Universal design for learning as a framework for social justice: A multi-case analysis of undergraduate pre-service teachers

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UNIVERSAL DESIGN FOR LEARNING AS A FRAMEWORK FOR SOCIAL JUSTICE:

A MULTI-CASE ANALYSIS OF UNDERGRADUATE PRE-SERVICE TEACHERS

Dissertation

by

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ABSTRACT

Universal Design for Learning as a Framework for Social Justice:

A Multi-Case Analysis of Undergraduate Pre-Service Teachers

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The diversity of the student population in K–12 settings has steadily increased over the past few decades. While students who are of a racial/ethnic minority background have increased (Villegas & Lucas, 2007), teachers are increasingly young, female, and white (Goldenberg, 2008; NCES, 2013). In acknowledging these demographic discrepancies between teachers and students, many studies and reports have put forward an array of frameworks that teachers can employ in their practice to address diversity. Among these frameworks are Teaching for Social Justice (TSJ) and Universal Design for Learning (UDL). This dissertation seeks to examine the potential relationship among the two frameworks as viewed by undergraduate teacher candidates as they develop their dispositions for teaching diverse learners through a 17-week course attached to a one-day-per-week pre-practicum experience.

This multi-case study examined how the beliefs of 19 participants regarding TSJ and UDL changed over the course of a 6-month study within the context of a course. This study investigated how these participants connected UDL and social justice as a cohesive framework for addressing diversity in the classroom. Using daily and weekly journals, online discussion forums, and pre- and post- surveys, this study analyzed all 19 participants to identify four representative cases.

Findings from this study reveal that most participants were impacted by the course to the extent that they were able to identify the importance of aspects of social justice in the practice of an educator. Fewer participants were able to identify the role of UDL in the classroom. Only one

participant viewed social justice and UDL as a cohesive framework for impacting classroom

practice. Analysis of the representative case studies suggests that participants at this level of

development may need more time to engage in complicated abstract concepts. They may also

need course-attached field placements in classrooms that align with the mission and vision of the

preparation program, consistency in messaging through the duration of a preparation program,

and differentiated supports based on their background experiences.

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CHAPTER 1

INTRODUCTION

For decades, the achievement gap in education has been the driving force for numerous reforms towards greater equity. Referring back to data from the 1960s through the mid 2000s, Gloria Ladson-Billings (2006) explains that part of the achievement gap narrative is the numbers:

> In the 2005 National Assessment of Educational Progress Results, the gap between Black and Latina/o fourth graders and their White counterparts in reading scaled scores was more than 26 points. In fourth-grade mathematics, the gap was more than 20 points (Education Commission of the States, 2005). In third-grade reading, the gap was more than 23 points, and in eighth-grade mathematics the gap was more than 26 points. …even when we compare African Americans and Latina/os with incomes comparable to those of Whites, there is still an achievement gap as measured by standards testing (Ladson-Billings, 2006, p. 4).

However, as Ladson-Billings continues she argues that this is not an achievement gap but rather a debt that is rooted in the educational history of the country. I contend that, beyond a debt, this is an opportunity gap. Simultaneously, with the increased diversity of students we are seeing fewer high-quality educational opportunities for all.

The diversity found in K–12 settings has constantly increased over the past few decades. Currently, 10 percent of students enrolled in public schools are English language learners (ELLs); just twenty years ago it was 5 percent. Students with disabilities accounted for 8.3

percent of total enrollment in 1977 and over 13 percent in 2010 (National Center for Educational Statistics, 2013). Overall enrollment of students who were of racial/ethnic minority backgrounds in public elementary and secondary schools has increased from 22 percent in 1972 to over 41 percent in 2005 (Villegas & Lucas, 2007). Teachers, on the other hand, are increasingly young, female, and white: 44 percent, 76 percent, and 83 percent, respectively. Moreover, these trends are not regional but found across the United States (Goldenberg, 2008; NCES, 2013). While the linguistic and racial discrepancy between teachers and students has been documented in numerous studies and reports, many of these studies focus on strategies that teachers can implement in their practice to address classroom and school diversity. Teacher preparation programs, therefore, are addressing this limitation in their training. But teachers need preparation in new frameworks that approach classroom diversity from a new perspective beyond just instructional methods.

Therefore, it is important for teachers to develop and execute strategies that address all types of learners: students with disabilities, English language learners, and all other students who display a range of skills, abilities, and interests as learners. Two dominant trends for teaching diverse learners have led the field: Differentiated Instruction (DI) and Sheltered Instruction Observation Protocol (SIOP). DI stems from the idea that instructional approaches in the classroom need to be adapted to the diverse individual students in the classroom (Tomlinson, 2001). While commonly used for students with special needs, DI requires educators to identify specific student needs and *differentiate* the curriculum for that specific student. Alternatively, SIOP, another framework for teaching diverse learners, is geared to "teach content effectively to English learners while developing students' language ability" (Echevarria, Vogt, & Short, 2012). SIOP, therefore, focuses mostly on the needs of ELLs. There is no doubt that both of these

perspectives can be beneficial for students and numerous studies have shown how both can influence students' educational experiences (Lucas, Henze, & Donato, 1990; Short, 2011; Tomlinson, Moon, & Callahan, 1998). However, DI and SIOP are myopic in nature as they traditionally serve one population of students each. A newer perspective, Universal Design for Learning (UDL) can be used to address the variety of diverse learners in a classroom while developing students' abilities to become experts in their own learning. When compared to SIOP or DI, UDL focuses on the curriculum, not the students. Further, UDL can address the opportunity gap by providing teachers with the skills and structures they need to ensure their students are receiving a high-quality, rich education.

Universal Design for Learning (UDL) is a comprehensive framework rooted in research and theory which provides enough guidance to support planning for all learners, yet allows teachers enough flexibility to plan and implement lessons using their own expertise. Fundamentally, the goal is to provide all students with access to meeting the same goals in any educational setting. For one student this could be vocabulary clarification and for another it may be using technology. Rather than isolate students from their peers when they need these different supports, UDL encourages teachers to plan resources and scaffolds for all students. Students who do not need vocabulary clarification can still benefit from it; those who do not need technological supports will develop abilities to interact and learn in new ways. In other words, UDL approaches access as an issue of equity—ensuring that all students have the ability to interact with and learn from curriculum rather than being given individualized instruction that further separates their learning from that of their peers.

This view of equity can—and should—be foundational in initial practicum experiences and coursework experiences for pre-service teachers. Mills (2009) and others (Brown, 2004;

Sleeter, 1995) have found that many courses meant to address diversity are stand-alone and pre-service teachers "enter and exit these … courses unchanged, often reinforcing their stereotypical perceptions of self and others in the process." Therefore, identifying these stereotypes at the start of a program and infusing a social justice perspective with pre-service teachers in both practicum experiences and coursework can have significant influence on the way they view, teach, interact, and plan for all students in their classrooms.

To begin to address the goals of social justice, UDL is a comprehensive framework to prepare teachers. This is reinforced by the 2008 reauthorization of the Higher Education Opportunity Act, which stated—

The term 'universal design for learning' means a scientifically valid framework for educational practice that—

a) provides flexibility in the ways information is presented, in the ways students respond or demonstrate knowledge and skills, and in the ways students are engaged; and

b) reduces barriers in instruction, provides appropriate accommodations, supports, and challenges, and maintains high achievement expectations for all students… (HEOA, P.L. 110-315, §103(a)(24)).

The inclusion of UDL in this public law additionally required teacher preparation programs to include UDL (Ayala, Brace, & Stahl, 2012). However, implementation of UDL in teacher preparation programs has been slow, as this requires teacher educators to have a strong grasp of the concept as well as how to include UDL in already structured programs. UDL can impact the teaching and learning in a classroom simply by increasing the opportunities that students have to

access the curriculum. When aligned with the goals of a social justice perspective, equitable educational experiences and resources can be provided to all students.

