



TEACHERS COLLEGE, COLUMBIA UNIVERSITY

## **How Can We Improve Teaching in Higher Education? Learning From CUNY Start**

Maria S. Cormier  
Susan Bickerstaff

May 2020

**CCRC Working Paper No. 120**

*Address correspondence to:*

Maria S. Cormier  
Senior Research Associate, Community College Research Center  
Teachers College, Columbia University  
525 W. 120th St., Box 174  
New York, NY 10027  
212-678-3091  
Email: [cormier@tc.edu](mailto:cormier@tc.edu)

The research reported here was supported by the Institute of Education Sciences, U.S. Department of Education, through Grant R305H140065 to MDRC. The opinions expressed are those of the authors and do not represent views of the Institute of Education Sciences or the U.S. Department of Education. The authors are grateful to CUNY staff and students for their participation in and support of this project. In particular, the authors thank Donna Linderman, Mia Simon, Susannah Thompson, and Jeanette Kim for their partnership and helpful feedback on the paper. Several additional reviewers provided valuable input and guidance on earlier drafts, including Michael Weiss, Jessica Brathwaite, Lauren Pellegrino, and Nikki Edgecombe.

## **Abstract**

Despite the growing evidence on promising approaches to postsecondary instruction—and particularly on the benefits of student-centered, conceptually oriented instruction for underprepared students—there has been limited investment in supporting these approaches' widespread implementation. Most postsecondary instructors have limited training in pedagogy, and broad-access colleges have relatively few resources to invest in improving instruction and building high-quality curriculum. Moreover, the field has few documented models of scalable professional development that results in demonstrated improvements in teaching and student learning.

To help address this gap in the literature, this paper describes the professional development model used in CUNY Start, a program developed at the City University of New York to support entering students identified as academically underprepared in literacy and mathematics. Using interview and survey data collected as part of a larger random assignment evaluation of CUNY Start, the paper explores how CUNY Start's multifaceted, coordinated system of professional development supports postsecondary instructors in enacting a student-centered, conceptually oriented instructional approach. CUNY Start's professional development model has several notable features: a staffing approach that values instructional expertise, an apprenticeship for new hires, coaching through classroom observations, and cross-college meetings. While this model is distinct from traditional approaches to professional development in higher education, elements of it can be applied in other higher education settings. The paper concludes by discussing how colleges and departments might structure professional development around a set of student learning goals, offer a system of ongoing supports, and create a staffing model that supports the development of instructional expertise.

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## 1. Introduction

Over the past decade, many of the postsecondary institutions serving the most academically vulnerable students have engaged in extensive reform to improve student outcomes. Numerous community colleges and broad-access four-year institutions have enhanced their student support services, reformed the structure and curricula of their developmental education coursework, and identified and changed institutional policies and practices that create barriers to student success. But though substantial effort has been devoted to increasing students' persistence and attainment, teaching methods and quality have received relatively little attention, particularly for underprepared students (Perin & Holschuh, 2019; Stes & Van Petegem, 2013)

Historically, instruction in higher education has been understudied, and improvement efforts have lagged behind those in K-12. However, there is a growing recognition that postsecondary students benefit from thoughtfully designed educational experiences that provide appropriate supports and opportunities to engage in relevant and complex tasks that require critical and analytical thought (e.g., Boston & Smith, 2009; Hern, 2013; Quarles & Davis, 2016). In addition, research suggests that encouraging greater student participation and engagement may improve learning outcomes (Lancaster & Lundberg, 2019). Evidence suggests that these types of course-based experiences, coupled with culturally responsive relational practices, can enhance students' perceptions of themselves as learners along with their persistence (e.g., De Vlieger et al., 2016; Micari & Pazos, 2012; Wood, 2014).

