RELAY GRADUATE SCHOOL OF EDUCATION

Part of a series of case studies on training data-literate teachers that includes **Western Oregon University**, **Relay Graduate School of Education**, **Boston Teacher Residency**, and **Urban Teachers**.

Michael & Susan Dell
FOUNDATION

"It's important to us that teachers know how to analyze the feedback they're getting about their students and then shift instruction based on that feedback. We have many teachers at our school who graduated from Relay; they come through the door with a great understanding of how to use data. They are quicker to understand—and act on—the story the data is telling them about their students."

— **Elizabeth Leebens**, graduate of Relay's National Principals Academy Fellowship program and assistant principal at Baychester Middle School in the Bronx, New York

PROGRAM HIGHLIGHTS

- **Strong leadership and vision**
- **Clearly defined data literacy practices**
- Highly skilled faculty
- **Operational supports for a strong data-use culture**
- **Defined outcomes for candidate success**

BACKGROUND INFO

YEAR FOUNDED: 2011

LOCATION: New York City (with additional campuses in Chicago, Delaware, Houston, Memphis, New Orleans, Newark, NJ, and Philadelphia & Camden)

TYPE OF PROGRAM: A master's degree program training 250 district and charter public teachers

DEGREE EARNED: Master's degree in Education from Relay Graduate School of Education

Relay Graduate School of Education (Relay) is one of a new generation of institutions divorced from a traditional university setting with a high touch, high accountability approach to teacher preparation. Relay graduation requirements directly tie to teaching candidates' K-12 students' academic performance; teaching candidates must hit minimum student achievement targets to earn their degree.

In the past several years, Relay has incorporated new programs and expanded into other cities, but its flagship remains the two-year New York Master of Arts in Teaching (MAT) program. Relay teachers work full time in traditional public schools or charter schools while completing coursework (some 40 percent of which is online, with in-person sessions focused on practicing newly learned skills and getting personalized faculty feedback). An explicit emphasis on data literacy goes hand in hand with Relay's outcomes-oriented approach. Data literacy and a commitment to continuous improvement undergird both the knowledge and skills Relay demands of teachers and the practices of its administrators, faculty and staff.

STRONG LEADERSHIP AND VISION

As Relay's provost and a founding faculty member, Dr. Brent Maddin's unwavering view of data literacy's centrality permeates all the areas he touches: setting Relay's curricular goals, managing curriculum design and advancing program innovation.

Maddin is equally unwavering about accountability for K-12 student results. "I fundamentally believe that we do not hold ourselves accountable enough as a profession for helping kids make adequate learning gains," he says. To Maddin, education data and evidence are critical teaching tools. "What Relay does is really about ... getting teachers to hold themselves accountable for whether or not their kids are learning. It's about getting them to ask, every day, 'Are the kids learning, and what evidence do I have? And what am I using on an interim basis to make decisions to inform my instruction?'"

Other Relay administrators share Maddin's vision. They consistently say helping novice teachers learn how to measurably and meaningfully improve their students' academic growth depends on helping those teachers master the use of data to connect teaching and learning. "A data-literate [teacher] should be able to say with some degree of certainty what percentage of their students are with them and have learned what they taught thus far that day. They can say whether that requires instructional adjustments to ensure the next day's learning or the next week's," says Annie Ferrell, an associate dean who has been with the school since its earliest days.

Relay leaders, faculty and staff also emphasize the need for teachers to internalize a sense of responsibility. "It's very important that the graduate student is talking about what *they* need to do differently to motivate their students, not talking about what *kids* can't do," says Kimberly Osagie, former associate dean for first-year teachers.

While Relay clearly seeks to produce data-driven educators who look at the hard numbers around student achievement, the institution defines education data and the skills that comprise education data literacy more broadly than just test scores. Teachers are also expected to weigh socioeconomic and contextual factors that may influence students' academic progress. And the program encourages teachers to help develop (and track growth of) students' personal character traits—such as grit, integrity and respect.

CLEARLY DEFINED DATA LITERACY PRACTICES

Relay's program is designed to methodically and systematically help graduate students absorb the full raft of teaching skills they will need to tailor their instruction to the needs of each child in their classroom. Faculty weave together subject matter knowledge, pedagogy, classroom culture and data literacy in a relatively seamless way. As a new, nontraditional institution, Relay has been free to design a flexible curriculum marrying online and in-person courses decoupled from the semester-based calendar. One course or module may take an hour; others may take weeks. Leaders say this allows Relay to better target its teachers' mastery of discrete skills and techniques. "When we founded the school, we wanted to spiral concepts over

time, which doesn't fit nicely into a 15-week, semester-long course model," Maddin says. "Taking a course on assessment design in a single semester and never returning to it again is not necessarily a great idea for in-service teachers."