Research Questions

This dissertation focuses on the participants enrolled in an initial course in the school of education at a private Jesuit university in a metropolitan city in New England. All participants were enrolled in a four-year secondary pre-service teacher education program with a focus on social justice and equity for diverse learners. As such, this study sought to answer the following questions:

In a four-year, private university teacher preparation program, this study focused on college sophomores in the initial stages of their degree program and asked the following questions:

- o How do these pre-service teachers' beliefs regarding UDL and social justice change over the course of a 6-month study?

- o How do these pre-service teachers connect UDL and social justice in their initial development as educators?

These research questions were answered through the use of surveys collected for 19 participants and further data collection on four focal participants within the larger group; all were enrolled in an introductory undergraduate university course on curriculum and instruction. Each participant completed the requirements of the course, which highlighted, amongst other components of curriculum and instruction, social justice and Universal Design for Learning. As this study operated under the belief that reflection and inquiry into practice are critical for developing needed skills and knowledge as an educator, data was analyzed to determine if participants' understanding changed throughout the course of the study. This study attempted to develop a

thorough understanding of how pre-service teachers make sense of complex concepts such as social justice and UDL at the start of their teacher educator licensure program.

Rationale

This study was conducted within the context of a university-based teacher preparation program with an explicitly stated focus on social justice: specifically, training and encouraging students to "seek to understand social problems such as poverty, violence, and social inequity and the role that cultural and social change plays in transforming social structures" ([University] School of Education, 2013). All courses in the school of education are "informed by a sense of the practical and the possible. Its understanding of social problems such as discrimination, poverty, violence, ignorance, and social inequity, and their impact in our communities, is based on experience working in and with the community" ([University] School of Education, 2013); as such, pre-service teachers are required to meet standards addressing social justice and equity in each pre-practicum experience.

The university's school of education also has numerous teacher educators who believe in the promise of UDL to increase equity for students with disabilities. Increasing access for student populations traditionally underserved is part of the training program for many of the pre-service teachers' experiences in course work as well as practicum expectations.

My positionality

In the context of this study, I, the principal investigator (PI) and sole researcher, was also the instructor of the course in which the study participants were enrolled. The concepts guiding this research study, social justice and UDL, are fundamental to my belief system and have grown over time. My role as the researcher of this study is led by my personal beliefs around equity in education. I believe that structural inequalities exist in the United States education system for

many students who are identified as 'diverse' and, therefore, teachers need active training (both in pre-service and in-service roles) in how to combat the status quo that is accepted across the dominant culture. My experience as an educator of children with special needs and with students who were learning English as a second (or additional) language has led me to believe that just teaching the abstract concept of social justice is not enough, and there must be a practical framework alongside.

Prior to beginning my doctoral program, I had fundamental beliefs around equity that I was not able to articulate well—to my colleagues, administrators, or parents of students. I was able to identify when I sensed something was not equitable for students (or, as a special educator and an ESL teacher, for myself) but was not able to identify the historical background, triggers to an event, or an alternative possibility that I would have preferred. When I entered my doctoral program I felt that my interests in special education and ESL were in silos, only overlapping in small pockets of research (see literature by Artiles; Bal; and Sapon-Shevin; amongst others) but not a part of the larger conversation. However, through my experiences in a program rooted in social justice, I have come to realize that these topics around students with disabilities or students learning another language were not in their own realms; rather they were part of the larger conversation around historical inequalities, racism, prejudice, democratic education, inclusion, and—at the core—social justice. This happened simultaneously with my enrollment in a UDL Leadership Colloquium, taught by Dr. Richard Jackson (Chair for this dissertation). This course helped me to identify deeply how UDL was connected with social justice: specifically, that UDL is a means towards social justice. Prior to this dissertation, I completed a pilot study with four participants enrolled in a practicum that I had re-envisioned to hinge upon UDL. This allowed me to see how these participants were making sense of this as it related to their practice prior to

entry to the field. This study, however, is focused less on actual classroom practice and more deeply on teacher beliefs and knowledge—a large body of research in the field of teacher education.

This will be my second time teaching the course that this study is situated within. As such, my experiences teaching the course for the first time heavily influenced the adjustments to assignments, presentations, required readings, and discussion prompts that I made. After reflecting upon the course, I made changes to assignments and overall grading policies (with the approval of the professor under whom the course is assigned).

I believe that teachers need to be given frameworks which increase student access to learning opportunities, and UDL provides that framework. Therefore, this study has developed out of my belief that in order to reach the ultimate goals of social justice a practical framework such as UDL must be implemented throughout an educator's work. Pre-service teacher education is the ideal time to begin to support and develop these concepts in future teachers' practice and knowledge bases through the variety of experiences pre-service teachers are given. Prior to beginning this study, I had expectations that the participants of this study would vary in their beliefs in a similar way to the numerous undergraduates I had supervised and mentored over the previous four years. My goals in re-structuring this course from the first offering to the second offering were that students would leave the course more (a) reflective on their practice, (b) critical about societal norms, and (c) encouraged to stand up against inequalities. Based on my experience teaching the course for the first time I made the assumption that students would enter the course with a wide variety of beliefs and experiences and while that would narrow a bit by the end of the course there would still be variation in their beliefs. My hope, then, for this study was that I would see changes in the participants' responses from the start to the end of the study.

Theoretical Framework

This dissertation is framed in the context of two theoretical frameworks: the frame of the study and the frame of the program. While the program is framed within teacher inquiry (Cochran-Smith, Barnatt, Friedman, & Pine, 2009), the overarching study is framed within a socio-cultural perspective. As such, I will discuss the theoretical framework of the study in this section but the theoretical framework of the program which is couched within this study will be discussed in the first section of the literature review (Chapter 2).

Sociocultural theory is rooted in Lev Vygotsky's work in the 1900s. This theory is based on the concept that "human activities take place within cultural contexts, are mediated by language and other symbol systems, and can be best understood when investigated in their historical development" (John-Steiner & Mahn, 1996). The "complex intertwining of the individual and the cultural in development" (Nasir & Hand, 2006) are the main units of analyses. Sociocultural perspectives consider that learning is "constituted by changing relationship in these social relationships and the social world" (ibid.). A sociocultural understanding of culture and interaction suggests that as people engage within their world, they "negotiate what it means to live within these cultures" (Schoepner, 2010).

In sociocultural theory, development occurs after interaction has taken place. For this dissertation, this is a critical distinction: the development of educators requires interaction in multiple spaces, including the course within which this study took place, the space in which participants taught lessons, and other aspects of the teacher preparation program where the participants were enrolled. As it relates to teacher preparation, there is a wide collection of context-based knowledge that teachers need to develop for their practice. As McDonald (2005) explains, who students are, where schools are located, and the types of resources available—

along with other contextual factors—all matter to the work of teaching and learning. Background

knowledge and experiences, along with courses and practicum placements, all influence the

knowledge developed by educators in training (McDonald, 2005; Engestrom & Miettinen, 1999).

As such, this theory is the appropriate framework in which to situate this work: a recognition of

the larger structures of teacher preparation, and, in the case of this study, UDL and social justice.

CHAPTER 2

LITERATURE

While the topic of this study is not one which has been researched previously, the premise stems from a variety of well-established fields. In order to identify the foundation of this current research, it is important to frame it within the following concepts. There are three strands of literature that have laid the groundwork for this research, each discussed individually below. While each of these strands of literature has strong histories, they overlap in ways that have not yet been identified in other studies.

Building upon the theoretical frame set forth in the previous chapter, this chapter identifies now only the three topics of literature critical for this study but also how they fit together for the purpose of this study. As this type of study—connecting social justice and UDL within the context of a teacher preparation program—is new to the field, the research presented sets the stage for why this study is necessary in this multi-layered context. Following a description of the literature, a process is presented for how the literature has informed the methodology, data collection, and analysis of this study.

The first strand of literature discussed is teacher knowledge; specifically, how do teachers learn how to become teachers, what is the knowledge that they need to become teachers, and how do educators develop that knowledge? This body of literature has the largest history and has been foundational for many fields within teacher education.

The second strand of literature is social justice. Social justice, while not a concept specific to the field of education, is one that has been strongly rooted to movements in education. Social justice in teacher education is a complex concept with related lines in anti-racist education, multicultural education, and democratic education.

