TEACHING IN A TRANSFORMATIVE DUAL-ENROLLMENT PROGRAM:

A STUDY OF A SYSTEM OF SUPPORT FOR HIGH SCHOOL TEACHERS DURING THE

INITIAL YEAR OF IMPLEMENTATION

A Record of Study

by

CATHERINE L. HILL

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Chair of Committee,   Mary Margaret Capraro
Co-Chair of Committee,   Bugrahan Yalvac
Committee Members,   Robert M. Capraro
                       Jeffrey Liew
Head of Department,   Michael De Miranda

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ABSTRACT

As the emphasis on college readiness intensifies, the demand for access to college-level coursework for high school students increases. Although Advanced Placement and International Baccalaureate have been traditional sources of strong preparatory coursework for postsecondary education (Cohen & Mehta, 2017), dual-credit or dual-enrollment programs are playing an increasing role in supporting students' college-readiness needs (An & Taylor, 2015; Miller et al., 2017, 2018). The purpose of this study was to investigate two participating teachers' experiences with a local system of support as they sought to implement a transformative dual-enrollment program. Throughout this action research study, I considered the issues faced by high school teachers related to stakeholders, instructional resources, university and local policies, and personal cognitive conflict during the initial year of implementation. I examined the literature to identify means of supporting teachers during implementation and used this research to design a system of support including a preprofessional development opportunity, accessible resources, and opportunities for reflection for two onboarding teachers. I also created a description for the role of OnRamps consultant for the person acting as a part of and maintaining the system of support. The preprofessional development and a focus group interview occurred before the two new teachers attended required program training. Throughout the fall of 2019, I updated resources, acted as OnRamps consultant, and conducted monthly semistructured interviews that also served as times for teachers to reflect. These activities provided data that I analyzed to better understand teachers' experiences and to enhance both the system of support and the role of OnRamps consultant. The findings showed that the two teachers' experiences with the system of support and the degree to which the system enhanced teacher agency differed

in terms of the teachers' characteristics and perspectives, the presence or absence of a team in the context of implementation, and the teachers' engagement with the system. However, the findings also showed the potential value of having designed elements of local support in place for OnRamps teachers. To improve future implementation of the dual-enrollment program, local campus and district leaders should consider the selection of teachers and identify ways to support teachers as they experience the demands of course implementation.

DEDICATION

But you—keep your eye on what you're doing; accept the hard times along with the good;

keep the Message alive; do a thorough job as God's servant.

II Timothy 4:5 (The Message)

Many on this journey have

Helped me walk the road.

Some have cheered,

Some have watched, and

Some have shared the load.

But my fam'ly more than all

Bent their needs for mine.

Husband's love,

Children's faith gave

Strength to cross this line.

For Johnny, Joshua, Amanda, and Rachel

For Mom and Dad

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Within my local district, multiple people contributed to the success of this project. My team in the Department of Learning and Teaching is simply "the best." The leaders of the department, Liz Deterra, Carl McLendon, and Jodie Villemaire, have been patient and encouraging. My coaching colleagues, Tara Banton, Dana Schrader, Jessica Barr, Lindsay Durr, and Chasity Beatty, have helped me talk through ideas until I could evaluate relevance. In addition, Tara has repeatedly offered her time to read my work over the last four years and deserves a special "thank you." Finally, none of this would have been possible without the willingness of the OnRamps teachers to share their experiences. They have been and continue to be dedicated professionals who daily invest in their students.

NOMENCLATURE

ACC	Austin Community College
AP	Advanced Placement
GPA	grade-point average
ESSA	Every Student Succeeds Act
HEI	higher-education institution
IB	International Baccalaureate
LMS	learning management system
LTC	learning and teaching coach
NCLB	No Child Left Behind
NDEA	National Defense Education Act
PASA	Population and Survey Analysts
PLI	Professional Learning Institute
pre-PD	preprofessional development
STAAR	State of Texas Assessments of Academic Readiness
TAPR	Texas Academic Performance Report
TEA	Texas Education Agency
TSI	Texas Success Initiative
USDE	United States Department of Education
UT	The University of Texas at Austin

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CHAPTER I

INTRODUCTION: LEADERSHIP CONTEXT AND PURPOSE OF THE ACTION

The Context

Throughout the first two decades of the 21st century, the concept of *education* has been questioned, criticized, and reimagined. As transformations persist with regard to what education means and what it "looks like" in practice, teachers find themselves implementing programs and using instructional strategies that often conflict with their experiences in pedagogy, content, and management. During this time of upheaval and uncertainty, teachers may feel constrained by a lack of ownership of their instruction while also feeling burdened by the knowledge that their successes and shortfalls during implementation will influence their students' outcomes. Consequently, it is critical to identify ways to mitigate risks for teachers (LeFevre, 2014) and help them achieve *agency*, "the active contribution to shaping their work and its conditions" (Biesta et al., 2015, p. 624). The potential for program outcomes to have long-term impacts on a student's life course signifies the value of learning more about the factors that influence implementation and studying how to better support teachers during the process.

National Context

Students' *college readiness* has been an outcome of the educational process that has prompted concern for more than 60 years. Initially, the Soviets' launch of Sputnik in 1957 galvanized efforts to address the issue of college readiness, resulting in the National Defense Education Act (NDEA) of 1958 (Barnes & Slate, 2013). Since that time, however, publications such as *A Nation At Risk* reporting the lack of success of United States education in producing a competitive workforce (National Commission on Excellence in Education, 1983), as well as

events such as the dawn of a new millennium increasing awareness of students' need for 21st-century skills (Kay & Greenhill, 2011), have kept this issue at the forefront of discussions about the effectiveness of public schools in the United States.

Recently, the recession of 2008 and the resulting changes in the job market have heightened concern about college readiness yet again. According to research from the Georgetown University Center on Education and the Workforce, workers with a minimum of "some postsecondary education" (Carnevale et al., 2016, p. 3) held 11.5 million of the 11.6 million jobs added to the postrecession economy between January 2010 and January 2016. In contrast, workers with a high school diploma or less gained only 80,000 jobs during that time—after losing 5.6 million during the recession (Carnevale et al., 2016). According to Carnevale et al. (2016), "workers with a high school diploma or less must attain postsecondary credentials if they want to compete effectively in growing high-skill career fields" (p. 33). Yet, only 38% of graduating students achieved college-readiness benchmarks on three of the four tested areas on the 2018 ACT, even though 76% expressed a desire for postsecondary education (ACT, 2018). These data paint a striking picture of the significance of college readiness for students and allude to the economic impact of an educated—or uneducated—workforce.

This economic impact requires additional elaboration. Between the 2006–2007 and 2016–2017 school years, the total cost (tuition, fees, room, and board) to attend a public higher-education institution (HEI) increased by more than 30% (United States Department of Education [USDE], 2018). Moreover, only 56.86% of entering postsecondary students in the fall of 2011 completed their degree within six years (Shapiro et al., 2018). Considering these statistics in tandem brings a greater understanding of how a lack of college readiness can prove costly for students.

As competition for skilled jobs increases both nationally and globally and the emphasis on college readiness intensifies, the demand for access to college-level coursework for high school students is rising. Advanced Placement (AP) and International Baccalaureate (IB) programs have provided advanced coursework for many years. However, dual-credit course options are growing, allowing districts to partner with HEIs and giving students the opportunity to take college courses in high school with the potential to gain both high school and college credit. With this growth, dual credit is gaining a significant presence as a resource to enhance college readiness, helping to offset the skyrocketing costs of a college education and appealing to a broader range of students.

Situational Context

In a school district in central Texas, campus and district leaders seek to offer every student at the high school level a path to experience a college-level course before graduation. The district serves an educated populace, with 61% of residents holding a bachelor's degree or higher (Population and Survey Analysts [PASA], 2019); therefore, this effort to increase access to college-level courses for all students aligns with community expectations. Although the district is classified as a fast-growth district by the Texas Education Agency (TEA)—growing by 33.31% over the past five years (PASA, 2019)—it boasts strong administrative leadership and committed teachers who have taken intentional, strategic steps to ensure that academic standards remain high as gains in the student population continue. According to data from the Texas Academic Performance Report (TAPR) compiled by TEA, the average SAT score for 2018 graduates from the district was 1217 compared with 1036 for the state, and the average ACT score was 26.3 compared with 20.6 for the state. Although these scores are noteworthy, they also demonstrate room for growth. The 2019 TAPR estimated that only 75.6% of 2018 graduates

from the district were considered college-ready. District and campus administrators recognize that there is more work to be done. Systems currently in place are meeting the needs of many students, but not all. As a result, administrators are pursuing additional avenues to close this gap.

Currently, the district has only one high school with an enrollment of approximately 3,425 students and a projected growth of about 1,000 students over the next 10 years (PASA, 2019). Because the district is growing rapidly, there may be a need for another high school within the next 10 years; therefore, establishing effective pathways that ensure college readiness is critically important at this time. Students at the high school have always had access to multiple AP courses and, more recently, dual-credit courses taught by faculty from Austin Community College (ACC). To increase accessibility to college-level courses for additional students, the district entered into a partnership with The University of Texas at Austin (UT) in the 2018–2019 school year to offer dual-enrollment courses to local students through the UT OnRamps program. This program differs from dual-credit offerings in that students receive both distance education through the university's learning management system (LMS) and classroom instruction from local high school teachers.

The Problem

The UT OnRamps program differs from traditional dual credit in that each student is enrolled in two separate courses and has two instructors of record—the university professor and the high school teacher. The professor develops the university-level curriculum for each course (Giani et al., 2018) and delivers it via distance education (UT, 2020a). The professor also determines the grade a student receives in the university course. On the high school side, local high school teachers must use the university-level curriculum to provide face-to-face instruction (UT, 2020a) and determine the appropriate grades for the high school course. These teachers are

consistently in a process of mediation as they seek to deliver a university-level course while daily accommodating both high school and university schedules and integrating both high school and university grading policies. In addition, high school OnRamps teachers experience cognitive conflict as they present rigorous content using specific instructional strategies that align with university expectations but may challenge teachers' pedagogical beliefs.

Relevant History of the Problem

The UT OnRamps dual-enrollment program is relatively new. It was initiated in 2011 (UT, 2020b) and piloted in the fall of 2013 with a goal "to increase the number and diversity of students who are fully prepared to follow a path to college and career success" (Giani et al., 2018, p. 1). Designers of the initiative established four pillars to promote achievement of this goal: OnRamps courses would "meet college standards, implement innovative pedagogy, facilitate a technology-enhanced education, and diffuse aligned college experiences" (UT, 2020b). During the 2018–2019 school year—just five years after its initial implementation—the program boasted an enrollment of approximately 30,000 students across Texas (UT, 2020b). This rapid growth in such a short period of time testifies to the common concern at the secondary and postsecondary levels about students' college readiness.

Aspects of the design of OnRamps reveal intentionality in making the program more appealing to high schools and, thus, more accessible to students. These include the emphasis on dual enrollment as opposed to dual credit, the consideration of students, and the qualifications for high school teachers. Although these aspects are inviting to schools, teachers, and students, teachers may also experience angst as the impact of this design plays out in the local classroom during implementation. The design aspects and teacher impacts deserve further exploration.

First, although some people may use the terms *dual enrollment* and *dual credit* interchangeably, the designers of OnRamps draw a clear distinction: OnRamps is a dual-enrollment program. Students enroll in both a high school and a college course, and they receive a separate grade for each (Giani et al., 2018). This design promotes delivery of courses that are "intentionally aligned with the expectations of faculty and departments at a leading research university" (Giani et al., 2018, p. 1) while at the same time offering the added support of local classroom instruction and reducing the risk for students who choose to enroll. The design also allows the UT professor to uphold the integrity of the university grade while permitting the high school teacher to align the type and number of grades with the local grading policy to obtain the high school mark. Unfortunately, this process can pose problems for high school teachers. In spite of the fact that faculty and academic staff at UT design the curriculum and all resources that support it (UT, 2020a), the college side of a course requires fewer grades and assessments than the high school side. Therefore, teachers must find ways to assess students in order to obtain additional grades for the high school course, often inflating the grade. This inflation produces conflict because teachers ultimately resort to assigning grades for the sake of meeting a quota rather than as a reflection of meaningful learning.

The second aspect of OnRamps that makes it appealing is its consideration of students with regard to accessibility and course credit. In terms of accessibility, high school students do not have to meet college eligibility requirements to take OnRamps courses, making the enrollment process less restrictive than that of taking dual-credit courses. For students to enroll in a dual-credit course, they must demonstrate eligibility based on Texas Success Initiative (TSI) compliance or exemption from TSI compliance due to a sufficient level of attainment on the SAT, ACT, or State of Texas Assessments of Academic Readiness (STAAR). However, because

OnRamps students are neither seeking a degree at UT nor admitted to UT as students, they do not have to demonstrate TSI compliance or TSI exemption. This accommodation eases student access and promotes the growth of OnRamps. However, without the TSI compliance or exemption requirements, some students enroll who are not prepared for the level of rigor of the courses, making it difficult for teachers to meet their needs while still upholding course expectations and maintaining required pacing.

Additionally, OnRamps provides the option at the end of a course for students to decide if they wish to accept the grade they have earned on the college side. If students choose to accept, then the grade becomes a part of their college transcript at UT; if not, there is no college record of the student taking the course. This option reduces the risk for students, yet ensures they still have a college-level experience. Again, however, these considerations can cause issues for teachers. OnRamps courses are accelerated courses and, as such, receive additional weight when determining the high school grade-point average (GPA). Although not prevalent, it is possible for students to become less interested in the content and purpose of the course when facing challenges and receiving lower college grades; students know that they can simply opt out. Instead of focusing on learning, students shift their concern to the high school grade because of the weight and the inflation mentioned earlier. In addition, teachers can find it disheartening for students to turn down UT credit because the grade is lower than what they customarily receive in high school.

Finally, the design of OnRamps includes an aspect that allows teachers to instruct OnRamps courses without meeting additional qualifications beyond their certification. This aspect offers two key benefits. The first benefit is that the level of education of teachers does not determine schools' ability to offer OnRamps courses. In the State of Texas, dual-credit

instructors must have a master's degree with at least 18 hours in the subject of instruction. This requirement would severely limit the number of schools able to provide OnRamps, the number of course offerings within schools, and, ultimately, the number of students who could take advantage of this opportunity. Indeed, it would prohibit attainment of the previously mentioned goal of OnRamps: "to increase the number and diversity of students who are fully prepared to follow a path to college and career success" (Giani et al., 2018, p. 1). With the design as a dual-enrollment program, though, teachers are technically instructing a high school course. Ironically, this design has the potential both to empower teachers as they envision opportunities for themselves and students and to constrain them as they present elevated content using unfamiliar methods. To help mitigate the concerns around content and pedagogy, participating OnRamps teachers receive high-quality professional learning. This is the second benefit of the design aspect. To prepare instructors and enhance the likelihood of implementation fidelity, the OnRamps program requires teachers to attend Professional Learning Institutes (PLIs), where they receive approximately "80 hours of professional development each year on innovative pedagogical approaches and integrating technology in the classroom" (Giani et al., 2018, p. 1). High school OnRamps teachers receive most of this training on the UT campus during the summer PLI, but they also meet virtually every month with UT OnRamps leaders and attend an additional one-day PLI on the UT campus each semester. In offering this professional learning, UT commits to a significant investment of time and interest in equipping teachers to effectively enact OnRamps courses. The implication is that teachers must be willing to invest significant time and energy in return. That time is typically outside normal working hours and in addition to time spent preparing for OnRamps and other course assignments.

Examination of the design of OnRamps reveals an intentional, innovative approach to address the problem of college readiness and overcome traditional obstacles. In spite of the benefit to high schools, teachers, and students, there are still factors that influence teachers' implementation. In this action research study, I have sought to better understand these factors and to identify ways to support teachers during the implementation of OnRamps courses.

Significance of the Problem

During the 2018–2019 school year, as selected pioneering teachers at the central Texas high school had worked to improve students' college readiness in alignment with program expectations during the initial year of local implementation of the UT OnRamps dual-enrollment program, they had grappled with factors influencing the local development of the program. First, some OnRamps teachers had expressed concerns about the involvement and support of key stakeholders, such as district- and campus-level administrators, parents, students, and other teachers. Also, during the initial year, some teachers had lived in a perpetual state of uncertainty about content and assessments, several without the support of a local colleague and all feeling the high stakes of providing instruction for student credit in a course that upholds the reputation of UT. In addition, high school teachers had faced persistent challenges regarding the effective use of instructional resources including new content, pedagogy, and learning spaces, as well as extensive demands on personal and professional time. Finally, OnRamps teachers had to abide by two sets of policies: those of UT and those of the local high school. The two sets of policies were not aligned, necessitating teachers' continuous adaptation of grading policies, testing procedures, and schedules to meet both university and district requirements.

The extended struggle with these factors influenced teachers' agency—"their active contribution to shaping their work and its conditions" (Biesta et al., 2015, p. 624). The negative

pressure on teachers promoted issues with current implementation of the program and potentially influenced the future growth and establishment of the OnRamps program at this high school. Although there is ample research on dual-credit or dual-enrollment initiatives and their influence on students' college readiness (i.e., An & Taylor, 2015; Miller et al., 2017, 2018; Radunzel et al., 2014), I did not locate any empirical studies addressing high school teachers' experiences with or perspectives on teaching dual-credit or dual-enrollment courses. Therefore, at an even greater level of granularity, there is a gap in research addressing the support of high school teachers during the implementation of a dual-enrollment program that could be considered transformative. I undertook this study in an attempt to address that gap.

Research Questions

The purpose of this study was to investigate the experiences of onboarding teachers as they interacted with a system of support during the implementation of an OnRamps dual-enrollment course at a central Texas high school. To evaluate the system of support and create an effective description of the role of *OnRamps consultant*, I sought to answer two central research questions, noted below: To answer the first research question, I asked four sub-questions:

(1) What were participating teachers' experiences with the local system of support consisting of preprofessional development, accessible resources, and opportunities for reflection?

    a. What were teachers' perceptions of the preprofessional development?

    b. What were teachers' perceptions of the accessible resources?

    c. To what extent did teachers use the resources?

    d. What were teachers' perceptions of the opportunities for reflection?

(2) To what extent did the support system aid the participating teachers in achieving teacher agency during implementation?

Personal Context

My interest in selecting and conducting this study was twofold. First, I have a long history with dual credit. After receiving my bachelor's and master's degrees in mathematics, I began teaching at a community college in a rural Texas town. After a few years, around the mid-1990s, the college was taking steps to provide dual-credit courses via distance learning. Before the process was fully underway, however, I took a sabbatical from teaching to care for my children. When I returned to teaching five years later, I took a position as a high school teacher. For eight years, I taught dual-credit courses in college algebra, trigonometry, and calculus. My experience was different from that of OnRamps teachers because there was little oversight from the partnering community college apart from approval of the syllabus. It was my responsibility to develop the syllabus, to design the curriculum, resources, course structure, and timeline, and then to instruct in accordance with my pedagogical beliefs. The professional freedom I had to create those courses for my students led to a feeling of ownership over the courses and satisfaction in students' preparation for future academic pursuits. This experience led to my second reason for pursuing this study: to identify ways to support teachers when the work is worthy but the challenges are constraining.

Researcher's Roles and Personal Histories

I have had a somewhat eclectic career in education. For 22 years, I taught at various levels in various types of institutions—4 years in private and 13 years in public high schools, 4 years in a community college, and 1 year in a university as a graduate teaching assistant. During the years I worked with high school students, I taught in both economically disadvantaged and property-wealthy districts instructing mathematics courses ranging from Fundamentals of Math to AP Calculus BC; however, I also received the occasional Spanish or SAT Prep course

assignment as needed. These experiences have afforded the opportunity to work with administrators, teachers, and students from many different backgrounds and have developed in me a desire to support teachers in their relational and instructional efforts with students.

As a result, five years ago I accepted the position of learning and teaching coach (LTC) in my current district. The role is somewhat different than that of an instructional coach in most districts, where the emphasis is on improving student achievement. The underlying purpose for the position in this district is to transform teaching and empower learners for future success in college and/or career. The role is a district administrative position, and the work is to support the district vision of learner-centric instruction resulting in learning that is social, inspiring, dynamic, and empowering. It is challenging work that requires skills in designing learning experiences, supporting teachers, navigating conflict, and building relationships. It is a role where I have observed challenges to teachers' agency many times, but I have also seen them find their footing and influence their students and the teachers around them.

Initially, there were only three coaches in the district, so I worked with teachers from all levels and in all subjects. As the number of coaches has grown, however, I have been able to narrow my focus, spending most of my time working with high school mathematics teachers and supporting OnRamps instructors in the initial years of the program.

Journey to the Problem

In the summer of 2017, I attended an OnRamps Academy for teachers of Algebra II with three teachers from my district. To be clear, OnRamps Academies are not the same as PLIs for teachers of OnRamps courses. The academies are summer trainings for high school teachers to expose them to high-level content and inquiry-based strategies in certain subjects. They do not correspond with dual-enrollment courses in the high school, nor do they provide curriculum or

assessments for the attending teachers. Academies do, however, include time for teachers to experience inquiry-based instruction and then to develop and present an inquiry-based lesson.

As an LTC, I attended the OnRamps Academy more as support for the teachers than as a participant, so I used the opportunity to observe. On each day during the four days of training, the leaders provided the choice between two afternoon sessions differentiated by level of difficulty. Although each of the three teachers had almost 20 years of experience instructing the subject and each was enthusiastic to learn, the same two selected the less difficult session each day. I wondered why one of the three teachers felt the confidence to consistently choose the more challenging session and the other two did not. As the three teachers and I worked together throughout the 2017–2018 school year to design and implement instruction in line with the inquiry-based methods we learned, I was continually amazed at the differences among the teachers' implementations and the degrees to which the practice of their instruction aligned—or failed to align—with the intended lesson design. Two of the teachers reflected a sense of agency in implementation. One of the teachers who did not select the more challenging sessions during the summer training did choose to step outside of her comfort zone and implement the material as designed, while the one who exhibited confidence during the training chose to implement what she liked or understood. However, the third teacher, another who selected the less challenging summer training sessions, gave a sincere effort but also struggled with implementation because the inquiry strategies conflicted with her identity as a "helpful" teacher who is always available to answer student questions.

In the summer of 2018, fresh off the experience of working with the Algebra II teachers, I began the support and observation of nine newly selected OnRamps teachers representing six different courses. Before teaching courses in the fall, those teachers had to attend a nine-day

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summer PLI, in which UT faculty leaders and course designers focused heavily on content, strategies, and student expectations. The OnRamps leaders provided curricula, assignments, assessments, and syllabi, so teachers had to adjust very quickly to new methods of instruction and rapid delivery of content. After my work with the three teachers throughout the previous year and my initial conversations with the new OnRamps teachers prior to attending the PLI, I knew that some would struggle during the training, some during the implementation, and some during both. In comparison to the previous year, I also knew that the heightened expectations around teaching or taking a course for credit at UT would magnify the intensity for teachers and students during implementation.

After supporting the 2018–2019 pioneering teachers through focus group conversations, natural conversations, and observations as part of my role in the district, I have a better understanding of the problem of teachers' challenges as OnRamps instructors and have been able to discern many of the issues around implementation. This knowledge has informed my search for relevant literature and influenced the design of artifacts to support onboarding teachers.

Significant Stakeholders

The two teachers who were new to instructing OnRamps courses for the 2019–2020 school year and who shared their experiences to inform this research are the most significant stakeholders. In addition, the nine pioneering teachers who initiated the implementation of OnRamps at the central Texas high school are key stakeholders. Their recorded experiences in the extant data informed the development of the artifacts that were deployed and evaluated in this action research study. All of these teachers willingly contributed their perspectives and their time to aid future onboarding teachers in the implementation process.

Other stakeholders include district leaders, campus administrators, and students. District leaders in the Department of Learning and Teaching must work with the university program leadership and with local high school administrators to continue to expand the program. District leaders' knowledge of teacher experiences will help determine how quickly to expand the program as they seek to increase the number of teachers involved and the number of courses offered. Consequently, campus administrators will benefit from a greater understanding of program expectations and requirements of teachers, thus informing their selection of participants as the program grows and as instructors are replaced because of attrition. Finally, as in most educational endeavors, students are stakeholders. The comportment of a teacher has the potential to sway students' perception of the value of a course and their efforts to be successful in that course. Therefore, the results of this study have the potential to directly impact students and their learning.

Important Terms

Achievement of Agency. "The outcome of the interplay of iterational [past], practical-evaluative [present], and projective [future] dimensions" (Priestley et al., 2015, p. 29).

College Readiness. "The level of preparation a student needs to enroll and succeed—without remediation—in a credit-bearing general education course at a postsecondary institution that offers a baccalaureate degree or transfer to a baccalaureate program" (Conley, 2007, p. 5).

Implementation. "What a program consists of when it is delivered in a particular setting" (Durlak & DuPre, 2008, p. 329).

Onboarding Teachers. Either or both of the two teachers participating in this study as new OnRamps teachers during the 2019–2020 school year at the central Texas high school used as the setting for this study.

Pioneering Teachers. Any or all of the nine teachers who initially implemented the OnRamps program during the 2018–2019 school year at the central Texas high school used as the setting for this study.

Teacher Agency. "[Teachers'] active contribution to shaping their work and its conditions" (Biesta et al., 2015, p. 624). According to Priestley et al. (2015), teacher agency is a temporal achievement in a current setting. Past experiences inform and future objectives orient the achievement of teacher agency in the present context, potentially constraining or supporting that achievement (Priestley et al., 2015).

Transformative Dual Enrollment. (In this paper) College-level coursework taught in high schools by high school teachers that requires them to attend "professional learning and development . . . to transform classroom instruction and student learning. Teachers join a facilitated network to enhance content knowledge, pedagogy, use of educational technology, and leadership" (UT, 2020c).

Closing Thoughts on Chapter I

Change is a difficult process, especially in the absence of a well-defined goal. In the field of education, change becomes particularly challenging as political, economic, and social interests compete to influence the meaning of education. These competing influences place teachers in a precarious position that jeopardizes their potential achievement of agency as they try to make sense of an ever-changing vision and the degree of alignment it holds to their pedagogical beliefs, their classroom experiences, their concern for student outcomes, and their identity as an educator.

In this action research study, I investigated the perceptions and experiences of two teachers during their first semester of implementing a transformative dual-enrollment program. I

enacted a system of support to encourage the achievement of teacher agency, and I used

qualitative data—primarily from interviews—to monitor and evaluate that system. In Chapter II,

I detail the history of dual credit and the factors influencing teacher agency and implementation

before discussing the study's solutions and methods in Chapter III, its analysis and results in

Chapter IV, and its conclusions in Chapter V.

CHAPTER II

REVIEW OF SUPPORTING SCHOLARSHIP

Introduction

In this literature review, I explore the research on dual credit, teacher agency, and program implementation. The research on dual credit forms the historical background for the review, culminating with factors that appear to support the achievement of agency by high school dual-credit teachers. This background sets the stage for a more thorough examination of teacher agency and program implementation. For the body of the literature review, an ecological model of teacher agency provided insight into the achievement of agency through the interrelated factors of teachers' histories, their desires for the future, and the current context in which they work. Informed by this model, I selected relevant studies detailing the effects of the elements of teacher contributions, contextual influences, and program characteristics on teacher agency and implementation. Through the examination of these elements, I offer evidence of mutual influence between teacher agency and program implementation. Specifically, the elements of teacher contributions, contextual influences, and program characteristics have the potential to affect, positively or negatively, the influence of program implementation on teachers' achievement of agency and, reciprocally, the influence of teacher agency on the success or failure of program implementation.

Relevant Historical Background

In examining the relationship between the exercise of teacher agency and the implementation of a dual-enrollment program, it is helpful first to consider the historical context leading to the development of dual enrollment, also known as dual credit. Education in the

United States has been in the process of reform for almost 200 years. The calls for school reform echo from the 1830s when Horace Mann proposed public elementary school access for all children (Cohen & Mehta, 2017). Less than a century later, the growth of public secondary schools was on the rise (Cohen & Mehta, 2017) and, with it, an increased interest in and desire for access to higher education (College Board, 2017). However, with the Soviets' launch of Sputnik in the 1950s, the demand for more rigorous academic work in high school that better prepared students for work as scientists and mathematicians brought the idea of college readiness into prominence (Cohen & Mehta, 2017). Although AP and IB programs have been traditional sources of strong preparatory coursework for postsecondary education (Cohen & Mehta, 2017), dual-credit programs are playing an increasing role in supporting students' college-readiness needs (An & Taylor, 2015; Miller et al., 2017, 2018). This provokes questions related to the role of dual-credit programs and their effectiveness in promoting college readiness.

If college readiness was important in the 1950s, it is even more so now. While it is true that a college education carries a high price tag, the lost opportunity to pursue that education may prove costly, as well. Students who graduate from high school and are not academically ready to attend a four-year college are less likely to attain their earning potential, which, consequently, affects social, emotional, and other aspects of their lives (Greene & Forster, 2003; Miller et al., 2017). All three programs mentioned previously—AP, IB, and dual enrollment—provide opportunities for students to obtain college credit while attending high school (Cassidy et al., 2010). Nevertheless, there are some distinctions. Both AP and IB require students to score at certain levels on a comprehensive end-of-year exam to demonstrate content mastery and promote the possibility of college credit (Cassidy et al., 2010). In contrast, dual-enrollment programs provide a way for high school students to enroll in a college course and potentially receive

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academic credit from each institution (Miller et al., 2017). Additionally, AP and IB programs provide a national curriculum for teachers, while the curriculum for a dual-credit course varies based on the HEI with whom the partnership exists (Cassidy et al., 2010). Perhaps the greatest distinction between these programs is the clientele. Although AP and IB are both open-enrollment programs, An and Taylor (2015) found students in the programs more likely to differ in their "observed characteristics" (p. 13), both from dual-credit students and from those choosing not to take accelerated courses. Their results revealed students in AP and IB "more likely to be white or Asian, male, have parents with post-bachelor's degrees, fewer siblings, and higher ACT scores" (An & Taylor, 2015, p. 13). In contrast, although dual-credit programs typically require students to meet college entrance requirements, the study's participating students showed observed characteristics similar to those who do not take accelerated courses, with the exceptions of parents' level of education and student ACT scores (An & Taylor, 2015). Additional research has shown that Latino/a students comprised 44% of dual-credit participants in the fall of 2015 in Texas (Miller et al., 2017). Although this corresponds to only 15.6% of Hispanics graduating from high school that year, it does represent a plurality among ethnicities participating in dual credit and reflects a growth rate of about 10% annually between 2000 and 2015 (Miller et al., 2017). These findings are relevant. Although dual-credit courses still serve the academically accelerated, they also offer a path to college readiness for more diverse student populations (Cassidy et al., 2010). Hence, in spite of entrance requirements, dual credit is filling a gap left open by the more traditional college-readiness programs.

The implementation of dual-enrollment programs to promote college readiness is increasing throughout the nation. In particular, the State of Texas has been taking active steps to pass legislation increasing the feasibility of dual-credit programs for both colleges and high

schools since 1995, thus promoting access to greater numbers of students (Miller et al., 2018).