The two-year MAT curriculum breaks down into a series of modules organized around Relay's "four elements of effective teaching": "Self and Other People," "Classroom Culture," "Content" and "Teaching Cycle." Participation in these modules proceeds along a methodical path (teachers complete about 50 modules by the time they graduate), as teachers increasingly develop the knowledge, dispositions and skills (including data literacy) they need to "demonstrate the ability to lead students to academic achievement."[1]

At the center of these "elements of effective teaching" sits a curricular strand dubbed "Student Growth and Achievement Pathway (SGA)." Maddin describes SGA as the key to systematically cultivating teachers' ability to effectively measure their students' learning and strategically use those data to improve student results. SGA helps set Relay apart from other graduate schools of education, leaders say. "The SGA Pathway is the codification of the data literacy that we want our people to have," Maddin says.

The school's SGA coursework and handbook describe the multiple types of evidence teachers are expected to consider and outlines the practical skills they need to put that evidence to work, such as how to set ambitious and feasible goals for students, how to analyze and respond to student achievement data and how to write a data-driven action plan. Teachers must select one to two subject areas in which to practice these skills. (Year 2 SGA modules also require teachers to record and assess limited data about character growth.) "The whole point is to help teachers set meaningful learning goals for what they want to accomplish in a year, and to establish a robust assessment system, not just summatively, but on an interim basis, that allows them, at many points throughout the year, to know how their kids are doing—and not just 'letter-grade doing,' but doing relative to [for example] a set of fourth-grade,

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1   Relay/GSE Year 2 Student Growth and Achievement Handbook New York Campus – Class of 2015

Common Core standards," Maddin says.

Relay graduate students start the SGA modules in the second semester of their first year and learn data literacy skills through a step-by-step scaffolding as the modules spiral out over a year and a half. Year one focuses on gathering and analyzing data, learning to spiral curriculum effectively and creating robust data-driven action plans to inform the next unit being taught. "Then, in the second year, [graduate] students have all the prerequisite skills and knowledge to be able to hold themselves to the high bar of measured achievement," says former Associate Dean Osagie.

As they move through the SGA courses, Relay graduate students build a foundation for that higher bar: a carefully compiled data narrative that is an essential part of their capstone project. Relay students must articulate the learning goals they intended to help each K-12 student achieve, describe how they approached the task and demonstrate that they've used a range of data to evaluate and report on the degree to which they've succeeded in meeting the learning goals. Without providing evidence that their students have reached a certain proficiency standard, teachers cannot graduate. The ultimate goal is a way to help teachers internalize data literacy skills. "This exercise provides a structure within which to learn data skills," says Dr. Billie Gastic, Relay's chief research officer. "But more than that, it's about beginning to infuse the idea that this is what effective teachers do... so that [graduate students] have a way of thinking and proceeding after Relay. Working this way is a mindset, but it's also a skill and competency."

All four of Relay's elements of effective teaching are steeped in this view of data literacy. "Every module we have, whether it's called a data module or not, is designed to push how aligned a teacher's practice is to his or her objectives of helping students meet their learning goals," says Associate Dean Ferrell. "We're trying to take teachers from the most concrete form of analysis, which is an assessment ... back to, 'What does that look like in the moment a student answers [a question]?' 'What does that look like when you're collecting exit tickets?' And those skills show up in modules like 'checking for understanding' or 'implementing rigorous instruction' or 'planning for rigor.' Those speak to how you design your instruction such

that you can draw these inferences."

OPERATIONAL SUPPORTS FOR A STRONG DATA-USE CULTURE

Several operational supports lend credence and heft to Relay's data literacy commitment, including Relay's hiring and training policies and policies that serve to connect Relay's research and academic faculty.

Relay explicitly hires faculty with a track record of success in helping K-12 students in high-needs schools hit high achievement targets. Relay also seeks out job candidates who view positively the notion of teachers being held accountable for student results.

"We look for folks who think that student performance on achievements tests is a reflection of the teacher's efficacy," says Dean Mayme Hostetter. "We ascertain the person's set of beliefs about what the teacher is responsible for, compared with the students themselves or the students' parents or the community. We look for former K-12 teachers; every single one of our faculty members has helped kids in high-need schools achieve really remarkable academic success during [that teacher's] K-12 teaching career. We find those people and then we can help develop them, at more or less whatever their incoming comfort level [with data] or quantitative skill is."

Relay doesn't assume everyone is a data scientist; new hires and returning faculty alike undergo data literacy training. "We pay particular attention to the on-boarding of our faculty and the people who work with us to make sure that they really do get this approach," Maddin says.

Adds Ferrell, "We develop each individual new faculty member and provide context about how we talk about data and data skills at this institution. That's a robust training that every faculty member undergoes." That professional development is reinforced on an ongoing basis; returning faculty revisit those skills every year, she says.

Other staffing priorities foster a culture that promotes and models strong data literacy practices. Relay invests in Ph.D.-level staff to ensure the institution can accurately analyze and act on data about candidates' performance, both as classroom teachers and as graduate students

engaged in coursework. The fact that Gastic's position of chief research officer exists is a testament to Relay's commitment to operationalizing—and modeling—its vision of data literacy.