The third part of this literature review addresses Universal Design for Learning (UDL): initially through an overview of the concept and then as it relates to teacher education. By introducing UDL as the newest framework and therefore least comprehensive body of literature in the review, this study hopes to add knowledge to how teacher educators teach about UDL in pre-service education programs.

These three strands of literature have been selected because they provide the foundation for this study's proposed research questions. By reviewing each strand of literature separately, overarching themes and concepts are found which are then summarized at the close of the literature review.

Teacher Knowledge

The program which this study is organized around is the teacher preparation program at the selected university. This program is guided by the tenets of teacher inquiry (Cochran-Smith, Barnatt, Friedman, & Pine, 2009), assuming that the process of becoming an effective teacher is dependent on participants questioning, conceptualizing, and assessing learning and "their understanding of the recursive nature of the inquiry process" (ibid.). The way teachers begin to make sense of their work is through practical knowledge which is "embedded in practice, in teachers' reflection on practice, and in teachers' practical inquiry about their everyday work" (Cochran-Smith & Lytle, 1999).

Cochran-Smith (2003) and others have studied the process and outcome of teacher preparation through coursework and practicum placements with inquiry as a critical component of their teacher preparation program (Barnatt, Cochran-Smith, Friedman, Pine, & Barroz, 2007; Cochran-Smith, et al., 2009). The site of this intervention is within this same school of education which values inquiry as "a way to encourage teacher candidates' reflection, re-thinking of beliefs

and assumptions, and decision-making" (Cochran-Smith, et al., 2009). The study and following

analysis assume that effective teaching means the ability to teach diverse learners and that this

knowledge is developed through coursework and a practicum placement.

Gore and Zeichner (1991) have found that reflection on practice and experience is

essential in the preparation of teachers; therefore, this study operates under the belief that

reflection and inquiry are a requirement for critical engagement in learning about teaching for

both theory and practice. The course within which data was collected is centered on the

fundamental beliefs underlying this theory of teacher inquiry.

Teacher knowledge has a rich history in research over the past few decades. Teacher

knowledge used to be based in the practice that resulted in high student achievement; new

teachers were taught those skills that would have a so-called impact on student achievement.

Teacher training, therefore, consisted of variables that were considered to be effective for pupil

achievement (Dunkin & Biddle, 1974). However, this process does not consider the rich

complexities that exist within the classroom and individual, and the teacher as an individual

being was not considered. In his American Education Research Association Presidential Address

in 1986, Lee Shulman suggested that there are three forms of teacher knowledge: "propositional

knowledge, case knowledge, and strategic knowledge"—each of which are organized across

content knowledge.

Propositional knowledge is what is mostly taught to teachers. This appears as research-

based principles for teaching, i.e., practical claims based not in research but agreed upon in the

field; and, finally, the "norms, values, ideological or philosophical commitments of justice,

fairness, equity, and the like, that we wish teachers and those learning to teach to incorporate and

employ" (Shulman, 1986). Case knowledge is that of events thoroughly described, not to re-tell

the details but to understand what concepts they represent. This type of knowledge includes

cases that present theoretical concepts, those that describe expected practice, and those that

suggest morals or ideals (ibid.). Strategic knowledge is what a teacher may use when they

encounter situations without easy answers. This knowledge requires a teacher to know their

practice well enough to deliberate to find a solution (ibid.). These three types of knowledge are

essential for all teachers and for teacher educators to appropriately train and support pre-service

teachers.

In the same address, Shulman (1986) explained that the content knowledge which

overlays teacher knowledge is "a) subject matter content knowledge, b) pedagogical content

knowledge, and c) curricular knowledge.". Shulman (1986) defines subject matter content

knowledge as "the amount and organization of knowledge *per se* in the mind of the teacher."

This form of knowledge requires a teacher to understand that content can be organized for

teaching in a variety of ways; teachers are not only responsible for teaching the facts of a content

area, but they are required to understand why those facts are the acceptable facts to know and

why they are worth knowing (Schwab, 1978; Shulman, 1986). Pedagogical content knowledge

goes beyond content knowledge "to the dimension of subject matter knowledge *for teaching*"

(Shulman, 1986; *sic*). This is shown in teachers' ability to represent and ensure that content is

comprehensible to students. Shulman (1986) noted that this type of knowledge also requires an

understanding of what is difficult or easy and knowing the conceptual assumptions that students

may have at various age or developmental levels. Finally, curriculum knowledge is the "full

range of programs designed for the teaching of particular subjects and topics at a given level, the

variety of instructional materials available in relation to those programs and the set of

characteristics that serve as both the indications and contraindications for the use of particular curriculum or program materials in particular circumstances" (ibid.).

While somewhat separate constructs in teacher education, both aspects of knowledge are critical for teachers. In fact, Carter (1990) identifies teacher knowledge as "the total knowledge that a teacher has at his or her disposal at a particular moment" (Verloop, Van Driel, & Meijer, 2001). Further, these concepts work as a larger framework in teacher learning; in their chapter on how teachers learn, Hammerness, Darling-Hammond, and Bransform (2005) highlight teacher learning as a framework where—

> "[New] teachers learnt to teach in a community that enables them to
> develop a *vision* for their practice; a set of *understandings* about teacher,
> learning, and children; *dispositions* about how to use this knowledge;
> *practices* that allow them to act on their intentions and beliefs; and *tools*
> that support their efforts."

This framework is outlined in Figure 1 where vision is the first step of teacher training which can "inspire and guide their professional learning and practice" (Feiman-Nemser, 2001). It is the role of teacher education programs, therefore, to support the development of new visions only after pre-service teachers have been given the opportunity to examine their own long-held beliefs.
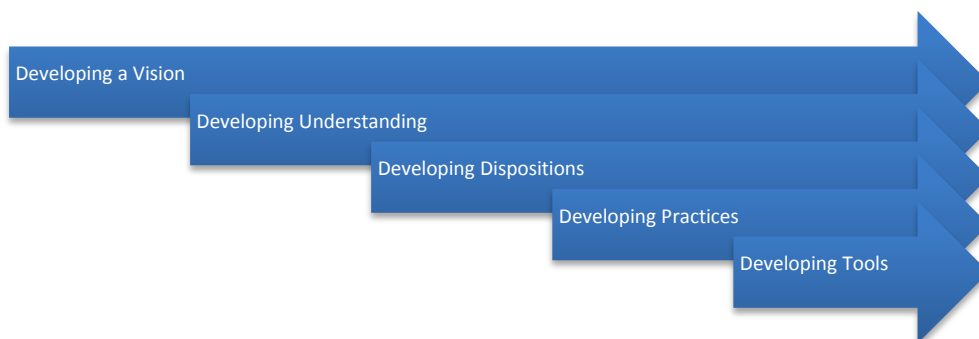
Figure 1. Hammerness, Darling-Hammond, Branstum's (2005) teacher learning framework.

The set of understandings that teachers must develop is the "deep knowledge of content, pedagogy, students, and social contexts" (Hammerness, et al., 2005) that they are able to pass on to their students in an accessible manner. Feiman-Nemser (2001) identifies knowledge of facts within a field, knowledge of frameworks to organize ideas, and knowledge of rules as the three central aspects of subject matter essential for teachers. In order to teach students in their classrooms, pre-service teachers must develop the tools—both conceptual and practical—that allow them to put in action what they have learned in their preparation; conceptual tools include notions such as comprehensible input while practical tools include resources such as running records. By learning about and how to implement these tools in their practice, pre-service teachers are developing their practice as educators, including "respect for evidence, openness to questions, [and] valuing of alternative perspectives" (Feiman-Nemser, 2001).

Building upon their understanding and tools, pre-service teachers can begin to develop the instructional practices which will give them the ability to plan and implement lessons, develop assessments, or provide feedback. Feiman-Nemser (2001) explains that pre-service teacher preparation is when teachers begin to develop this knowledge:

> "This means becoming familiar with a limited range of good curricular
>
> materials, learning several general- and subject-specific models of
>
> teaching, and exploring a few approaches to assessments that tap students'
>
> understanding … helping teacher candidates figure out when, where, how,
>
> and why to use particular approaches." (Feiman-Nemser, 2001).