Policies have established provision of funds for dual-credit courses; mandatory availability of at

least 12 hours of accelerated coursework for students in high school that may include AP, IB, or

dual credit; and extension of dual-credit participation opportunities to 9th- and 10th-grade

students (Miller et al., 2018). As a result, the number of high school students enrolled in at least

one dual-credit course increased by more than 1,100% between the years 2000 and 2016 (Miller

et al., 2018). Critics and promoters alike have responded to this growth with an increased focus

on instruction, content, and student outcomes to determine the effectiveness of dual credit in

promoting college-ready status (e.g., An & Taylor, 2015; Miller et al., 2017, 2018; Radunzel et

al., 2014). Within this focus, it is likely that the greatest concerns surround quality of instruction

and rigor of content when high school teachers serve as dual-credit instructors. Therefore,

although different types of dual-enrollment programs exist and instructors of the courses may be

high school or college faculty (Cassidy et al., 2010), the scope of this review limits consideration

to implementation of courses taught on the high school campus by teachers from within the high

school. Accreditation of dual-credit courses requires HEIs to ensure alignment between the

corresponding dual-credit and college-site courses (Miller et al., 2017). In addition, agreements

between high schools and HEIs, known as *memoranda of understanding*, include guidelines

about faculty selection, curriculum, and instruction to increase the likelihood of students

receiving a comparable college-level course (Miller et al., 2017). In the State of Texas, the

minimum qualification for a high school teacher to lead a dual-credit course is a master's degree

with at least 18 hours in the content area of instruction (Miller et al., 2017). Research by Miller

et al. (2018) on dual-credit programs in Texas compared instructors from high schools and

colleges teaching dual-credit courses in mathematics and English and expanded the study to

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include college instructors teaching the college-credit courses. They reported "no discernible differences" (p. 4) among faculty when considering the criteria of amount of content, depth of required student thought, and grading. In addition, Radunzel et al. (2014) concluded that "dual-credit courses were generally as effective as traditional courses" (p. 4) in qualifying students for subsequent courses. These findings appear to validate the current framework for ensuring that students receive college-level instruction in dual-credit courses taught by high school teachers. If so, student outcomes should be positive. An and Taylor (2015) examined data on students at the end of their first year in college who had taken dual-credit courses in high school and found statistically significant evidence of greater college readiness at that time compared with students without dual credit. Radunzel et al. (2014) looked beyond the first year and observed that students with dual-credit experience are more likely to complete a bachelor's degree in four to six years. Although these results confirm the value of dual-enrollment programs in enhancing college readiness, they may not point to expanded access to higher education. Findings by Miller et al. (2018) on dual-credit education programs in Texas revealed that most participants were planning to attend college before enrolling in the courses. In this case, dual enrollment may have a greater space in which to expand as educators and policymakers seek to close the opportunity gap for seekers of a college education.

These studies establish the role played by dual enrollment in effectively supporting college readiness. They also offer insights that enable readers to consider the relationship between the agency of high school dual-enrollment teachers and the implementation of the program. First, these teachers likely have a high level of teacher agency in their role. Because dual-enrollment teachers must have advanced degrees with a minimum of 18 hours of credit in the content area of instruction and have considerable autonomy in their classes (Miller et al.,

2017), they probably experience little risk to their pedagogical beliefs yet high congruence with their professional purpose. In addition, policies at the national (USDE, 2010) and state (Miller et al., 2017, 2018) levels support dual enrollment in district and school contexts, so agency-constraining policies, such as accountability expectations, are irrelevant. Finally, although professional development support may vary according to the partnering entity (Miller et al., 2017), the value of dual-enrollment programs is evident and the need for adaptability is minimal. The combined strength of these factors would appear to promote the exercise of teacher agency in the implementation of traditional dual-enrollment programs because, historically, these programs have required little change from high school teachers who have implemented them. However, as the call for education reform expands to higher education, dual enrollment may experience a transformation, as well. In this study, participating high school teachers experienced a dual-enrollment program requiring the teachers to attend specially designed professional development in preparation for teaching, explicitly stating the goal to "transform classroom instruction and student learning" (UT, 2020c). Through the process of action research, I investigated onboarding teachers' experiences with a system of support as they acted within the interplaying influences of implementation and agency.

Alignment with Action Research Traditions

Action research is a problem-based research approach. According to Hinchey (2008), "action research is a process of systematic inquiry, usually cyclical, conducted by those inside a community rather than outside experts; its goal is to identify action that will generate improvement the researchers believe important" (p. 7). In alignment with this definition, I acted as the researcher in this study and sought to address the issue of local teachers' personal and professional struggles during their initial year of implementing the UT OnRamps dual-

enrollment program. The mutually influential factors of agency (Biesta & Tedder, 2007) and program implementation (Durlak & DuPre, 2008) were instrumental in the design of a system of support for these teachers. The focus of the study was onboarding teachers' experiences with that system of support in an effort to evaluate and improve the system for future onboarding teachers.

Throughout the study, Ivankova's (2015) "iterative steps" (p. 42) provided a systematic process of inquiry to enhance the trustworthiness of the research. These steps include

diagnosing an issue (identifying a problem), reconnaissance (collecting, analyzing, and interpreting data about a problem), planning (developing a plan for action/intervention), acting (implementing action/intervention plan), evaluation (collecting, analyzing, and interpreting data about action/intervention), and monitoring (revising and testing action/intervention). (pp. 42–43)

Through the assigned responsibility to support OnRamps instructors during implementation, I was able to identify the problem for this study. The step of reconnaissance included collecting literature to support the planning phase, as well as using knowledge gained from the extant data gathered in my role as an instructional coach within the district. These data drove the development of plans for two artifacts to help mitigate implementation issues and promote positive teacher agency: a definition of the role of OnRamps consultant and the design of a system of support available to all OnRamps teachers but targeting onboarding teachers. In the acting stage, I served in the role of OnRamps consultant, implementing the preprofessional development (pre-PD) before onboarding teachers attended the summer OnRamps PLI and offering the remaining elements of the system of support—the curated resources and the reflection opportunities—throughout the fall of 2019. The ongoing nature of the system of support granted frequent interaction with teachers and fostered a deeper understanding of their

perspectives, which aided the examination and refinement of both artifacts in alignment with the evaluation and monitoring stages of action research.

Theoretical or Conceptual Framework

The conceptual framework (see Figure 1) shaped the research through alignment with Ivankova's (2015) steps to action research: diagnosing, reconnaissance, planning, acting, evaluation, and monitoring. The action of artifact implementation occurred early in the research process to raise teacher awareness of potential issues and offset the effects as much as possible through knowledge of resources and applicable strategies. As I continued gathering data around factors, issues, and influences during program implementation, I was able to evaluate the artifacts and monitor their refinement for more effective implementation in the future.

Figure 1

Conceptual Framework for Proposed Action Research Process
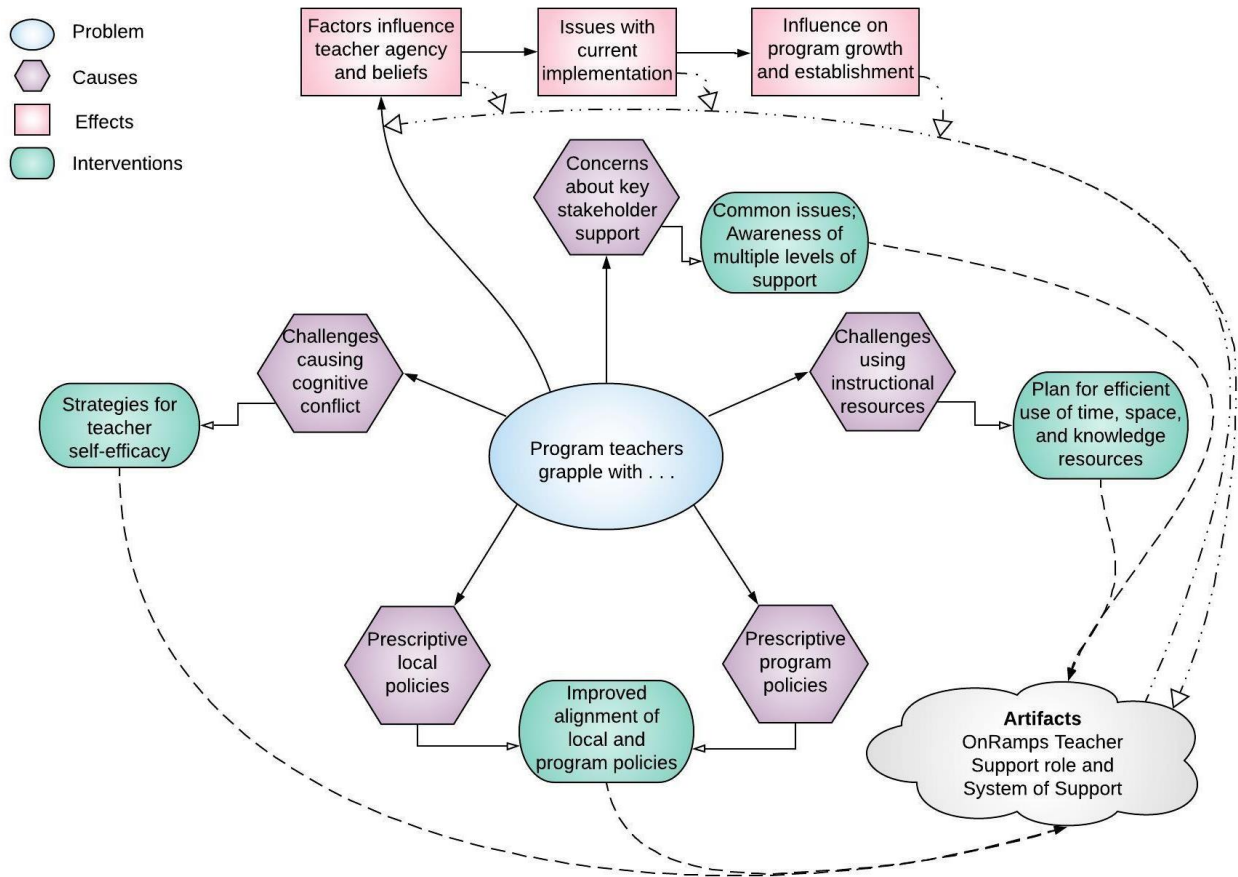
Most Significant Research and Practice Studies

The concept of teacher agency is increasingly becoming a topic of interest within the

field of education. The recent focus in the literature on teacher agency and its role in education

reform reveals a growing awareness of importance due to its inadvertent effect on policy

implementation at local, state, and national levels (e.g., Biesta et al., 2015; Priestley et al., 2012;

Robinson, 2012; Tao & Gao, 2017). For this study, I used an ecological model of teacher agency

(Priestley et al., 2015), detailed further in the next section, before examining the contributions of

the teacher, the influence of the context, and the role of the program in teacher agency and program implementation.

Theoretical Framework for Teacher Agency

In the midst of implementing an innovative program, expectations in the current context often challenge teachers' beliefs formed through past experiences and blur their vision of the future. The resulting haze from the struggle may hinder a teacher's agentic action. The ecological model of teacher agency proposed by Priestley et al. (2015) (see Figure 2) captures this wrestling by theorizing agency as a potentially achievable phenomenon that may or may not emerge based on the level of engagement of the individual with and within the context. Pulling from Emirbayer's and Mische's (1998) view of agency as a process that is both temporal and relational as it occurs in the structures of the context, Priestley et al. (2015) provided a model that brings attention to how teachers' past experiences inform their positioning toward the future, both of which act to influence the achievement of agency in the present. The authors designated these dimensions as the *iterational*—composed of teachers' personal and professional histories— the *projective*—including teachers' intentions and motivations that influence actions toward near and more distant future goals—and the *practical-evaluative*—where cultural, structural, and material components form a context that can hinder or encourage the achievement of agency. Understanding teacher agency and the process promoting its achievement can raise awareness of the need to consider elements related to both the teacher and the context when creating programs for implementation in educational settings.

Figure 2

Ecological Model of Teacher Agency (Reprinted with Permission from Priestley et al., 2015)
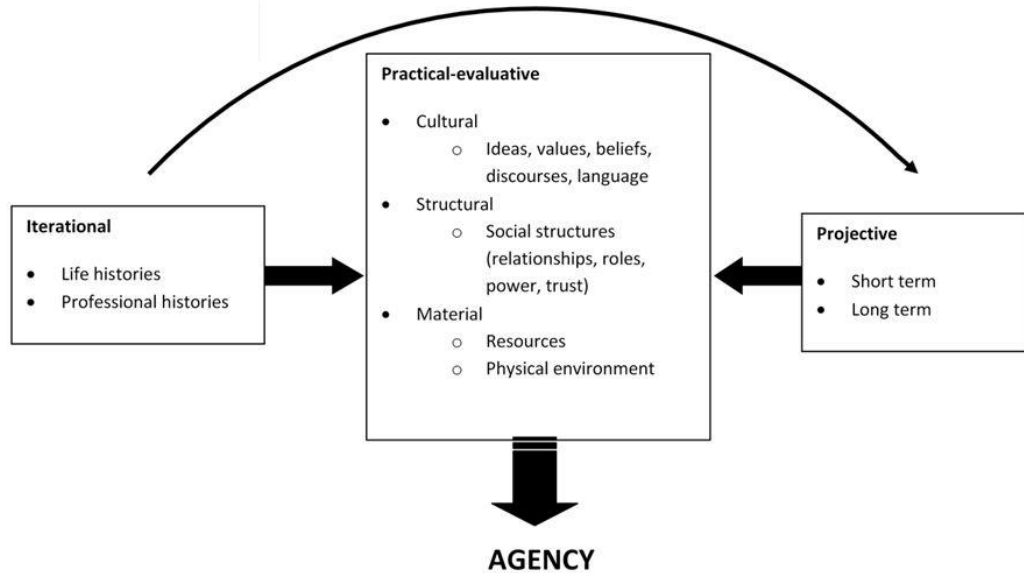
The Contribution of the Teacher in Teacher Agency and Program Implementation

Teachers demonstrate their commitment to students and student learning through their ongoing efforts to identify effective means of instruction. However, what qualifies as "effective means" may differ from teacher to teacher (Tao & Gao, 2017). Throughout the past 50 years of education reform, individuals, companies, and policymakers have invested in designing innovative programs with promising outcomes to help teachers meet student needs (e.g., Berman & McLaughlin, 1976; Le Fevre, 2014; Stein & Wang, 1988). Studies of such programs have consistently shown two connected findings: (1) the key to achieving those outcomes is the manner of implementation of the program in the institutional setting (Berman & McLaughlin, 1976; Durlak & DuPre, 2008) and (2) teachers hold the central position in effective implementation (Berman & McLaughlin, 1976; März & Kelchtermans, 2013; Stein & Wang,

1988). When noting this connection, it is beneficial to recognize the interaction of past experiences and future aspirations within the context of implementation because that interaction influences the degree to which teachers agentically engage with the program.

The field of teaching is different from other professional fields. New accountants likely do not walk into their first job with more than 15 years of exposure to professional accounting practices. And yet, new teachers do walk into that first year of teaching with 15 or more years of exposure to formal education, much of which comes from personal experience. Accordingly, teaching and learning incorporate both cognitive and emotional aspects developed through teachers' past experiences in and with education (van Veen & Lasky, 2005), informing a professional identity that evolves throughout one's teaching career (Buchanan, 2015). These aspects include teachers' capacity, composed of their skills and knowledge, and their personal and professional beliefs, both of which are key elements in the iterational (past) dimension of teacher agency (Priestley et al., 2015). Thus, capacity and beliefs become important considerations during implementation of a reform-based program.

Developing capacity is an ongoing process for teachers. Traditionally, teacher candidates begin formal efforts in college, learning the requisite knowledge and skills to educate students during preservice instruction. Once coursework is complete, most candidates must demonstrate their capacity by passing standardized tests measuring their knowledge and skills to achieve certification (Angrist & Guryan, 2008). In addition, in-service teachers in many states must attend professional development throughout their careers to maintain that certification (Hoffman & Harris, 2020). This continuous qualifying process testifies to the high priority given to teachers' cognitive contribution to classroom instruction and intimates the investment made by teachers to effectively influence student outcomes.

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However, in an era of education reform, the capacity that teachers have developed may not fully equip them for the type of instruction expected for an innovative program. According to Darling-Hammond and McLaughlin (1995), successful reform hinges on "teachers' success in accomplishing the serious and difficult tasks of *learning* the skills and perspectives assumed by new visions of practice and *unlearning* the practices and beliefs about students and instruction that have dominated their professional lives to date" (p. 597, emphasis in original). The emphasis on learning and unlearning in this statement speaks to the challenge faced by teachers when implementing a new program—a challenge that confronts both their capacity and their beliefs. The inclusion of beliefs is significant because most teachers maintain strong beliefs about content, pedagogy, and the classroom environment (März & Kelchtermans, 2013). They also hold steadfastly to tenets about their purpose (Biesta et al., 2015) to "make a difference in the lives of students" (Fullan, 2003, p. 18) and generally measure their success based on student outcomes (Guskey, 2002). For most teachers, these beliefs serve as precepts, guiding their professional choices and actions.

Furthermore, teachers' beliefs inform their professional identities. Consequently, the choice and action of change are value-laden (März & Kelchtermans, 2013), asking teachers to release many of those beliefs and their perspectives of themselves as teachers to embrace an uncomfortable new identity with uncertain expectations (Ballet & Kelchtermans, 2008; Le Fevre, 2014). To mitigate some of the associated risks and enhance implementation, teachers must perceive a level of ownership (Ketelaar et al., 2012) that permits them to be more than mere executors of policy (Ballet & Kelchtermans, 2008; Robinson, 2012). They need cultural support for personal resilience as they negotiate to find meaning in the ups and downs of change (Le Fevre, 2014), as well as permission to modify some aspects of the curriculum to better fit the

local organization and cultural norms (Durlak & DuPre, 2008). These factors have the potential to ease the cognitive and emotional struggle inherent in the process of change, thus promoting the achievement of agency and supporting teachers' positive contributions to program implementation.

Another possible approach for abating teachers' anxiety is to connect their personal and professional aspirations to the program goals and potential outcomes. In the ecological model of teacher agency, goals and aspirations are part of the projective (future) dimension, which interplays with both the iterational (past) and the practical-evaluative (present) dimensions (Priestley et al., 2015). More precisely, the projective dimension is where "agency is in some way 'motivated,' i.e. that it is linked to the intention to bring about a future that is different from the present and the past" (Biesta & Tedder, 2007, p. 136). Therefore, although implementation of reform-based initiatives involves risk (Le Fevre, 2014), making challenges and uncertainty unavoidable, a vision of "what could be" can serve as a motivating factor for overcoming difficult circumstances and sustaining engagement (Priestley et al., 2015). This concept implies the value of at least some degree of congruence to beliefs and aspirations for sustained engagement during implementation. Results from several studies reinforce the motivating value of congruence between program objectives and teachers' beliefs and goals during successful program implementation (e.g., Berman & McLaughlin, 1976; Cohen & Mehta, 2017; Durlak & DuPre, 2008; Stein & Wang, 1988). Implementation experiences then become part of professional histories, shaping the iterational dimension and ultimately influencing the development of professional identity moving forward (Priestley et al., 2015). Drawing on their identities, teachers who view a program as meeting a need and producing necessary outcomes while concurrently viewing themselves as capable of accomplishing or learning to accomplish

the required skills are more likely to implement the program with fidelity (Berman &

McLaughlin, 1976; Cohen & Mehta, 2017; Durlak & DuPre, 2008). In general, greater fidelity to

program design during implementation yields better outcomes (Durlak & DuPre, 2008).

Consequently, there is an increased potential for the teacher to agentically choose to sustain

innovative instruction.

This line of thought, however, assumes some proclivity by the teacher to openly consider

changing practices, which may or may not be the case. In a study by März and Kelchtermans

(2013) on reforming statistics curriculum in secondary schools, 13 teachers who reported

congruence between the rationale and objectives of the curriculum and their own professional

beliefs expressed positive perceptions of the reform. They also detailed specific changes in their

practice resulting from implementation and expressed motivation to continue use of the

curriculum. In contrast, seven teachers whose beliefs diverged from the rationale of the reform

found it difficult to implement and were unwilling to spend time learning its methods (März &

Kelchtermans, 2013). These teachers agentically chose to not implement the program, thus

demonstrating that the exercise of agency may not always result in acceptance of reform-based

practices; rather, it may elicit confidence to resist the desired change.

Teacher contributions play a major role in effective, agentic program implementation.

This is particularly true in light of the fact that the demands of implementation and the

navigation of risk factors can exact an emotional toll on teachers (März & Kelchtermans, 2013).

The achievement of teacher agency involves the choice and action of teachers (Tao & Gao,

2017) to develop their current work and the learning environment (Biesta et al., 2015) in

accordance with their beliefs and values (Robinson, 2012) and guided by their aspirations

(Priestley et al., 2015). Moreover, teacher agency is a critical component in maintaining

professional growth and is strengthened by teachers' commitment to their professional identity (Tao & Gao, 2017). The literature has shown, however, that teachers may choose to exercise that agency, whether for positive or negative, through acceptance of or resistance to change (Emo, 2015; Ketelaar et al., 2012; Priestley et al., 2012). Therefore, although agentic choices and actions can promote successful implementation of a program (März & Kelchtermans, 2013; Stein & Wang, 1988), they can also spur the selective use of only those activities or behaviors that align to strongly held beliefs or prompt rejection of the program altogether (Berman & McLaughlin, 1976; März & Kelchtermans, 2013). As a result, consideration of contextual influences and program characteristics as they interplay with teacher contributions is critical to promoting positive teacher agency and successful program implementation.

The Influence of Contexts in Teacher Agency and Program Implementation

When instructing for reading comprehension, teachers may use the phrase "Context is key" to emphasize the accurate discovery of meaning. The statement applies to program implementation (Berman & McLaughlin, 1976; Durlak & DuPre, 2008), as well, when considering that "meanings are always social products, the result of interactions and responses to contexts inside and outside" (März & Kelchtermans, 2013, p. 19). Informed by their beliefs and aspirations, teachers interpret their contexts—and the cultural, structural, and material factors within those contexts (Priestley et al., 2015)—in various ways and act according to the meanings they determine (März & Kelchtermans, 2013). Those meanings may enhance or hinder teacher agency (Ketelaar et al., 2012), thus affecting implementation of the program. Fullan (2003) identified three levels of context that influence educational reform: the state, the district, and the school. In the United States, there is both a federal and a state presence in education, so the term *legislative* is a more accurate description of the larger context than the term *state*. The meanings

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within the contexts of legislative, district, and school form a complex interweave that impacts the culture—shaping levels of teacher agency and degrees of program implementation.

Within the legislative context, policies and regulations set standards and establish guidelines that monitor various aspects of the educational process. In the United States, the introduction of a national accountability policy in education through the No Child Left Behind (NCLB) Act of 2001 had the positive intent to help schools recognize strengths and weaknesses so that all students could receive a consistent, high-quality education (Cohen & Mehta, 2017). Although NCLB succeeded in raising awareness of inequalities in education (Cohen & Mehta, 2017), its high-stakes nature often promoted achievement over learning (Dee et al., 2010). Accountability policies, such as NCLB or the more recent Every Student Succeeds Act (ESSA) of 2015, affect the culture of education on a large scale (Cohen & Mehta, 2017). These, as well as state-mandated policies, may promote or curb reform through program implementation based on the teachers' perceived impact on students' academic achievement (Durlak & DuPre, 2008). Research also has shown that accountability policies and curriculum standards can affect agency as teachers navigate the sometimes-conflicting expectations of achievement and innovation (e.g., Biesta et al., 2017; Priestley et al., 2012; Robinson, 2012).

Districts must comply with legislative policies and regulations, but the degree of emphasis on those requirements influences the culture of learning in the district context. As stated previously, in the current dialogue regarding educational priorities, teachers may feel caught in a professional "tug-of-war" between accountability and innovation (Robinson, 2012). However, Stein and Wang (1988) asserted that teacher perceptions of district goals and beliefs could influence willingness to try innovative programming, and Robinson (2012) found that teachers could adapt and adopt requirements by retaining some current practices and conforming

others to those requirements in a supportive culture. In research on "change agent" programs, Berman and McLaughlin (1976) found active support by district leaders to be a factor in the implementation process increasing the likelihood of teacher change and the perception of program success. In light of this, it appears that district leaders have the potential to influence positive teacher agency by taking steps to clarify a district vision and cultivate a culture more conducive to risk-taking and innovation.

The school context sits within the benefits and constraints established by government and district policies (Fullan, 2003). The culture and structures in this context may be influenced by a number of factors, including parents and community members (Cohen & Mehta, 2017; Skaalvik & Skaalvik, 2010; Stein & Wang, 1988), campus leadership (Berman & McLaughlin, 1976; Ketelaar et al., 2012; Oolbekkink-Marchand et al., 2017), and peer interaction (Ketelaar et al., 2012; Robinson, 2012; Siciliano, 2016). It is valuable to examine more closely the contextual contributions of each of these.

Although parents and community members are not technically "in" the school context, they play a role in defining school culture. The perception of support from this group for innovative programs and instruction indicates to teachers a correlation of beliefs and values that promotes an environment receptive to change (Cohen & Mehta, 2017; Stein & Wang, 1988). In contrast, a lack of support from these stakeholders increases a perceived level of risk and decreases willingness to innovate (Skaalvik & Skaalvik, 2010). Given the natural potential for community pushback during transition, schools need to consider ways to enhance teacher support during curricular reform.

To minimize the perception of risk from the potential lack of community support, school leaders should seek to create an environment that undergirds teachers' innovation efforts and

facilitates their contributions to implementation. Within schools, principals "appear to be the 'gatekeepers' of change" (Berman & McLaughlin, 1976, p. 361), offering support and feedback. When they unite teachers and equip them to work together with purpose (Bandura, 1993), effective leaders play a "crucial" role in promoting teacher agency (Oolbekkink-Marchand et al., 2017, p. 44). In addition to administrative backing, Durlak and DuPre (2008) proposed the need for a trusted "program champion" (p. 338), a designated support person who helps negotiate solutions to implementation problems and encourages teachers throughout the process. Overall, constructing a culture that supports the innovative process requires school leaders to respect teachers as they negotiate challenges to their beliefs and to advance a collaborative environment (Ketelaar et al., 2012). The presence of this collaborative environment as described above proves significant for teachers. Reliance on efficacious peers can result in the achievement of collective agency (Wilcox & Lawson, 2018) as teachers discuss uncertainties and gain the perspectives needed to enact changes together (Siciliano, 2016). In contrast, a lack of collaboration is isolating and generally hinders program implementation (Ketelaar et al., 2012). One other factor worth mentioning related to collaboration and implementation is time. Examination, discussion, and adaptation of program materials require time (Emo, 2015). Without it, teachers are unable to share practices and may resort to doing what is most efficient rather than risking innovation (Priestley et al., 2012). As a whole, evidence has emphasized the compelling need to consider parents and community members, campus leadership, and peer interaction in efforts to establish a culture of innovation and agency within the school context.

The "nested" nature of the contexts described here is noteworthy: the context of the school sits within the context of the district, which sits within the context of the state and national governing bodies (Fullan, 2003). Teachers operate under the expectations of a plethora

of policies enacted at each of these levels. In spite of these constraints, some of them find ways to negotiate their professional space (Oolbekkink-Marchand et al., 2017) at the local level and act as "agents of change" (Priestley et al., 2012, p. 191) in the process of program implementation. Providing the cultural, structural, and material resources that facilitate broader access to positive agency within this space is imperative for education reform. There is, however, one additional factor to consider when striving for a mutually positive influence between agency and program implementation.

The Role of the Program in Teacher Agency and Implementation

Thus far, the exploration of teacher agency and implementation has included the contribution of the teacher and the influence of the contexts. The final element of significance is the role of the program. During their careers, teachers witness what often appears to be a "revolving door" of educational programs. As a result, teachers who have been established in the system for a while may be reticent to consider new programs or initiatives. In addition, all schools provide different cultures for implementation (März & Kelchtermans, 2013), so teachers may not trust that a program is appropriate to meet the needs of their particular students (Berman & McLaughlin, 1976). Teacher change in these situations is difficult, but there are aspects of programs that may resonate sufficiently with teachers to mitigate the impact of these attitudes. Studies have shown essential measures that promote implementation to include the perceived value of the program (Durlak & DuPre, 2008; Stein & Wang, 1988), the adaptability of the program (Berman & McLaughlin, 1976; Durlak & DuPre, 2008), and program support (Durlak & DuPre, 2008; Guskey, 2002). The degree to which these measures are evident before and during implementation likely has a strong impact on teachers' initial receptivity and continued commitment to the program.

Establishing program value requires an evaluation of priorities. In education, perceived program value is tied to teacher beliefs (Stein & Wang, 1988). Accordingly, teachers need to contemplate three criteria to help determine perceived value: feasibility, desirability, and student benefits (Ballet & Kelchtermans, 2008). The first criterion, feasibility for the teacher and the school, prompts teachers to examine their capacity for implementation in light of program expectations (Ketelaar et al., 2012) and the ability of the school or district to support the program (Durlak & DuPre, 2008), thus incorporating the interplaying factors of teacher, contexts, and program. Feasibility also prompts teachers to try to make sense of the program and its use of individual and collective resources (Ketelaar et al., 2012) to meet an observed or revealed problem (Cohen & Mehta, 2017). The second criterion for program value is desirability for the teacher and the school. As the emphasis on education reform and student-centered learning grows, teachers may feel pressure to innovate, yet they lack the time (Ballet & Kelchtermans, 2008) or understanding (Olson, 1980) needed to start the process of reforming instruction. The program could prove valuable to teachers if it offers objectives aligned with teachers' goals and structured guidance toward those goals (Stein & Wang, 1988). Finally, determining program value must include an analysis of student outcomes. Student outcomes are the "ultimate indicator" of an innovation's effectiveness (Berman & McLaughlin, 1976, p. 350) and "an essential criterion" in teachers' consideration of program implementation (Ballet & Kelchtermans, 2008, p. 52). Although these benefits may hold the highest relevance to program implementation, opinions of what constitutes "student benefits" are not consistent, even within teachers of the same subject (März & Kelchtermans, 2013). Nevertheless, the answers to these three questions can help teachers establish priorities and determine their perceived value of the program within the context of implementation.

When considering teachers' perceptions of a program, there must be the acknowledgment that every school is different. Therefore, each has needs specific to its student population and teaching staff (Berman & McLaughlin, 1976). While fidelity of implementation may support achievement of touted program outcomes, Durlak and DuPre (2008) acknowledged complete fidelity as unrealistic—some adaptation will occur. These authors stated that the role of adaptation in implementation "might be the most provocative finding" of their review (p. 341). The importance of adaptability extends beyond the needs of the context, however. As previously mentioned, teachers want to exercise a measure of ownership over the program (Ketelaar et al., 2012). Without the ability to adapt an innovation and make sense of it with regard to their beliefs, teachers become discontent and feel that they are losing their professionalism (Ballet & Kelchtermans, 2008). Although this is an important consideration, there must be an expected level of implementation on critical aspects of the program, or the outcomes will be unattainable (Durlak & DuPre, 2008). A process of "mutual adaptation" (Berman & McLaughlin, 1976, p. 349) may offer a balanced solution to this conundrum. Berman and McLaughlin (1976) recommended mutual adaptation as a means to adapt the program design to the context of implementation while helping the school and its teachers adapt to the program expectations. The authors identified essential elements in the process of mutual adaptation: continuous planning, frequent staff meetings, in-service training based on data from staff meetings, and local development of materials. In addition, they emphasized the critical nature of time in the process of adaptation because change is a slow process. In this way, adaptation can enhance the implementation process and promote the agency necessary to achieve a shift to innovative practices.

In education, the term *innovation* implies teacher change. The process of change often places teachers in the uncomfortable position of questioning or defending their professional competence (Ballet & Kelchtermans, 2008). Admittedly, this position of defense bolsters feelings of uncertainty (Le Fevre, 2014), but program support through ongoing, targeted professional development can foster change and ease the stress of the implementation process (Berman & McLaughlin, 1976; Durlak & DuPre, 2008; Guskey, 2002; Stein & Wang, 1988). Guskey's (2002) professional development principles for program support gave credence to teachers' hesitancy to change without excusing them from the process. Noting that the attitudes and actions of teachers in the study did not typically change until after implementation, he addressed the need for professional development programs to acknowledge change as a "gradual and difficult process for teachers" (p. 386); to provide consistent feedback pointing to progress in student learning; and to sustain support throughout implementation, coupled with pressure to maintain commitment to the process. In other words, single-opportunity preservice programs are inadequate to strengthen teachers' skills or boost their willingness to operate within the uncertainty of instructional risk (e.g., Berman & McLaughlin, 1976; Durlak & DuPre, 2008; Guskey, 2002; Stein & Wang, 1988). Thus, effective professional development for innovative programs should provide ongoing support for the details of implementation and potential practical problems (Berman & McLaughlin, 1976), as well as providing multiple opportunities for teachers to make sense of program objectives and expectations in relation to their professional beliefs (März & Kelchtermans, 2013). These offerings have greater potential to address the complex nature of teacher change.