These benefits may be particularly critical to the success of postsecondary students with academic weaknesses—especially those enrolled in developmental education, which has been under scrutiny for the ways it stymies the success of students from historically underrepresented groups (Mejia, Rodriguez, & Johnson, 2016). Researchers have documented a tendency for developmental education to involve skills-based, procedurally oriented instruction that prioritizes teacher explanation and memorization (Grubb, 2013), leading many to argue for more student-centered, conceptually oriented instruction (Cox, 2015; Givvin et al., 2011; Richland et al., 2012).

Despite this growing body of evidence, however, there has been limited investment in supporting the widespread implementation of these kinds of instructional

approaches in higher education. Most instructors have limited training in pedagogy, and broad-access colleges have relatively few resources to invest in improving instruction and building high-quality curriculum. Moreover, the field has few documented models of scalable professional development that results in demonstrated improvements in teaching and student learning.

To help address this gap in the literature, this paper describes the professional development model used in CUNY Start, a program developed at the City University of New York to support entering college students who have been identified as academically underprepared in literacy and mathematics. At the heart of CUNY Start is an instructional approach that uses student-centered pedagogy to build metacognition, conceptual understanding, and students' sense of themselves as learners who are capable of college-level work. Often, this approach involves engaging students in conceptually oriented, open-ended tasks that require them to explain their thinking in small-group and whole-group discussions. The program helps instructors approach classroom practice differently by providing a system of professional support grounded in clear learning goals for students. Research suggests that CUNY Start has a positive impact on student success in developmental education, relative to other developmental education options at CUNY (Allen, 2015; Scrivener et al., 2018; Webber, 2018; Weiss et al., 2020). The program's instructional approach in math, in particular, may be an important factor in students' success (Bickerstaff & Edgecombe, 2019).

Drawing on interview and survey data collected as part of a larger random assignment evaluation of CUNY Start,<sup>1</sup> we explore how the program's multifaceted, coordinated system of professional development can support postsecondary instructors in enacting a student-centered, conceptually oriented instructional approach. Our data sources include interviews with 21 CUNY Start instructors and 13 CUNY Start staff members in administrative roles, including professional development coordinators. In addition, researchers observed a selection of professional development activities during two semesters. Finally, 56 CUNY Start instructors and 159 developmental education

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<sup>1</sup> Students in four CUNY community colleges who were placed into remediation were randomly assigned to either CUNY Start or traditional developmental courses and services. For more information about the larger study, see Scrivener et al. (2018).

faculty members not affiliated with CUNY Start participated in a survey about their background and professional experiences. (See Scrivener et al., 2018, for details on survey administration and response rates.) The analysis for this paper focused on data relevant to instruction and professional learning. Survey data were used to triangulate themes uncovered in the analysis of interviews.

Below, we provide a brief overview of CUNY Start's program structure and instructional approach. We then describe the four components of CUNY Start's professional development model in detail:

1. a staffing approach that values instructional expertise,
2. an apprenticeship for new hires,
3. coaching through classroom observations, and
4. cross-college meetings.

Finally, we argue that while this model is distinct from traditional approaches to professional development in higher education, elements of it can be applied in other higher education settings. Drawing on the unique features of CUNY Start's approach, we discuss how colleges and departments might structure professional development around a set of student learning goals, offer a system of ongoing supports, and create a staffing model that supports the development of instructional expertise.

## **2. Program Structure**

CUNY Start is a prematriculation developmental education program that enrolls students with the most significant academic needs in literacy and math. The program, which is administered by the CUNY Office of Academic Affairs, served over 3,000 students in 2018 across nine two-year and four-year colleges in the CUNY system.

Incoming students with referrals to remediation in writing, reading, and math are invited to enroll in their college's CUNY Start program.<sup>2</sup> Those who opt to enroll defer

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<sup>2</sup> Students with less significant remedial needs may be referred to the University Skills Immersion Program, which provides pre-term, tuition-free, intensive remedial instruction, or other developmental education offerings (though they are not prohibited from enrolling full- or part-time in CUNY Start).

their matriculation for one semester in order to participate. The program costs \$75, allowing students to save their financial aid for future semesters. Students can enroll in an integrated reading and writing course, a mathematics course, or both. All students attend a weekly college success seminar taught by a CUNY Start advisor. Advisor caseloads are kept low so that advisors are available to meet with students individually as needed. Students can attend the program part-time (one subject) for about 13 hours per week or full-time (both subjects) for about 25 hours per week. Academic supports are embedded in each classroom in the form of math tutors and writing assistants, and additional tutoring is available outside of class.