Finally, teaching dispositions, which include "habits of thinking and action" (Hammerness, et al., 2005), are deeply connected to all of the components of the learning process for teachers. These

dispositions can present themselves as how teachers view their work as educators, their students, or perhaps larger personal alignments.

This framework for learning is set within a community of others, including professors, clinical supervisors, and peers, which deepen and influence the process of learning for pre-service teachers as "…what [pre-service teachers] bring to pre-service teacher education" (Wideen, Mayer-Smith, & Moon, 1998). This comprehensive model allows pre-service teachers to analyze what teaching is (*versus* solely their own K–12 experiences), implement what they know (content) into action (teaching), and develop the habits that can allow them to manage the complexities of classroom dynamics (Hammerness, et al., 2005). While Hammerness and colleagues have discussed teacher knowledge, the context of teacher education within which that knowledge develops is an important factor of discussion.

Teacher knowledge and teacher education

While teacher knowledge is a highly researched concept, research on the knowledge of pre-service teachers is much more difficult to find. Therefore, while the following empirical articles range across content and grade level, they provide a bedrock for the concept of knowledge in teacher education. Prior to the millennium, most studies on teacher knowledge for pre-service teachers have been commonly referred to as "learning-to-teach," are more frequently qualitative, and focused on a small number of participants (Kagan, 1992). Since then, more qualitative studies have been conducted that develop a deeper understanding of the knowledge pre-service educators develop.

In one study, Shapiro (1991) studied change in knowledge for 23 pre-service secondary teachers. Shapiro found that the participants' initial understanding of teaching, the role of teachers, and the reactions of students, changed from the beginning to the end of the first phase

of their teacher preparation program. Similarly, Florio-Ruane and Lensmire (1990) investigated how six pre-service elementary teachers' knowledge on writing instruction would change throughout their enrollment in a methods course on teaching writing. Through the use of activities in the pre-practicum placement, Florio-Ruane and Lensmire (1990) found that the participants entered the course believing in the transmission model of education where a teacher is the giver of knowledge and students were to absorb that knowledge. However, through their enrollment in the course, the participants were able to interact with teaching writing to students and develop an understanding of the role of teachers and students in a classroom more accurate to practice. Both Shapiro (1991) and Florio-Ruane and Lensmire's (1990) studies found that the work engaged in during preparation programs were critical for developing some knowledge in how to teach.

An alternate perspective to understanding teacher knowledge is in Blömeke, Buchholtz, Suhl, and Kaiser's (2013) study investigating the process of developing teacher knowledge and teacher beliefs. From a sample of 183 pre-service secondary mathematics teachers, Blömeke and colleagues, using pedagogical content knowledge tests and belief surveys, found that the qualifications future teachers had when entering their preparation program predetermine their achievement during the program. This relationship between prior knowledge and that gleaned during a program is one referenced in other studies, including Aitken and Mildon (1991), who found that, amongst other things, the experience that pre-service teachers had prior to enrollment in their program were the main determinant in what they learned from their teacher preparation coursework.

Bramald, Hardman, and Lear (1994) found that while these prior experiences might influence pre-service teachers, courses have some influence as well. They surveyed 162

secondary graduate teacher education students three times during their program on seven-point bi-polar scales of agreement (Bramald, et al., 1994). Bramald and colleagues found that as the participants progressed through their program there was inconsistent change in their thinking across all participants. These findings suggest, similar to Goodman (1988) and Lortie (1977), that "student teachers are likely to adopt practice they remember from their own experiences as pupils" (Bramald, et al., 1994). They concluded with a recommendation for teacher preparation courses to increase the amount of reflection that pre-service teachers do in order to develop their thinking about teaching and learning.

In addition to learning in coursework, pre-service teachers experience a variety of knowledge development through their pre-practicum experiences. In one such study by Eisenhart, Behm, and Romagnano (1991), eight pre-service middle school teachers were interviewed throughout the course of a two-semester-long student teaching placement. Eisenhart, et al. (1991) found that the pre-service teachers were overwhelmed with expectations about the placement (which included implementing pedagogical strategies or relating practice and theory) and therefore they struggled with reflecting thoroughly. The participants in this study were misjudged regarding their knowledge and ability by faculty when they in fact barely had the minimal knowledge and skills to survive in the classroom (Eisenhart, et al., 1991). In this study, teacher knowledge in pre-service educators was overly assumed while in fact the participants failed to meet the goals set forth by their university preparation program. In an oft-cited study, Hollingsworth (1989) researched pre-service teachers' knowledge in reading instruction before and after a fifth-year teacher education program. Hollingsworth (1989) found that before pedagogical or academic tasks could be attended to the pre-service educators in her program had to be taught knowledge around classroom managerial routines. Without this knowledge, similar

to the participants in Eisenhart and colleagues' (1991) study, the pre-service teachers struggled in obtaining and implementing the knowledge related to the content in their practice in the classroom.

Summary of Teacher Knowledge and Teacher Preparation

The knowledge that teachers develop over time in teacher preparation programs is one that is heavily influenced by their own personal experiences, though preparation programs have a role as well. This finding, in many studies, indicates the need for teacher preparation programs to increase practical experiences and to connect theory to practice more tightly (Blömeke, et al., 2013; Bramald, et al., 1994). Additional findings on teacher knowledge suggest that while there is change over time in teacher preparation programs the relationships between teacher-focused *versus* student-focused is part of teacher knowledge growth over time (Shapiro, 1991; Florio-Ruane & Lensmire, 1990).

This section of the existing literature strongly influences this dissertation as it revolves around an initial course in a teacher preparation program. The planning and organization of the syllabus, readings, assignments, and activities need to be considered in light of the importance of all types of knowledge: content knowledge, pedagogical knowledge, and overall curricular knowledge as it relates to practice and theory. This strand of research is critical in laying the foundation for the rest of the dissertation, including the following two strands of literature.

Social Justice in Education

Fundamentally, the concept of social justice can have different meanings in different settings. Personal backgrounds and experiences influence how individuals view social justice and by extension how it might be taught. The definitions of social justice may include concepts of acceptance, understanding diversity, creating a just world, removing inequalities, or moral

actions. The reality is that social justice has political, social, cultural, and economic significance in our varying sets of experiences (North, 2008).

One of the premiere researchers in the field of social justice, Lee Anne Bell, describes social justice as "both a process and a goal" (Adams, Bell, & Griffin, 2007). She continues:

> "The goal of social justice is full and equal participation of all groups in a society that is mutually shaped to meet their needs. Social justice includes a vision of society in which the distribution of resources is equitable and all members are physically and psychologically safe and secure…. Social justice includes social actors who have a sense of their own agency as well as a sense of social responsibility toward and with others, their society, and the broader world in which we live."

This importance of social justice in education is not solely sitting with researchers but also in the general public. In 2009, United States Secretary of Education Arne Duncan stated, "I believe that education is the civil rights issue of our generation. And if you care about promoting opportunity and reducing inequality, the classroom is the place to start. Great teaching is about so much more than education; it is a daily fight for social justice" (Duncan, 2009). To this end, a few university teacher preparation programs have taken on social justice as a core component of the training and experience of pre-service teachers (Cochran-Smith, Shakman, Jong, Terrell, Barnett, & McQuillan, 2009).

For many, social justice is seen as an umbrella term encompassing concepts such as multiculturalism and anti-bias education (Derman-Sparks & Ramsey, 2006; Schniedewind & Davidson, 2006; Sleeter, 2005), culturally relevant pedagogy (Ladson-Billings, 1995), culturally responsive teaching (Irvine, 2003), anti-racist teaching (Berlak & Moyenda, 2001), ableism (Hehir, 2002), and anti-oppressive teacher education (Kumashiro, 2004) amongst others

(Agarwal, Epstein, Oppenheim, Oyler, & Sonu, 2009). Social justice finds its place somewhat at the end of the trajectory of diversity, anti-racism, and multiculturalism. This is not to say that social justice is the final, end-all to these terms; rather it has seemed to take over as the new buzz word: a substitute for 'controversial' multiculturalism, replacing the 'uncomfortable' racism, being used deliberately by authors because it has not been attached emotionally in the same way that other terms have been (North, 2008).