Teachers often seem to have an "I'll believe it when I see it" attitude toward program implementation. This attitude may lead to the negative exercise of agency that often impedes

program implementation (Biesta et al., 2015). However, the literature has shown that there are measures to consider that might help teachers justify change (e.g., Ballet & Kelchtermans, 2008; Ketelaar et al., 2012; März & Kelchtermans, 2013). If teachers are able to recognize the value of a program (Ballet & Kelchtermans, 2008) and its adaptability to their particular setting (Ketelaar et al., 2012), as well as to use ongoing professional development for support in the change process (März & Kelchtermans, 2013), they may be more likely to practice innovative instruction. From this perspective, the positive perception of a program is a contributing factor to the constructive exercise of agency and the enhancement of program implementation.

Closing Thoughts on Chapter II

In examination of the literature, an influenced and influencing relationship was found between agency and program implementation. Teachers' perceptions of their beliefs and purpose (Biesta et al., 2015), the contexts of implementation (Fullan, 2003), and the program mutually act to facilitate positive change or to maintain the "status quo" (Robinson, 2012). Teachers' histories and aspirations may enable them to overcome the risks and uncertainties associated with program implementation and promote willingness to change in the present context (Priestley et al., 2015). Although policies and procedures mandated within legislative, district, and school contexts (Fullan, 2003) often feel like constraints to teacher agency, district and school leaders can establish cultures within those contexts that promote the agency needed to implement innovative instruction (Oolbekkink-Marchand et al., 2017). Finally, teachers are more likely to implement an innovation if they perceive the value of the program, have a measure of adaptability with certain aspects of the program, and experience a process of feedback and support throughout implementation (Stein & Wang, 1988). These three aspects—the teacher, the

contexts, and the program characteristics—operate as contributing factors to the achievement of agency and influence the process of program implementation.

In education, program implementation influences student outcomes. College readiness has been an outcome of the educational process that has prompted concern for more than 60 years. Even though other programs exist that address this concern, dual credit has gained increasing popularity with the skyrocketing cost of a college education and its appeal to a broader range of students. Traditional dual credit has required little change from the high school teachers who have implemented it; however, there is some evidence that this pattern may be changing. While minimal literature exists about what could be considered *transformational* dual enrollment, it appears that the design of this type of dual-enrollment program seeks to transform both the instructional practices of the teachers who implement it and the learning strategies of the students who participate (Giani et al., 2018). I address this gap in the literature through the study of a transformational dual-enrollment program and the perspectives of teachers acting within the interplaying influences of implementation and agency.

CHAPTER III

SOLUTION AND METHOD

Outline of the Proposed Solution

My experiences with teachers who had participated in an OnRamps Academy or who had implemented OnRamps courses led me to focus on enhancing teacher agency—"the active contribution to shaping their work and its conditions" (Biesta et al., 2015, p. 624). After considering the primary factors influencing implementation—concerns about stakeholders and resources, conflicting schedules and policies between the high school and the university, and the cognitive dissonance experienced in balancing the demands—I recognized that the proposed solution needed to offer a process of continuous support (Guskey, 2002). Therefore, I designed two artifacts to implement in the acting phase of the action research. The first artifact is the creation of a description for the role of OnRamps consultant. The person in this role would provide ongoing support for all OnRamps teachers during implementation for at least the first three years to promote program sustainability and meet the needs of onboarding teachers thereafter. The second artifact is a system of support that includes four elements: the OnRamps consultant, a one-day pre-PD training for onboarding teachers, a concise library of curated resources, and monthly opportunities for guided reflection. The provision and maintenance of these elements are part of the role of OnRamps teacher support.

Justification of the Proposed Solution

The design of the artifacts for this qualitative action research study reflects key considerations found in the literature. Research-based factors from Durlak and DuPre (2008) provided the foundation for designing the system of support. Part of my role in the past two years

has been to support new OnRamps teachers, to act in the role of *program champion* (Durlak &

DuPre, 2008), as the district launched the program. Although I retitled the role OnRamps

consultant, I acted in alignment with Durlak's and DuPre's (2008) definition to "rally and

maintain support for the innovation, and negotiate solutions to problems that develop" (p. 337). I

held monthly focus groups during lunch in which I asked interview questions focusing on factors

primarily in the categories of *provider characteristics, factors relevant to the prevention delivery*

system, organizational capacity, and *factors related to the prevention support system* (Durlak &

DuPre, 2008). These opportunities provided teachers time to gather collectively to share and

reflect. The interviews also supplied extant data that enhanced my understanding of teachers'

challenges. I used both the analysis of the extant data and the findings of the article from Durlak

and DuPre (2008) to inform creation of a description for the role of OnRamps consultant (see

Appendix A). This is my first artifact.

My second artifact is a local system of support for OnRamps teachers including a pre-PD

opportunity, accessible resources curated in the district's LMS, and monthly opportunities for

reflection through semistructured interviews with participating teachers (see Appendix B).

Figure 3 provides a model of the local system of support. The pre-PD occurred before instructors

attended a nine-day summer PLI and laid the groundwork for maintaining teacher agency during

program implementation through the local system of support. I designed the training to address

many of the factors identified by the previous year's pioneering teachers and supported by the

work of Durlak and DuPre (2008). (See Figure for a model of the pre-PD.) Teacher beliefs

served as the central emphasis of the training, with factors such as the perceived need for

OnRamps and the perceived benefits of offering the dual-enrollment courses (Durlak & DuPre,

2008) receiving primary focus. However, as the trainer, I also affirmed the organizational

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capacities of the local school district and the UT OnRamps program that would allow each

organization to play a supporting role throughout the process. Finally, no program occurs in a

vacuum; contextual factors do exist, primarily at the campus, community, and state levels. While

acknowledging the challenges, I also emphasized the supporting factors at each level that

demonstrate a common vision for preparing students for success in the future.

Figure 3

Model for the Local System of Support for OnRamps Teachers
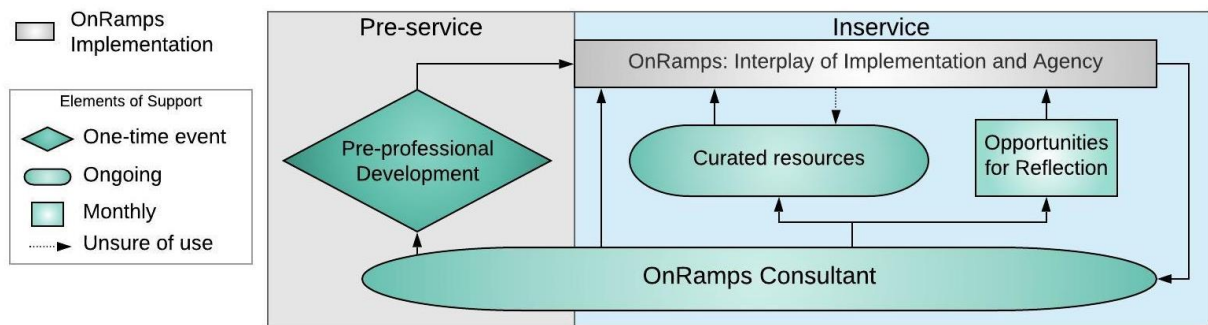
Figure 4

Model for OnRamps Pre-PD (Adapted from Durlak and DuPre, 2008)
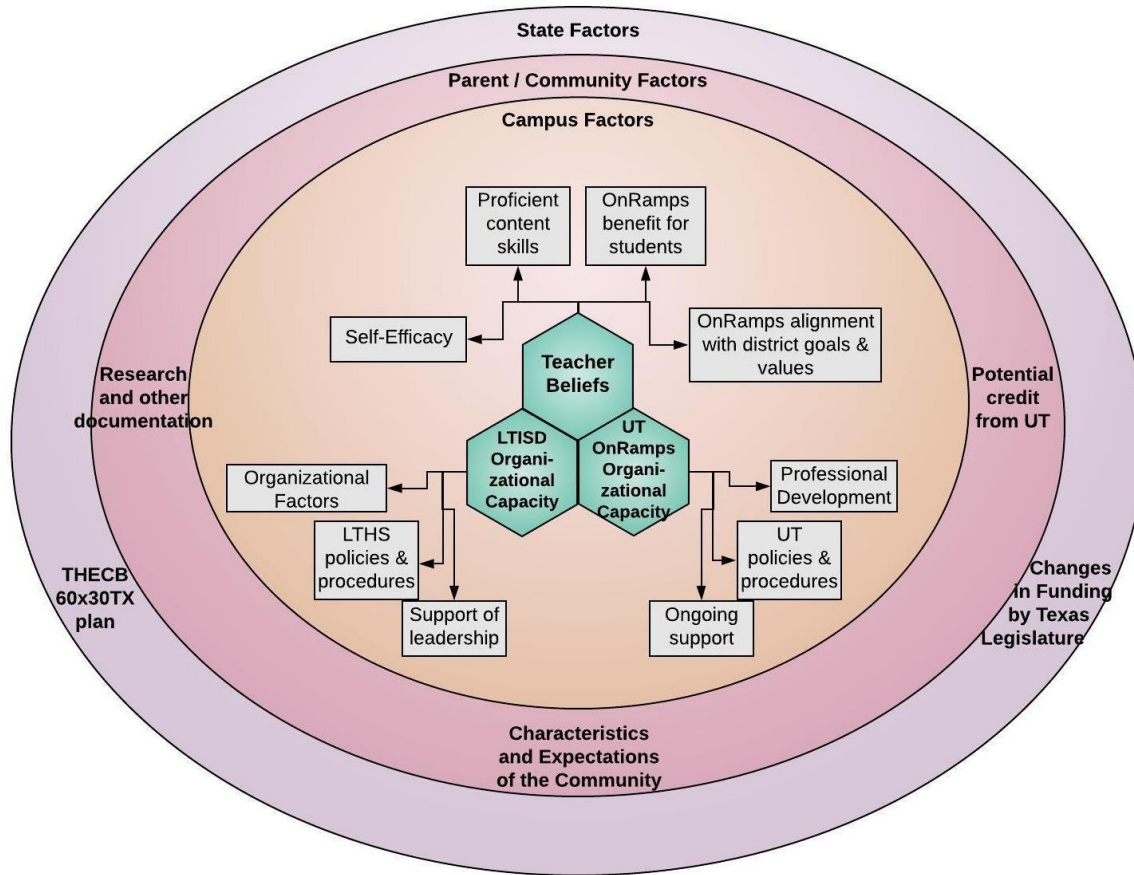
The curated resources were another element of the system of support. These resources were available to all OnRamps teachers through the district's LMS, but they should have been most valuable to onboarding OnRamps teachers. To meet a variety of needs, the resources included articles supporting the innovative strategies used to teach OnRamps courses, videos on creating courses in UT's LMS, a list of frequently asked questions in the local context of implementation, information from the pre-PD, and state and local statistics on students' college readiness. The final component of the system of support was the intentional inclusion of

opportunities for reflection. Although reflection initially occurred during focus groups and one-on-one interviews to gather data for this study, the opportunities will continue as a part of the role of OnRamps teacher support.

The element of agency in this study prompted me to think more deeply about how to equip teachers to operate from a proactive stance rather than a reactive stance (as much as possible) when facing the challenges of implementation. In order to effectively promote the achievement of teacher agency during implementation, I knew that I needed to meet teachers' needs in four ways. These included helping teachers (1) maintain a focus on the collective vision of the OnRamps program: providing a college experience for high school students; (2) visualize their students as successful now, in college, and beyond and letting that fuel their motivation to "stay the course" during times of struggle; (3) plan and act with purpose rather than existing in a victim mentality or "survival mode"; and (4) act as reflective practitioners, examining their actions and beliefs as teachers in light of the demands of implementation. These ideas align with Bandura's (2006) core properties of human agency: intention, forethought, self-reactiveness, and self-reflectiveness. Briefly, according to Bandura (2006), intention includes people's commitment to their plans for purposeful action and their strategies for accomplishing those plans. Forethought refers to the envisioning of desired outcomes that motivates the drive toward those outcomes (Bandura, 2006). The property of self-reactiveness allows a person to consciously and intentionally choose to regulate actions or behavior (Bandura, 2006). Finally, self-reflectiveness is a metacognitive process through which a person is able to reflect on self, thoughts, and actions, influencing future thoughts and actions (Bandura, 2006). When working with teachers, I exchanged some of the terminologies for words with greater familiarity. I used

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motivation instead of forethought, *action* rather than self-reactiveness, and *reflection* in place of self-reflectiveness.

To further promote the connection of these concepts with teachers' thoughts and actions, I considered what they might mean in the context of OnRamps implementation. This also allowed me to consider the concepts in light of the ecological model of teacher agency and from a temporal perspective (Priestley et al., 2015). The concepts of intention and motivation align with the short- and long-term goals of the projective (future) dimension, and the influence of a strong understanding of and desire to achieve those goals impacts action and reflection in the practical-evaluative (present) dimension. To keep the terms and their contextual applications at the forefront of teachers' minds and to enhance the likelihood of the achievement of agency, I created an infographic (see Figure 5) that defined the four properties in the context of OnRamps implementation.

- Intention: Provide a rigorous college-level experience for high school students
- Motivation: Envision long-term student academic success
- Action: Plan for regulated reaction
- Reflection: Evaluate past actions and adjust as needed for future efforts

This infographic served as a visual anchor during OnRamps implementation, hanging in the office designated for OnRamps teachers. In addition, these concepts and contextual definitions were reviewed and discussed each month in the interviews.

Figure 5

OnRamps Infographic of Key Concepts

THINGS TO REMEMBER WHEN

TEACHING ONRAMPS

Intention

PROVIDE A RIGOROUS COLLEGE EXPERIENCE

Be purposeful. OnRamps is not about the grade or the credit. It's about the experience. You are ensuring students experience college-level learning before college.

Motivation

ENVISION STUDENTS' LONG-TERM COLLEGE SUCCESS

Be persistent. College readiness requires productive struggle. Trust the process. Remember only 15.9% of ninth grade students in Texas complete a degree within six years of finishing high school. Your work is changing that statistic.

Action

PLAN FOR REGULATED REACTION

Be efficient. Try to avoid "survival mode." Breathe. Let something go. Do the next thing. Phone an OnRamps friend. And breathe again.

Reflection

EVALUATE PAST ACTIONS TO INFLUENCE FUTURE EFFORTS

Be effective. Consider the following:
+ What is going well?
△ What could be improved?
📢 What is worth cheering about?
⛰ What is challenging?

IT'S GOING TO BE
A GREAT YEAR!

Each product designed for this record of study and for the support of teachers incorporates research-based findings. Through the development and application of these ideas for the local problem, I have been able to support current implementation. Moving forward, the system of support has the potential to influence retention of OnRamps teachers and undergird growth of the program at the local high school. Furthermore, because these ideas align with aspects of agency, the results of the study accurately reflect the achievement of teacher agency during the process of implementation.

Study Context and Participants

The context for this study includes both the state and local settings. The State of Texas has taken bold steps to promote advanced academics for high school students and ensure college readiness. In particular, legislation promoting access to dual-credit courses has benefited both students and HEIs through increased funding and reduced restrictions for participation (Miller et al., 2018). This broad context of support established a strong foundation for the local efforts of leaders in the central Texas school district of study to offer every student at its high school a path to experience a college-level course before graduation. At the time of the study, this school was the only high school in the high-performing, fast-growth district. Families move to this district to enroll their children in the schools, and, with 61% of the population holding at least a bachelor's degree (PASA, 2019), the community holds high expectations for the educational experiences that students receive. Based on the increasing enrollment, the district could need another high school within the next 10 years; therefore, establishing effective pathways to college readiness at this time is critically important.

During this study, I employed convenience sampling, identifying as participants the only two teachers at the high school who were new to the OnRamps program for the 2019–2020

school year and who both attended the same nine-day PLI during the summer of 2019. Participants in this study were two female high school teachers. During the process of the study, one teacher was instructing Rhetoric, which corresponds with English III at the high school level, and the other teacher was instructing Statistics. The rhetoric teacher had two local colleagues who taught the course in the 2018–2019 school year, both of whom were teaching OnRamps again in the 2019–2020 school year. These three teachers formed a team that collaborated extensively in preparation for OnRamps instruction. In contrast, the statistics teacher had been the only statistics teacher at the school for three years, so she was without a local collaborator during implementation of the OnRamps Statistics course. In addition, 2019–2020 was the first year for OnRamps Statistics at the high school, so this teacher was introducing the course into the local context.

Research Paradigm

The purpose of this study—to investigate the experiences of onboarding teachers interacting with a system of support during the implementation of an OnRamps dual-enrollment course—necessitated the use of a qualitative action research study. Because I had supported OnRamps teachers in this high school prior to the study, Ivankova's (2015) steps of action research served as an effective way to conduct a systematic inquiry of the impact of the artifacts on new OnRamps teachers' implementation and agency. The initial steps of diagnosing and reconnaissance were already in action, informing the planning stage through literature and extant data. Implementing the artifacts and evaluating the collected data provided evidence to consider in the monitoring stage for improvement of the artifacts before their implementation with future onboarding teachers.

Through the process of inquiry, I wanted to provide a detailed description of teachers' experiences in the context of the local high school. This purpose aligns with the goal of the qualitative paradigm to gain an in-depth understanding of the researched phenomenon (Hathaway, 1995). To accomplish this purpose, I, as the researcher, needed to be actively engaged with a small group of teachers using the qualitative approach of naturalistic inquiry (Patton, 2015). This approach enabled the gathering of textual data within the setting, bringing to light many of the complex interacting factors influencing teachers' experiences (Guba & Lincoln, 1982). Alignment with the qualitative paradigm and usage of the elements of qualitative research supported achievement of the purpose of this study.

Data Collection Methods

Data collection around the central phenomenon of teachers' experiences with the local system of support occurred in alignment with the evaluation stage of action research, primarily using the qualitative methods of focus group interviews, one-on-one interviews, and observations (Creswell, 2014). Over the course of the study, I conducted two focus groups with both teachers and three interviews with each individual teacher for a total of six one-on-one interviews. All sessions began with a request to audio-record the interviews, a statement of the purpose of the research, norms for the interview and for ensuring the security of the collected data, and the opportunity for teachers to add norms if they wished. Neither teacher chose to add norms at any time. The focus groups and semistructured interviews consisted of questions informed by the literature on teacher agency and aligned with the terms and contextual definitions previously described: intention, motivation, action, and reflection. For example, the questions in the September interviews were as follows:

- Intention: Think about the OnRamps purpose to provide a rigorous college-level experience for high school students. With that thought in mind, what are your perspectives about the OnRamps PLI? What did you find particularly valuable from the training? What do you wish had been addressed?

- Motivation: Knowing that it is important to envision students' long-term academic success to maintain motivation in the day-to-day implementation of OnRamps instruction, do you have a connection with another OnRamps teacher to support you in this effort? Have you accessed the resources provided by OnRamps to support your instruction?

- Action: Considering the benefit of having a plan for "regulated reaction," what have you done so far to adapt to the expectations for instructing your course? What would you like to do for next year?

I asked probing questions as needed to clarify answers or prompt elaboration. In addition, with the exception of the initial focus group meeting that occurred during the summer, each semistructured interview offered teachers the opportunity to share celebrations and challenges they had experienced during implementation. Teachers communicated their education histories and demographics during the first focus group. (See Appendix C for initial focus group questions.) For all focus groups and interviews, teachers received agendas by email in advance of the meetings (see Appendix D). These agendas included the list of interview questions that might have been asked during the allotted time.

Two additional methods supplied evidence for this study: surveys and storylines. First, as the researcher, I designed two brief surveys to collect data following implementation of the pre-PD. The first survey consisted of three open-ended questions and ten five-point Likert-scale

questions, with a value of 1 representing "not at all" and a value of 5 representing "absolutely." This survey (see Appendix E) was administered at the conclusion of the pre-PD to gather data regarding the initial evaluation of that element of the system of support. Both teachers completed the survey before leaving the training. The second survey comprised two open-ended questions, one multiple-choice item, and two five-point Likert-scale questions, again with a value of 1 representing "not at all" and a value of 5 representing "absolutely." I distributed the second survey (see Appendix F) via email to teachers at two different times during the nine-day OnRamps PLI, after day four and after day nine. These data were used to inform understanding of the perceptions of the pre-PD as teachers experienced the summer OnRamps PLI. Although both teachers filled out the second survey at the halfway point, only one of them did so at the end of the training; however, I followed up with the other teacher at the first interview. Because there were only two participants, these surveys were considered qualitatively.

The final instrument of data collection was less traditional than the other methods. Using the storyline method (Oolbekkink-Marchand et al., 2017), teachers plotted an estimation of their agency on a two-dimensional graph, with the days of the month forming the horizontal axis and the estimation of their level of agency forming the vertical axis (see Appendix G). The vertical axis was labeled numerically from 0 to 10. For the purposes of this study, a plotted point in the following ranges represented the corresponding perception of achieved agency:

- 0 to 2, low level of agency
- 2 to 4, medium-low level of agency
- 4 to 6, medium level of agency
- 6 to 8, medium-high level of agency
- 8 to 10, high level of agency

Teachers labeled low points and high points to provide a better picture of the experience of teaching an OnRamps course and, potentially, to aid in determining if the elements of the system of support provided the aid needed by OnRamps teachers to achieve a positive perception of agency.

Throughout the collection process, I took intentional precautions to protect the participants' rights and the security of the data. Before I began collecting data, I explained to both teachers the purpose of the study, procedures, possible risks and benefits, means of maintaining their confidentiality, and their rights as study participants. I invited them to participate in the study. They volunteered to participate and signed a consent form (see Appendix H) to indicate their agreement. Although total anonymity could not be guaranteed with such a small sample, I deidentified data and ensured that no information was shared that could jeopardize their positions. Recordings and transcriptions, as well as data from observations, surveys, and storylines were secured on a password-protected Google Drive.

Justification of Use of Instruments in Context

Although focus groups, one-on-one interviews, and observations are traditional means of gathering data for qualitative research, surveys and storylines are not. As stated previously, the surveys were used qualitatively, offering teachers another method to provide feedback and aid in the triangulation of data (Patton, 2015). In addition, the second survey allowed collection of data while the teachers were at the summer PLI and not available in the local context. In another study that also used the ecological model of teacher agency (Priestley et al., 2015), the researchers felt that the use of storylines in combination with observations and interviews permitted triangulation of data because the storylines "provided . . . insights in relation to the temporal aspects of teacher agency" (Oolbekkink-Marchand et al., 2017, p. 40). I used storylines

in my study for the same purposes—to gain insight and allow for data triangulation (Patton, 2015). The storylines provided a creative, visual way for teachers to communicate their experiences. When compared with the monthly interviews, these storylines filled in the time gaps, increasing understanding of teachers' perceptions of the day-to-day implementation of their courses. They also helped teachers remember key events during our times of reflection that potentially would have been overlooked in the context of immediate pressure.

Data Analysis Strategy

Although the surveys (see Appendix E and Appendix F) allowed me to gather some quantitative data, the sample size was too small and the number of questions too few to consider the closed-ended results statistically valid, so, as previously stated, these data were used qualitatively to determine positive or negative perceptions of the phenomenon or event. The storylines for Lauren (see Appendix I) and Christina (see Appendix J) provided primarily visual data with some verbal and textual data from teachers' explanations. Analysis of paths included visual observation of consistencies and changes in the storylines over time, as well as correlation with data collected during corresponding months of the interviews. Through this process, storylines allowed a degree of triangulation of the textual data (Patton, 2015) and offered insight into each teacher's perception of agency during implementation. Data analysis for all textual data in this action research study employed the use of thematic analysis (Braun & Clarke, 2006). This systematic, iterative process began with reading and rereading the transcripts of focus groups, interviews, and observations to gain familiarity with the data set (Braun & Clarke, 2006). Although initial open coding began after the interviews in September, continuous reading, rereading, comparing, and coding occurred as I gathered and transcribed additional data.

Throughout this time, I kept a notebook of personal and analytic memos to help identify patterns and prompt questioning (Braun & Clarke, 2006) as more data were gathered.

Although I initially began the process of inductive coding using qualitative data analysis software (ATLAS.ti), I soon found that I wanted to be able to mark the data by hand and to lay it out for visual inspection. As I examined coded segments of data, I created pages of codes that permitted consideration of the teachers individually and in comparison to one another on similar topics. This refining process occurred several times, providing a means of aligning and renaming similar codes to reduce their number.

At this point, I compiled a list of the existing codes, cut them apart, and placed them in affinity groups to determine potential themes. I then considered the research questions and one of the purposes of qualitative research—to meaningfully communicate people's stories (Patton, 2015)—to identify key themes and subthemes. With increased clarity gained from the process, I examined the data one more time to ensure the accuracy of the interpretation. Overall, this systematic reduction of the data provided greater insight into the perspectives of OnRamps teachers and the deeper meanings of their responses. The results were then interpreted considering existing research around factors influencing teacher agency and implementation, thus enhancing the likelihood of credible inferences and strengthening the understanding of teachers' perceptions of the artifacts supporting OnRamps implementation.

Timeline

This study spanned a period of six months with three phases of implementation. Phase 1 included the review of relevant literature, the gathering and analysis of extant data, and the design of the two artifacts. About a week before onboarding teachers attended the summer OnRamps PLI, phase 2 began. This phase included the selection of participants, the first focus

group interview, and the implementation of two elements of the system of support: the role of

OnRamps consultant and the pre-PD. Finally, phase 3 spanned the fall semester of the

onboarding teachers' initial year of instructing an OnRamps course. As the researcher and the

OnRamps consultant, I implemented all elements of the system of support and continued data

collection and analysis. See Figure 6 for the timeline of this study.

Figure 6

Timeline for the Study
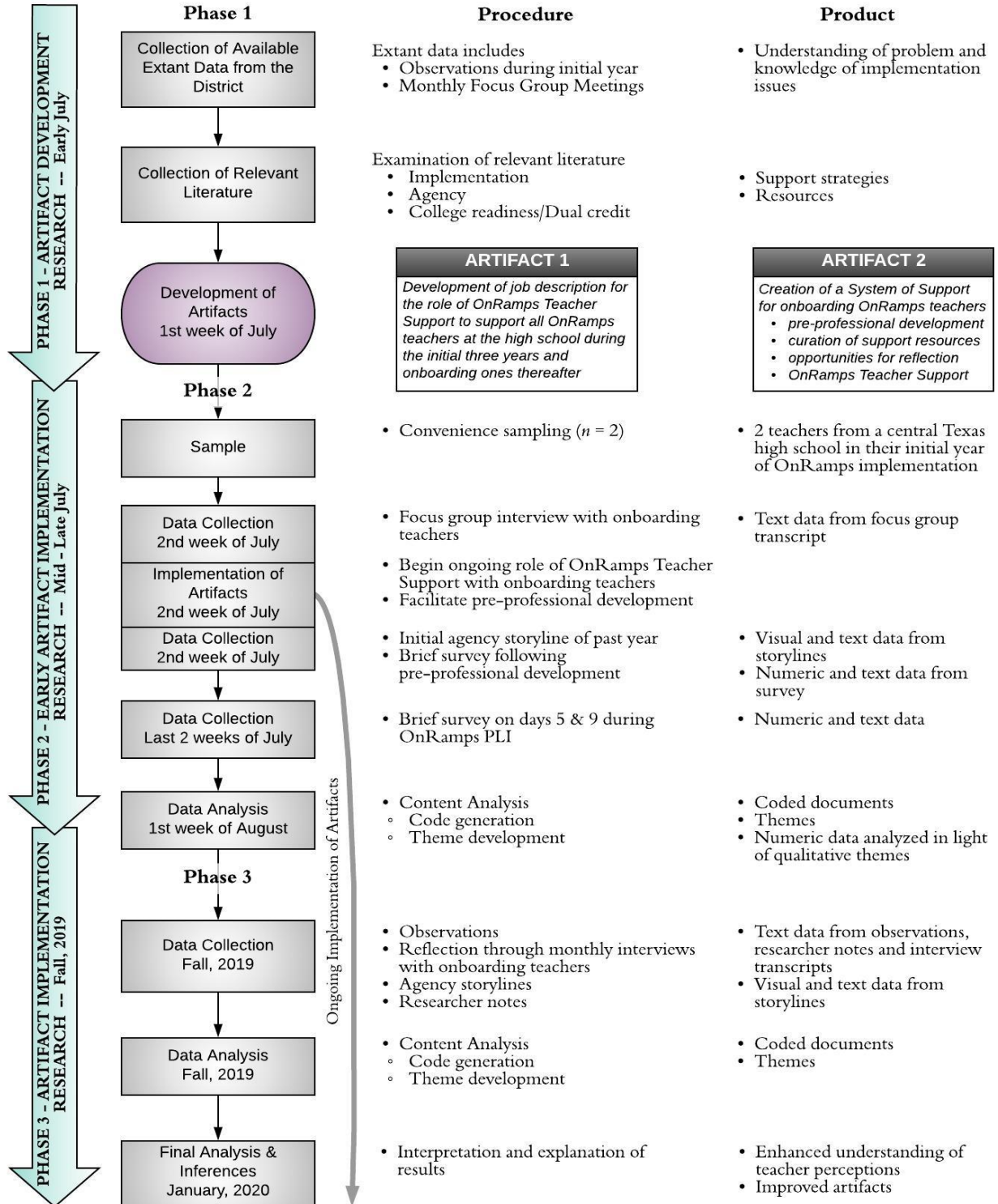
Reliability and Validity Concerns

Throughout the design and implementation of this study, I took steps to ensure the trustworthiness of the research. I acknowledge that my history with the OnRamps program, as well as the dual role I held as both researcher and supporter of OnRamps teachers, rendered the setting aside of all assumptions and preconceptions unrealistic; my experiences and personal knowledge could have influenced the findings of this study. However, having a history with the program and holding a dual role also provided relevant insight into the issues faced by teachers during implementation. Additionally, I was familiar with the expectations and culture of the district and with the development of the program in the local high school. Therefore, to elicit the collection of high-quality data (Patton, 2015), I examined methods and results from reputable studies, analyzed extant data, and considered the context of implementation. This background information shaped the choice of methods and the execution of those methods to provide meaningful insight into teachers' experiences and verifiable answers to the research questions.

To enhance validity, I worked closely with teachers to deeply understand their experiences. According to Creswell (2014), spending extended time with subjects in the research setting can increase the researcher's comprehension of the "phenomenon under study" (p. 202) and can enable more accurate communication of details, thus contributing to the credibility of the results. Data gathering for this study occurred over a six-month period that included a range of experiences for teachers: preimplementation hesitancies, startling realities of the initial weeks of implementation, mid-semester exhaustion, and end-of-semester reflective metacognition. Through the use of different qualitative methods to access and record these experiences, I was able to triangulate the data (Patton, 2015) and to systematically develop justifiable themes (Creswell, 2014), which I compared with findings in the relevant literature. Study participants

then had the opportunity to provide feedback on the accuracy of conclusions through the process of member checking (Creswell, 2014). In addition, I sought the collaboration of a colleague for the purpose of peer debriefing (Creswell, 2014). She reviewed and analyzed the two focus group interviews, asking questions and providing valuable feedback. Each of these strategies strengthened the validity of the study.

Because I was the only researcher, establishing reliability was less involved than doing so in team research or in studies where more than one person is coding the data. Nevertheless, reliability still required attention. Yin (as cited in Creswell, 2014) recommended extensive documentation of procedures and of the steps within the procedures to stabilize the research process. In following this recommendation, I created a matrix that aligned research questions with interview questions (see Appendix K) and identified a consistent format for conducting the interviews (see Appendix D). I also transcribed the interviews and checked them for errors (Creswell, 2014). During the analysis of the data, I used a systematic process of thematic coding and did not allow codes to vary in their meanings between or among documents (Creswell, 2014). These actions promoted the reliability of this study.

Closing Thoughts on Chapter III

To design an effective means of support for OnRamps teachers, I needed to consider multiple perspectives on teacher experiences during program implementation. Relevant literature, extant data, and my personal knowledge as the researcher contributed to a deep understanding of the problem and shaped the development of the system of support.