The larger U.S. Department of Education Institute of Education Sciences–funded random assignment study this paper is a part of showed that after one semester, 38% of students assigned to CUNY Start passed CUNY’s developmental education exit exams in reading, writing, and math, compared with 13% of those assigned to traditional courses and services (Scrivener et al., 2018). The differences in mathematics were particularly dramatic, with a 32 percentage point difference between students in the program and control groups.<sup>3</sup>

### **3. Instructional Approach**

The CUNY Start instructional approach is guided by a set of principles that emphasize student-centered, conceptually oriented instruction. In CUNY Start, this means that students are responsible for engaging in challenging, open-ended tasks and explaining their thinking in small-group and whole-group discussions.

In mathematics, instructors do not lecture but instead pose questions that give students responsibility for articulating their understandings and justifying their reasoning. Rather than solely providing students with a set of mathematical procedures to practice or memorize, instructors invite students to explore number relationships, visual models, and real-world problems. Through classroom discussion, instructors invite students to explore

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<sup>3</sup> As expected, given that CUNY Start students postpone their enrollment by one semester, after one semester of follow-up, they earned fewer college credits than the control group. For more detailed descriptions of the CUNY Start program and its impacts, see Allen (2015), Allen and Horenstein (2013), and Scrivener et al. (2018). A forthcoming paper by Weiss et al. (2020) will present three-year outcomes.

multiple problem-solving approaches with an emphasis on the conceptual foundation for each approach (Bickerstaff & Edgecombe, 2019; Hinds, 2009). In the integrated reading and writing course, students are apprenticed into academic literacy practices, such as text interpretation and argument. Instructors explicitly model their own approaches to reading and writing and provide scaffolding for students, with the goal of building students' metacognitive awareness of the processes associated with reading and writing.

In both disciplines, instructors work to create a positive classroom environment where students are expected to share their thinking and provide justification verbally (i.e., by referencing texts or explaining their mathematical reasoning). CUNY Start has created detailed curricular documents in reading/writing and mathematics that provide guidance to instructors on how to implement this instructional approach. Scrivener et al. (2018) found that instructors in both disciplines implemented CUNY Start's instructional approach with fidelity.

In a comparative analysis of instructional approaches, Scrivener et al. (2018) found that the techniques used in CUNY Start classes are different from those used in many developmental education classes at CUNY. CUNY Start instructors are less likely than non-CUNY Start instructors to lecture and more likely to facilitate interactive discussions, particularly in mathematics. Importantly, the goals and purpose of these instructional techniques are different in CUNY Start versus traditional classes. For example, while instructors in both types of classes pose questions to students, the purpose of questions in traditional mathematics classes is typically to elicit a correct procedure or calculation (e.g., "How did you simplify the equation?"), whereas the purpose of questions in CUNY Start classes is to elicit student reasoning (e.g., "Do you agree with [your classmate's] reasoning? Why or why not?") (Bickerstaff & Edgecombe, 2019). These differences in instruction are significant, given that teaching practices are notoriously difficult to change. Thus, understanding how CUNY Start supports its instructors to implement this approach consistently will advance the understanding of how teaching may be improved in higher education.

## **4. Professional Development Model**

To understand how CUNY Start supports its instructors to employ a student-centered, conceptually oriented approach, we describe four interconnected components of the professional development model:

1. a staffing approach that values instructional expertise,
2. an apprenticeship for new hires,
3. coaching through observations, and
4. cross-college meetings.