If social justice is meant to teach for democracy, to teach students how to function in the greater world context as Adams, Bell, and Griffin (2007) explain, and to fight for what is right and to support those who are outsiders to cultural and social 'normative' expectations, then educators need the appropriate training and support to accomplish those goals. In a study on university-school partnerships, Murrell (2007) defines this to be "a disposition toward recognizing and eradicating all forms of oppression and differential treatment extant in the practices and policies of institutions, as well as a fealty to participatory democracy."

Types of social justice

Gates and Jorgensen (2009) believe that social justice in itself is a complex concept to define and therefore propose three levels of how social justice may be constructed in the field: moderate, liberal, and radical. Moderate forms of social justice focus primarily on "fairness and equity." These forms do not challenge the status quo nor do they necessarily acknowledge societal structural inequalities. Moderate social justice might suggest forms of change but not to the extent of challenging social conditions. Gates and Jorgensen (2009) suggest this is the "easiest to sign up to" as the demands are minimal in the field of social justice. Liberal forms of social justice, which are more demanding, do acknowledge the structural inequalities that exist in society and attempt to address these yet believe that work within classrooms can lead to change

without impacting larger structures in society. Gates and Jorgensen (2009) caution that this can implement itself as a focus on "language or discourse as roots of oppression" which may not address social justice goals as a whole. Radical forms of social justice not only acknowledge structural inequalities but seek to undo these inequalities through active practice. Most demanding of the three, radical forms of social justice recognize "relational inequality and structural inequality, social class and ideology" (Gates & Jorgensen, 2009).

In light of Gates and Jorgensen's (2009) categorization, the majority of the studies reviewed below are moderate, perhaps bordering on liberal, forms of social justice. For teacher preparation programs, with significant amounts of content to impart and training to provide teachers (Shulman, 1986), it seems appropriate that radical forms of social justice are not found. However, there is a large body of literature on radical forms of social justice in the classroom, albeit outside of teacher preparation and connected to teacher practice (EdLiberation, 2013; NYCoRE, 2013; NAME, 2013).

Social justice and teacher preparation

Some critics of social justice in teacher education view it as propaganda for liberal perspectives, "engaging in 'thought control' and 'political screening' using criteria derived from the [progressive left]" (Villegas, 2007). Yet social justice in teacher education is critical, as schooling is a complex institution based on deep-seated histories of segregation and hierarchies (Villegas, 2007). None can deny the influence that schools have on forming students into the adults they will become; therefore, teachers need the appropriate skills and experiences to interact with an increasingly diverse student population amongst whom many have been at the disadvantaged end of societal inequalities for much of their lives.

Where universities' teacher preparation programs have taken on the responsibility to teach social justice to their pre-service teachers, Nieto (2000) acknowledges the harmful role some teacher education programs have had: "steeped in negative perspectives about diverse populations, based on deficit theories.". She also expresses concern that teacher education programs are approaching issues of social justice and equity at a "sluggish pace" (Nieto, 2000). To counter this, Cochran-Smith (2003) suggests a renovation of university-based teacher preparation which situates social justice at the forefront of the teacher education curriculum. This preparation is two-fold: it requires teachers to provide their students with more than just content, but also the opportunity to learn about the world around them and their role in that world. Secondly, it provides teachers with the perspective and knowledge to enter into the classroom aware of structural inequalities that exist today. In classrooms, teachers are taking the knowledge from their programs and the influence of their administrators to teach for social justice. They are asked to make sure that their children receive more than traditional content—that they learn about the world around them and how they are a part of it.

Social justice education has been "associated with different beliefs, practices, and policies over time" (North, 2008) in a variety of settings such as universities, classrooms, and communities. Much of the research on social justice in teacher education programs is fueled by the increasing diversity amongst urban schools. The changing demographics of classrooms, yet overwhelmingly white, middle-class, female population of teachers (Villegas & Lucas, 2002; Ladson-Billings, 2001) has led to the frequently asked questions of what kind of education children are receiving, who is providing it, and what their qualifications are. It is through coursework, service-projects, and inquiry activities which emphasize social justice that some

colleges and universities are attempting to develop cultural competency, awareness of differences, and a desire to teach for social justice.

Moderate forms of social justice can be found in the foundational teaching of strategies or methods to traditionally marginalized or under-served populations of students. Coursework focusing on social justice and what role it plays in the classroom can be coupled with more traditional methods courses where pre-service teachers can learn some of the skills they need to be prepared for classroom teaching. Much of the research on social justice in these courses, as a reflection of the teaching profession's demographics, has focused on the demographic of white middle-class female teachers teaching non-white urban students. Porfilio and Malott (2011) found that theoretical coursework was not enough to teach and sustain a social justice mindset with pre-service teachers. They found that there is no single method to employ to ensure that white teachers have a desire to teach for personal and social transformation.

In preparing teachers, universities provide courses such as *Teaching for Diversity* or *Social Justice Education* which encourage all pre-service teachers to engage with topics that are seen as movements towards social justice. Many pre-service teachers are interested in the impact of issues such as racism, power, privilege, bilingual education, heterosexism, parent involvement, community engagement, school segregation, and learning disabilities, as Graziano (2008) found; yet at most universities social justice is limited to a specific course, rather than permeating through an entire program (M[c]Donald, 2005). Pre-service teachers are not given opportunities to fully develop understanding of these topics through personal reflection on how these issues may relate to their teaching.

In a qualitative case study of two teacher education programs with a social justice focus, M[c]Donald (2005) followed ten pre-service teachers to better understand how these participants

learned about social justice. Through interviews with participants, university professors, and university reports, McDonald (2005) found both similarities and differences in how these programs integrated social justice into coursework and experiences. Neither university offered enough opportunities to explore issues of social justice as they relate to students with special needs as the participants were not given options to work with that population of students. Alternatively, both universities provided participants with the experiences working with English language learners yet coursework emphasized conceptual knowledge over practical knowledge in the classroom. Further, one university provided additional assignments and experiences on how to amend instruction for English language learners. Both universities required students to engage in foundational courses on multiculturalism or a related topic in which participants were to investigate oppression towards various groups in their community or society at large. McDonald (2005) found that the universities in the study focused on conceptual learning around social justice as opposed to practical learning, at times even curbing opportunities of practice depending on the placement of students. This is similar to findings by Hollins and Torres Guzman (2005) who, in a study on pre-service teachers' preparation for diversity, found that while attitudes were impacted, classroom actions were not addressed as significantly.

Cochran-Smith and colleagues (2009) investigated the understanding of social justice for twelve masters-level pre-service teachers enrolled in their university in which social justice is a stated agenda. They found that each of the participants believed teaching for social justice meant to emphasize pupil learning; some participants emphasized that this included "affirming and building on differences, teaching basic skills, promoting critical thinking, expanding pupils' worldviews, and maintaining high expectations for all pupils" (Cochran-Smith, et al., 2009).

As an antithesis to the assumed liberal agenda of indoctrination by critics of social justice, Cochran-Smith and colleagues found that participants were drawn to the program because of the status of social justice (2009). Across their twelve participants, though, one expressed that the emphasis on social justice was irrelevant, suggesting it was perhaps only necessary in urban, low-income communities. Similarly, the sole participant in Garmon's (2004) study investigating a pre-service teacher's attitudes towards diversity felt that social justice was more necessary in urban school settings than suburban after watching videos about the experiences of students of color in urban schools compared to white students in suburban schools. Yet this contrasts with a participant in Agarwal, et al.'s (2009) study who, when required to reflect upon her prejudices around privilege and whiteness after teaching in a gifted classroom, saw a change in her beliefs and perceptions.