Through this qualitative action research study, I sought to assess the effectiveness of this system. To ensure trustworthiness, I designed the study to align with the evaluating stage of action research (Ivankova, 2015) and to include multiple methods of data collection with

systematic analysis of those data (Creswell, 2014). Other strategies such as member checking

and peer debriefing (Creswell, 2014) further contributed to the validity of the study. As the

researcher, I carefully constructed the study to include intentional, structured procedures to

promote accuracy in conveying the participants' experiences with implementation of OnRamps

courses, as well as their interactions with the system of support and its influence on the

achievement of agency.

CHAPTER IV

ANALYSIS AND RESULTS/FINDINGS

Introducing the Analysis

As previously stated, the purpose of this study was to investigate the experiences of onboarding teachers as they interacted with a local system of support during the implementation of an OnRamps dual-enrollment course at a central Texas high school. I designed and implemented the local system of support in July 2019. Prior to designing the system of support for 2019, I investigated the data being generated by nine teachers who taught OnRamps courses during the 2018–2019 school year. To better understand the needs of onboarding teachers in 2019, I analyzed extant data detailing the initial-year experiences of the nine local teachers. I identified five key areas of concern for new OnRamps teachers: stakeholders, instructional resources, local policies, OnRamps policies, and personal cognitive conflict. I used the key areas of concern to design the 2019 local system of support for OnRamps teachers. Through the process of action research, I sought to gather sufficient data to create a description of the role of an OnRamps consultant and to evaluate the designed system of support.

Research Findings

I began collecting the study data and implementing the local system of support with two onboarding teachers in July 2019. On July 10, 2019, the teachers attended the pre-PD at a location away from the high school campus, participating in the introductory focus group during the first 45 minutes of the pre-PD. The pre-PD occurred about a week before teachers attended the nine-day summer OnRamps PLI on the UT campus, which began on July 16, 2019. In September, October, and December 2019, I interviewed the two teachers individually in the

natural context of their respective classrooms. These semistructured interviews occurred during the teachers' available lunch times and averaged approximately 35 minutes. During November 2019, the two participating teachers engaged in the second focus group interview lasting approximately 30 minutes. With the consent of the teachers, I audio-recorded all focus group and individual interview conversations. I then transcribed them verbatim. I also took field notes during classroom and contextual observations and during informal conversations with the two teachers. I organized my notes and the transcriptions from the interviews and analyzed them in tandem, coding the transcribed data by hand. Throughout the multiple cycles of the analysis process, I used thematic analysis (Braun & Clarke, 2006) to guide identification of themes and subthemes, leading to results that allowed me to answer the two central research questions:

(1) What were participating teachers' experiences with the local system of support consisting of preprofessional development, accessible resources, and opportunities for reflection?

    a.   What were teachers' perceptions of the preprofessional development?

    b.   What were teachers' perceptions of the accessible resources?

    c.   To what extent did teachers use the resources?

    d.   What were teachers' perceptions of the opportunities for reflection?

(2) To what extent did the support system aid the participating teachers in achieving teacher agency during implementation?

In this chapter, I detail the presentation of data leading to these themes and explain the results in response to the research questions.

Presentation of Data

The analysis process resulted in two sets of themes, one for each of the central research questions. For the first question regarding teachers' experiences with the system of support, the

themes were perceived benefits (or the lack thereof) and time. The second question was more complex yet inextricably tied to the first, attempting to observe a relationship between the achievement of teacher agency and the system of support. The examination of data to answer the second question resulted in subthemes aligned under the themes of cognitive negotiations, perceptions of structures and relationships, and managing physical resources and constraints.

Throughout the gathering and analysis of data, the teachers' perspectives reflected dichotomous views on several topics. Therefore, it was important to develop a profile of each teacher in this study to enhance the understanding of their points of view. I utilized the iterational, projective, and practical-evaluative dimensions (Priestley et al., 2015) that led the two teachers to an achievement of agency in the past and prepared them to accept roles as onboarding OnRamps instructors at the time the study began. As a reminder from the literature, the iterational dimension (past) represents teacher histories and includes teachers' capacities and beliefs, the projective dimension (future) encompasses teachers' intentions and motivations that orient actions to accomplish goals, and the practical-evaluative dimension (present) consists of the elements of the context affecting the achievement of agency (Priestley et al., 2015). The primary source of information for the teacher profiles was the initial focus group in July 2019, and the data from the follow-up interviews verified the teacher characteristics presented here.

Teacher Profiles

Lauren

Iterational Dimension. Lauren (a pseudonym) is a young, female teacher who laughed frequently during the interviews, sometimes a little nervously. The nervous laughter in the initial focus group seemed to point to a sense of concern about her own capacity for teaching the two one-semester OnRamps Rhetoric courses. As an example, when I asked near the end of the

interview if she had any lingering questions about preparing for OnRamps instruction, she replied, "Can I do it? [laughs] I mean that little bit of—I believe I can, but at the same time, it's just—it's different. Brave new world." In spite of her trepidation, Lauren possesses the educational background necessary for the position, having taught English to on-level students in the research setting for five years after receiving her Bachelor of Arts in English from UT and seeking alternative certification as a teacher through UTeach Liberal Arts.

Personal and professional experiences had influenced Lauren's beliefs about her role and about instruction. Positive support from her high school teachers as they "helped [her] get through the more tumultuous areas of being an adolescent" shaped her decision to follow this career path and motivated her sense of purpose to "[ferry] [students] through high school without—with minimal trauma or damage to their whole person." Professionally, she had worked with an instructional coach to take supported risks through innovative approaches. She described one experience as "giving kids the kind of terrifying power to check their peers . . . it involved all this discussion and peer editing and revision and so on." This experience provided a beneficial foundation for OnRamps implementation because it mirrored many of the instructional expectations of the rhetoric courses.

Projective Dimension. When describing her intent and motivation as a teacher, Lauren revealed a global perspective of the educational process and a relational orientation. As she reflected on her shorter-term priorities, Lauren again mentioned educating the "whole person" and emphasized her desire to "[let] [students] know they're valued and—and worthy of [her] attention, of their classmates' attention, of—of getting a chance to do something or be a part of something that's bigger than just . . . nine to four o'clock." Considering a longer-term perspective, Lauren stated that students "seeing English as relevant would be very important,"

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but she extended her response by asserting her "main goal" as "mak[ing] sure that they're just prepared for 'outside of the classroom'—being able to be a thinker and a communicator in the real world." Throughout her responses, Lauren conveyed the value she places on encouraging connections and growth between and among herself, her students, and the content.

In addressing her motivation for teaching OnRamps, Lauren focused on the aspect of professional growth:

> The thing that I was motivated by with taking this on was the idea of getting to challenge myself professionally in a different way, and work with it, even though the goal of— knowing that the goal of OnRamps includes any kid can be college-ready if they're given the right opportunities. Just knowing that it'll be a different course at a different level, different expectations, was enticing.

After a few years of teaching the same course, Lauren was "ready for something to get [her] out of [her] comfort zone in the teaching world."

Practical-Evaluative Dimension. As an instructional coach, I observed the strong support experienced by Lauren throughout her introductory years of teaching. Two experienced teachers welcomed her onto their team, willingly mentoring her and encouraging her growth. In addition, her team and department took intentional steps to align their teaching with the district vision for implementing innovative instructional strategies and making learning relevant. To enhance the likelihood of success in their efforts, the team and department had taken advantage of district resources such as instructional coaching and technology access. These circumstances provided a context for teaching that encouraged risk-taking while minimizing the fear of potential consequences.

After discussing her past experiences and beliefs, future aspirations, and the present context during the focus group, Lauren marked her level of agency by month over the 2018–2019 school year, as demonstrated in Figure 7. She noted a couple of lows, "kids' motivation drops" in November 2018 and "getting bogged down in middle of year survival" in February 2019, as well as a few encouraging events such as "renewed past break" in January 2019, "SXSWedu" in March 2019, and "talking about new school year" in May 2019. The average of her monthly self-assessed values was 6.8 with a population standard deviation of 1.327.

Figure 7

Factors Contributing to Lauren's Achievement of Agency for the 2018–2019 School Year
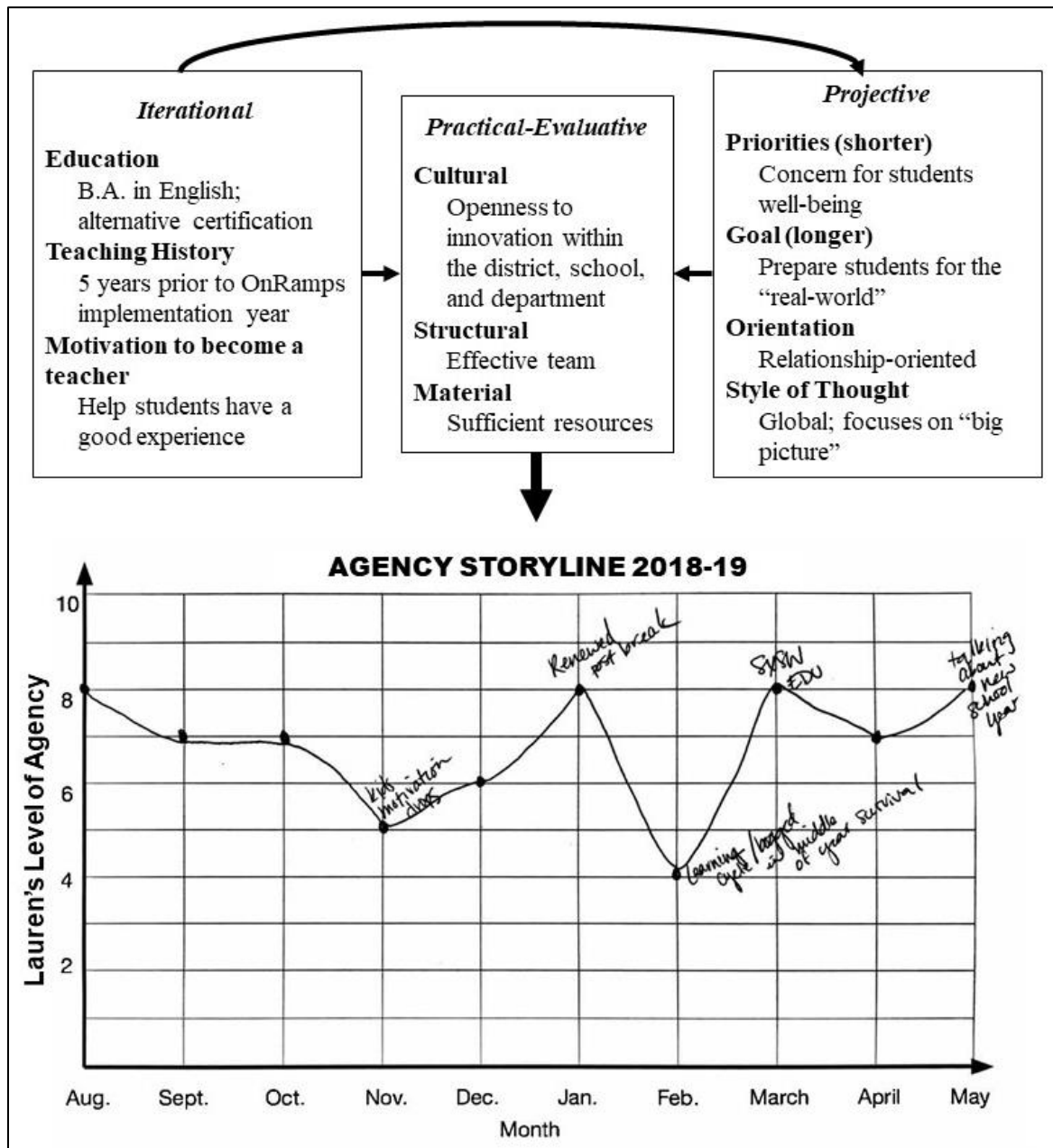
Christina

Iterational Dimension. Throughout most of the focus group interview, Christina (a pseudonym) spoke with the confidence of an experienced educator and described herself as "highly organized . . . flexible, but sticking with the routine." She possesses a strong background in both content and pedagogy, having earned a Bachelor of Science in Mathematics with a minor in Statistics and a Master of Education in Curriculum and Instruction. However, even after 20 years of teaching, Christina demonstrated a level of anxiety near the end of the interview when asked about lingering questions regarding the implementation of the OnRamps Statistics course. Unlike Lauren, the concern was not related to her capacity as a teacher; rather, she expressed apprehension about the capacity of the program and the students. For example, she asked, ". . . just how much more do we need to add to [OnRamps]—the online learning—for the students to be successful?" and "How do I ensure [the students] watched the videos? . . . I can just see some of mine clicking through and trying to get through the quizzes without maybe watching them and learning." These concerns revealed the hesitancy Christina felt as she anticipated implementing OnRamps instruction.

Similar to Lauren, Christina's beliefs about her role and about instruction at the time of the initial focus group reflected influences from her personal and professional background. In high school, she recognized that she "was really strong at [math]" and "really liked the peer tutoring and helping other students." She revealed the value of that experience when she stated, "And I had confidence in that." As a result, the "tutoring and teaching just kind of led [Christina] down the path" to becoming a teacher, and her diverse career experiences since that time—in high school, community college, technical college, and university settings—have provided opportunities to employ various instructional strategies. During the focus group, I asked about

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blended learning, in particular, because it is an approach used in OnRamps courses. Christina recounted her use of blended learning when teaching college algebra at a technical school. She described an online support program and then said, "I would do a lot of examples and things just on my own with [students], and then set them free under [the program] . . . So, definitely, I experienced blended learning and I loved it." Overall, Christina communicated a feeling of responsibility to and for her students, "trying to meet them where they're at and have them all be successful."

Projective Dimension. The accumulation of experiences throughout her career led Christina to develop what seemed to be a guiding question for her intent and motivation as a teacher: "How can I get [students] ahead in college for the things that I teach?" She consistently spoke to "getting students ready for college—their next step" and how "[her] goal for [her AP Statistics students] is college credit." Even in her precalculus course, where students cannot obtain college credit, Christina stated that she tells them, "Your job in high school is to get as much college taken care of as you can . . . Even in the precalculus classes, this—this is about your calculus AP exam." These responses, as well as others during the interview, revealed Christina's tendency to think more locally than globally and to be achievement-oriented. The responses also pointed to a strong alignment between her guiding question and her classroom actions.

When Christina explained her motivation for teaching OnRamps, she continued along the same line: "For me, it's what the kids can get out of it. It seriously boils down to the college credit for me." She also maintained her sense of responsibility for students as she emphasized, "I just wanted to do it for the kids. It's one more thing that could be offered for them." Furthermore, Christina expressed hope that during the OnRamps course, she could prepare

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OnRamps students for the AP Statistics exam "so that it just opens more opportunities for them because they don't know yet if they're going to stay in Texas or go to Harvard." This consideration of potentially two ways to receive course credit at the college level demonstrated the influence of Christina's guiding question on her motivation as a teacher.

Practical-Evaluative Dimension. Although Lauren and Christina were in the same school at the time of the study, the context proved more challenging for Christina. When she came to the high school four years before the study began, Christina had more postsecondary experience than any other mathematics teacher. Thus, there may have been little perceived need for support. However, because AP Statistics classes occupied the majority of her schedule each year—and she was the only instructor for the course—Christina was somewhat isolated from other teachers. In addition, whereas the district had been promoting innovative approaches, members of the mathematics department were reticent to try new instructional strategies, finding it difficult to release their practice of daily notes and direct instruction. It is also important to note that in the year prior to the study, three other mathematics teachers taught OnRamps courses; but, the challenges of an increased workload without compensation and an altered approach to instruction caused most teachers in the department to dismiss the idea of agreeing to teach OnRamps. In the face of these obstacles, there was little contextual support for the risk inherent in innovation.

Yet, in spite of the challenges of the context, Christina maintained a high level of agency during the year prior to the study. Whether influenced by her years of experience or the teaching of a course aligned with her values, Christina's agency storyline for the 2018–2019 school year resulted in a mean level of agency of 8.4 with a population standard deviation of 1.281 when she self-assessed her achievement of agency after the focus group interview (see Figure 8). She

began with a high—"Beginning, Fresh Start"—in September 2018 before marking the typical

teacher slump in October, November, and December 2018. Her agency level was back up in

January 2019 ("Fresh Start Again, Rejuvenated"), then down a bit for "Schedule

Predictions/Spring Break" and "Senioritis" in February and March before coming back up as she

prepared her students for the AP exam.

Figure 8

Factors Contributing to Christina's Achievement of Agency for the 2018–2019 School Year
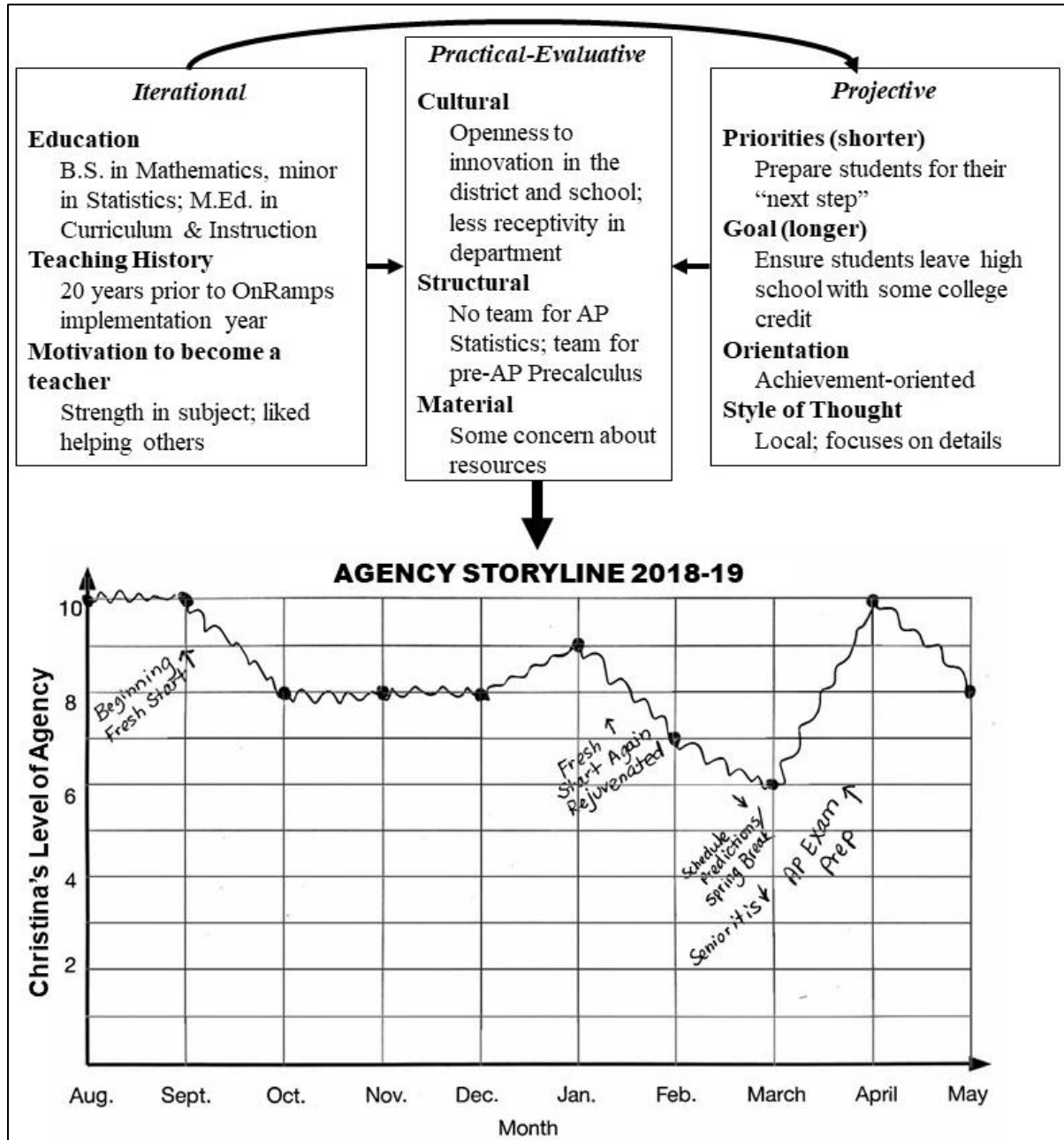

Table 1 compiles, presents, and compares the teacher profile data for both teacher participants, Lauren and Christina.

Table 1

Comparison of Teacher Profiles

Dimension	Lauren	Christina
Iterational dimension		
Education	BA in English; alternative certification	BS in Mathematics with a minor in Statistics; MEd in Curriculum and Instruction
Teaching history	Five years prior to OnRamps implementation year; all years at research setting	20 years of experience prior to implementation year; experience included high school, community college, technical college, and university settings
Motivation to teach	Relationships with students	Strength in subject; likes helping others
Projective dimension		
Priorities as a teacher	Concern for students well-being	Preparing students for college
Goal as a teacher	Preparing students for the "real world"	Ensuring students leave high school with some college credit
Orientation	Relationships	Achievement
Style of thought	Global; focuses on "big picture"	Local; focuses on details
Practical-evaluative dimension		
Contextual influences during 2018–2019	• Cultural: Openness to innovation in district, school, and department • Structural: Effective team for on-level English III • Material: Sufficient resources	• Cultural: Openness to innovation in district and school; less receptivity in the department • Structural: No team for AP Statistics, team for pre-AP Precalculus • Material: Some concern about resources
Dimensions interacting to produce a resulting level of agency for 2018–2019		
Self-assessment of teacher agency	Level of agency: Medium-high Mean of monthly ratings: 6.8 PSD: 1.327	Level of agency: High Mean of monthly ratings: 8.4 PSD: 1.281
During the study: OnRamps course(s) being taught	Two one-semester courses Rhetoric: Research & Writing Rhetoric: Rhetoric of American Identity	One-year-long course Statistics & Data Sciences: Data Analysis for Health Sciences

Notes. BA: Bachelor of Arts. BS: Bachelor of Science. MEd: Master of Education. PSD:

population standard deviation.

Research Question 1

What were participating teachers' experiences with the local system of support consisting of preprofessional development, accessible resources, and opportunities for reflection?

To further explore the teachers' experiences with the local system of support consisting of the pre-PD, curated resources, OnRamps consultant role, and opportunities for reflection, I investigated the effectiveness of each element of the system from the teachers' perspectives. Questions about participating teachers' interactions with the local system of support were incorporated as part of the monthly semistructured interviews (see Appendix D). My analysis of the interview data led to the themes provided in Table 2, which I explore in greater detail in the data presentation and findings for each of the four subquestions.

Table 2

System of Support: Identified Themes

Theme	Descriptor	Excerpt from data	
Perceived benefits (or lack thereof)	Comments related to the degree of perceived benefit or support from elements of system of support	Benefit:	"Being reminded of OnRamps initial mission of closing the gap and raising the bar encourages me that what [the research setting] and UT are doing with the OnRamps program is of great significance. It matters."
		Lack of benefit:	"I believe the courses of OnRamps are all taught using different strategies and methods, so it may be difficult to meet the needs of all of the courses."
Time	Comments related to time recommendations/ constraints regarding use of elements of system of support	"The hard thing about resources like that it's easily—it's so helpful, but it's easily forgotten because it's one more thing that you don't necessarily have the brainwaves for or the time for."	

Research Question 1a

What were teachers' perceptions of the preprofessional development?

I designed the pre-PD with the intent to provide onboarding teachers with an overarching view of OnRamps course implementation within the influencing contexts of school, community, and state and to connect to teacher beliefs. The driving question for the time was *How does the purpose and implementation of OnRamps align with my purpose as a teacher?*, and the expected outcomes for teachers included developing (1) a broader understanding of OnRamps and its purpose, (2) a greater sense of preparedness for OnRamps implementation, and (3) a foundation for the exercise of positive agency during implementation.

The pre-PD occurred the week before the nine-day OnRamps PLI. Data collection for this element of the local system of support differed in that it incorporated two brief surveys in addition to the interview questions previously mentioned. Teachers responded to the first survey immediately after the pre-PD (see Appendix L), and they replied to the second survey two times—after day five and after day nine of the OnRamps PLI (see Appendix M). To determine teachers' perceptions of the pre-PD, the results from the first survey and the two administrations of the second survey were merged, along with the textual data from interviews. The use of varied data sources collected at different times promoted triangulation of results (Patton, 2015).

Teachers' perceptions of the pre-PD seemed to vary. Responses from teachers supported perceptions of both benefit and nonbenefit. The following paragraphs comprise a representative sample of the responses from surveys and interviews reflecting the perceived benefits or lack thereof of the training.

On the side of benefits, Lauren stated in her initial survey on July 10, 2019, "Being reminded of OnRamps initial mission of closing the gap and raising the bar encourages me that

what [the research setting] and UT are doing with the OnRamps program is of great significance. It matters." In Christina's initial survey on July 10, 2019, she remarked on "expectations, an invitation to reach out if in need of support. We are not in this alone unless we choose to not ask for help." Lauren further expressed her perception of benefit derived from the training in her September 2019 interview by saying,

> It definitely was a good feeling of—like a launch into "You're about to go to this two-
> week thing that is very hard and just want—and here's all the support you have back at
> the district," and things like that.

> However, the teachers also offered comments that revealed a lack of perceived benefit,

sometimes offering ideas for improvement. On Lauren's second survey from July 22, 2019 (after five days of the summer OnRamps PLI), she included the following:

> The PLI covers so much information that is content based, which I don't know can really
> be prepared for at the district level. Instead, I feel like it would be helpful to have more
> logistical information about the OnRamps make up in the Fall/Spring. What that looks
> like at the school.

Christina mentioned a logistical improvement that could be made when she responded on her second survey on July 26, 2019 (after nine days of PLI training), "It might have benefited me to meet at the UT campus to become familiar with where I would be wandering, looking for buildings!" Regarding the applicability of the training lacking benefit, she said in her September 2019 interview,

> I don't feel like it [was beneficial], to be honest . . . and from talking to the few people
> that I have talked to a little bit in the OnRamps hall, like it feels like [the courses are] all

kinda different. So, I don't feel like one specific training would be—you know—good for all of us.

In spite of the varied responses, there were data to show both teachers recalled topics from the pre-PD and used them during implementation. In the training, I recommended that the teachers intentionally develop a relationship with a teacher from another district during the OnRamps PLI to provide additional collaborative support. Lauren formed a friendship with another rhetoric teacher in a neighboring town, and they met in the fall of 2019 to discuss grading challenges they were facing. In addition, Christina noted on her September storyline, "Need a good presentation on 'Growth Mindset'" and then mentioned the training specifically in November when she said, "And, you know, we talked about it this summer—the growth mindset idea." Teachers appeared to perceive training topics as helpful.

The time of the pre-PD was another aspect of the training teachers addressed. In a survey, Christina commented that having a local post-PD after the OnRamps PLI training might be better than the pre-PD, justifying her perspective by adding, "My questions/thoughts might be more focused with more understanding from the PLI." In contrast, Lauren said, "I feel like before is better." Regardless of their thoughts on the positioning of the local professional development with respect to the OnRamps PLI, the two teachers agreed that the combination of both trainings so closely together was demanding. For this study, the pre-PD had to occur before teachers attended the summer OnRamps PLI but after acceptance of the research proposal, so it was squeezed between the teachers' six weeks of summer learning to prepare for the PLI and their two weeks of intense training at the PLI. Although both teachers willingly attended the one-day pre-PD, Christina admitted later, "It was a lot going into the two weeks [of the PLI]," and Lauren said she felt "worn down" after attending both the pre-PD and the OnRamps PLI.

Research Question 1b

What were teachers' perceptions of the accessible resources?

For the purpose of this study, accessible resources included both the curated resources in the school district's LMS and the person acting in the local role of OnRamps consultant. The curated resources housed links to varied informative resources including, but not limited to, videos on how to use the LMS for UT, articles supporting the use of the instructional strategies of the various courses, research on the student impact of OnRamps, and local student data from the TAPR (see Appendix B). My goal was to create a set of curated resources that would be informative but not overwhelming.

In the analysis of teachers' perceptions of curated resources, the themes of benefit and time were interwoven. When questioned about the materials, both teachers perceived the information as potentially beneficial; however, contextual factors placed demands on teachers' time and influenced access to the resources. For example, learning to use the district's new student information system and a system for monitoring students' content access on Google Chromebooks took priority over exploring the resources. Also, the content was housed in the district LMS, which experienced an issue at the beginning of school, making the stored materials inaccessible for a time and inexplicably removing some OnRamps teachers from the group. As a result, teachers' perceptions of benefit were not actually grounded in experiences with the curated resources.

The purpose of the local role of OnRamps consultant was to support teachers during implementation of their OnRamps courses in the local district and to influence the setting to promote positive teacher agency. Both participating teachers testified to the advantage of having someone in a supporting role during OnRamps implementation. Christina described having

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access to a support person as "very helpful," giving her "peace of mind" and "a level of comfort." She also expressed gratitude for the role, saying, "I really do feel supported, and I do feel like I could reach out to [the consultant] on anything if I needed to, and I do appreciate that." When Lauren reflected on the support, she stated,

> It always feels like somebody's interested—not interested, but *invested* in how things are going for us. That it's not just like us buoying out here, like there's somebody at the district level who wants to make sure that it's functioning and working and providing resources.

Research Question 1c

To what extent did teachers use the resources?

As a result of the previously mentioned issues with time at the beginning of the 2019–2020 school year, teachers did not have an opportunity to explore the curated resources before school, and the demands of implementation did not allow for it after school began. However, throughout the study, Christina offered suggestions of items to add as she experienced a need— for example, a link to the steps for adding students to OnRamps courses—but she finally admitted in December 2019 that the resources would be "beneficial for next year [2020–2021]." In September 2019, Lauren wrote herself a note to look at the resources:

> The hard thing about resources like that, it's easily—it's so helpful, but it's easily forgotten because it's one more thing that you don't necessarily have the brainwaves for or the time for. Like, it would be helpful if you went and looked at it (laughs), but it's just a matter of getting there.

In December 2019, she said again that she had not had "time or brainspace" to be able to review the content. She added that the primary resource she needed throughout the semester was additional time.

The use and accessibility of the role of OnRamps consultant as a resource stands in sharp contrast to that of the curated resources. In this role, I was able to make teachers aware of local resources to aid implementation, remind them of access to resources offered by OnRamps, help with various technology needs, and arrange for classroom walk-throughs and a panel discussion to increase awareness of aspects of the program among campus and district personnel. Although the theme of *time or timing* in relation to this element did not arise during interviews, it could be implied that, by offering support in key areas, the Onramps consultant provided greater opportunity for teachers to focus their available time on addressing other aspects of implementation.

Research Question 1d

What were teachers' perceptions of the opportunities for reflection?

The opportunities for reflection occurred through two methods: (1) reflective questioning and sharing during the monthly interviews and (2) reflective documentation on the monthly agency storylines. During the interviews, teachers had the opportunity to share celebrations and challenges from the previous month, as well as to answer questions about the impact of OnRamps on teacher instruction and learning, on student learning, and on teacher beliefs. Using the agency storylines, teachers were able to record their perceived level of agency and the events or processes that caused it to rise or fall within the context of implementation.

For this element of the system of support, the participating teachers perceived the methods of reflection differently. For example, Christina found the storylines to be more beneficial than the monthly reflective conversations. She asserted,

I do think there's a lot of value in [the storylines] . . . so I would encourage you to keep encouraging us to do it . . . You can see that when I do it, I do reflect, I think, and it does help me—I don't know—to process and deal with my day-to-day. I think it's good.

In contrast, Christina suggested the verbal opportunities for reflection made her more aware of the "disconnect between . . . administrators and [teachers]." Christina struggled throughout the semester to mentally negotiate the varying policy expectations of the local high school and OnRamps, so discussions related to professional judgment and managing OnRamps courses differently than other courses felt "messy."

Different from Christina, Lauren spoke to the value of the monthly interviews for her reflection:

I would say they have helped with the long term because they are reflective and I'm being asked to stop and think about how I feel as a professional on the whole process, about how I feel about the program, about what I think of the support from the district level, and things like that. So that it not only feels like a long—an achievable long-term goal to get through a semester or a year with students and trying to experience that rigorous college experience, but I feel the support in it as well—the reminder of "Oh, there's this whole community around you of people who are at the district level in school trying to reach that same goal."