### **4.1 Staffing**

CUNY Start's staffing practices serve as the foundation for the other three components of its professional development model in two ways. First, the program is committed to maintaining professional development (PD) coordinators with expertise in mathematics and reading/writing on staff. Second, CUNY Start prioritizes and values instructors' willingness to make improvements to instruction in its hiring and advancement practices.

CUNY Start has six PD coordinators. As part of the CUNY Central Office team, these staff members update and revise the CUNY Start curriculum in reading/writing or math and provide training and ongoing support to campus instructional staff. They may be experienced CUNY Start instructors who transition into the role, or they may be educators with expertise in evidence-based instruction and faculty development. CUNY Start's investment in employing staff devoted solely to curriculum design and PD reflects an acknowledgment that the program's curricular documents and pedagogical philosophies are essential to the model and that teaching in CUNY Start is challenging and requires ongoing support.

During the hiring process, candidates for instructor positions are evaluated in part on their willingness to implement the CUNY Start instructional method. A commitment to working with the CUNY Start student population is also considered essential. Previous teaching experience is important, but PD coordinators and other staff reported that openness to learning the CUNY Start approach to teaching is critical to a new hire's success. A CUNY Start administrator told us:

The requirements are really that they're open to these new ways of teaching. And as long as they're open to them, and they state that they want to try them, then we're willing to work with them. It's a plus if they have experience and have a reason to want to make a change. They have to have the content knowledge.

Most CUNY Start instructors have prior experience teaching in a range of educational settings, including high school, adult education programs, and/or college. At the time of our survey, CUNY Start instructors had an average of seven years of teaching experience overall and three years at the college level. Most CUNY Start instructors reported having a postgraduate degree, with some differences between reading/writing and math instructors. In reading/writing, 88% of instructors reported having a master's degree, and 16% indicated having a bachelor's degree. In math, 52% of instructors reported having a master's degree, 7% reported having a doctoral degree, and 31% reported having a bachelor's degree.

CUNY Start differentiates instructors based on their level of expertise in the program's instructional method and their degree of responsibility for teaching and training new staff. The majority of CUNY Start instructors are core instructors—full-time employees who have completed an apprenticeship in the CUNY Start model. Instructors who demonstrate exceptional skill in CUNY Start's instructional approach and want to advance can apply to become lead instructors, who work closely with PD coordinators to train new instructors. Support instructors have completed an apprenticeship but do not have their own classroom, either because of fluctuating enrollment trends or because they are deemed in need of further development before taking on their own class. Support instructors can substitute for absent colleagues, lead portions of class periods, and provide extra support to students in the classroom. This role differentiation signals that the program's instructional method requires skill and experience that can be gained over time. Table 1 describes the roles in terms of their progressive level of responsibility.

**Table 1. Instructor Roles in CUNY Start**

| Role                           | Description   |
|--------------------------------|---|
| Cooperating instructor (co-op) | New instructors who spend a semester as an apprentice.  |
| Support instructor             | Instructors who completed an apprenticeship and support core instructors in their classes and/or serve as substitute teachers.  |
| Core instructor                | Instructors who completed an apprenticeship and take full responsibility for teaching their own classes; the majority of instructors fall into this category.                                     |
| Lead instructor                | Instructors with several semesters of experience teaching CUNY Start who work closely with PD coordinators to support cooperating instructors, most critically by hosting one in their classroom. |

## 4.2 Apprenticeship

CUNY Start’s PD model includes an apprenticeship period that provides new, cooperating instructors (co-ops) opportunities to learn the curriculum and develop the skills to implement the program’s instructional approach. Almost all new CUNY Start instructors participate in a paid, semester-long apprenticeship before they take on responsibility for their own classroom.<sup>4</sup> Offering this type of professional support represents an acknowledgment that the instructional model is difficult to implement and that it will take time for instructors to fully understand how to implement it.