Au and Blake (2003) investigated how a pre-service teacher's cultural identity impacts learning to teach and found that programs which require participants to teach in diverse settings help them develop a "critical understanding" of others. Additionally, they point to the importance of the training of teachers who are of a racial minority to improve learning and educational experiences for students. Su (1997) found that approximately a third of the pre-service teacher candidates of color interviewed in her study believed that challenging the status quo was a requirement of good teachers while none of the mainstream white teacher candidates showed the same level of commitment to disbanding structural inequalities.

Yet, in a study investigating the experiences of three teacher candidates who admittedly were committed to social justice, Agarwal and colleagues (2009) found that each participant struggled with the tension between their ideals and their practice. The authors suggested that the practice of social justice was frequently blocked by the day-to-day complexities of teaching. One

participant felt that while her commitment to challenging systemic inequalities was at the core of her beliefs, her work in the classroom wasn't enough due to external factors, including her curriculum.

As behaviors, values, beliefs, and ways of thinking (Gee, 1996) influence training, development, and the way teachers teach, a study on pre-service teachers enrolled in a multicultural education course found that minority pre-service teachers were frustrated and fearful that their white peers would become teachers after witnessing some of their actions during the course (Amos, 2010). Before experiencing coursework in social justice, pre-service teachers require the opportunity to assess their own history and knowledge in order to gain both conceptual and practical understandings of social justice in their classroom environments.

Summary of Social Justice and Teacher Preparation

Teacher preparation programs are more aware than ever of the importance of including social justice coursework in light of the increase in diverse contexts in which teachers will teach (Ladson-Billings, 2001). A perspective which focuses on social justice is one which can support the diversity found within classrooms, especially in a context where many teachers are a demographic mismatch with their students. Social justice, as many of these studies suggest, highlights the importance for pre-service educators to investigate their knowledge about societal inequities and to develop teacher practices which support them in challenging the status quo they, perhaps, have not thought about previously.

This study took place within a school with a fundamental focus on social justice for educators. The participants in this study are required to meet standards of social justice and equity to progress through their teacher preparation program; this study collected data which supported their initial growth. The research above influenced the selection and organization of all

the assignments, readings, and activities chosen for this study to ensure that social justice is more than a 'buzzword' and becomes a requirement for inquiring into one's own practice. Additionally, through the guidance and findings of many of these studies, data collection tools— including a survey and journal prompts—were developed. This strand of research on social justice supports the investigation of the first research question of this study.

Universal Design for Learning

Universal Design for Learning stems from the field of Universal Design, an architectural term for designing "all products, buildings, and exterior spaces to be usable by all people to the greatest extent possible" (Center for an Accessible Society, 2013). In architecture, universal design is not about the style but the premise behind building and creating so that all individuals can have access. Universal design hinges on usability and accessibility for all; specifically, if something is designed for those with disabilities, then it can work better for all.

Developed by architect Ronald Mace at North Carolina State University in the 1950's, the universal design framework in architecture provides guidance and support to the population at large by building accessible home or working spaces. Aspects of architecture typically attributed to universal design include curb cuts and ramps into buildings; however, these are only the most simplistic ways to include design for all. An architectural structure truly universally designed will include visuals, sounds, and other supports; for example, when crossing the street, providing a curb cut, walk sign, and audio cues as well as textured ground to indicate the start or end of a sidewalk. These supports allow various people to access the information needed to safely cross the street.

This premise has become more commonplace than many realize, because, as universal design would indicate, what is necessary for some can be beneficial for all. Those walking across

a street while texting or while pushing a baby carriage can use the indicators just as those who

might be in a wheelchair or are blind. The Center for Universal Design at North Carolina State

University has identified seven principles of accessible design: equitable use, flexibility in use,

simple and intuitive, perceptible information, tolerance for error, low physical effort, and size

and space for approach and use. As Welch (1995) has explained, "The concept of [universal

design] goes beyond the mere provision of special features for various segments of the

populations. Instead it emphasizes a creative approach that is more inclusive, one that asks at the

outset of the design process how [something can be] functional for the greatest number of users."

These principles in architecture have laid the groundwork for universal design in education, or

Universal Design for Learning (UDL).

In an ERIC/OSEP topical brief, Orkwis and McLane (1998) expressed the necessity of

every student having access to meaningful curriculum regardless of "disability, difference, or

diversity." They suggest that access to curriculum "begins with a student being able to interact

with it to learn … in order for [all] students to understand and learn, the curriculum must be

delivered with an array of supports for the student. The barriers to access must be removed, but

more importantly, the curriculum has to continue to challenge them" (Orkwis & McLane, 1998).

At the forefront of this research is the Center for Applied Special Technology (CAST) whose

researchers have developed UDL for educational environments (Rose & Meyer, 2002).

UDL requires design at the front of instruction to be inclusive of all individuals and their

wide differences, including "abilities to see, hear, speak, move, read, write, understand English,

attend, organize, engage, and remember" (Orkwis & McLane, 1998). CAST further explains

UDL as a framework that is deeply rooted in learning sciences and neuroscience. Mapped onto

three brain networks—recognition, strategic, affective—UDL gives clarity to long-held, yet incorrect, beliefs in types of learners.

Neuroscience background

Decades of research on the brain have led to the concept of variability which is at the root of UDL. Individuals are highly variable in all aspects of life, including learning, which means that the concept of *norm* is inconsistent, at best. Factors such as culture, language, age, experience, family, or immediate circumstance can influence an individual at any given time. Multiply by the number of students in a classroom and the concept of having an average learner or a typical learner in a classroom becomes much more difficult to grasp (Hall, Meyer, & Rose, 2012). One way to conceptualize learning is through three brain networks: the recognition network, the strategic network, and the affective network.

The recognition network is the "what" of learning or how individuals make sense of information. This is the network that allows people to identify patterns, recognize words, and understand complex concepts. The strategic network is the "how" of learning or how learners are able to monitor their actions. It is through the strategic network that we examine every mental task we engage in. The affective network is the "why" of learning or how individuals connect emotion to tasks at hand. While this network may be more complex than the other two, it indicates the importance of emotions and engagement while learning. While separate networks, they work in unison for all acts we complete as humans.

Universal design for learning principles

Aligned with the three brain networks are three principles that guide the premise of UDL: representation, action and expression, and engagement. Each of these principles is meant to guide educators in supporting all learners (Appendix A). UDL Guidelines Principle 1, Multiple

Means of Representation, requires options to be provided around perception, language, and comprehension of content to be learned. The Representation Principle includes use a variety of sensory inputs, presenting content in visual and auditory manners, clarifying language and terminology critical to understanding the content, and activating background knowledge, as a few examples.

UDL Guidelines Principle 2, Multiple Means of Action and Expression, focuses on how students are actively expressing what they are learning and on developing executive functioning skills. This Principle allows students to be held to the same ultimate goals but to show their knowledge in a way that is best for them at any given moment. This Principle includes providing physical options for communication through technological tools, supporting students with graduated levels of support, and guiding goal setting, as examples. UDL Guidelines Principle 3, Multiple Means of Expression, helps support students' engagement through recruiting interest, encouraging effort, and self-assessment and regulation. This Principle includes, for example, providing choice and autonomy to students, increasing the use of mastery-oriented feedback, fostering collaboration, and developing the skills of self-assessment and reflection (http://cast.org).

By emphasizing the concept of "multiple means," UDL offers inclusive practices for all students through these three principles. The promise of UDL is the increased availability of a flexible curriculum for all students, regardless of need. It allows for the creation of learning environments that may catch students before they fall behind by pro-actively setting goals for a wide range of students and developing materials and assessments accordingly.

In planning for instruction across the three principles, UDL highlights four components of practice: goals, instructional materials, teaching methods, and assessment (Hitchcock, Meyer,

Rose, & Jackson, 2002). A UDL curriculum requires each of these components to be implemented in a way that allows the learner to master their own ability in learning: to become strategic, skillful, goal-directed with a purpose, and motivated to learn (Rose & Gravel, 2010). In the UDL framework, goals for the curriculum must include various pathways to reach those goals. Goals are typically based on acquisition of skills or in gaining knowledge based on standards. Materials include tools that support those pathways and encourage students to demonstrate their knowledge in varied ways. Teaching methods go beyond differentiating for individual students and require flexible, varied methods that all students can connect with, if needed, throughout a lesson. Finally, assessment requires a laser focus on the learning goals, ensuring that what is expected of students is accurately being taught and determining their knowledge of content is used to further plan for all students in a class (Hall, et al., 2012). Overall, a UDL curriculum includes these four components aligned with each of the three UDL Principles to provide students equitable, varied access to a curriculum aligned with high standards and goals. Planning curriculum under the UDL framework requires appropriate knowledge and training that must be found in teacher preparation and professional development.