Gastic oversees external and internal research and evaluation projects, including studies on the impact of Relay's programs. Her team provides insight for continuous program improvement. They evaluate everything from teacher surveys and academic progress checks to faculty observation of teachers' classrooms and module completion rates to end-of-year K-12 student achievement data to make sure teachers are being appropriately trained in the data knowledge and skills they need to connect teaching and learning.

Relay has institutionalized partnerships between Gastic's research team and academic faculty to create a data feedback loop that benefits all. "None of what we do is in isolation, and that's a very specific organizational decision that is baked into Relay's being," Gastic says. "Our deans [across campuses] ask us researchers questions. They are active collaborators in our data analysis. There's a cultural sense that we each contribute to graduate student performance. It matters so much that our institutional research team is embedded in instruction."

Her research team's findings frequently trigger retooling of courses, course sequences and teacher supports. For example, they looked at teachers' performance rates by school placement and saw that teachers in traditional district schools (versus charter schools) needed more feedback from instructors in their classroom instruction. This ultimately led to a build-out of the "instructional fellows" who coach teachers needing more support.

DEFINED OUTCOMES FOR CANDIDATE SUCCESS

Relay expects teachers to provide measurable evidence of meaningful student learning. And the bar for success is rigid and clear: To graduate, teachers must demonstrate that their students have met a prescribed minimum of academic achievement. For example, for a math teacher, that minimum is 70 percent mastery (on average across all students) of the relevant standards selected. For a candidate teaching reading, the minimum is a year's

growth. Maddin is both unapologetic about that numbers-driven approach and keenly aware of its limitations.

"When I'm interviewing people for certain positions on staff, I set a scenario: 'You've got two graduate students in your program, one working at a relatively high-performing charter school, the other working at one of the lowest-performing schools in the city. One candidate has 71 percent standards mastery; the other has 68 percent. Does one graduate and the other one not?' And that's a hell of a question. The answer that I'm looking for has some nuance and sophistication, but ultimately the headline is, 'If you don't reach the bar, you don't reach the bar.'" Students who don't hit the minimum achievement targets can try again.

But Relay also teaches its graduate students to select right-size student achievement goals to strike a balance between the ambitious and the realistic. Teachers learn how to assess where each student is starting at the beginning of the school year so they can then set (and measure progress against) academic goals that are within reach. These goals are also informed by grade level standards and benchmarks. For example, Relay guidelines recommend that a teacher working with a fourth-grade student who is reading at a first-grade level should set an ambitious goal of one and a half to two years' growth by the end of the year. Teachers can then demonstrate that their students have achieved meaningful learning, even when they work in schools where many students start the year well below grade level.

Relay continues to grapple with finding equilibrium between its focus on hard numbers and a focus on the whole child. "We want them [teachers] to learn to use data to teach," Gastic says. "And we want to empower and enable them to do it well and responsibly." Responsible usage comes from understanding that real-life students can't be reduced to a set of numbers, no matter how conscientiously deduced. By positioning SGA at the heart of its program, Relay has struggled at times to find an appropriate boundary between rigorously measuring and assessing student progress and falling into the trap of reducing teaching to a numbers game.

Liam Honigsberg, SGA's associate director, offers an anecdote that embodies this tension. Honigsberg, a trained

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92% of teachers use multiple sources of student data to modify/enhance instruction.

91% of teachers use data to plan lessons.

91% of teachers use data to set learning goals.

91% of teachers use data to form small groups of students for targeted instruction.

90% of teachers use data to develop recommendations for tutoring or similar interventions.

92% of teachers say Relay has prepared them to use data to inform instructional practices.

90% of teachers say they use data on a regular basis to inform their instructional practices.

91% of teachers say what they have learned about using data at Relay is valuable to them as a teacher.

Source: Relay Graduate School of Education teacher survey

and experienced statistician, observed two teachers trying to figure out how to better reach struggling students. "One graduate student brought up a question about their SGA results, saying, 'They're lower than I want. What do I do about it?' And the best response that a peer came up with was, 'Well, you should analyze the numbers and see what you need to reteach.' In other words, he put forth a view of data-driven action planning that's a very, very limited subset of what a teacher does as a best practice for driving student learning."

"I was a little bit horrified," Honigsberg continues. "There wasn't a connection being made between these data and everything you do— from *how you set up the room*, to *how you manage the classroom*, to *how do you get to know students?*, to *how have you set up your lesson plans?* and *are your assessments rigorous and high-quality?* and *what are your re-teaching plans?* and *how do you backwards-plan in your units?* and *what do they look like?* The reality is, if your scores are low, all those things should feed into your ideas about what to do next. Not just: 'Let's just hone in on the data and make a discovery about which standard is being mastered at the lowest level.'"

Leaders' willingness to hold and interrogate this inherent tension in their vision of data literacy and how it connects teaching and learning adds nuance and depth to Relay's work.

"At the end of the day, a data-literate teacher uses the data that they have, the numbers, as part of the conversation, and uses the softer information they have to really tie the story together," Honigsberg says. "Data-literate people understand that, in the end, a lot of the data we collect is a proxy for success. What we want for the whole child is far deeper" than numbers alone can reflect.