As part of their apprenticeship, cooperating instructors attend a multiday orientation facilitated by PD coordinators that provides an introduction to CUNY Start’s instructional approach and curriculum. A reading/writing PD coordinator described how, during the new instructor orientation, for instance, co-ops learn about the cognitive apprenticeship model, a key component of the reading/writing curriculum:

New co-ops come to [CUNY’s] central office for orientation. And in reading/writing, there are four or five sessions of orientation. They read about cognitive apprenticeship. They look at student writing. They look at who the students are. They look at parts of the curriculum.

After orientation, co-ops are assigned to a lead teacher’s classroom for the duration of the semester. During this time, the co-op observes each lesson and plays an

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<sup>4</sup> To meet the demand for reading/writing instructors during a period of rapid program expansion, in a few instances, writing assistants already working in the program or very experienced educators bypassed the apprenticeship semester.

important support role in the classroom, circulating and guiding students as they work individually and in small groups. Co-ops typically receive the curriculum a week at a time so they can study each lesson's activities and instructional approaches in depth. A CUNY Start instructor explained:

I would see how lessons are planned, and I would talk with [the lead] instructor one-on-one quite a bit about what is going on behind this lesson. What are our goals here? What are we trying to do? And how might I teach it?

Math apprenticeship training also includes weekly preview sessions facilitated by PD coordinators to introduce co-ops to upcoming lessons and support them in thinking through how best to apply CUNY Start pedagogy in situations that might arise in the classroom.

The co-op and lead teacher regularly debrief lessons to deepen the co-op's understanding of the goals of the lesson and instructional approaches for meeting those goals. Debriefings provide another opportunity to reinforce the program's expectations for student learning. Co-ops also work with lead instructors to learn how to provide feedback on students' written work.

Toward the end of the semester, co-ops lead portions of lessons. At that point, either the lead teacher or the PD coordinator will provide feedback to co-ops on their implementation of the instructional model. At the end of the apprenticeship semester, the lead instructor and the PD coordinator assess the co-op's readiness to become a core instructor and take on a class of students. In the vast majority of cases, co-ops are promoted, but in some cases, particularly in math, the co-op will become a support instructor and continue to improve their ability to implement the CUNY Start instructional approach before becoming a core instructor.

CUNY Start stakeholders reported that the apprenticeship semester is a critical component of CUNY Start's PD model. Several interviewees characterized this component as among the program's most important features. A lead instructor explained:

Teaching is a profession where you go from zero to 60 right away. "Here's the curriculum, here's your roster, go teach" ... is the typical model for teaching. [This] means that your first class of students, first couple classes of students, are the deepest part of your learning curve as a teacher. The CUNY

Start model isn't that way. We don't throw people in and expect them to lead the class on day one.

A CUNY Start math instructor reflected on lessons from the apprenticeship experience:

I look back to the first day, and I just feel, boy, was I stupid back then. And I tell you why, because I [came] with a traditional [approach]. And so, I look back, and I get it. So the professional development is important. It gave us a time to reflect not only on our own personal experiences, but we got to share them with the other co-ops. I think that is just as essential.

### **4.3 Coaching Through Classroom Observation**

CUNY Start instructors receive further PD through coaching based on classroom observations. Observations are conducted by PD coordinators and are used to support instructors in refining their implementation of CUNY Start's instructional approach. Most instructors are observed at least once each semester. New instructors may be observed more frequently.

Prior to classroom observations, PD coordinators email the CUNY Start instructor and ask them to identify areas they would like the PD coordinator to focus on during the observation. According to a PD coordinator, "I don't go in [to the observation] thinking this is what I want to work on with this teacher, other than what they tell me they want to work on." This approach is intended to make the observations individualized and useful to the instructor. In cases where the instructor has been previously observed, PD coordinators will often ask the instructor to explain where they have made progress since the last observation.