Universal design for learning and teacher education

Given the fact that UDL is a relatively new conceptual framework in education, there are very few peer-reviewed articles or books on the training of educators in UDL. Therefore, this topic was expanded to include related concepts such as lesson planning and learning how to use technology, both under the umbrella of UDL.

The 2008 re-authorization of the Higher Education Opportunity Act included UDL as a "scientifically valid framework for guiding educational practice … [maintaining] high achievement expectations for all students" (HEOA, P.L. 110-315, §103(a)(24)). The inclusion of

UDL in this federal law additionally required teacher preparation programs to include UDL (Ayala, et al., 2012). Teacher educators recognize the importance of training general education teachers to "meet the needs of students with disabilities, those at-risk for academic failure and learners from diverse cultural, linguistic, and socioeconomic backgrounds" (Jimenez, Graf, & Rose, 2007). By applying concepts of UDL to the preparation of pre-service teachers, pedagogical training can focus on all students in K–12 classrooms. Through the use of UDL in the classroom, "general and special education teachers can more effectively accommodate students who learn differently, engage with content from different perspectives, and speak English at varied levels of proficiency" (Courey, Tappe, Siker, & Le Page, 2012).

In a study conducted by McGuire-Schwartz and Arndt (2007) at a private college, thirty-six pre-service teachers were taught undergirding concepts of action research during their pre-practicum experience. Prior to their pre-practicum, they were taught guidelines of UDL over four courses in education. Through observations and work with their supervisors, the pre-service teachers identified an area of need and developed UDL strategies through research and data collection. In a second study carried out by McGuire-Schwartz and Arndt (2007), five teacher candidates enrolled in a public university program were observed as they implemented a six-week thematic unit in an after-school program. In the larger study of 2007, McGuire-Schwartz and Arndt found that participants felt confident about the interventions developed because they were able to "[note] the success" of the students. In the smaller study, they found that participants felt they had a better grasp of what their students were learning.

Participants in both studies conducted by McGuire-Schwartz and Arndt in 2007 felt they would continue to use UDL strategies and techniques in their classrooms because they felt it "helped all students" and not just those on whom they had focused. Frey, Andres, McKeeman,

and Lane (2012) conducted a similar study with a focus on preparing pre-service teachers for inclusive classroom environments. The sixteen participants in their study had completed coursework in their respective content area and some teaching content courses. By reviewing the culminating portfolio, which included examples of lesson plans before and after being taught UDL guidelines, they found participants used UDL principles in designing lesson plans and were appropriately adapting instruction. In another study, Spooner and colleagues found a statistically significant increase in mean scores of inclusion of UDL concepts in lesson planning for pre-service teachers who received an extra hour of UDL training for every course taken (Spooner, Baker, Harris, Ahlgrim-Delzell, & Browder, 2007). Frey found that there was a positive impact on student outcomes with stronger UDL-designed lesson plans (Frey, et al., 2012). Both of these studies suggest an intervention including training in UDL guidelines can positively impact the way pre-service teachers plan lessons.

McGuire and Arndt (2007) claim that "there is a lack of research about how to prepare teacher candidates in the planning and carrying out of universally designed lessons … [we] do not know what works and what does not work, what is effective and what is not," a sentiment echoed by many other experts. While studies on UDL lesson planning training have been conducted (Browder, Mims, Spooner, Ahlgrim-Delzell, & Lee, 2008; Dymong, Renzaglia, Rosenstein, Chun, Banks, Niswander, & Gilson, 2003; Meo, 2008; Metcalf, Evans, Flynn, & Williams, 2009), there is a need for continued research on the preparation of student teachers with UDL, including information about explicit teaching of UDL, developing lesson plans that effectively include UDL, implementing aspects of UDL in classrooms, and determining the effectiveness of program models. Research on UDL at the teacher preparation level is necessary

to develop an understanding of how general education teacher candidates can be appropriately equipped for using UDL to address the needs of diverse learners in their classrooms.

Planning with UDL

Beyond teacher education in UDL, a few articles on training and support for teachers on UDL exist. Empirical studies included intervention studies with teachers while conceptual studies included lesson plan templates and suggestions through the use of checklists and other organizational tools for planning within the UDL framework.

Lesson planning is critical for effective classroom instruction; expanding planning to include concepts of UDL has been an increased area of interest. Lynch and Warren (2008) discuss the fact that research has shown that using UDL as a strategy of teaching to all students can increase assessment scores, student engagement, and teacher sense of efficacy. Similarly, McGuire, Scott, and Shaw (2006) share practical steps to include UDL in lesson preparation, including planning for a variety of choices in assignments or responses, using the "learning pyramid" to organize content for all students, and overlapping curriculum concepts that address a variety of skills.

The fundamental steps to planning a lesson, as described by Lynch and Warren (2008), include objectives, an anticipatory task, lesson activities, closing activity, extension opportunities, independent work, evaluation, and re-teaching based on evaluation. Expanding upon those steps, Courey, et al. (2012) conducted a study in which they implemented the use of a lesson plan template that also included individual goals for students on IEPs who may require specific skills addressed as well as state standards appropriate for grade and content level. Kurtts, Matthews, and Smallwood (2008) also included the importance of individual steps during a lesson to appropriately match UDL to curriculum and classroom needs. Participants in these

studies were able to use strategies that may have been originally geared towards students on IEPs

for all students in the classroom (Courey, et. al, 2012; Kurtts, et al., 2008). Many of the strategies

the participants used in order to include UDL in their instruction required thoughtful planning of

resources and materials ahead of time, including books on tape, PowerPoint presentations,

guided notes, and story maps (Courey, et. al, 2012). Similarly, Metcalf, et al. (2009) reviewed

and developed examples of both low-tech and high-tech for each component of UDL after

identifying potential barriers for learning.

An alternate way of lesson planning based on principles of UDL is planning for all

learners (PAL) (Meo, 2008). This four-step circular method begins with setting goals and then

moves into analyzing the status of the curriculum and classroom, applying concepts of UDL to

lesson development, and finally teaching the UDL-focused lesson (Meo, 2008). Meo's four-step

strategy was implemented in a high school reading course with further support through

professional development and a school team comprised of general education teachers and special

educators. There were two main findings that bear importance. Firstly, the teacher in the study

found that his blame had shifted from unprepared students to an inherently flawed curriculum.

Much like Metcalf, et al. (2009), the focus on curriculum and classroom barriers had a direct

impact on lesson planning. Secondly, there was significant benefit in planning with a co-teacher

which led to a greater ability to create an appropriate curriculum and to adopt UDL language and

strategies in planning and instruction (Meo, 2008). While not all studies had a component of co-

teaching or co-planning, many of them integrated a form of professional development which

allowed participants to engage and work with others.

Summary of Research on Universal Design for Learning

Much of the literature on UDL focuses on the concept itself, as very few peer-reviewed published studies have been conducted in the past decade. Yet, of those published, many have been intervention studies aligned with teacher preparation programs or courses, or training sessions for student teachers (or in-service teachers) focusing on how to plan and implement lessons which encapsulate the UDL principles. Many of the participants in these studies responded to UDL as a positive framework from which all students in the classroom could benefit. While some participants saw the impact of UDL in data collected on their students (McGuire-Schwartz & Arndt, 2007; Frey, et al., 2012), others responded to UDL through an increased accuracy in including concepts in their planning and implementation of teaching (Frey, et al., 2012; Spooner, et al., 2007).

