metrics we assigned to each quality indicator throughout the report series.

Figure 5:Greece Central School District Professional Learning Dashboard



The district adopted a professional learning management system that facilitated the process of defining benchmarks and then focused heavily on seeking input from teachers on what they needed and wanted in a professional learning system. Leaders also approached professional learning not as a compliance activity, but as an opportunity to help move from an average school district to one that is continuously pursuing excellence. While Greece Central Schools is still working toward its best possible professional learning system, they see the process as on-going and under constant revision. Their efforts to improve are driven by the notion that all teachers deserve access to the knowledge and skills they need to be successful — and those needs are ever-changing.

As Greece looks to the future, they face a world in which their students may stay in the area to become scientists, musicians or other social contributors — or perhaps go somewhere else in the world to pursue

With support and guidance from the **Every Student Succeeds Act** in hand, every teacher in America can have access to excellent professional learning that truly supports their instruction and improvement over time.

other careers. Wherever they go and whoever they become, students will need excellent instruction during their K-12 experiences that prepares them for the next steps in their lives. For that reason, leaders in Greece have already started looking toward the next phase in their professional learning system development to ensure educators have access to the learning and support they need to help every student to be successful. In the future, district leaders will seek more avenues for professional learning that is truly personalized to individual educator needs. In parallel with efforts to ensure students experience increasingly personalized learning opportunities, they will work toward a personalized playlist for each teacher in the district. One strategy for achieving that goal will be an increase in access to high quality on-line learning opportunities that meet all six quality criteria while also helping advance teachers at a pace that matches with their interest and capacity.

Our previous reports focused heavily on each of the six quality indicators defined in the Every Student Succeeds Act: sustained, intensive, job-embedded, collaborative, data-driven and classroom-focused. We used data from over 200 school districts to help us understand the current state of the field, and then worked with school district partners to identify who is leading the charge toward improvement.

With this final installment, we focused on the last two indicators through the lens of Greece Central School District. Their lessons provide helpful guidance for any school district that aims to improve over time and ensure students can meet the increasing demands of an evolving economy and society. With sustained effort to improve and a commitment to incremental progress, they have translated the last fifteen years into a proving ground for instructional improvement through quality professional learning.

Across the U.S., thousands of other school districts can chart their own courses for improvement using lessons learned in Greece, Harrison and Greenville — among others. Professional learning today is falling short of what it can be, but the path toward improvement is perhaps clearer now than ever. With support and guidance from the *Every Student Succeeds Act* in hand, every teacher in America can have access to excellent professional learning that truly supports their instruction and improvement over time. The first step toward achieving that promise is within the hands of any school leader who will take the time to establish the vision.

Learn More

For more insights into K-12 education, visit

FrontlineInstitute.com

About the Institute

The Frontline Research & Learning Institute generates data-driven research, resources and observations to support and advance the education community. The Institute's research is powered by Frontline Education data and analytics capabilities in partnership with over 9,500 K-12 organizations and several million users nationwide. The Institute's research reports and analysis are designed to provide practical insights for teachers and leaders as well as benchmarks to inform strategic decision-making within their organizations.