During an observation, PD coordinators document what is said and done by both the instructor and the students, taking detailed notes. Typically, the PD coordinator transcribes at least a portion of the class verbatim. Afterward, the PD coordinator and the instructor meet to discuss the class and review the transcript. In this meeting, the PD coordinator aims to encourage reflection and openness and diminish any anxiety that may arise from an observation. Often, they do this by asking the instructor to select several

issues from the transcript to review so they can tailor their feedback to the instructor. In describing this approach, one PD coordinator noted:

I think it's important to be able to listen to their problems, what they are struggling with. . . . A lot of it is being able to listen to people and to be able to not impose what I think is happening or what I think needs to happen.

Some PD coordinators select particular parts of the observation transcript for instructors to comment on. A PD coordinator explained that rather than pointing out when an instructor uses direct instruction instead of questioning, PD coordinators create opportunities for teachers themselves to recognize what they did in those instances:

[We] ask the teacher, "What do you think happened here? What went on with the student here?" And in most cases, the teacher is able to say, "Oh, yeah, I really kind of put those words in the mouth of the students, didn't I?"

In most feedback sessions, PD coordinators also emphasize what worked well and what strengths the instructor displayed.

Most CUNY Start instructors find value in this component of the model. According to the data from our instructor survey, almost all math and reading/writing instructors reported receiving feedback based on ongoing classroom observations. In interviews, instructors noted that reading portions of the classroom observation transcripts helped them identify areas for improvement and that observations provided an opportunity for them to receive feedback on specific issues. For example, an instructor described struggling with implementing group work, a common instructional strategy in CUNY Start classes, and how this became the focus of a classroom observation:

This past observation, he came in for a pre-observation meeting, so we have a game plan as to what we were going to do the next day. And I was asked to identify what I wanted to work on and what I thought was my weakest part of my teaching. I said implementing group work, so [the observation] was focused on implementing group work.

A different instructor referred to an instance when a PD coordinator helped them see how they were overemphasizing a certain approach for learning square roots:

Last semester, we were going over square roots, and I was introducing the topic. And I had forgotten one of the approaches that was outlined in the notes, and I was emphasizing the other approach a lot more. And so the PD person asked about that and thought I should go into greater depth in terms of emphasizing them both equally. So I think that was helpful because it was more of a geometric approach to square roots and help[s] students who are more spatially inclined to understand that concept.

Overall, examples such as these suggest that most CUNY Start instructors appreciate and learn from observation sessions.

#### **4.4 Cross-College Meetings**

Instructors participate in professional development activities at cross-college meetings coordinated by CUNY Central Office administrators and PD coordinators. These meetings bring together instructors from across CUNY Start college sites and offer an efficient way to introduce new ideas and information, address instructional topics with relevance to a large number of staff, and facilitate peer collaboration and learning.

At the beginning of each semester, instructors meet with their disciplinary colleagues to review programmatic and curricular changes made by the PD coordinators. In addition, twice each year, CUNY Start convenes all instructors and advisors for an all-staff day, which includes presentations to the full staff, sometimes by guest speakers. Topics discussed at all-staff days are frequently generated based on issues and needs identified by instructors. For example, a PD coordinator explained that they decided to offer a workshop on helping students with learning disabilities after staff identified this as an area of need on a survey.

At all-staff day, instructors and other staff can present at breakout sessions, which offer an opportunity for peer-to-peer learning. For example, a reading/writing instructor described a presentation they gave on how specific reading passages can help foster stronger connections with students. The presenter shared examples from the curriculum and facilitated a discussion among the audience about how these texts could facilitate learning in a more contextualized way.

## 5. Discussion

Evidence shows that CUNY Start positively impacts students' progression through developmental education (Scrivener et al., 2018; Weiss et al., 2020). While the program has several essential features whose effects on student outcomes cannot be isolated (e.g., a substantial increase in class time; a well-developed, evidence-based curriculum; a low student-to-advisor ratio; and embedded academic supports), the instructional approach is central to the model and is distinct from typical teaching methods in higher education. Research shows that instructors are able to implement this approach as intended, which suggests that the hiring practices and robust professional support system described here are effective in promoting instructors' use of CUNY Start's student-centered pedagogy.