Therefore, although the teachers differed on which opportunity was more beneficial to them personally, they did agree that reflection helped them think critically during the process of implementation.

When planning for the reflection conversations, I structured the meetings to have minimal impact on teachers' schedules because available time was limited. One teacher, when running late to the November 2019 focus group meeting, explained with a smile that she thought she would "finally have a day without a meeting . . . then the computer reminded [her], 'Nope! You have a meeting.'" And at one point during the semester, both teachers had to take pictures of their storylines and send them to me because neither had had the time to complete them. In addition, the school bells defining teachers' time for lunch limited all interviews. Nevertheless, throughout the study, the teachers prioritized the time and willingly set aside spaces in their schedules for the reflection opportunities.

Research Question 2

To what extent did the support system aid the participating teachers in achieving teacher agency during implementation?

The purpose of the system of support was to provide four supporting elements with which teachers could interact at varying levels to promote the achievement of agency during OnRamps implementation. To evaluate the impact of the system of support, I needed to better understand the mutual influence between implementation of an OnRamps course and teacher agency for these two teachers.

Teacher Agency and OnRamps Implementation

I collected data to aid this understanding of mutual influence through agency storylines. From August through November, 2019, Lauren and Christina self-assessed their perceived levels

of agency and marked those levels on monthly graphs. They also offered comments to explain some of the markings. The storylines provided visual and textual data that I used in two different ways. First, I analyzed the storylines by finding the mean level of agency and the population standard deviation. These statistics provided insight into the degree of influence between teacher agency and OnRamps implementation. Second, I compared the storyline data with the interview data and researcher notes to triangulate data (Patton, 2015) about teacher experiences during implementation. I compiled representations of the agency storylines in Figure 9 and Figure 10 (for Lauren and Christina, respectively) and relevant comments in Table 3 and Table 4 (for Lauren and Christina, respectively). Copies of the actual teacher storylines are available in Appendix I and Appendix J. It is important to remember that agency, as an "ecological construct," is affected by various "cultural, structural, and material influences" (Priestley et al., 2015, p. 39) in the setting. The data in this study came from two competent, dedicated professionals. Neither the level of achieved agency nor the degree of struggle during implementation should reflect negatively on these teachers. They willingly and openly shared to help me understand their experiences and to benefit future onboarding teachers.

Figure 9

Lauren's Agency Storylines by Graph, August to November 2019

August 2019 graph (Level of Agency Marked by Lauren vs. August 2019 dates: 8/14, 15, 16, 19, 20, 21, 22, 23, 26, 27, 28, 29, 30, 9/3, 4, 5)

August 2019 statistics
Mean level of agency: 9.125
Population standard deviation: 0.217

September 2019 graph (Level of Agency Marked by Lauren vs. September 2019 dates: 3, 4, 5, 6, 9, 10, 11, 12, 13, 16, 17, 18, 19, 20, 23, 24, 25, 26, 27, 30)

September 2019 statistics
Mean level of agency: 8.575
Population standard deviation: 1.328

October 2019 graph (Level of Agency Marked by Lauren vs. October 2019 dates: 1, 2, 3, 4, 7, 8, 9, 10, 14, 15, 16, 17, 18, 21, 22, 23, 24, 25, 28, 29, 30, 31)

October 2019 statistics
Mean level of agency: 9.023
Population standard deviation: 0.862

November 2019 graph (Level of Agency Marked by Lauren vs. November 2019 dates: 1, 4, 5, 6, 7, 8, 11, 12, 13, 14, 15, 18, 19, 20, 21, 22, Thanksgiving Break)

November 2019 statistics
Mean level of agency: 9.444
Population standard deviation: 0.780

Overall statistics
Mean of means level of agency: 9.042
Mean population standard deviation: 0.797

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Table 3

Lauren's Agency Storylines by Comments, August to November 2019
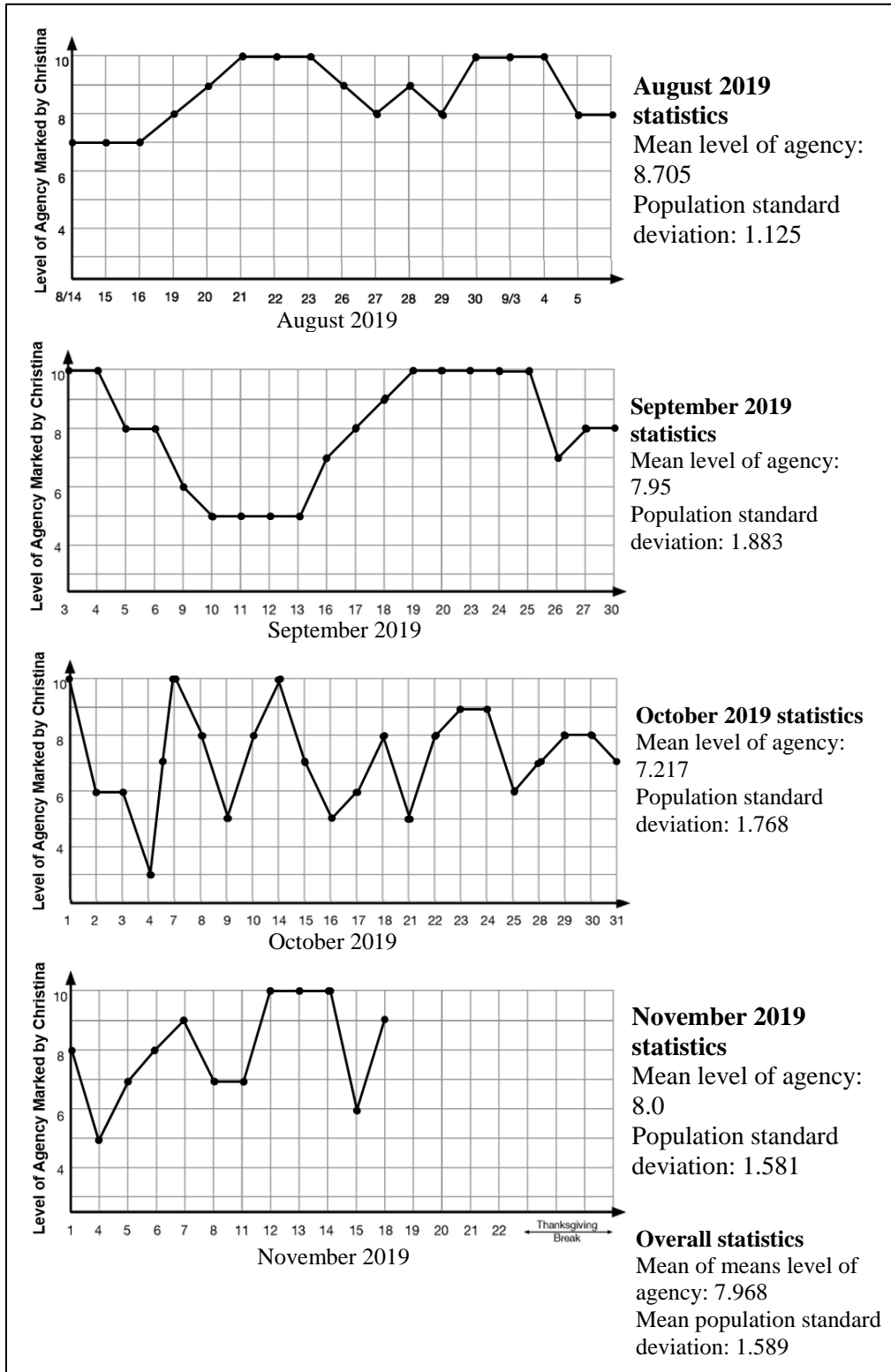
Date range	Comments
August (starting 08/14)	None
September	09/03: Time constraints (7.5) 09/05: Conferences with articles (6.5) 09/09: Attribution activity (10) 09/13: Submit research summary #2 (9) 09/23: Planning (7) 09/27: Formal research summaries (7)
October	10/01: Submitting papers (10) 10/09: "Calm" break (9.75) 10/15–22: Rushed w/paper conferences for revised paper (8) (*PSAT, out for Fall PLI, etc.) 10/24: Results of mapping a controversy, revised (8.5)
November	11/11: Time to choose activities for kids to work with various types of argument (10) 11/14–18: SibMe required upload (digital coaching submission) (8)

I averaged the monthly mean levels of agency from August to November 2019 to find Lauren's overall mean level of agency of 9.042 during the study. I also averaged the standard deviation values to determine the amount of fluctuation around that level of agency during the study. This resulted in a mean population standard deviation of 0.797. In December 2019, I placed all of Lauren's agency storylines in a line and asked her to review them. Lauren was surprised at how high she had marked herself in August 2019; but, after she had reflected for a moment, she acknowledged that the majority of the work in August was on student registration and preparing students for the expectations of the course. As a whole, Lauren believed the

storylines to be an "accurate" depiction of the level of agency she felt during implementation of

her OnRamps course.

Figure 10

Christina's Agency Storylines by Graph, August to November 2019

August 2019 statistics
Mean level of agency: 8.705
Population standard deviation: 1.125

September 2019 statistics
Mean level of agency: 7.95
Population standard deviation: 1.883

October 2019 statistics
Mean level of agency: 7.217
Population standard deviation: 1.768

November 2019 statistics
Mean level of agency: 8.0
Population standard deviation: 1.581

Overall statistics
Mean of means level of agency: 7.968
Mean population standard deviation: 1.589

Table 4

Christina's Agency Storylines by Comments, August to November 2019

Date range	Comments
August (starting 08/14)	08/14: Sick--difficult way to start school (7) 08/20: Getting better each day (9) 08/22: Getting into a groove (10) 08/28: Struggling with not enough hours in each day! (8-9) 08/30: Yay! 3-day weekend (10) 09/04: OPEN HOUSE (late night) (10) 09/05: Exhausted (8)
September	09/05: Exhausted (8) 09/06: Students need to do practice problem sets to work out kinks. (It went pretty well.) (8) 09/11–12: Very sick, no energy, but don't want to be out and get behind (5) 09/18: Feeling better each day, but still struggling with lack of time in the day (8–9) 09/24: First UT grades; A-day ran well (10) 09/25: B-day we had issues (College Fair--had to move B-day problem sets) 09/30: Disappointed in UT grades. Need a good presentation on "Growth mindset" (8)
October	10/01: Busy, but good day! Lunch meeting with researcher; OnRamps virtual conference at 4:30 pm; A-day OnRamps boys stepping up/watching videos (10) 10/02–03: Overwhelmed with no end in sight! It will get better! (6) 10/04: NO INTERNET!=NO WORK in OnRamps (3) 10/07: Pretty close to being all caught up on grading! A-day OnRamps boys sat with me and learned RStudio! (10) 10/09: Lots of complaining about problem sets (5) 10/21: Fall PLI - honestly would rather be at work with the students. So much prep time to be out with little reward. (5) 10/22: Glad to be back to school. Seems everything went well while I was absent. (8) 10/29–30: Unit 3 problem sets; They did better! Now to prep for big exams! (8) 10/31: OnRamps - "You'll never use that" comment (7)
November	11/01: Friday night grading led to a nice Sat/Sun weekend of planning (8) 11/05: Lost test copies = STRESS! Meeting with [researcher] and Lauren—I liked having it together. (7) 11/06: Students are disappointed in their OnRamps exams…said wording was confusing. (8) 11/07: [AP Stats = FUN!] OnRamps kids seem ready to give up. Need a good pep talk! (9) 11/08&11: OnRamps Stats seem disappointed with their exam grades, but don't to want to make changes. Need ideas to motivate them. Growth mindset quiz and video went ok. I always wished I was a better cheerleader. (7) 11/13: [AP Stats tests graded.] OnRamps Stats seem checked out (10) 11/15: OnRamps Stats – not working as hard as I would like. (6) 11/18: OnRamps Stats – several good questions today! (9)

As with Lauren, I averaged the values of both the monthly mean levels of agency and the population standard deviations to provide a comprehensive evaluation of Christina's level of agency from August through November 2019. The overall mean level of agency Christina achieved was slightly under 8 (7.968). However, the value of Christina's mean population standard deviation was 1.589, demonstrating greater fluctuation around her overall level of agency. When Christina reviewed all of the agency storylines in December 2019, she affirmed, "My year has been much more challenging this year, and that's visually evident." However, she went on to add,

> But, I think with change that is just gonna happen . . . I don't think it's "Let's blame OnRamps." It's just that it's a change, and I'm in it on my own . . . It doesn't surprise me, and I hope that I would be back to—not so up and down, so pushed for time, and all that stuff because I'm becoming more confident and comfortable with scheduling.

Teacher Agency, OnRamps Implementation, and the System of Support

From the storyline data, I could see the influence of implementation on agency and could infer the influence of agency on implementation. Equipped with greater knowledge of this relationship, I considered the impact of the system of support on teacher agency as teachers engaged with the system to varying degrees. I intentionally analyzed the data with the ecological perspective of teacher agency in mind. According to Priestley et al. (2015), teacher agency is not "an individual capacity-- . . . something individuals have or don't have"; rather, agency is something "achieved in concrete and specific situations" (p. 34). Past histories and future aspirations may affect the achievement of agency, but the accomplishment of achieving agency can only occur in the present context—in the practical-evaluative dimension of agency (Priestley et al., 2015). Guided by this understanding of agency, I analyzed the data inductively and

identified themes of cognitive negotiations, perceptions of structures and relationships, and managing physical resources and constraints. These themes and the underlying subthemes align with the descriptions used by Priestley et al. (2015) to distinguish the cultural, structural, and material aspects of agency in the practical-evaluative dimension:

- Cultural aspects, "ways of thinking, understanding and talking about the issues and the situation--and this concerns both 'inner' dialogue (one's own thinking) and 'outer' dialogue (one's conversations with others in the situation)" (p. 34), included teachers' cognitive negotiations as they implemented their OnRamps course in the local high school.

- Structural aspects, "social relationships (both the way in which particular relationships can support the achievement of agency and the way in which such relationships can hinder achievement)" (p. 34), encompassed teachers' perceptions of structures within the school and within the OnRamps program.

- "The material aspects of the situation (the built environment, the physical resources, etcetera)" (p. 34) incorporated managing physical resources and constraints during implementation of OnRamps in the school context.

Although there was some degree of overlap as these aspects played out in context, I attempted to distinguish between themes and subthemes for the purpose of this study. The themes and subthemes are represented in Table 5.

Table 5

Influences on Teacher Agency in the Context of Implementation: Identified Themes

Theme	Descriptor	Subtheme	Excerpt from data
Cultural aspects			
Cognitive negotiations	Comments related to making sense of beliefs and aspirations in light of the context and OnRamps course implementation	a. Role	"It's just not who I am, but I feel like it's going well." (Christina)
		b. Goal	"A lot of [students] are mentioning they don't care about the UT grade already anymore." (Christina)
		c. Trusting the process	"Just know that you're—*you're* experiencing college preparedness. And that's much more important than this number [grade]." (Lauren)
		d. Personal resources	Celebrates small things: "just having kids submit" the first assignment (Lauren)
Structural aspects			
Perceptions of structures and relationships	Comments related to teachers' perceptions of structures and relationships influencing the teachers during implementation of OnRamps course(s)	a. In the school	"There—the—like the pacing is a struggle, but figuring out how to make it fit is great because we have resources like a team." (Lauren)
		b. In and with the OnRamps program	"'You did just as well as that kid over there, but you had a tough grader'—so that takes away some of my . . . ability to help them with college stuff." (Lauren)
		c. With students	"They think in our—in our culture of our school—that if you don't have a high A that you're not being successful." (Christina)
Material aspects			
Managing physical resources and constraints	Comments related to managing the implementation of OnRamps course(s)	a. Instructional resources	"These [Chromebooks] are kinda—well, they're not the best—and our network has its glitches, and so we just have learned." (Christina)
		b. Time constraints	"Last week we met a couple of times, as well . . . and then, this week might not [meet twice] because we have our prescribed PLC day for OnRamps . . . and then English III, which is the team [another OnRamps teacher] and I are on . . . " (Lauren).

Note. PLC: professional learning community.

Throughout this section, I offer data to support and clarify the themes and subthemes. Following the examination of themes and subthemes, I provide findings about the usage of the elements of the system of support.

Cultural Aspects. As I analyzed the data with regard to cultural aspects, I began to notice evidence of teachers' cognitive negotiations as they tried to make sense of the demands of implementing an OnRamps course. *Cognitive negotiations*, then, became a theme as an influencer of agency. According to Priestley et al. (2015), teachers' past histories and future aspirations influence their perceptions of the present context, and the manner in which teachers speak about contextual demands conveys how they think and understand issues. In this study, teachers alluded to the theme of cognitive negotiations as they discussed their role as an OnRamps teacher, their conformity to the goal of OnRamps instruction, their choices and actions to trust the OnRamps implementation process, and their uses of personal resources.

As teachers of OnRamps courses, both Lauren and Christina recognized their role as that of "supporting" or "coaching" students. For Lauren, this role was not new. However, when I questioned her about similarities and differences between her OnRamps Rhetoric course and her English III courses, Lauren elaborated on a key difference: "In a regular English class, you exercise a little more compassion of 'Oh, okay. We'll slow down' . . . But when you don't set the deadline, it's—it's just different . . . You can't save them." She also described her role as that of a "middle-man between [students] and UT," stating, "but that's also the point of OnRamps—to give [students] some supports that they wouldn't necessarily have in college."

Christina's response was similar as she compared OnRamps Statistics to AP Statistics: "I'm not spoon-feeding [students] everything and . . . comparing it to the way my AP stats is facilitated—[AP Stats is] like direct-teach every day—[OnRamps is] very different." Christina

was less familiar with the role of "coaching," though, and she revealed the conflict with her identity when she said, "It's just not who I am, but it—I feel like it is going well, and it is putting the responsibility back on the kids—which I see as a positive thing."

Part of the goal of OnRamps is for students to "engage in learning experiences aligned with the expectations of leading universities" (UT, 2020b). Thus, teachers need to implement their courses with a focus on the value of the experience, not the grade or college credit. Lauren expressed belief that her students were receiving the "college-level experience," in part because of the amount of content and the need for student responsibility. She acknowledged that, if they chose to not review on their own, the result would be "a very unfortunate college-level experience of [realizing], 'I am not prepared for this.'" But, Lauren also felt the experience went beyond the classroom. She said that students "have to take ownership and agency over what [they] are able to do," and they have to learn to "fill in the gaps . . . to be able to achieve what [they] want to achieve. So that's not just a writing skill—that's also a life skill."

As Christina spoke, she recognized the value of the goal, but she also expressed the internal struggle of releasing control:

> I hope that [students are] gonna eventually take away study skills for when they go to college—that they can't just "sit and get"; they have to dig into the material themselves, whether it's through the videos or the reading or both, taking notes, whatever—they're gonna have to figure out their learning style that's gonna help them be successful . . . It's hard to let them—to sit back and let them do it, but they've obviously already made a change, so [that's been] really good.

Specifically, because Christina's guiding goal was to "help students get college credit for the things [she] teach[es]," it was difficult for her to release that goal and shift her focus to providing a college experience.

Another aspect of cognitive negotiations that influenced teacher agency was the degree to which teachers willingly trusted the process of OnRamps course implementation. University professors intentionally designed OnRamps courses and curricula to "meet college standards" and "implement innovative pedagogy" (UT, 2020b). This design ensures course alignment because the teachers "receive" the content and implement it using a specific instructional strategy, but the design also means that teachers do not have the overarching course perspective of the developer. As a result, teachers have to choose, to a certain degree, to trust the designed process of implementation and act in accordance with that choice. Although Lauren faced challenges during implementation, she approached implementation with a global perspective, looking beyond the immediate circumstances. She validated the process when she said, "There's a lot of kicking out of the nest it feels like. Not a lot of hand-holding—and experience is a great teacher." She gave the example of one student who had worked really hard but only received grades of low-C and mid-C on her first two papers. She told the student, "The grade that you're getting isn't an accurate reflection of how hard I know you're working . . . Just know that you're experiencing college preparedness. And that's much more important than this number."

As a veteran teacher, Christina found it more difficult to trust the process. On some topics, such as the lack of reteaching and retesting in her course, she reacted strongly: "That's my *values* of teaching. I'm not just gonna let it go. If you missed it, we need to relearn it. We need to revisit it." However, on other topics, she voiced the internal struggle as she tried to implement in alignment with course expectations. For example, the lilt in her voice reflected

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both assertion and questioning when she said, "I feel like, in my core, if I would have just direct-taught them all [the content] that I would have had a higher class average? But I don't know if they would have walked away with as good of an understanding?"

Throughout the process, both teachers made statements reflecting their ability to access personal resources to aid the achievement of agency during implementation. Lauren's global perspective allowed her to view problems from several perspectives in order to find solutions, which she offered frequently. In addition, she celebrated small victories with students such as "just having students submit" their first assignment in a college-level course. Christina served as a problem-solver, as well, finding "new little tricks" to make the technology work better and relying on her years of experience to persist "day by day" with the confidence that "it will be better next year."

Structural Aspects. After I analyzed the data from the perspective of structural aspects, I determined that the theme of *teachers' perceptions of structures and relationships* best represented the data. According to Priestley et al. (2015), "social structures have emergent properties such as power and trust, which provide relational resources for social actors" (p. 89). Structures and relationships influenced this study's teachers and their achievement of agency through interaction in three basic areas: in the school, in and with the OnRamps program, and with the students.

The teachers discussed their perceptions of structures and relationships in the school primarily at the administration level and at the team level. Both Lauren and Christina perceived that counselors and principals had a lack of awareness about the OnRamps program, the differences between AP and OnRamps, and the expectations for OnRamps students and teachers. They both admitted that each OnRamps course was different, so it would be hard for school

leaders to understand the details of each. Lauren suggested creating a T-chart comparing general principles of AP and OnRamps, and Christina expressed the desire for leaders to visit classrooms. As the OnRamps consultant, I accessed a chart from another district that compared AP, OnRamps, and dual-credit courses and updated it with local information. I also organized a learning walk for counselors and principals. The leaders received the chart and ideas of classroom elements to observe. The district director of learning and teaching and other secondary coaches helped by facilitating small groups as leaders visited four OnRamps classrooms. We closed with an opportunity for reflection. Following this experience, another OnRamps teacher and I prepared a template for a "one-pager" (see Appendix N) for each course, on which OnRamps instructors provided details and expectations specific to their course. These were compiled as a packet and distributed to counselors and principals at an OnRamps teacher panel discussion I moderated at our district conference.

Although Christina was not a member of a team, both she and Lauren spoke to the value of being on a team during OnRamps implementation. Lauren expressed belief that "there is a lot to having other people with you that are going through the same struggle." During each interview, she referred to her team and how they worked together to determine a common plan of instructional action that would allow them to stay "very, very much in line with one another." This was not the case for Christina, who felt a degree of isolation even within her local department. She knew she "was supposed to really rely on [her virtual OnRamps] cohort," but she also admitted the reality that she was in the local setting "every day by [her]self." On the storyline from November 2019, Christina referred to the focus group held with Lauren when she wrote, "I liked having it together!" And as Christina reviewed her storylines in the final

interview in December 2019, she suggested, "As you're looking at kinda recruiting other folks, I would say a big thing is a team. I think it would have made a difference."

In addition to structures and relationships in the school, these teachers also had to navigate structures and relationships in and with the OnRamps program. In terms of issues with structures, Lauren described "feel[ing] kind of helpless" as she worked with students to revise their work because many of them had different graders who evaluated student writing with varying levels of expectation. Similarly, Christina felt she could not effectively help her students because of limited access to problem sets, stating that she could "only see the problem sets once." As I worked with OnRamps teachers during the 2018–2019 school year, I observed the benefit of teachers developing relationships with other onboarding teachers at the summer OnRamps PLI to find ways to adapt to these and other challenges. Therefore, I recommended during the pre-PD that teachers attend the OnRamps PLI with the intent of finding someone to collaborate with throughout the first year of course implementation. Lauren related, "I met several teachers at the training that I've stayed connected to, which is good. One of 'em is at [a neighboring district] . . . and we went for a walk this weekend (laughs) and talked about what to do with grades for OnRamps." Christina, however, said, "I—I feel comfortable reaching out to— even [the mathematics leader] who's in charge of all of it. I feel comfortable reaching out to the senior teacher." Although these people may have been valuable resources, they could not offer the perspective or understanding of another onboarding teacher.

In terms of structures and relationships with students, both teachers consistently demonstrated sincere interest in students and the educational experience that students received. They also expressed concern about the culture of the local district "that if you don't have a high A that you're not being successful." During one interview, Lauren shared the experience of her

OnRamps teammates from the 2018–2019 school year: "A lotta kids who had like a B+ just did not take [the college credit] because they were worried about it affecting their 4.0 in college." As they implemented their respective OnRamps courses, each teacher was aware of structures and relationships within their classroom that influenced them as teachers. Lauren confessed that she "just [didn't] feel quite as close to these kids as [her] other classes" because "it's harder to build in the time for the little things that build trust and relationships with kids." As the OnRamps consultant, I asked if she could possibly use the two-week period after the end of the OnRamps semester and before the end of the high school semester to build the desired classroom culture, which she believed was a good option. Christina was disappointed that her students did not work more consistently throughout the units instead of trying to complete everything "the night before." She had pondered setting up checkpoints throughout the units, but she could not decide if that "took away from the college experience." In spite of their concerns about and challenges with students, both Lauren and Christina experienced resilience from their interactions with the young people in their courses. Lauren smiled as she told about watching a group of girls "digging in . . . and enjoying the course even though it's challenging," and Christina both shared and recorded on her storyline about a group of boys who "sat with [her] and learned Rstudio [online statistics]!" The impact of these and other similar experiences with students was apparent as teachers' eyes brightened and the tension faded from their voices during the retelling of these stories.

Material Aspects. Throughout the study, teachers faced management issues as they implemented the OnRamps course. Therefore, I used the theme of *managing physical resources and constraints* to represent the material aspects that influence agency (Priestley et al., 2015).

Resources and constraints during implementation of OnRamps could be separated into two primary categories: instructional resources and time constraints.

During implementation of an OnRamps course, the teachers relied on the provision of resources from both OnRamps and from the local district. It was interesting to see teachers shift their perspectives regarding the OnRamps resources between July and the months after the beginning of the school year when implementation began. At the pre-PD in July 2019, Lauren was concerned about the curriculum just "coming down from somewhere else," and after the summer PLI, she said, "If I purely followed Canvas, everyday would basically be 'Read this module and post on this discussion board.'" But by September, she confidently claimed, "The sense that I have ownership over this and I can still make it my class is very much alive." Christina also voiced hesitancy at the pre-PD in July 2019 when she talked about the lack of "direct teach" and added, "We'll see how that goes." At the summer PLI, Christina was disappointed to learn that her course would be taught using a flipped classroom. Although she never changed her perspective of the delivery of the course, by October she readily admitted, "I really like the course . . . It's exciting that [students are] giving RStudio a chance . . . Even students who've never coded before are being successful with it, so that's really neat for me to get to witness." Overall, both teachers felt the available content was sufficient to prepare students for the requirements of the course and future learning experiences if the students took advantage of the resources.

The use of local resources varied greatly for each teacher. For Lauren, the Google Chromebooks and GSuite products met the needs of her students. She and her colleagues experienced one issue when the district's internet filter would not allow student access to the UT library and the team was unable to reach the technology department, but I was able to arrange for

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her team to contact the district director of learning and teaching directly to prevent this occurrence in the future. In contrast, Christina's OnRamps Statistics course relied heavily on technology resources. The high school setting of this study had several issues with technology in the fall of 2019 that slowed the internet speed. For Christina's students who needed to download data and use an online statistics tool, this proved to be an issue, particularly on the OnRamps timed assessments. In addition, students often needed to have four screens open at a time on their device—which is a challenge on a Chromebook—and there was limited calculator access. Furthermore, Christina had to be able to monitor all student screens during OnRamps testing. As OnRamps consultant, I addressed each issue, and I also encouraged Christina to advocate for herself. I informed the district technology director of the issues with speed, but I also recommended that Christina ask a technology resource person to come into the classroom and witness the download challenges. To aid with testing, I provided information about the district's new screen-monitoring tool. I could not resolve the calculator access issue, but Christina's department chair ordered additional calculators and shared his with her until the shipment arrived. Finally, I asked her to approach the associate principal with me to ask about computer lab availability during her classes and if she could move her students to the lab. There was a room available, and Christina began teaching there in January 2020.

In education, time constraints are always an issue. For Lauren and Christina, the available time for teacher preparation and for course pacing was hindering. When considering time for teacher preparation, two courses did not appear to be an overwhelming number of preparations for Lauren, but she was taking on the extra work to prepare for only one section of OnRamps Rhetoric. Lauren and her OnRamps team met often, but she also met weekly with her English III team, and, by November 2019, she said she felt like she had been in a "time warp." The addition

of OnRamps Statistics raised Christina's total number of preparations to three, with one of those being a single section of pre-AP Precalculus. Throughout the study, Christina's responses often reflected the struggle to manage her time. For example, Christina claimed to feel "organized," but she also emphasized several times that there were "not enough hours in the day." Also, she stated that teaching OnRamps Statistics did not "require a ton of planning," but she invested time to create additional resources and retests for students.

Even at the pre-PD in July 2019, Lauren was concerned about course pacing and "trying to figure out how to fit what [OnRamps] needs to happen and your schedule with picture day and the class assembly." In October 2019, Lauren referred to her September storyline when she shared two events related to time constraints in course pacing:

[My level of agency] was a little bit lower 'cause kids submitted the research summary and there were a couple who were just really struggling, and it felt like my ability to help [students] was just kind of limited—for the same reasons. Always time constraints, basically. And then [the OnRamps team] hit a day a couple weeks ago, where all of us were having that—that moment of like, "Wait! We should have regulated reaction about how to respond to this [pacing issue]" (laughs) . . . And it turned out we really didn't need to freak out the way we did.

Christina expressed disappointment that she did not receive a scope and sequence at the summer OnRamps PLI. In September 2019, she explained,

I've had to be flexible of my planning of things because—as a first-year [teacher] in this—I don't know how long [students] need for such and such quiz or such and such lab, and so it's almost been a "wing-it" kind of day-by-day.

Reflecting her attention to detail, Christina maintained a calendar showing "in black text what we actually did on each day and in green text my suggested assignment for [students] . . . and then I'll have it saved for next year."

Summary

For this study, the analysis of the data provided information about teachers' experiences with a local system of support and the extent to which that system supported teachers in the achievement of agency during implementation. The teachers in the study, Lauren and Christina, revealed different beliefs and experiences that influenced their aspirations and their approach to implementing OnRamps courses in the context of the local high school. These differences seemed to influence each teacher's perceptions of the elements provided through the system of support, resulting in mixed results regarding the value of some of the individual elements. In addition, varying levels of interaction with the elements influenced the teachers' perceptions of the system. However, when considering the cultural, structural, and material aspects of teacher agency, there was evidence that the system of support impacted each aspect. I explore these findings more thoroughly in Chapter V.

CHAPTER V

SUMMARY AND DISCUSSION

Summary of Findings from Chapter IV

In this study, I described two high school teachers' experiences with a local system of support and their achievement of agency during implementation of OnRamps dual-enrollment courses. During the research process, I served as both the researcher and as the OnRamps consultant who supported the participating teachers. The participating teachers in the study possessed different qualifications and characteristics. They also operated in contexts that offered varying levels of cultural, structural, and material support. As a result, multiple variables influenced the teachers' experiences and achievement of agency in this study.

The system of support consisted of four elements: the pre-professional development (pre-PD), the curated resources, the OnRamps consultant, and the opportunities for reflection. Based on the findings, Lauren and Christina showed mixed perceptions of the pre-PD. Upon analysis of the data collected over time, I observed a decline in the perceived value of the training with each successive survey. Although several factors might have shaped these perceptions, two factors deserve consideration: time and teachers' styles of thought. As previously mentioned, the available time for implementing the pre-PD was short, which potentially influenced perspectives of this element. Considering that the data show the teachers to have been uncertain about what they would face in the upcoming nine-day OnRamps PLI, it is possible that their frame of mind might not have been ideal to receive some of the content and make the connections necessary to benefit from it.