As a prematriculation program run through CUNY's system office, CUNY Start has greater oversight of curricular and pedagogical practices than academic departments do. Notably, all instructors are expected to adhere to detailed curricular documents that are informed by evidence on literacy and numeracy instruction and that provide clear guidance on what to teach and how to implement the instructional approach. Consequently, training and support for CUNY Start instructors can be highly specific and applicable to the courses they are teaching. In contrast, many college faculty teach multiple courses, sometimes in disciplinary areas where evidence on instructional practice is weak, making it difficult for colleges to offer PD that is both detailed and broadly applicable. Moreover, because CUNY Start's curricular and instructional expectations are clear, instructors do not need to pursue outside support related to curricular design and innovative pedagogical strategies, topics which are frequently the focus of PD for non-CUNY Start faculty. Instead, CUNY Start instructors can work on self-identified needs related to the program's instructional model. However, despite the particular nature of CUNY Start, three aspects of the program's PD model can inform professional learning for faculty across higher education contexts.

First, because CUNY Start is grounded by a particular set of student learning objectives and an accompanying instructional approach, professional learning goals for instructors are clear. While college departments rarely have an instructional vision that is as well-specified as CUNY Start's, PD offerings should be informed by student learning

objectives and accompanying goals for faculty. For example, CUNY Start aims to build students' capacity to engage in challenging, open-ended tasks and explain their thinking in small-group and whole-group discussions. CUNY Start's PD opportunities, therefore, focus on strategies for creating a student-centered classroom environment that facilitates that type of learning. Colleges may similarly work to ensure that PD activities are tied to specific learning goals for students by making those learning goals explicit and identifying strategies to support them.

Second, CUNY Start's PD model is an ongoing, coordinated, multifaceted support system offered across different modes within and outside the classroom in service of programmatic goals. New ideas are introduced in workshops and meetings, and coaching and observations provide opportunities for guided practice and refinement. The ongoing nature of CUNY Start's professional support allows instructors to engage in continuous refinement and improvement. New CUNY Start instructors receive intensive support upon hiring, but experienced instructors continue to have opportunities for growth. CUNY Start provides time for instructors to learn, practice, and reflect on what is required to implement the program's unique instructional approach. Research on teacher learning suggests that instructors benefit from support to improve their practice over time and that single-dose learning experiences are unlikely to result in significant changes to practice (Cobb et al., 2018). In a traditional postsecondary setting, many full-time faculty have a range of venues for professional learning, including first-year faculty experiences, mentoring, conferences, workshops on campus, and online resources. However, these are unlikely to be connected to a system of supports that develop and refine specific instructional skills. Colleges and departments may need to think strategically about how various PD offerings fit together to support systemic goals.

Finally, CUNY Start's staffing practices prioritize instructional improvement, as is reflected both in hiring criteria for instructors and in the central role of PD coordinators. PD coordinators are instructional experts, and many have taught in CUNY Start, giving them an intimate understanding of its learning goals and instructional approach. Traditional faculty PD is often led either by faculty who have expertise in teaching but not peer coaching and facilitation or by faculty developers who are skilled facilitators but not well versed in specific content areas. Investing in content-specific

instructional expertise may be a way for colleges to build departmental and college capacity to improve instruction.

Higher education researchers are working to build a body of evidence establishing connections between faculty development and student outcomes (e.g., Condon et al., 2016). Much of this work aims to inform strategies for supporting instructors, asking: What features of professional supports enable faculty to enact high-quality instructional approaches that will enhance student learning and success, and how can those supports be embedded in institutional practice? These questions are critical for the thousands of postsecondary enrollees referred to developmental education each year and the instructors who teach them (Chen, 2016). In a field that has historically made few changes to staffing and professional learning, CUNY Start offers novel insights into how colleges and departments can structure professional learning opportunities to improve instruction.

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