The teachers' different styles of thought were evident throughout the study: Lauren demonstrated a tendency to think globally, while Christina showed a propensity for detail. The pre-PD was designed to provide an overarching view of OnRamps as a dual-enrollment program and to emphasize the OnRamps goal "to increase the number and diversity of students who are fully prepared to follow a path to college and career success" (Giani et al., 2018, p. 1). The primary goal was to help the participating teachers connect the goal of OnRamps with their identities as teachers and provide an anchor to beliefs when anxiety threatened commitment during implementation of their particular course. Based on the results from the initial survey (see Appendix L), the concepts from the pre-PD resonated with teachers to an extent at the time of the training. However, the details and demands of the OnRamps PLI, offered the following week, quickly overpowered any connection between goals and identities established during the pre-PD. By September 2019, Lauren had regained some perspective and could again find relevant connections to overarching concepts from the training. Christina made connections, as well, but with more localized topics of discussion, such as growth mindset. For Christina, who typically found relevance in details, there was not enough specific information for the experience to feel valuable. Thus, each teacher's perceived value of the pre-PD experience waned after the event, but the teachers still drew on concepts and topics covered during that time as they implemented their OnRamps courses.

In evaluating the pre-PD, ideas from the experience appear to have been helpful, even if the training as a whole did not meet teachers' perceived needs and expectations. Nevertheless, the data on teacher perceptions do not provide conclusive evidence to describe the pre-PD as either an effective or ineffective element of the system of support.

When examining the accessible resources, including the curated resources and the

OnRamps consultant, differing levels of access existed depending on the resource. Therefore, the

usage of the resources depended on the type of resource and the degree of perceived benefit with

respect to the demand on limited time. Regarding the curated resources, it seems that the teachers

perceived a potential benefit of having such a repository. Both Lauren and Christina expressed

belief in the usefulness of the stored materials—yet neither actually reviewed the content.

Therefore, a perception of value existed, but without the interaction needed to verify the finding.

The teachers each cited "lack of time" as the reason for the inability to interact. Considering the

prevalence of the issue of time throughout this study, perhaps the need for time was greater than

the need for information in light of the additional temporal requirement for teachers to

familiarize themselves with the stored materials. Usage of the curated resources was a concern

when I was designing this element of the system of support, so the findings justified this concern.

In contrast, the perceived benefit of the role of OnRamps consultant was informed by

extensive interaction with the element of support. The presence of a district-level person as a

resource brought assurance that leaders at the district level supported both the implementation of

OnRamps courses and the participating teachers' roles in that. Additionally, I was able to work

with campus leaders to aid their understanding of the OnRamps program and the expectations

placed on teachers. Finally, through the duration of this study, Lauren and Christina requested

and accepted my support as I fulfilled the role of OnRamps consultant.

Overall, teachers' perceptions of the accessible resources, including the curated resources

and the OnRamps consultant, were positive. The perceptions of the curated materials were

unsubstantiated, but the teachers' beliefs in the potential value justified a continued presence in

the system of support. In addition, teachers appreciated the backing of the role of OnRamps consultant.

For the last element, the opportunities for reflection, both teachers mentioned how reflection helped them process aspects of implementation. It was interesting, however, that beyond that, their differing viewpoints influenced the preferred method and foci of their reflection. As an instructor of rhetoric, Lauren found value in the opportunities for verbal communication. She described the reflection in the monthly interviews as helping her to evaluate the program, processes, and goals as a professional, demonstrating her global style of thought. In contrast, Christina, as a statistics teacher, felt the analytical charting of data on the agency storyline was more helpful. Christina suggested the storylines assisted her in the challenges she faced in daily implementation, a focus following a more local style of thought. In spite of their differences, both teachers perceived the reflection opportunities as supportive in the implementation process.

The teachers' combined responses to the system of support reveal the potential value of having designed elements of local support in place for OnRamps teachers. Although the teachers' experiences with individual elements varied, the findings provide the information necessary to improve each element in order to strengthen the overall system.

In this study, the teachers' self-assessed agency storylines display in a concise yet striking way the interplay between teacher agency and OnRamps implementation for each teacher. The results from the statistical analysis of the data in the storylines provide evidence of two very different experiences during the initial year of teaching an OnRamps course. On one hand is Lauren, who in July 2019 marked monthly levels of agency that resulted in a mean level of agency of 6.8 with a population standard deviation of 1.327 during the 2018–2019 school

year. This marking reveals a medium-high level of agency varying by ±19.5% from the mean. Yet, in the midst of the challenges of implementing her initial OnRamps course, Lauren's level of agency from August through November 2019 as a mean of means rose to 9.042 with a mean population standard deviation of 0.797 (±8.8%). Therefore, Lauren achieved a high level of agency and was able to maintain that level with general consistency throughout the study. In fact, Lauren's level of agency was higher than the previous year when she was not teaching an OnRamps course.

On the other hand, Christina marked her monthly levels of agency for the 2018–2019 school year with values resulting in a mean of 8.4 with a population standard deviation of 1.281—a high level of agency varying ±15.25% from the mean. But Christina's storylines show great and frequent vacillation during the time of the study, visually depicting the cognitive struggles she experienced through the implementation process. The mean of means for Christina's level of agency from August to November 2019 was just under 8 (7.968), which is sufficiently close to state that she achieved a high level of agency during the study, although it was lower than her level the previous year. Also, with a mean population standard deviation of 1.589 (±19.9%), Christina's agency fluctuated. However, the numerical data from the storylines as presented here are devoid of the present context of implementation—the place where the achievement of agency occurs (Priestley et al., 2015).

Upon consideration of the resulting levels of teachers' agency, I found the differences in context played an important role, as aspects of the iterative, projective, and practical-evaluative dimensions interacted to influence each teacher during implementation of an OnRamps course. Although teaching in the same high school, Lauren and Christina had different experiences within the narrower contexts of their classrooms and departments. Because Lauren had practiced

similar instruction in previous years, she faced fewer challenges to her beliefs about instruction. Lauren also encountered minimal material constraints because her course required few resources. The factor appearing to contribute most significantly to Lauren's agency was the strength of her team. Their collaborative efforts and support of each other did not reduce the expectations of implementation of an OnRamps course, but it did mitigate the impact of those demands.

Different from Lauren, Christina used unfamiliar instructional strategies that produced cognitive conflict as she implemented the OnRamps statistics course using a flipped-classroom approach. The lack of direct instruction and the absence of structured reteach, relearn, and retest in the course significantly challenged her beliefs about instruction. In addition, Christina began the year with several material challenges. Although her students' interest in and success with RStudio was encouraging to Christina, technology issues including internet speed and screen size of available devices hindered students' ability to access and interact with required content in a timely manner. Finally, Christina did not have the support of a team for the OnRamps Statistics course. In fact, she felt like some members of the department considered her a "traitor" (Christina, personal communication, December 5, 2019) for agreeing to give her time to teach the OnRamps course without receiving additional compensation from the district. In addition, she perceived a lack of campus administrative support for her course.

Establishing these findings regarding teachers' agency during implementation was important before examining the extent to which the system of support aided the participating teachers in achieving agency. The system of support contributed to cultural, structural, and material aspects of teacher agency, but the impact of that contribution varied according to the engagement of the individual teacher with the system of support. In terms of the cultural aspect, Lauren's discourse reflected interaction with the system of support. During the pre-PD and each

time of reflection, I defined and used the terms *intention, motivation, action,* and *reflection* to help teachers anchor to the purpose and vision of OnRamps while reacting intentionally to the challenges of course implementation. As the study progressed, *regulated reaction* and *agency* became a part of Lauren's vocabulary. She also demonstrated an understanding of *intention* and *motivation* as she consistently pointed students toward recognizing the value of the college experience over the course grade. When looking at structures and relationships, Lauren developed relationships with other first-year OnRamps Rhetoric teachers from outside the district at the summer PLI in July 2019. Grounded in the experiences recorded in the extant data from the 2018–2019 OnRamps teachers, this was a point of emphasis in the local pre-PD Lauren attended before the summer PLI. Although the argument could be made that as a relationship-oriented individual, Lauren might have forged relationships without encouragement, the context of our conversation and her intentional application of other concepts supported the inclusion of this data as evidence of interaction. Looking more closely at our conversations as I acted in the role of OnRamps consultant, Lauren seemed to enjoy the established times of reflection and the opportunity to think critically about past reactions and future improvements to course implementation. Finally, Lauren needed little personal support with material resources. However, I was able to perform a few time-saving acts such as procuring, updating, and demonstrating a device to record the required video of instruction for virtual coaching and establishing a plan for student accessibility to blocked research sites. Although other factors also played a role, Lauren's engagement with the system of support within each aspect of the practical-evaluative dimension of agency—cultural, structural, and material—provided credible evidence that the system of support was effective in promoting the achievement of agency during her implementation of an OnRamps course.

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The system of support did not have the same level of impact on Christina's achievement of agency as it did on that of Lauren. From the cultural aspect, Christina's use of language did not incorporate the terms nor the meanings of the terms that were designed to help teachers maintain focus during the challenges of OnRamps implementation. In particular, Christina maintained her achievement-oriented goal of helping students get college credit rather than adopting the OnRamps goal of having a college experience. Furthermore, she seemed to vacillate on the idea of releasing control for students to accept responsibility for their learning, a concept we discussed in the pre-PD in July 2019. At times, Christina spoke to the value of the concept, while at other times, her language revealed a lack of awareness of what it means in practice. An example of this would be statements such as "I need you to study more" as opposed to "You need to study more." When considering structures and relationships, the system of support played a minimal role in supporting Christina's level of agency. Christina did not establish a relationship with another first-year OnRamps Statistics teacher during the summer OnRamps PLI in July 2019, as suggested in the pre-PD the prior week. Although this may have been caused in part by Christina's reserved nature, it still reflects a hesitancy to engage with others and with the elements of the system. In contrast, Christina was open and seemed to enjoy sharing during our scheduled times for reflection, yet these times did not result in apparent shifts that could have elevated Christina's level of agency. Lastly, Christina received extensive support in the area of material resources. In addition to the support provided for all OnRamps teachers as I worked to raise awareness of the program at the campus and district levels, I worked with Christina to implement new technology tools she needed for monitoring OnRamps tests and with campus-level administrators to move Christina's classes to computer labs for access to larger screens. Nevertheless, there were resource issues that I could not improve or eliminate. Overall,

Christina's engagement with the system of support was impacted by her involvement with the numerous contextual challenges she confronted during OnRamps implementation and by her adherence to established beliefs and goals. Given the influence of these factors, it would have been difficult for the local system of support or, more specifically, a district leader in the local role of OnRamps consultant to offset the daily, campus-level influences on the positive achievement of teacher agency during implementation.

To summarize, this study examined the impact of a local system of support on the achievement of teacher agency during the initial year of implementing an OnRamps dual-enrollment course. As the participating teachers provided complex but interesting data, they demonstrated varying perceptions more often than aligned ones and provided insight into multiple variables that influenced the results. Three findings offer insight into this phenomenon. First, the varying perceptions may have been, in part, a result of the teachers instructing different subjects and having different levels of experience, but they also seem to have been a reflection of the contrasts in the teachers' orientations and styles of thought. Second, the presence or absence of the collective support provided by a team influenced teachers' perceptions of the context and contributed to varying reactions to the demands of OnRamps implementation. Finally, the perceived effectiveness of the system of support by an individual depended on the level of personal engagement with that system.

Discussion of Results in Relation to the Extant Literature or Theories

This study on the interaction between teacher agency and a system of support provides findings that demonstrate influencing factors of teacher differences, the presence or absence of collective support from a team, and the role of engagement with the system of support. In considering the results of the study in light of the literature, it is important to remember the role

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of context in teacher agency—to "not just . . . look at individuals and what they are able or not able to do but also at the cultures, structures and relationships that shape the particular 'ecologies' within which teachers work" (Priestley et al., 2015, p. 3). It is also significant that the literature recorded a similar finding almost 40 years earlier with relation to implementation: "An innovation's local institutional setting has the major influence on its prospects for effective implementation" (Berman & McLaughlin, 1976, p. 361). Therefore, the following information should be considered with an awareness that the teachers in this study, though working in the same high school, perceived different contexts of implementation within their departments, which could have influenced their level of achieved agency.

The teachers in this study often had differing perceptions of the system of support, different reactions to course implementation, and varying levels of agency. Teachers' beliefs and aspirations may have been the sources of some of these differences. When looking at implementation, the degree of congruence between the values and goals of the project and those of the participants influences implementation (Berman & McLaughlin, 1976; März & Kelchtermans, 2013). Correspondingly, an innovation's congruence with teachers' identities influences their level of agency during implementation (Oolbekkink-Marchand et al., 2017; Tao & Gao, 2017). During implementation of their OnRamps courses, Lauren expressed greater congruence with the instructional methods and expectations of the rhetoric course than Christina did in relation to the statistics course. In addition, the findings in this study reflect the influence of teachers' orientations, whether relational or achievement, and styles of thought, whether global or local. In my original review of the literature, I did not knowingly locate any studies on teacher agency that discussed this topic. However, in reviewing the literature I had gathered, I found Biesta et al. (2015) to have implicitly addressed this topic in their discussion on the

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projective dimension of teacher agency, on "questions of purpose and value. Teachers are driven by goals in their work, but such goals often seem to be short-term in nature, focusing on process rather than longer-term significance and impact" (p. 636). This statement alludes to why Lauren's relational orientation and global style of thought as personal characteristics may have allowed her to set longer-term goals and likely aided her achievement of agency. The statement also gives insight into Christina's struggle to maintain a somewhat consistent level of agency as her goals were shorter-term, shaped by her achievement orientation, and focused on the details of implementation. In this way, the research justifies the findings related to the differing contributions of teachers and their resulting levels of agency.

Another relevant differential finding in this study is the presence or absence of collective support by a team. According to Berman and McLaughlin (1976), the frequent meetings of teams "provided a forum for reassessing project goals and activities, monitoring project achievements and problems, and modifying practices in light of institutional and project demand" (p. 360). In contrast, the authors spoke to the feelings of isolation and lack of appreciation felt by teachers who were alone in their implementation. These sentiments were echoed in slightly different words during the interviews with Lauren and Christina; Lauren spoke to the influence of her team, and Christina shared the challenges of solo implementation. The research on teacher agency has shown similar findings. Robinson (2012) found that "professional agency appears to be constructed through the collective actions of the teachers" (p. 244). Other studies have shown that support by a team has "considerable personal impact" (Priestley et al., 2015, p. 90) and promotes "collective emotional resilience" (Wilcox & Lawson, 2018, p. 189). These studies verify the finding that the lack of a team hindered Christina's agency, while the presence of a collaborative team enhanced the agency achieved by Lauren.

The third primary finding for this study involves the impact of engagement on the perceived value of the system of support and the resulting influence on teacher agency. Throughout the work by Priestley et al. (2015), the authors mentioned the significance of engagement. For example, vocabulary usage demonstrates teachers' engagement with their practices and contributes to teachers' achievement of agency. Also, a focus on the process of implementation at the expense of engagement with the purpose of the program may negatively impact the quality of education that results. Additionally, Priestley et al. (2015) found that teachers' beliefs "provide a focus for engaging with the present" (p. 59), that "engagement with the practice of teaching" (p. 60) contributes to teachers' professional knowledge, and that agency can be limited by engagement in "the genuine day-to-day difficulties involved in reconciling the old with the new" (p. 120). The topics described by Priestley et al. (2015) show the need for teachers to actively engage in many aspects of education, and, in fact, the topics align with some of the opportunities for engagement with the program and the system of support in this study. Drawing from Biesta and Tedder (2007), "agency should . . . be understood as something that has to be achieved in and through engagement with particular temporal-relational contexts-for-action" (p. 136). The system of support was designed to positively influence the present context in a manner that would support implementation and the achievement of agency. However, the literature and the results of the study demonstrate the significance of engagement with the system of support as it influences elements of time, relationships, and contexts for it to affect the promotion of agency.

The extant literature contributed to many aspects of this study. The literature provided a framework for the design of the study, an unusual tool for gathering data (i.e., agency storylines), and a guide for analysis of the data. Studies provided knowledge of the factors influencing

implementation and aspects of contextual aspects of teacher agency that informed the design of the system of support. And, in the end, the literature confirmed the findings, enhancing the validity of this action research study.

Discussion of Personal Lessons Learned

Although the list of personal lessons I learned through the research process could be quite extensive, I focus on two lessons, in particular: the influence of action research and the examination of my own achievement of agency. Through the process of action research, the participating teachers experienced supportive efforts that were intentional and informed because I learned to use the extant literature to meet research-verified needs occurring during implementation. I have been able to support these teachers in ways I would not have considered otherwise. Stronger relationships developed because I learned to listen carefully and to write down insightful thoughts that might be fleeting, as well as mundane observances that could contribute to insight. As I followed up with teachers later, the looks on their faces showed their appreciation of my continued interest in and remembrance of their comments and concerns. Also, the process of action research allowed me to deeply understand teachers' experiences with implementation of OnRamps courses. With that understanding, I was able to construct opportunities for OnRamps teachers and students to share their experiences and to increase recognition of the program. Although these are only a few examples of the influence of this action research project, they are sufficient to show the benefit of the study in this context.

As I examined the research for this study, I also became aware of the importance of teachers' identities and contexts as influencing aspects on agency. This led me to consider my own achievement of agency through this process. How was my identity influencing my perspectives? Did my beliefs hinder or promote my research efforts? What were my aspirations

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and was I looking forward far enough to help me move beyond the present challenges? Often, I could have used the teachers' words of "it's just hard" or "there's not enough hours in the day," but there were also the moments of "I need to have regulated reaction" and the conscious acknowledgment that "[I have to] fill in the gaps . . . to be able to achieve what [I] want to achieve." Intentionally considering my own context with cultural, structural, and material aspects helped me realize how to make changes to those aspects and promote my own achievement of agency through this process.

Implications for Practice

The data and resulting analysis of the system of support in this study offered valuable information to inform the next iteration of the system of support, including a description of the role of the local OnRamps consultant. Implications for practice include targeted changes to the pre-PD, the curated resources, the role of OnRamps consultant, and the times for reflection that reflect more intentional thought about adaptations for teachers' orientations and thinking styles. Because time was an important factor impacting each element of the system of support, I also kept that consideration constantly in mind as I determined the necessary changes.

The local pre-PD requires more revision than the other elements. The first change to the local pre-PD will be to alter the time that it is provided. The high school setting for this study has three in-service days at the end of the school year in May. By using one day of this time, I can ensure that teachers do not have to volunteer an additional day in the summer over and above the required nine days for the OnRamps PLI. Using this time also allows me to ensure teachers' awareness of the expected summer work as preparation for the OnRamps PLI and to help them chart a schedule for timely accomplishment of that work that may reduce the stress of preparation. The second change will be to include more detail about the summer OnRamps PLI. I

am not privy to the planning done for each different course, so it is not practical to meet on the campus and locate the several classrooms where each teacher will be meeting, which was suggested. However, I can provide a campus map and suggest nearby restaurants for lunch. Also, I can share one-page documents detailing the different innovative approaches to instruction used in each OnRamps course currently offered at the local school. I worked with current OnRamps teachers to prepare these during the 2019–2020 school year for campus leaders, but the documents will also be helpful for onboarding teachers to review. Finally, I need to more clearly frame the purpose of the pre-PD. My goal during the summer of 2019 was to connect the purpose of OnRamps to teachers' beliefs and to help them feel confident about going to the OnRamps PLI. Teachers' surveys at the end of the 2019 pre-PD reflected the accomplishment of this goal, but without sufficient details to ground them, the emotional connection waned. In addition, the recognition of the subtle difference between the OnRamps goal of a college experience and a teacher's goal of college credit has led me to think more about prompting teachers to think critically about their professional beliefs and goals for students, the alignment or misalignment of those to the OnRamps goal, and the mental shifts that may need to occur to mitigate some of the potential tension from misalignment. There are elements I will continue to include in the pre-PD, as well, such as the data showing the impact of the OnRamps dual-enrollment program on college readiness and the available supports from OnRamps and the local district to support course implementation. Additionally, I will continue to emphasize teacher agency and the intention, motivation, action, and reflection as defined for OnRamps implementation that have the potential to anchor a teacher to the goal of OnRamps in the midst of the challenges of course implementation.

To enhance the use of the curated resources, I will provide time during the pre-PD for teachers to explore the content and gain familiarity with the organization. This will also allow me to receive feedback from teachers about other content they would like to have included in the repository. Throughout the year, I will revise and update as needed, keeping the content concise and relevant.

As district leaders have become more familiar with the OnRamps program and the expectations of OnRamps teachers, they desire to maintain the role of OnRamps teacher support as a part of the assigned job of one learning and teaching coach (LTC). Therefore, I kept notes throughout this year of work I did, activities I led, issues that arose, and questions I asked. I used this information to write a role description to be included in the job description of an LTC. Defining this role will provide clear expectations for the person in the role of OnRamps consultant and ensure continued support of OnRamps teachers as the program grows in the local district.

Finally, I will make one major change to the opportunities for reflection. In the future, I will conduct all monthly meetings as focus groups. These focus groups will usually consist of only onboarding teachers, but the groups will include both onboarding and experienced OnRamps teachers two to three times each semester. This will strengthen the bond between the teachers and promote the forming of an OnRamps team. In this way, all members have a means of potential contextual support even if they are implementing a course without a team. The opportunities will continue to be semistructured meetings with research-informed, reflective questions that promote productive conversations. Lastly, I want to continue to emphasize the use of intention, motivation, action, and reflection as terms adapted to promote teacher agency during implementation of OnRamps courses.

In all elements of the system of support, I need to maintain awareness of the beliefs and aspirations of teachers, as well as the cultural, structural, and material aspects of the present context (Priestley et al., 2015) of implementation. These implications for practice are not limited to the arena of OnRamps implementation, however. As an instructional coach, this study has made me more cognizant of the obligation to really listen to teachers, to discern what is important to them, and to effectively meet their needs while also giving them room to cognitively negotiate their space in their efforts to implement more innovative instruction.

Connection to the Context

The term ecological model of agency (Priestley et al., 2015), by its intentional inclusion of ecologies, emphasizes the importance of context. Priestley et al. (2015) explicitly pointed to the role of context in the achievement of agency in the premise that "agency is always enacted in a concrete situation; it is both constrained and supported by discursive, material, and relational resources available to actors" (p. 30). Therefore, as I have detailed throughout this section, the research setting had an impact on the results of this study on teacher agency. However, as I pursued the study, there were impacts on the local setting, as well. For example, through the research process, opportunities arose to convey course benefits and teacher experiences to campus and district leadership. As the OnRamps consultant, I maintained constant contact with the director of secondary teaching and learning and conveyed to him many of the challenges teachers faced. In this way, he could advocate for the teachers to an extent with campus leaders and the assistant superintendent of teaching and learning.-As a whole, OnRamps teachers felt that campus leaders were unclear in their understanding of the purpose of OnRamps courses and the differences between OnRamps and other advanced academic courses. To increase awareness of these aspects among principals and counselors, I was able to arrange a learning walk for

counselors and administrators during which they visited several OnRamps classrooms and spoke to students and teachers. I also arranged for and moderated a panel discussion at our district learning conference during which OnRamps teachers shared their experiences and those of their students with counselors, principals, and teachers. In this way, the research served as the impetus, raising awareness of the need for and supplying the information that justified providing these experiences.

Connection to the Field of Study

Dual-credit and dual-enrollment courses are playing increasingly prevalent roles in the college readiness of high school students (Miller et al., 2017, 2018). As stated previously, in my review of the literature, I was unable to locate studies examining the experiences of high school teachers as instructors of dual-credit courses. In particular, because OnRamps is a new and growing program, I could not find any literature on its impact on teachers as a transformative dual-enrollment program. OnRamps does invest in the high school teachers who implement the dual-enrollment courses. The program provides the PLIs, virtual coaching, and monthly virtual small group meetings. However, district and campus leaders may be unaware of the additional expectations and challenges OnRamps teachers face. In addition, without a proper understanding of the purpose of OnRamps, counselors and administrators may be hindered in their ability to discuss the courses with students and parents. Therefore, the results of this study could be used to inform district and school leaders about the challenges of implementation and to encourage local support of OnRamps teachers.

<div align="center">

Lessons Learned

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The OnRamps program was designed to offer many benefits to teachers as they facilitate the instruction of college-level content through innovative instructional methods. However,

teachers also face challenges during the implementation of OnRamps courses. After supporting the pioneering OnRamps teachers in the local high school during the 2018–2019 school year, I learned that these teachers struggled with factors including district stakeholders, cognitive conflict, instructional resources, and the policies of both UT and the local district. These factors influenced the local development of the program and hindered the teachers' achievement of agency during implementation.

To aid onboarding OnRamps teachers, I reviewed studies on the factors affecting program implementation and support that could mediate those factors. I also examined research on teacher agency and factors that could hinder or enhance its achievement. Using what I learned from the immersion in the literature, I developed the artifacts in this study as a foundation for providing strategic support for implementation of OnRamps courses and the achievement of positive teacher agency. Through the creation and implementation of the artifacts during the research process, I learned about needed improvements. In fact, as I read and reread the data from interviews with the participating teachers in this study, it appeared that they wanted to do more than simply tell their stories; they wanted to help future OnRamps teachers in the local context. Thus, I studied the findings with the intent to identify ways to better support onboarding teachers going forward and, in the process, to strengthen the efforts of district and campus educational leaders to establish a successful OnRamps program.

Since the district initiated the OnRamps program in the local high school in 2018, I have supported and advocated for the OnRamps teachers. Durlak and DuPre (2008) emphasized the importance of having a person in this role who can "rally and maintain support for the innovation and negotiate solutions to problems that develop" (p. 337). District officials had expected me to meet with teachers for monthly reflections, observe their classes to better understand the

instructional strategies, create annual records of the program in the local setting, and speak to teachers' experiences during implementation. Through the research process, I also became aware of the need to raise awareness of the program and its expectations with high school principals and counselors, which became a focus in the late fall of 2019. As I kept a record of the duties and actions I performed, I developed a role description for a local OnRamps consultant (see Appendix A). Acting in this role, I have worked with teachers to collaboratively problem-solve and identify the most beneficial solutions during implementation, recognizing that perfect solutions may not be realistic. I have been able to provide OnRamps teachers a voice outside the classroom. Also, I have recognized their investment in their students and their contribution to the local high school. Through the research process, I have learned the importance of this role during the foundational years of the OnRamps program in this setting. The development of a formal description of the role as a part of the job of an LTC ensures that a person will continue in this role. The assistant superintendent for learning and teaching in the local setting has approved the role description.

During my supporting efforts with pioneering OnRamps teachers during the 2018–2019 school year, I realized that some aspects of implementation could be better aided by incorporating additional elements to form a system of support (see Appendix B). After studying the 23 factors Durlak and DuPre (2008) identified as influencers of implementation, I determined that I could intentionally address 14 of the factors in a system of support consisting of the pre-PD, curated resources, the local OnRamps consultant, and opportunities for reflection. Five additional factors could potentially be improved, and four of the factors were outside my control. Several of these factors, such as the organizational norms regarding change, the integration of new programming, and the shared vision, impacted the context of implementation and, thus, had

the potential to enhance teacher agency, as well. Although time influenced the implementation of the pre-PD and the use of the curated resources in the current study, that factor will be addressed moving forward. Without that factor in play, these elements have the potential to be effective supports for onboarding teachers.

During the 2018–2019 school year, I witnessed the cognitive conflict of OnRamps teachers as they wrestled with allowing the productive struggle of their students before fully understanding and accepting the OnRamps intent of providing a college experience. Once I discerned the lack of connection to the purpose of OnRamps, I better understood a part of their struggle during course implementation. I knew I could develop a pre-PD to help teachers better understand the "perceived need for" and "perceived benefit of" (Durlak & DuPre, 2008, p. 337) OnRamps implementation, possibly influencing the projective dimension of agency (Priestley et al., 2015). In the pre-PD, I wove together teachers' beliefs, Fullan's (2011) "moral imperative" to "raise the bar and close the gap" (p. 19) for all students, and the OnRamps goal of increasing "the number and diversity of students who are fully prepared to follow a path to college and career success" (Giani et al., 2018, p. 1), while supporting the need for OnRamps with state and local college-readiness statistics. The integration of beliefs and data supporting those beliefs offered an opportunity for teachers to find purpose in their endeavor. The pre-PD also included information on contexts influencing implementation (Durlak & DuPre, 2008; Fullan, 2003) and the contextual support available through the local district and OnRamps (Durlak & DuPre, 2008). It concluded with an exploration of the core properties of agency (Bandura, 2006) and strategies for maintaining agency during OnRamps implementation. I learned through this study, however, that the emotional connection established during the pre-PD was insufficient to meet teachers' needs as they prepared for the summer PLI. Teachers needed some concrete, relevant

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details to make it more effective. By offering the pre-PD at the end of school in May and restructuring it to include time for teachers to explore the curated resources and to plan their summer preparatory work, I will be able to create a learning opportunity with greater benefits for onboarding teachers in the future.

Although I felt like the content in the pre-PD could benefit teachers as they prepared for OnRamps implementation, I also learned that a single professional development opportunity was not effective in producing teacher change (Guskey, 2002). For the second element of the system of support, I wanted to create a collection of curated resources in the district LMS, Schoology, where teachers could return during the year and access content from the pre-PD, such as the presentation and the statistics. I also wanted this LMS to house links to additional support. The extant data from the 2018–2019 OnRamps teachers contained comments about difficulties in learning to manage Canvas, the LMS used by UT for OnRamps courses. In support of this idea, Christina mentioned in the September session that there was insufficient time devoted to learning the navigation of Canvas during the summer 2019 PLI. To reduce the impact of such difficulties, I linked several instructional videos with steps to accomplish necessary tasks. In addition, I knew several teachers had received emails from parents who expressed concern about the level of difficulty of the courses and the facilitative role of the teacher, as opposed to a more directive role. I identified brief articles about the different instructional strategies, such as flipped-classroom, peer-tutoring, and inquiry-based learning, and linked them in the district LMS, along with a policy brief detailing the impact of OnRamps on students' college success. Teachers could draw from these resources in their responses to parents using external justification to support their instruction.

Collectively, the contents of the curated resources were well-organized and concise. There were problems with the district LMS at the beginning of the 2019–2020 school year, hindering teachers' access until the second or third week of school, which led to their lack of use in this study. Nevertheless, by including exploration time during the pre-PD, the resources can be used to support teachers during implementation and as a way of enhancing their communication with parents and other stakeholders as the OnRamps program continues to grow.

Although I alluded to the opportunities for reflection in the brief description of my duties in supporting OnRamps teachers earlier, these focus group conversations during monthly lunches afforded teachers a designated time to pause and process their experiences. During the 2018–2019 implementation, the district director of secondary learning and teaching attended a few of the focus group meetings. He felt the reflective questions were instrumental in prompting teachers to think critically and negotiate the cognitive challenges they continuously faced in their new roles. In the discussions with the participating teachers during the fall of 2019, I thought I could enhance teacher agency by adding a monthly emphasis and structuring the questions to address agency through aspects of OnRamps implementation. However, I also chose to interview the teachers separately during September, October, and December 2019. My goal was to allow each teacher adequate time to share because our conversations were limited by lunch bells. I inferred from the data in this study that Christina, who was implementing without a team, likely needed to share her experiences with Lauren. By having these two teachers meet together, I could have increased the likelihood of a level of collective agency (Wilcox & Lawson, 2018) that had the possibility of improving Christina's implementation experience. I will correct this misjudgment in the future.

The benefit of the opportunities for reflection was not limited to the teachers. The discussions also contributed to my understanding of the successes and challenges of OnRamps implementation. This understanding, then, informed my actions as the local OnRamps consultant. Through the discussions, I learned of local grading policies causing unnecessary hardships on OnRamps teachers. I was able to address those issues with the principal and to change the policies for the OnRamps courses. I also learned of the need for campus leaders to have a greater awareness of the program and its expectations, which I also addressed. In this way, the opportunities for reflection were and will continue to be mutually beneficial to both teachers and the OnRamps consultant.

I have elaborated previously on another element of the system of support, the local OnRamps consultant. However, in addition to actively supporting and advocating for OnRamps teachers, the person in this role should also maintain or execute each element in the system of support. Although the OnRamps program offers varied supports for teachers that include professional learning opportunities, digital coaching, and monthly virtual meetings with other teachers, the value of a local person in the district who will "champion" (Durlak & DuPre, 2008, p. 337) the program should not be overlooked.

During this study, the system of support with the significant inclusion of the local OnRamps consultant offered needed support for teachers. The elements of the system were designed to help mitigate the challenges teachers faced and to enhance teachers' achievement of agency in the local setting. By employing the lessons learned from this study to refine the system of support and to ensure the continued presence of an OnRamps consultant, the second iteration of the system can strengthen implementation of both the OnRamps program as a whole and the individual courses in particular. This effort to lay a strong foundation of support during the initial

years of implementation has the potential to promote growth and increase the sustainability of the OnRamps program at the local high school.

Recommendations

I reviewed the data collected through this study with the intent of identifying aspects that could have improved this research and those that could contribute to further improvements when schools implement an OnRamps program. To improve this study, I recommend defining the levels of agency for the agency storylines. Although I left them undefined intentionally because I wanted to provide teachers the freedom to interpret levels for themselves, listing brief descriptors for each level that enhance understanding but still allow for personal interpretation might promote more consistent self-evaluation. I also recommend identifying ways to increase engagement with the system of support from the beginning of the study. Because this was an action research study, the goal was to improve the artifacts for the next iteration of implementation. Although the lack of engagement with the system of support in this study revealed aspects of each element that were missing, greater engagement would provide data to improve what is there or to justifiably eliminate aspects due to ineffectiveness.

As campus and district leaders seek to build a successful OnRamps program in their high schools, they need to possess deep understandings of the expectations of the OnRamps program. Analysis of the current and extant data revealed general recommendations that could apply to other sites of OnRamps implementation. Because the implementation of OnRamps courses occurs in a high school, these recommendations may be particularly helpful to the high school principal.

Examining the findings from the perspective of benefit to future onboarding teachers led to recommendations about program demands, selecting teachers, and supportive resources.

District and campus leaders need to realize that implementing an OnRamps course is a demanding process—and the demands of that process begin two to three months before the first day of school in the fall. During the interviews for this study that began in July 2019 and continued through December 2019, the teachers used phrases such as "It's a lot" or "It's hard" more than 20 times as they described the work to prepare for the summer OnRamps PLI and the effort to implement their courses during the fall. The mental and temporal conflicts teachers experience result in negotiations that can exhaust personal resources, even in the best of teachers.

Because of these demands, it is important that principals are selective when identifying teachers who will implement OnRamps courses. I reviewed the extant data and the data from this study to identify characteristics of committed, successful OnRamps teachers. These data led me to the conclusion that OnRamps teachers should be competent in their content knowledge, yet willing to admit their own fallibility. This confidence needs to allow them to trust the process of implementation and take the expected risks, but also to be sufficiently resilient to try again if an effort is unsuccessful. Persisting with the required instructional methods, trusting the process of implementation, and enacting resilience also play a role in withstanding the frustration of students and parents as they adapt to college-level expectations.

Even with the qualities of persistence, competence, and resilience, though, OnRamps teachers require support. Although a district-level support person, such as the OnRamps consultant, is helpful, OnRamps teachers will continue to need campus support. In the current and extant data, teachers mentioned several times their desire for campus administrators to visit their classrooms and witness the investment and growth made by both teachers and students. District leaders led classroom walks with several regional and national groups, but that did not satisfy the teachers' desire for campus acknowledgement and support in this study. The need for

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campus administrative support during program implementation has been reinforced by several researchers (e.g., Ketelaar et al., 2012; Oolbekkink-Marchand et al., 2017; Siciliano, 2016). One final consideration with regard to the presence of support is the benefit of a collaborative team, which is also evident in prior literature (e.g., Berman & McLaughlin, 1976; Priestley et al., 2015; Robinson, 2012). Whenever possible, leaders should try to identify two or more teachers to implement the same OnRamps course. The value of intentional interaction through planning, discussion of challenges and ways to overcome them, and mutual understanding of needs was evident in this study. The support of the team brought consistency to implementation.

District and campus leaders should be aware of the challenges that accompany the implementation of OnRamps courses. In particular, principals can enhance the likelihood of successfully providing the OnRamps program in their high schools by considering the selection of teachers and identifying specific ways to support those teachers as they experience the demands of course implementation.

This study included many variables that could contribute to topics for further research on the implementation of OnRamps dual-enrollment courses. The teachers in this study taught different courses. Lauren taught rhetoric, and Christina taught statistics. Including teachers of other subjects could lend insight into the role of the course in enhancing or achieving teacher agency during course implementation. Similarly, selecting multiple participants who teach one particular course or subject could clarify the role of teachers' styles of thought in promoting the achievement of agency. Additional recommendations could include the examination of the similarities and differences of agency in male and female OnRamps teachers or in onboarding OnRamps teachers with different levels of experience as educators. Further research in these areas could increase understanding of teacher agency during implementation of OnRamps

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courses, specifically, and contribute to the body of research on high school teachers' experiences with implementing transformational dual-enrollment courses in general.

Closing Thoughts

As education trends toward the use of innovative instruction and reform-based programs, teacher agency has become a growing area of interest in the recent literature. Another topic of importance in current research is the value of dual-credit or dual-enrollment programs in promoting college readiness. However, I could not locate studies examining the agency of high school teachers when teaching dual-credit or dual-enrollment courses.

As an LTC in a district with the goal of offering every student at the high school level a path to experience a college-level course before graduation, I had previously supported high school teachers as they implemented what could be considered a transformative dual-enrollment program. My interest in pursuing this action research study on teacher agency developed in response to observations concerning the challenges these high school teachers faced during implementation and the desire to support teachers in the implementation process. This led to an examination of the relevant literature and the extant data from the district on the experiences of teachers of these courses during the previous school year. The resulting information informed the design of a system of support consisting of four elements that could act as a structure for intentionally meeting teacher needs and promoting the likelihood of the achievement of teacher agency during implementation of their dual-enrollment courses.

The purpose of this study was to explore two high school teachers' experiences with the local system of support and their achievement of agency during implementation of their respective dual-enrollment courses. The teachers differed in many respects at the time of study, including their beliefs about instruction, their aspirations for their students, and the contexts in

which they taught, even though both teachers taught in the same high school. These differences led to contrasting evaluations of the benefits of some of the elements of support; however, the evaluations confirmed the continuation of the system of support and provided data for improving each element. The differences between the teachers and their contexts also contributed to their engagement with the system of support, thus influencing the degree to which the system was effective in supporting the achievement of agency.

Although these findings are specific to the setting of the study and cannot be generalized, some recommendations from the study could benefit district and campus leaders in other locations as their teachers implement the same dual-enrollment program. These lessons suggest that administrators should strive to (1) be aware of program demands on teachers, (2) select teachers for implementation of the program who exhibit openness to innovative instruction and resilience to challenges, and (3) provide support to program teachers both personally and through collaborative teams when possible. These efforts could aid in establishing a practical-evaluative dimension of agency in the context of implementation that is more likely to enhance than to hinder teacher agency.

Finally, this research was influenced by multiple variables such as the teachers' perceptions, the years of experience, and the course implemented. Further exploration of these variables could enhance understanding and expand understanding on high school teachers' achievement of agency during the implementation of transformative dual-enrollment programs.

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APPENDIX A

ARTIFACT 1

Role Description - Local OnRamps Consultant

Primary Function: Under the direction of the Learning and Teaching Director-Secondary, provides leadership support for teachers instructing OnRamps courses and other district initiatives. This support includes facilitation and maintenance of the OnRamps System of Support as part of the assigned duties for a designated secondary Learning and Teaching Coach.

Responsibilities / Duties:

Program Support
- Articulates alignment between the OnRamps program and the District with regard to mission, instructional philosophy, and curriculum implementation strategies to the campus, district, parents, and community
- Maintains a record of past and present OnRamps courses offered, instructors of those courses, and dates of training
- Uses the record of past and present OnRamps courses to assist the Director of Secondary Learning & Teaching in planning, developing, and expanding the OnRamps program and the local course offerings at the high school
- Aids principals and district leaders in the identification of teacher candidates as potential OnRamps instructors, ensuring candidates meet the requirements for course instructors as established by the OnRamps program
- Assists in data collection and makes recommendations for continuous improvement of program effectiveness and program evaluation
- Supports and participates in meeting the objectives of the district improvement plans
- Maintains current information related to state and local funding of teacher training and student tuition costs
- Implements the statewide initiatives including 60X30 Texas Higher Education Plan and TEA initiatives
- Promotes OnRamps Academies to principals and teachers as a means to enhance content and pedagogical content knowledge
- Provides frequent opportunities for teachers to meet and intentionally reflect on program implementation and personal growth
- Supports the implementation of OnRamps curriculum
- Assists in resolving teacher issues and concerns in a timely manner
- Analyzes critical needs and works collaboratively to implement and improve programs

- Fosters positive morale by participating in team-building activities and the decision-making process

Communication
- Verifies summer dates for OnRamps PLIs and OnRamps Academies and communicates those to district and campus leaders
- Organizes and conducts district-wide and campus OnRamps meetings and presentations
- Advises the supervisor on matters regarding assigned programs/services and provides information, advice, and documents to staff, administrators, and others as necessary
- Provides internal and external communication to campus, district, parent, and community stakeholders to raise awareness of and support for the implementation and growth of the OnRamps program
- Communicates frequently with OnRamps teachers to share program information and provide support
- Oversees maintenance and continued development of the OnRamps group in Schoology as part of the OnRamps System of Support which provides support for new and current OnRamps teachers that includes relevant research on instructional methodologies, current local and state statistical information on students' college and career readiness, and support for the use of Canvas and for facilitation of student registration with UT.

Policy Implementation
- Implements the policies established by OnRamps and local board policy
- Aids in determining appropriate PEIMS coding for new courses
- Works with teachers to coordinate OnRamps regulations and policies with the regulations and policies of the district and school

Other
- Complies with policies established by federal and state law, including but not limited to State Board of Education and local Board policy
- Demonstrates behavior that is professional, ethical, and responsible
- Serves as a role model for all district staff
- Performs other duties as assigned

Knowledge and Abilities

Knowledge of:
- OnRamps mission, pillars, and goals
- General, research-based support for college-level coursework taught in the high school context showing proven results at secondary and post-secondary levels
- Current research regarding, specifically, the efficacy of the OnRamps program in enhancing student experiences of college-level coursework based on results at the secondary and post-secondary levels

- Academic policies and procedures
- Curriculum and instruction

Ability to:
- Establish and maintain relationships and partnerships with OnRamps teachers
- Effectively use technology to communicate program information and provide support
- Interpret policies and procedures
- Problem solve and develop long and short-range plans
- Work independently with little direction
- Communicate effectively both verbally and in writing
- Maintain regular and consistent attendance
- Analyze situations accurately and adopt an effective course of action
- Meet schedules and timelines
- Organize and prioritize work responsibilities

Education/Licenses/Experiences
Master's degree preferred. Valid Texas teaching certificate in any secondary subject. Three years of experience in secondary education, preferably at the high school level and including instruction of academically accelerated courses. Prior understanding of dual credit or dual enrollment learning and expectations preferred.

Working Conditions
Mental demands: Work with frequent interruptions; maintain emotional control under stress; develop presentations and manage groups of stakeholders

Physical demand/Environmental factors: Frequent walking, standing, bending/stooping, reaching, pushing/pulling, and twisting; repetitive hand motions including frequent keyboarding and use of mouse and technology hardware; frequent reaching; occasional district travel; occasional prolonged and irregular hours

The foregoing statements describe the general functions and responsibilities assigned to this role as a part of the job of Learning & Teaching Coach and are not an exhaustive list of all responsibilities and duties that may be assigned or skills that may be required.

_____

Employee Signature   Date

System of Support

Element 1: OnRamps Pre-PD

I.   Welcome
    A. Introductions of Participants and Researcher
    B. Action Research and Purpose of Study
        1. Teacher Participation During the Pre-PD and Summer OnRamps PLI
        2. Teacher Participation Throughout the Fall
    C. Consent to Participate

II. Focus Group Interview

III. Introduction
    A. Definition of Teacher Agency
    B. Agency Timelines
        1. Explanation and Purpose
        2. Reflect on 2018-2019
            a) Participants Complete Timeline for Previous Year
            b) Participants Explain Their Markings
    C. Driving Question
    How does the purpose and implementation of OnRamps align with my purpose as a teacher?

IV. Objective 1: A Broader Understanding of OnRamps and its Purpose
    Activity 1: *Connect 4 - What does playing Connect 4 have to do with teaching OnRamps?*

    A. Teacher Beliefs
        1. Moral Imperative (Fullan, 2011)
        2. Importance of the Moral Imperative for Texas Students - Statistical Support
    Activity 2: *The 5 Why's - Why do only 15.9% of 9th-grade enrollees in Texas complete a college degree or certificate within six years of finishing high school?*

    B. Teacher Beliefs and College Readiness
        1. Moral Imperative Realized (Fullan, 2011)

    2. Relevance of the Moral Imperative to OnRamps
  C. OnRamps Beliefs and College Readiness
    1. Alignment of OnRamps Purpose and the Moral Imperative
    2. OnRamps and the "Realization" aspect of the Moral Imperative
      a) Dual Enrollment
      b) Focus on College Experience
      c) Teacher Support
    3. OnRamps Results - Statistical Support
  D. Need for OnRamps at the Local High School

Reflection: *Do the values and beliefs of OnRamps resonate with your values and beliefs as a teacher? If so, how? If not, why not?*

V. Objective 2: A Greater Sense of Preparedness for OnRamps Implementation
  Activity 3: *Speed - Why did I select that game for you as an OnRamps teacher?*

  A. Issues (Based on extant data)
    1. Stakeholders (Brief)
    2. Instructional Resources
    3. Local Policies
    4. OnRamps Policies
    5. Cognitive Conflict
  B. Organizational Capacities to Support Implementation
    1. Local District
    2. OnRamps Program

Activity 4: *Contextual Considerations - Think of at least 2 questions or issues that relate to or occur in each context--campus, community, and state--in relation to any aspect of OnRamps. Write the questions on sticky notes and place them in the appropriate context.*

  C. Contexts and Connections to OnRamps
    1. Campus
    2. Community/Parents
    3. State

Reflection: *How does having a "bigger picture" perspective of OnRamps, its purpose, and the contexts within which it operates influence your thoughts about teaching OnRamps?*

VI. Objective 3: A Foundation for the Exercise of Positive Agency During Implementation
  Activity 5: *Bowling - Why did I have you bowl differently (using non-dominant hand, using bumpers, bowling normal)?*

  A. Definition of Teacher Agency
  B. Maintaining Teacher Agency During OnRamps Implementation

1. Core Properties of Agency
2. Contributing Factors to Agency
3. Exploration of the Infographic

VII. Close
    A. Review of the Driving Question
    B. Question and Answer Time
    C. Reflection Survey

Element 2: Curated Resources

- Policy Brief: OnRamps to College (Link)
- Promoting Agency when Teaching OnRamps (Link)
- Student Registration for OnRamps - Step-by-Step (Link)
- Canvas Videos (Folder of video links for the LMS)
- Relevant Information - Local High School (Folder of links to state reports on college readiness data for the local high school)
- Relevant Information - College Readiness (Folder of links to supporting information from sites such as 60x30TX, E3 Alliance, ACT Achieve, etc.)
- Relevant Articles - Instruction (Folder of links to articles about the benefits of the different instructional strategies used in OnRamps courses, the value of productive struggle for student learning, etc.)
- OnRamps: FAQs at LTHS (A live Google Doc of questions and answers from local teachers about implementing OnRamps at the local high school)
- Presentation Slides from the Pre-PD (A link to the slides from the pre-PD in pdf format)

Element 3: Local OnRamps Consultant
    See Appendix A.

Element 4: Opportunities for Reflection

Monthly Reminder: Core properties of agency

- Intention: Provide a rigorous college-level experience for high school students
- Motivation: Envision long-term student academic success
- Action: Plan for regulated reaction
- Reflection: Evaluate past actions and adjust, as needed, for future efforts

I.   September Reflection Questions - The teacher and OnRamps
    A.   *Intention:* Think about the OnRamps purpose to provide a rigorous college-level experience for high school students. With that thought in mind, what are your perspectives about the OnRamps PLI? What did you find particularly valuable from the training? What do you *wish* had been addressed?
    B.   *Motivation:* Knowing that it is important to envision students' long-term academic success to maintain motivation in the day-to-day implementation of OnRamps instruction, do you have a connection with another OnRamps teacher to support you in this effort? Have you accessed the resources provided by OnRamps to support your instruction?
    C.   *Action:* Considering the benefit of having a plan for "regulated reaction," what have you done so far to adapt to the expectations for instructing your course? What would you like to do for next year?

II.   October Reflection Questions - The teacher and the instruction of OnRamps
    A.   *Motivation:* You are being interviewed for a 15 second sound bite. The reporter asks, "What are your beliefs or what do you value as a teacher?" What is your reply?
    B.   *Intention:* When thinking about teaching OnRamps courses, in general, or teaching OnRamps courses at LTHS, in particular, . . .
        1.   What resonates with your values as a teacher?
        2.   What challenges your values as a teacher?
    C.   *Action:* What is one thing you wish you had known before starting this program? How would your actions be different if you had known? Can you make that change now to influence actions going forward? Why or why not?

III.   November Reflection Questions - The teacher and the OnRamps students
    A.   *Intention:* Choose one option and complete the sentence.
        1.   I feel my students are receiving a college-type experience because _____.
        2.   I do not feel my students are receiving a college-type experience because ____.
    B.   *Motivation:* Choose the term that best fits your perception and justify your choice.
        1.   As I watch and work with my students using OnRamps curriculum, instructional strategies, and expectations, I believe, at the end of this course, they will be (choose 1) *highly / adequately / not necessarily* prepared for success beyond high school because _____.

C. *Action:* Again, choose one option and complete the sentence.
  1. Through the increased expectations around pace of the course, hard deadlines, rigorous grading, and other characteristics of OnRamps courses, I believe my students (choose 1) *have / have not* learned to plan better for what we have called "regulated reaction." I say this because _____.

IV. December Reflection Questions - The overall experience
  A. *Intention:* Evaluate the influence of these monthly opportunities for reflection on your focus on the purpose of OnRamps--to provide a rigorous college-level experience for high school students. How has that focus guided your planning and instruction in a way that aided in achieving the purpose?
  B. *Motivation:* Have these monthly opportunities for reflection helped you persist with a long-term vision in mind, looking beyond the day-to-day ups and downs of teaching OnRamps? If so, can you offer an example or justification? If not, what could be done to improve them?
  C. *Action:* Have these monthly opportunities for reflection helped you think about how to plan strategically for efficient use of time and resources? If so, in what ways? If not, what would help?

APPENDIX C

FOCUS GROUP QUESTIONS IN PREPROFESSIONAL DEVELOPMENT

1. What is your "education story"?

    a. How long have you taught?

    b. Where have you taught?

    c. Why did you choose to be a teacher?

2. What is important to you as a teacher?

3. How would you describe yourself as a teacher?

4. Why did you agree to teach an OnRamps course this coming year? What motivated you to accept this assignment?

5. What experiences do you have with innovative learning approaches such as blended learning, inquiry-based learning, or peer instruction? Were your experiences—or lack of experiences—a factor in your decision to teach OnRamps?

6. When you think about the upcoming year and teaching an OnRamps course, what excites you?

7. As you think about the upcoming year and teaching an OnRamps course, what concerns do you have?

8. How do you think teaching an OnRamps course will compare to teaching other courses for you? Similar or different? Why do you think this?

9. What questions hang in your mind with regard to preparing for OnRamps instruction?

10. Is there anything else you would like to share?

AGENDA TEMPLATE FOR MONTHLY MEETINGS

Lunch meeting - Date

I. Opening (Request for recording)
   A. Thank you (for sharing, willingness to participate)
   B. Purpose (to understand your experience as an OR instructor)
   C. Norms (feel free to be open and honest; interviews are confidential)
II. Monthly Information
   A. Celebrations / Challenges
   B. Your needs
   C. Follow-up report
III. Reflection and Interview Questions
   A. A Focus on Agency
      1. Core properties of agency
         a) Intention: Provide a rigorous college-level experience for high school students
         b) Motivation: Envision long-term student academic success
         c) Action: Plan for regulated reaction
         d) Reflection: Evaluate past actions and adjust, as needed, for future efforts
      2. Questions
         ● *Intention*
         ● *Motivation*
         ● *Action*
   B. Local System of Support - Resource Usage
      ● Do the available resources meet your needs as an OnRamps instructor? Why or why not?
      ● What could be added to improve the applicability of this resource to the needs of OnRamps teachers?
      ● Have you accessed any of the curated resources so far? If so, which one(s)?
      ● Have you used them to aid understanding or instruction? If so, how? If not, why not?
IV. Closing
   A. Summarize
   B. Next Steps
   C. Thank you

PREPROFESSIONAL DEVELOPMENT REFLECTION SURVEY

1. This training helped me think critically about my beliefs as a teacher. *Mark only one oval.*

	1	2	3	4	5	
not really	O	O	O	O	O	absolutely

2. This training raised my awareness of the potential for personal cognitive conflict during implementation of the UT OnRamps program. *Mark only one oval.*

	1	2	3	4	5	
not really	O	O	O	O	O	absolutely

3. This training offered strategies I could apply to mitigate personal cognitive conflict and enhance implementation. *Mark only one oval.*

	1	2	3	4	5	
not really	O	O	O	O	O	absolutely

4. This training raised my awareness of possible issues during implementation of the UT OnRamps program. *Mark only one oval.*

	1	2	3	4	5	
not really	O	O	O	O	O	absolutely

5. This training provided resources and potential solutions available at Lake Travis High School I can use to address possible issues. *Mark only one oval.*

	1	2	3	4	5	
not really	O	O	O	O	O	absolutely

6. This training made me aware of resources and potential solutions available from OnRamps I can use to address possible issues. * Mark only one oval.*

	1	2	3	4	5	
not really	O	O	O	O	O	absolutely

7. As a result of this training, I have a better understanding of the purpose of OnRamps. *
Mark only one oval.

	1	2	3	4	5	
not really	O	O	O	O	O	absolutely

8. As a result of this training, I have a better understanding of the purpose of making OnRamps courses available at Lake Travis High School. * *Mark only one oval.*

	1	2	3	4	5	
not really	O	O	O	O	O	absolutely

9. As a result of this training, I am more confident about teaching an OnRamps course. *
Mark only one oval.

	1	2	3	4	5	
not really	O	O	O	O	O	absolutely

10. Overall, I found this pre-professional development training to be beneficial. * *Mark only one oval.*

	1	2	3	4	5	
not really	O	O	O	O	O	absolutely

11. What is your primary "take-away" from today? *

12. What do you wish had been included? *

13. Additional comments

* Required Questions

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FOLLOW-UP SURVEY

1. Email address *

2. The OnRamps summer PLI is enhancing my content knowledge. * *Mark only one oval.*

	1	2	3	4	5	
Not at all	⬭	⬭	⬭	⬭	⬭	To a high degree

3. The OnRamps summer PLI is enhancing my pedagogical understanding of the innovative instructional methods I am expected to use in my OnRamps course. *
   Mark only one oval.

	1	2	3	4	5	
Not at all	⬭	⬭	⬭	⬭	⬭	To a high degree

4. Did the "Get Ready" pre-professional development provide insights or information you have referred to during the summer PLI? * *Mark only one oval.*

⬭ Yes   ⬭ No   ⬭ Maybe

5. If so, can you briefly describe what has helped?

6. Based on your experience so far, what additional information or strategies would have

been helpful in the "Get Ready" pre-PD?

* *Required Questions*

Figure G-1

Sample Agency Storyline Graph

AGENCY STORYLINE
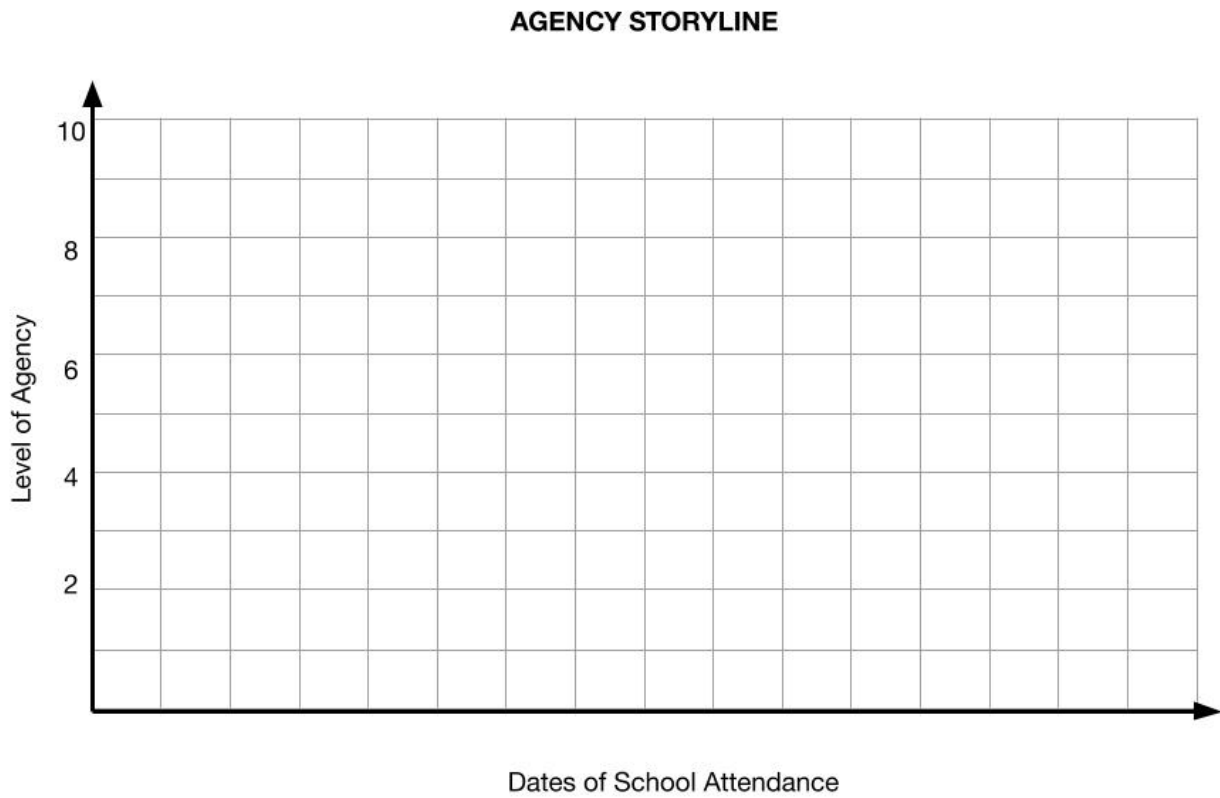
CONSENT TO PARTICIPATE

Title of Study: ***Teaching in a Transformative Dual Enrollment Program: A Study of the Perspectives of High School Teachers During the Initial Year of Implementation***

Interviewer: Cathy Hill
Position: Doctoral Student at Texas A&M University
Contact: 806.392.3481

Introduction

- You are being asked to be a participant in a study of the implementation of the UT OnRamps© program at Lake Travis ISD.
- You were selected as a possible participant because you are an OnRamps teacher at LTISD and you have been/will be participating in activities that will contribute to your perspective of implementing this program.
- Please read this form and ask any questions that you may have before agreeing to be in the study.

Purpose of Study

- The purpose of the study is to explore the teacher experience during the initial year of UT OnRamps© implementation for participating teachers at Lake Travis High School. The study will examine the teachers' experiences in three stages: program preparation, program implementation, and program reflection.
- Ultimately, this information will be reported as data in a Record of Study as part of the requirements for a doctoral degree at Texas A&M University.

Description of the Study Procedures

- If you agree to participate, you will be asked to complete surveys, participate in focus groups, allow classroom observations, and answer questions in interviews. You will also be asked to review the final analysis of your interviews to ensure the researcher has correctly interpreted your responses.

Risks/Discomforts of Being in this Study

- There are no reasonable foreseeable (or expected) risks. There may be unknown risks.

Benefits of Being in the Study

- The benefits of participation include the following:
  - The opportunity to share perspectives that will be used to improve implementation of the program going forward.
  - The opportunity to actively and intentionally reflect on aspects of the program and its influence on your role as an educator.

Confidentiality

- Your identity will not be disclosed in the analysis. You will be provided an opportunity to review and approve any material before it is included in the project.

Right to Refuse or Withdraw

- The decision to participate in this study is entirely up to you. You may refuse to take part in the study at any time without affecting your relationship with the investigator of this study. Your decision will not result in any loss or benefits to which you are otherwise entitled. You have the right not to answer any single question, as well as to withdraw completely from the interview at any point during the process; additionally, you have the right to request that the interviewer not use any of your interview material.

Right to Ask Questions and Report Concerns

- You have the right to ask questions about this research study and to have those questions answered by me before, during or after the research. If you have any further questions about the study, at any time feel free to contact me, Cathy Hill at hillc@ltisdschools.org or by telephone at 512.533.6490. If you like, a summary of the final results of the study will be sent to you.
- If you have any problems or concerns that occur as a result of your participation, you can report them to Liz Deterra at deterral@ltisdschools.org.

Consent

- Your signature below indicates that you have decided to volunteer as an interview participant for this project, and that you have read and understood the information provided above. You will be provided a copy of this form to keep, along with any other printed materials deemed necessary.

Subject's Name (print): _____

Subject's Signature: _____ Date: _____

Interviewer's Signature: _____ Date: _____

LAUREN'S MONTHLY AGENCY STORYLINES
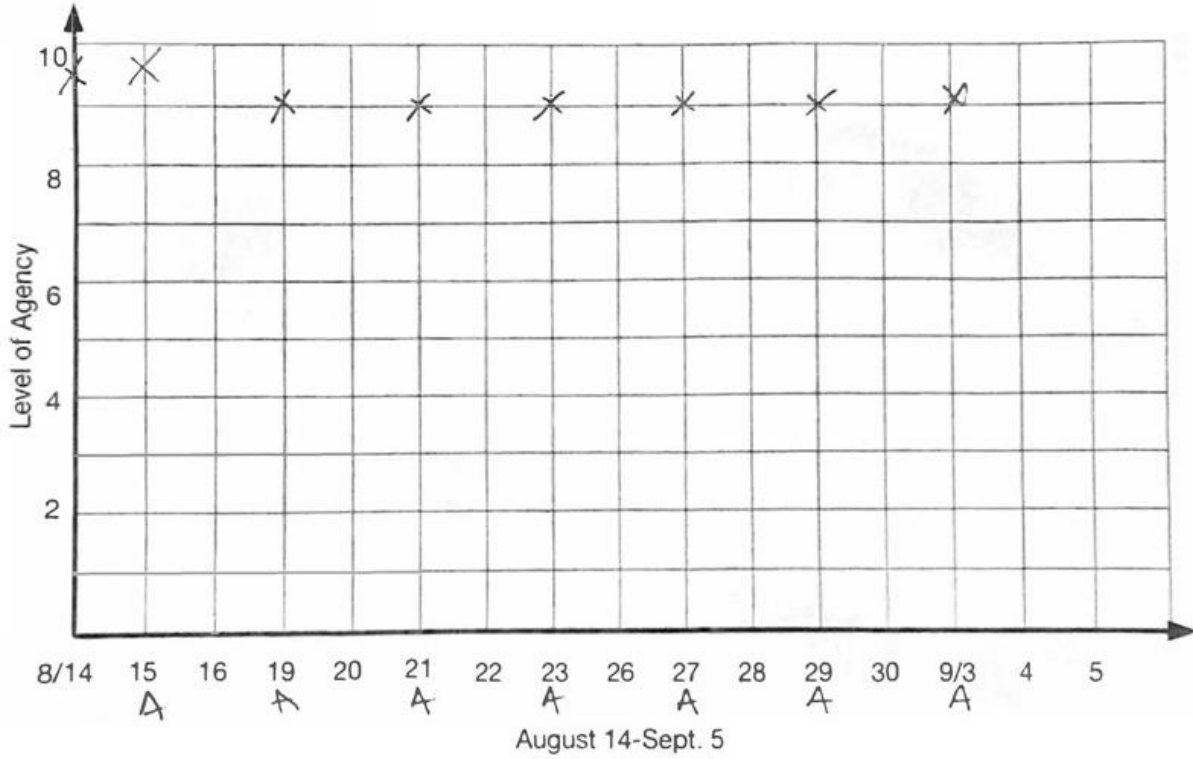
Figure I-1

Lauren's Agency Storyline for August

Figure I-2

Lauren's Agency Storyline for September

Lauren's Agency Storyline for September
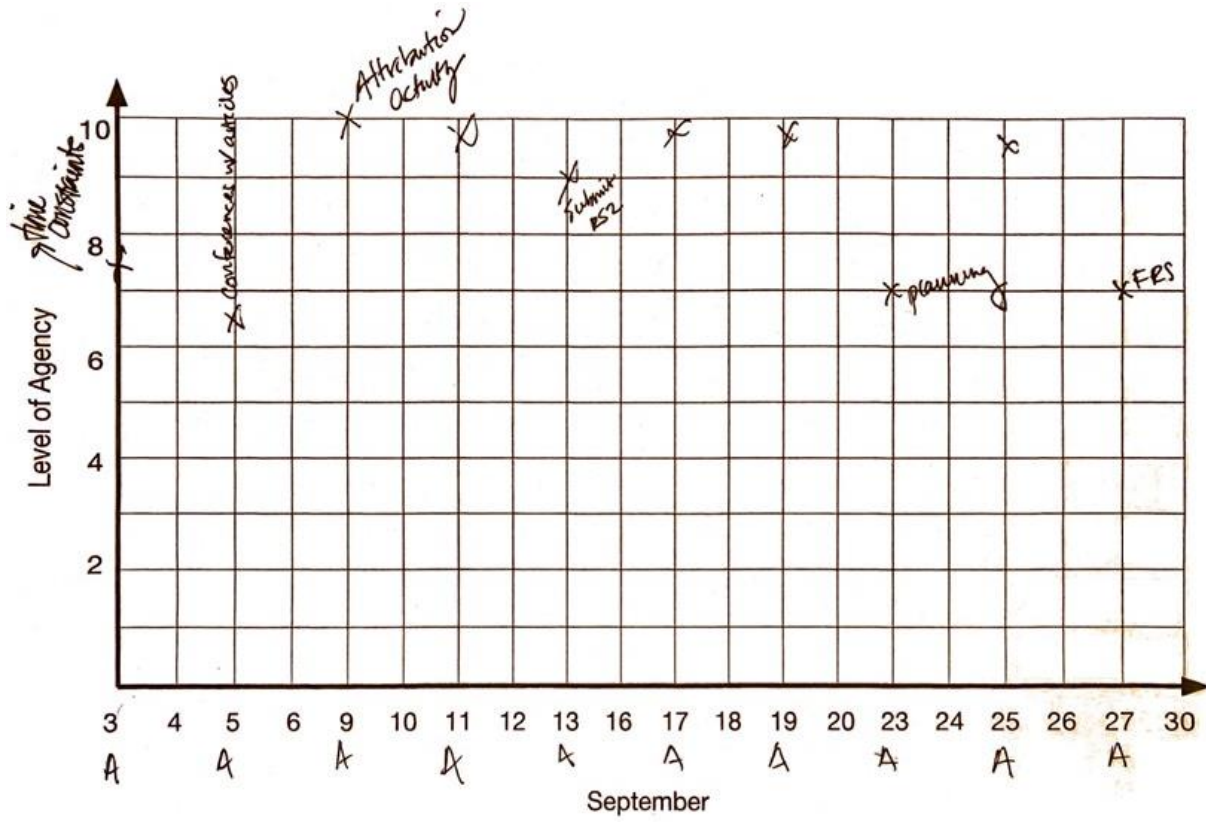
156

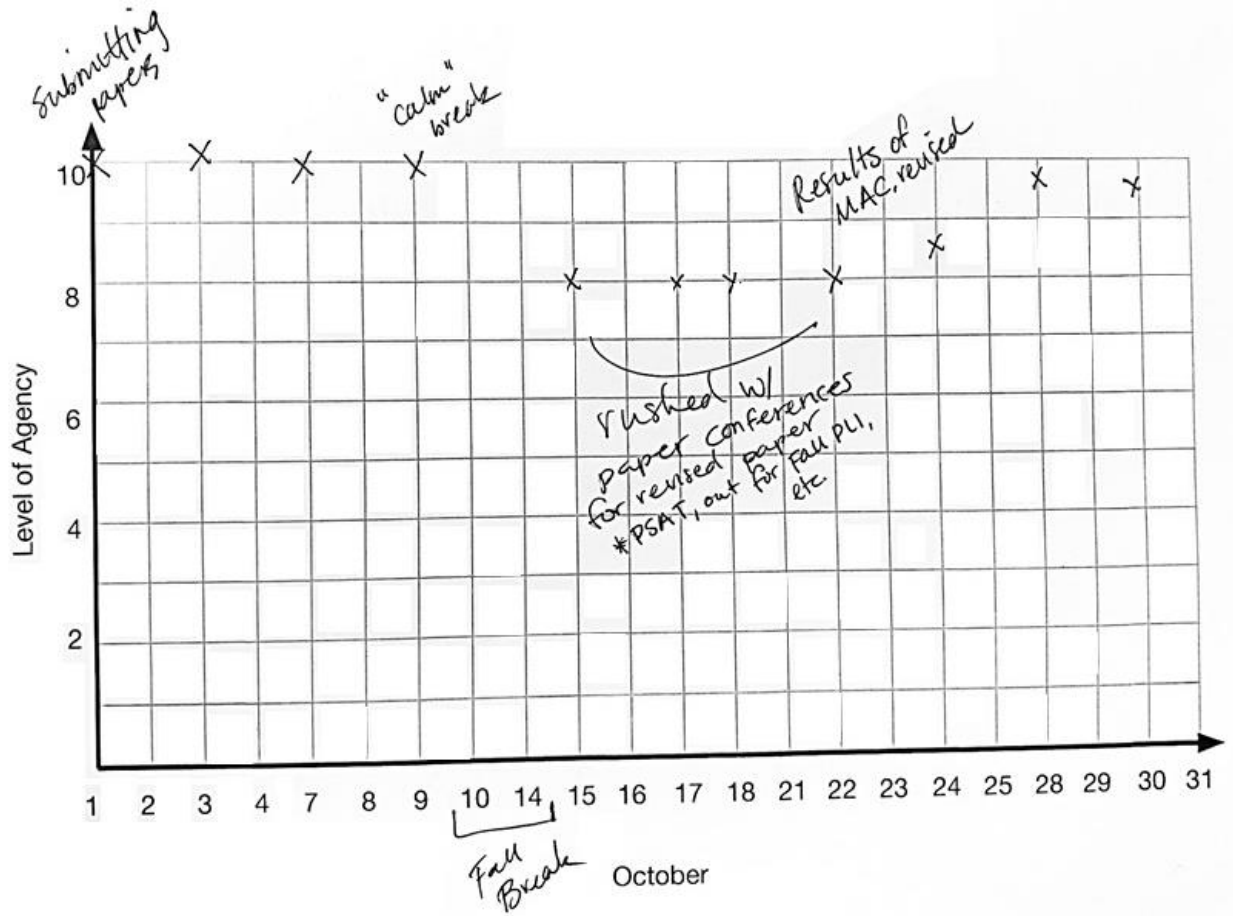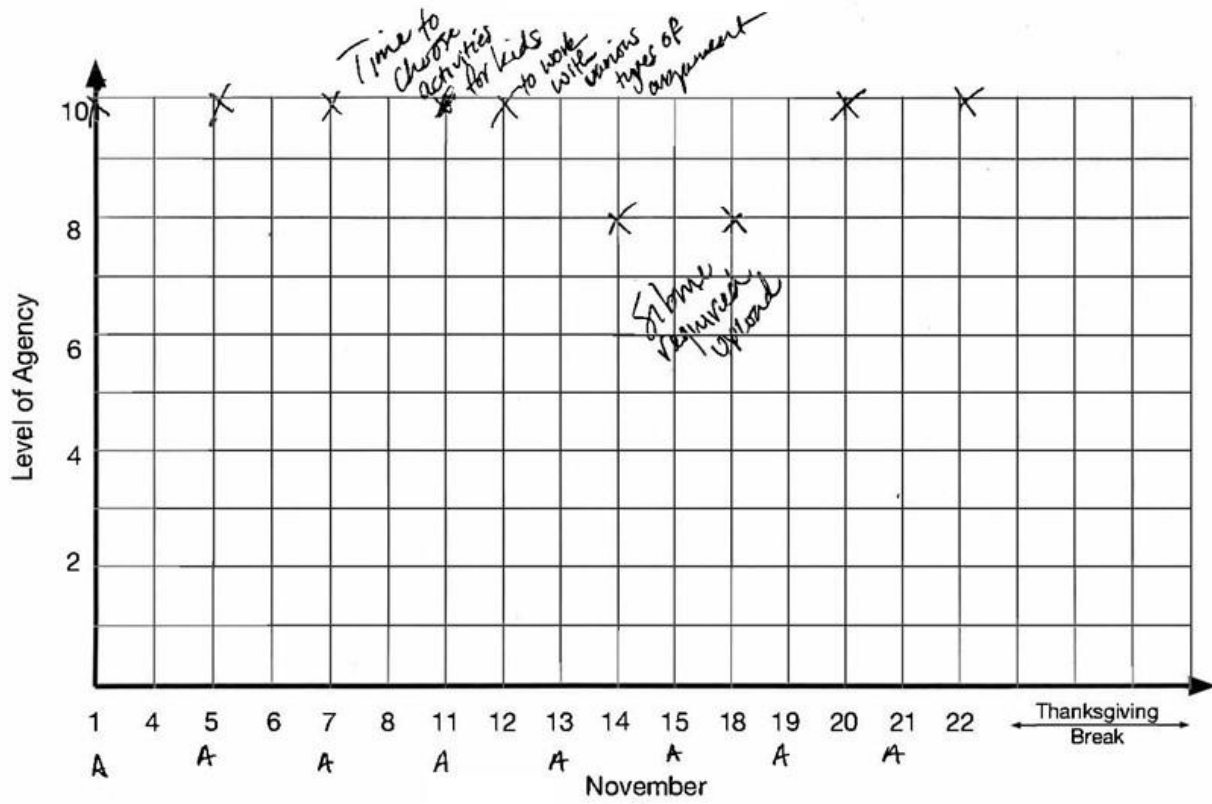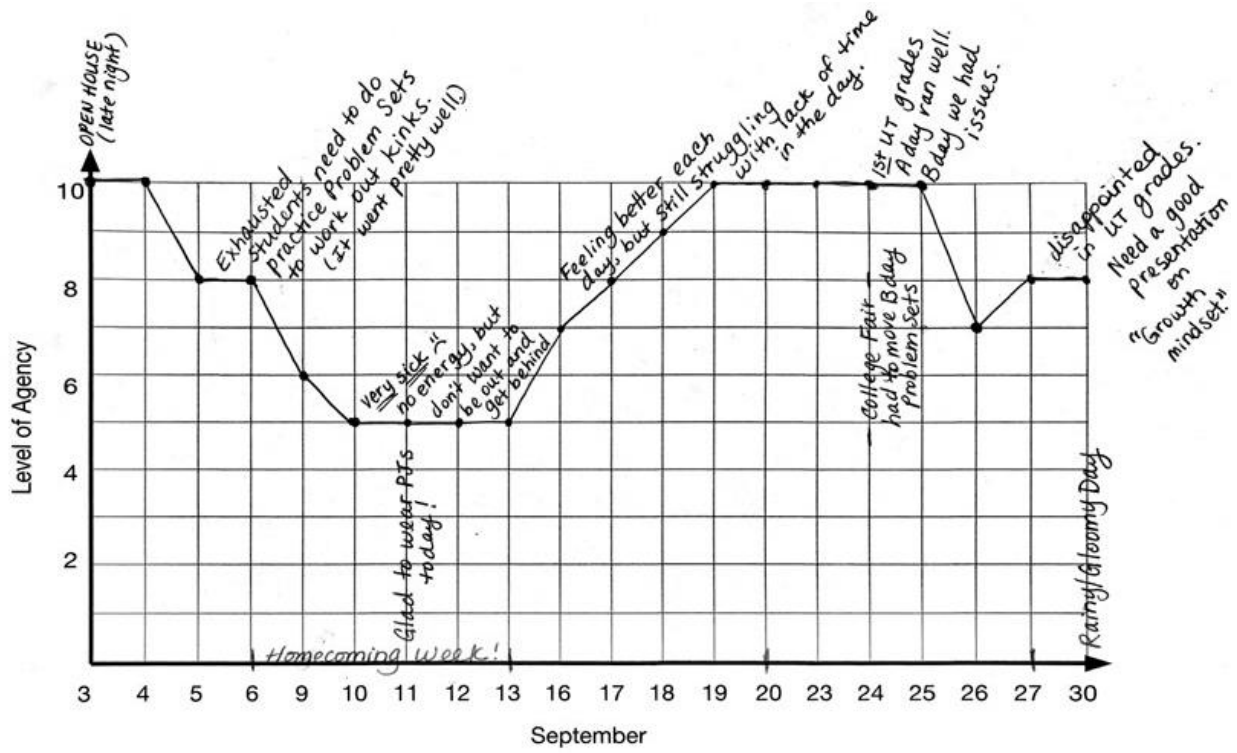**Figure I-3**

Lauren's Agency Storyline for October

Figure I-4

Lauren's Agency Storyline for November

CHRISTINA'S MONTHLY AGENCY STORYLINES

Figure J-1

Christina's Agency Storyline for August

Level of Agency

August 14-Sept. 5
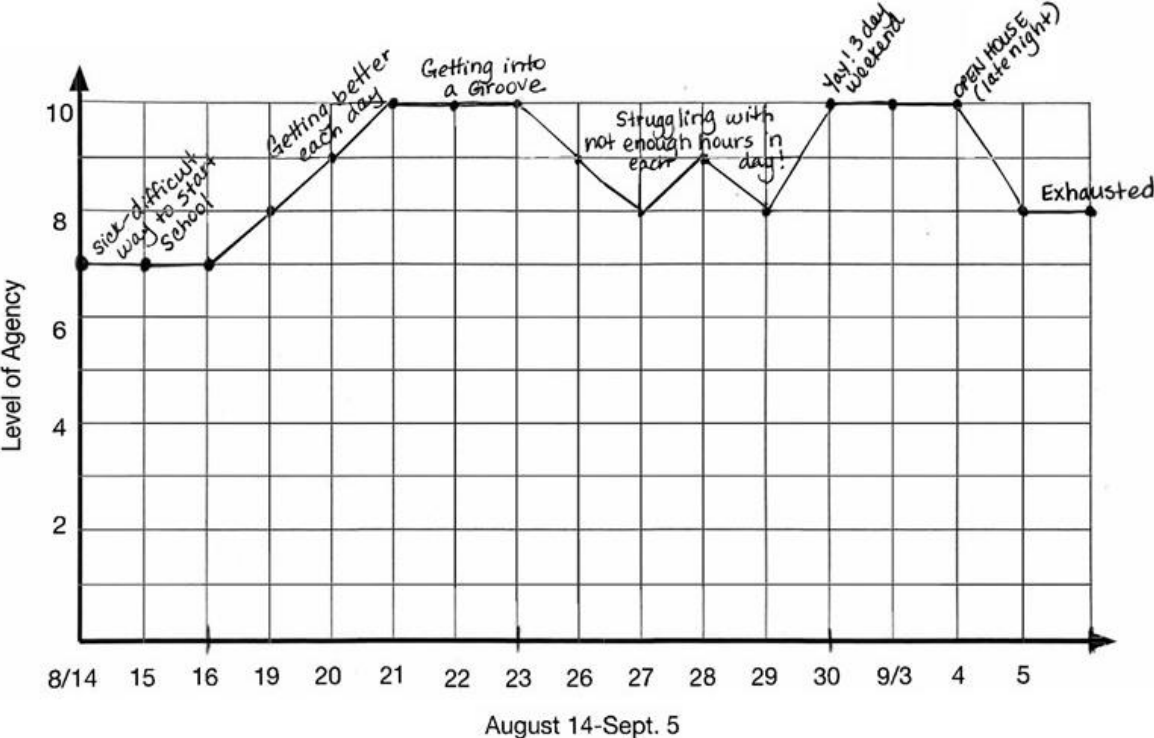
Figure J-2

Christina's Agency Storyline for September

Figure J-3

Christina's Agency Storyline for October
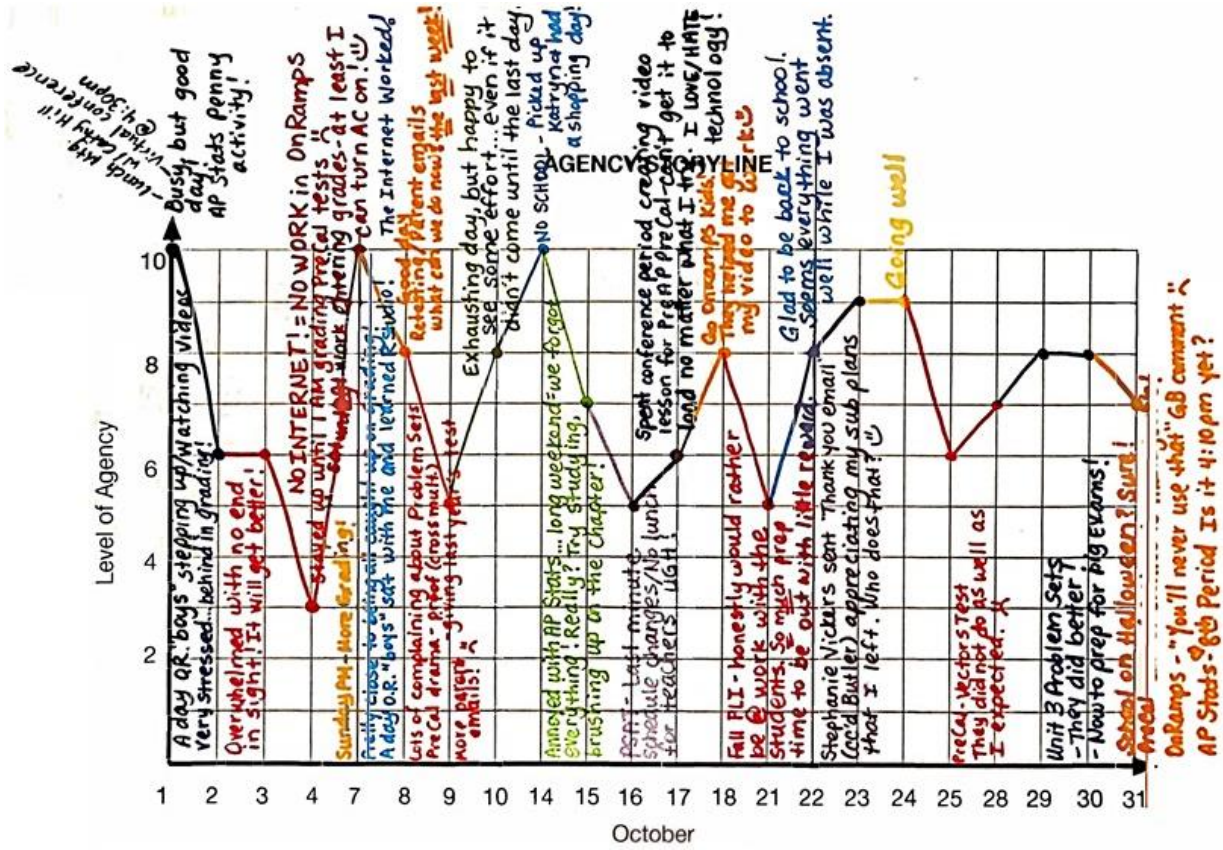
Figure J-4

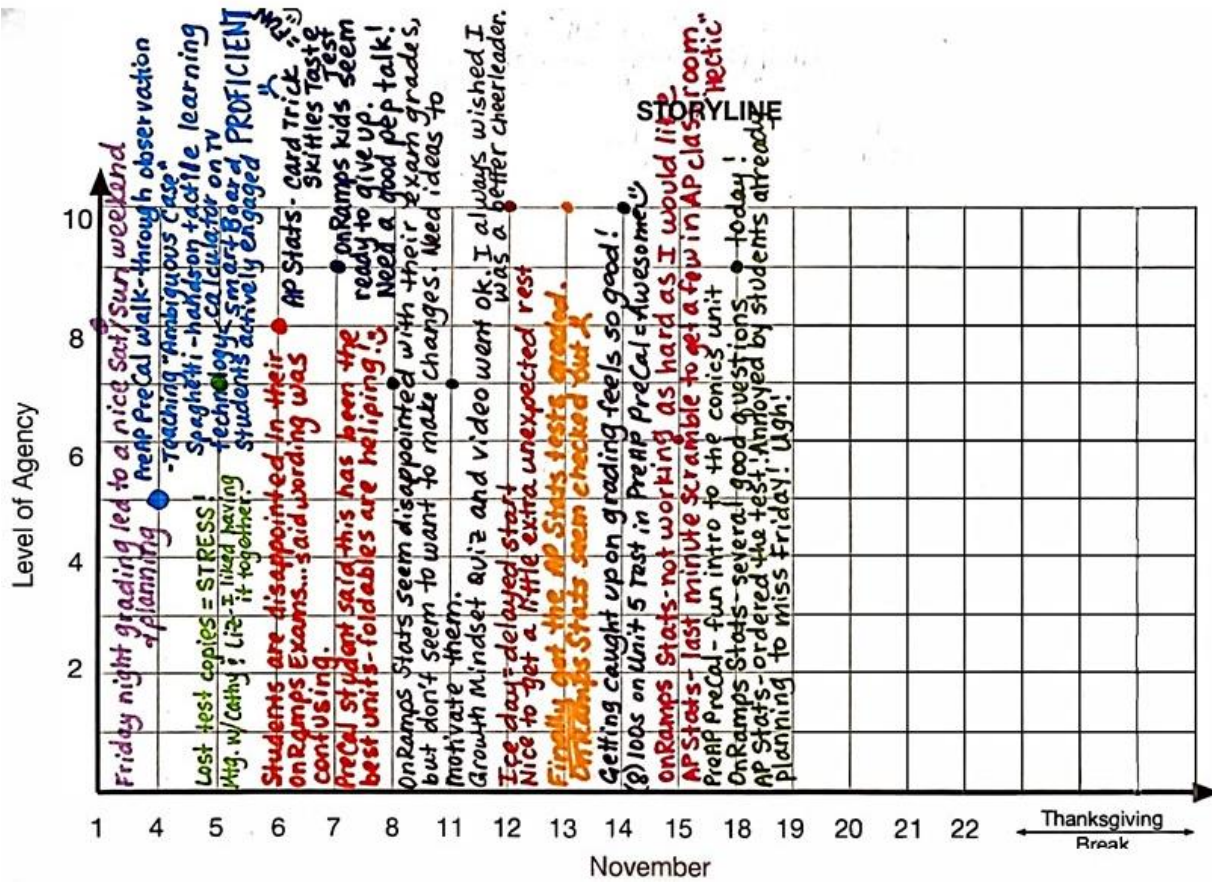*Christina's Agency Storyline for November*

RESEARCH QUESTION AND INTERVIEW QUESTION MATRIX

Table K-1

Research Question and Interview Question Matrix

Primary research question	Subquestion	Means of assessment
What are participating teachers' experiences with the local system of support consisting of pre-professional development, available resources, and opportunities for reflection?	What are teachers' perceptions of the pre-PD opportunity?	Surveys in July • "Get Ready" (App. D) • "Follow-up" (App. E) Interview Questions in Sept. (App. C) • Have strategies or information from the pre-PD been helpful during the initial weeks of teaching your OnRamps course? If so, how?
	What are teachers' perceptions of the available resources?	Interview Questions in Sept., Oct., Nov., Dec. (App. C) • Do the available resources meet your needs as an OnRamps instructor? Why or why not? • What could be added to improve the applicability of this resource to the needs of OnRamps teachers?
	To what extent will teachers use the resources?	Interview Questions in Sept., Oct., Nov., Dec. (App. C) • Have you accessed any of the curated resources (so far/this month)? If so, which one(s)? • Have you used them to aid understanding or instruction? If so, how? If not, why not?
	What are teachers' perceptions of the reflection that occurs during the monthly interviews?	Interview Questions in Dec. (App. B) • Have these monthly opportunities for reflection helped you focus on the purpose of OnRamps--to provide a rigorous college experience for high school students? If so, has that focus guided your planning and instruction in a way that aided in achieving the purpose? • Have these monthly opportunities for reflection helped you persist with a long term vision in mind, looking beyond the day-to-day ups and downs of teaching OnRamps? • Have these monthly opportunities for reflection helped you think about how to plan strategically for efficient use of time and resources? If so, in what ways? If not, what would help?

Table K-1 *Continued*

Primary research question	Subquestion	Means of assessment

To what extent will the local support, provided through the OnRamps Teacher Support and the System of Support, aid the participating teachers in maintaining positive teacher agency during OnRamps implementation?		Interview Questions in July (App. ***)
		➜ These questions will help inform a perception of each teacher's current level of agency before beginning OnRamps
		Storyline in July, Aug., Sept., Oct., Nov. (App. H & I)
		➜ Teachers record points on a graph that indicate their level of agency with notes of events/factors influencing the level at that time.
		Interview Questions in Sept., Oct., Nov., Dec., (App. B)
		➜ Reflective questions structured around intentionality, forethought, and self-reaction to address Bandura's (2006) four core properties of agency; terminology adjusted slightly for ease of use
		    • Intention: Provide a rigorous college experience for high school students
		    • Motivation: Envision long-term student academic success
		    • Action: Plan for regulated reaction
		    • Reflection: Evaluate past actions and adjust, as needed, for future efforts
		Sept. - The teacher and OnRamps (topics only)
		    • Intention: Perceptions of OnRamps PLI?
		    • Motivation: Connections at OnRamps PLI?
		    • Action: Adapt your expectations?
		Oct. - The teacher and teaching OnRamps
		    • Intention: Beliefs and values?
		    • Motivation: How teaching OnRamps resonates/challenges beliefs/values?
		    • Action: Missing info? Different actions if known?
		Nov. - The teacher and the OnRamps students
		    • Intention: Receiving a college experience?
		    • Motivation: Prepared for academic success beyond high school?
		    • Action: Learned to plan for "regulated reaction," as well?

PREPROFESSIONAL DEVELOPMENT REFLECTION SURVEY DATA

Table L-1

Teacher Perceptions of Pre-PD Value Immediately After Training

Survey question	Teacher A	Teacher B
This training helped me think critically about my beliefs as a teacher.	5	5
This training raised my awareness of the potential for personal cognitive conflict during implementation of the UT OnRamps program.	3	3
This training offered strategies I could apply to mitigate personal cognitive conflict and enhance implementation.	4	4
This training raised my awareness of possible issues during implementation of the UT OnRamps program.	3	4
This training provided resources and potential solutions available at Lake Travis High School I can use to address possible issues.	3	4
This training made me aware of resources and potential solutions available from OnRamps I can use to address possible issues.	3	4
As a result of this training, I have a better understanding of the purpose of OnRamps.	3	4
As a result of this training, I have a better understanding of the purpose of OnRamps courses at Lake Travis High School.	4	3

Table L-1 *Continued*

Survey question	Teacher A	Teacher B
As a result of this training, I am more confident about teaching an OnRamps course.	4	3
Overall, I found this pre-professional development training to be beneficial.	4	4
What is your primary "take-away" from today?	Being reminded of OnRamps initial mission of closing the gap and raising the bar encourages me that what [the research setting] and UT are doing with the OnRamps program is of great significance. It matters.	Expectations, an invitation to reach out if in need of support. We are not in this alone unless we choose to not ask for help.
What do you wish had been included?	I'm not sure what this refers to: "This training provided resources and potential solutions available at Lake Travis High School I can use to address possible issues." Are there specific resources available?	It may be more beneficial to meet after the PLI so that there are not so many unknowns. My questions/thoughts might be more focused with more understanding from the PLI.
Additional comments	Prior to the training, I felt like I had an awareness of OnRamps because of the interactions I had with current teachers throughout last school year along with the pre institute orientation. However, taking a moment to get together with others who understand the expectations of OnRamps added to my feelings of preparedness for the next two weeks at the PLI.	It was a fun day and I truly appreciate your flexibility in accommodating my daughter.

FOLLOW-UP SURVEY DATA

Table M-1

Teacher Perceptions of Pre-PD Value During and After Summer PLI

Survey question	Teacher A	Teacher B	Teacher B
	Responses after day 5	Responses after day 5	Responses after day 9
The OnRamps summer PLI is enhancing my content knowledge.	5	3	4
The OnRamps summer PLI is enhancing my pedagogical understanding of the innovative instructional methods I am expected to use in my OnRamps course.	5	3	4
Did the "Get Ready" pre-professional development provide insights or information you have referred to during the summer PLI?	Maybe	Maybe	No

(continued)

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Table M-1 *Continued*

	Teacher A	Teacher B	Teacher B
Survey question	Responses after day 4	Responses after day 4	Responses after day 9
If so, can you briefly describe what has helped?	The most valuable thing about the "Get Ready" session was feeling supported before going to the training.	Having the laptop has been very helpful. This would have been greatly challenging had I tried to use the Chromebook instead.	(*No response*)
Based on your experience so far, what additional information or strategies would have been helpful in the "Get Ready" pre-PD?	"The PLI covers so much information that is content based, which I don't know can really be prepared for at the district level. Instead, I feel like it would be helpful to have more logistical information about the OnRamps make up in the Fall/Spring. What that looks like at the school. The Pre-Institute assignments through UT prepared me for the philosophy of the course and to begin the PLI assignments."	My course is flipped learning, not IBL, so it may be difficult for the pre-PD to touch on the different learning styles of each course.	"Statistics is taught with a flipped learning model and not inquiry based. I believe the courses of OnRamps are all taught using different strategies and methods, so it may be difficult to meet the needs of all of the courses. It might have benefited me to meet at the UT campus to become familiar with where I would be wandering, looking for buildings! I had a lot of anxiety over finding the correct buildings."

TEMPLATE FOR ONE-PAGER

The objective of OnRamps is to increase the number and diversity of students who engage in learning experiences aligned with the expectations of leading universities (*https://onramps.utexas.edu/about/*)

OnRamps Course Subject - Course number: Course title

Key ideas from course description from here. Through enrollment and active participation in this course, students have the potential to receive both a high school credit and three hours of college credit. [*Optional closing statement depending on your content:* This course counts as a core requirement (*Science & Technology, Part II / Texas core code 031*) for all undergraduates at Texas public universities. Many private and out-of-state institutions may award credit for this course, as well.]

Course Content :		Course Faculty:
		The course is taught by a high school teacher who receives substantial support from UT including course materials, UT faculty lead, UT instructor of record, UT course manager, and UT implementation coach.

Course Prerequisites:	Grade Levels	Student Course Materials:	Modes of Learning:
High School Algebra I, no programming experience required	10-12	UT Canvas Learning Management System (not Schoology)	● Working in collaborative groups ● 3-4 brief bullet points

College Grade			High School Grade	
Course Orientation	1%		Minor Daily Assignments	40%
6 Individual Exams	39%		Exams and Projects	60%
5 Group Projects	60%			
Total	100%		**Total**	100%

College Grade: All Projects and Tests MUST be turned in within the window set up by UT, regardless of class attendance. No retests are given for the college grade. Students with Disabilities who receive high-school accommodations/ modifications related to a disability may also receive accommodation in their dual-enrollment, however eliminating answers on a test or providing word banks are not approved post-secondary accommodations for disabilities.