This strand of literature on UDL is critical for teacher candidates to develop knowledge of and an understanding of this newer body of research. While a few studies focus on educators, the majority of the research on UDL is *proposed* in nature; in other words it suggests more of what teachers could or should do under the framework of UDL. By answering the second research question on UDL (i.e., connecting UDL and social justice), this study will support the development of this field to inform practice. The literature presented above was instrumental in developing the course within which this study took place. As with social justice, UDL is more than a concept to read about but one to investigate as it relates to teacher candidates' work ; therefore, the activities and readings that the participants in this study engaged in were be influenced by the guidelines of UDL.

Summary of Literature

In light of these three differing strands in research literature, a conceptual frame for bringing them together is best explained by Cook-Sather and Youens (2007): "all students have the right not only to learn but also to have a say in how their education is conceptualized and

enacted.". This perspective implies that UDL may be a powerful tool for social justice. By preparing teachers to use the UDL framework, they are able to enact an educational experience for students which addresses the diversity of backgrounds, knowledge, and experiences that students bring the classroom. With the ultimate goal of social justice in their work, pre-service teachers are able to ensure that all students can exercise their right to learn and engage with all curricula presented in their classrooms.

Each area of research has influenced an aspect of the study, from development of materials to data analysis. Further, these three strands of literature combine with each other to present a comprehensive perspective for teaching pre-service teachers about equitable perspectives and practice in their own future classrooms. This literature also assumes inquiry in one's practice is a necessary way to develop knowledge as educators as well as around perspectives such as social justice and UDL.

This study proposed that the foundation of teacher preparation is anchored in a connection between teaching for social justice and UDL. By integrating these concepts within a sociocultural frame, the participants experienced a course and field component that focused on those theoretical underpinnings of teacher education, reflection, and development of practice. In sum, the literature supported the development the curriculum and practices by the course instructor for the study.

Based on review of the literature, this dissertation is a logical next step in integrating concepts that have the potential to deepen the practice of teachers during their training programs. Within the larger framework of sociocultural theory, this study relies on what is known about preparing teachers, concepts and practices of UDL, and perspectives of social justice to identify and implement a methodology which allows for thorough data collection and analysis to answer

my research questions. My hope is that this type of a framework—integration of commonly held

concepts supported by an appropriate theory—can further the fields of social justice and UDL

with respect to teacher preparation. As this framework is a new perspective on teacher

preparation, those in the field of teacher preparation may be able to take this structure as they

develop courses, select required experiences, and create structures that allow pre-service teachers

to develop their knowledge across multiple fields instead of isolated silos.
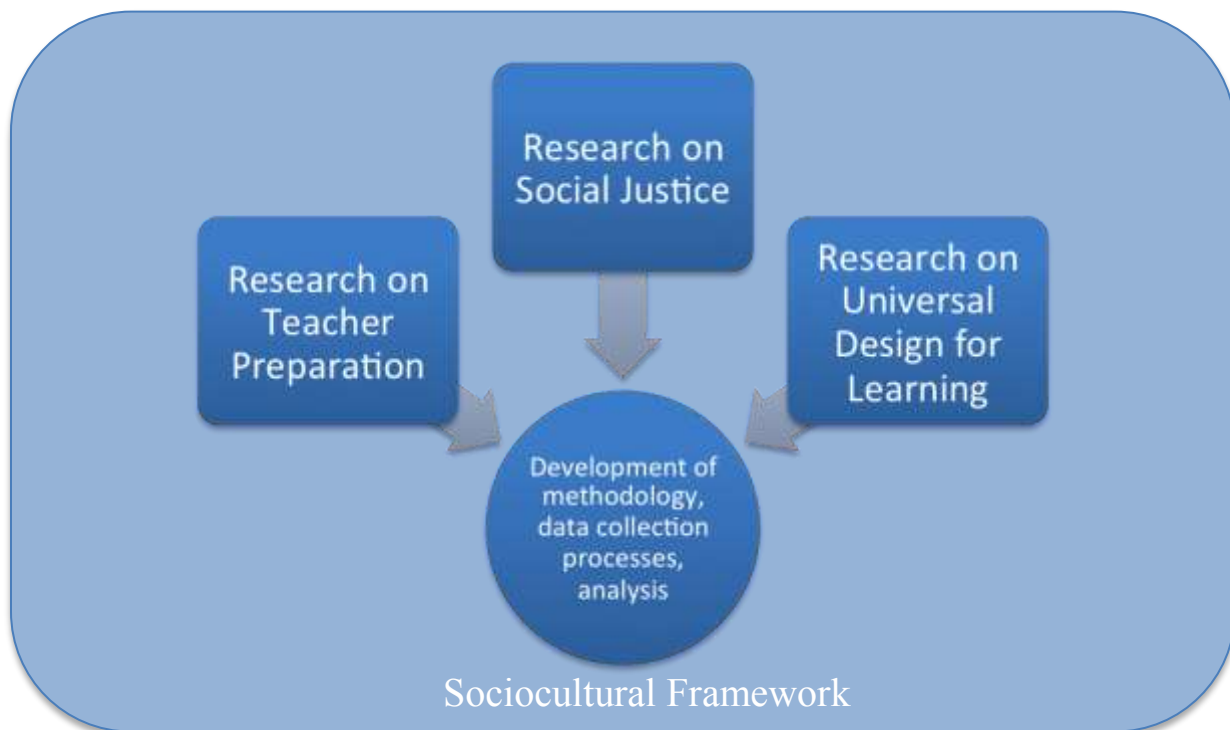
Figure 2. Framework for literature review.

CHAPTER 3

METHODOLOGY

Research Setting and Context

This study was embedded within an undergraduate course at a private Jesuit college in New England. The course, ED211: Secondary Curriculum and Instruction, is the initial course for secondary majors in the school of education. This course took place during the spring of the 2014 school year and lasted 17 weeks, from January 13th through May 8th. The course had eleven objectives for participants as they progressed through the semester: 1) provide a site-based, pre-service teaching experience in an urban high school; 2) develop pre-service teachers' understandings of principles of classroom-based inquiry; 3) develop pre-service teachers' abilities to identify, understand, and critique personal biases about diversity which includes but is not limited to race, ethnicity, culture, gender, age, language, academic abilities, and sexual orientation; 4) introduce multiple frameworks and theories of social justice education; 5) introduce the inclusive framework of Universal Design for Learning; 6) immerse pre-service teachers in genuine connections between theory and practice; 7) develop pre-service teachers' understanding of theories and methods of secondary curriculum and instruction; 8) increase pre-service teachers' knowledge, understanding, and application of the planning practice; 9) immerse pre-service teachers in the realities of an urban school; 10) challenge preconceived notions of urban schools, teachers, pupils, and parents; and 11) prepare pre-service teachers to teach all students, across all facets of diversity. These objectives, save "introduce the inclusive framework of Universal Design for Learning" were identified as course goals prior to the conception of this study.

The course syllabus includes a full description of assignments, readings, and expectations (Appendix B). Supplementing the 17-week in-person course was an online course management system (Canvas) used to maintain readings, assignment submissions and responses, online discussions, and other resources for the course. The major assignments in the course included a school culture assignment, a three-part academic language project, and an advocacy project. The school culture assignment required participants to reflect upon their experiences, class lectures and discussions, and the school placement in order to develop an understanding of the culture of the school as it related to their own experiences. The academic language project was a three-part assignment which required students to investigate text, learn more about the linguistic diversity in the classrooms where they were placed, and revise lesson plans using their knowledge of the complexities of language and the students in their classrooms. The advocacy project was the culminating project for the course. The purpose of the assignment was for students to identify an area of educational injustice, highlight relevant research, and develop an action plan. Additional assignments in this course included scheduled daily exit tickets, weekly journals, and discussion board postings via Canvas. These assignments were tied directly to the content of a day's focus or objective and occasionally required student participants to respond prior to a course meeting.

This course overlapped with participants' first pre-practicum placement at the same school. The course met twice during the day (7:45 a.m.–9:15 a.m. and 2:00 p.m–3:10 p.m.) and participants were placed in two or three classrooms at a local high school between 9:00 a.m.–2:00 p.m. While this project did not collect any specific data on the practicum experience, there was an assumption that classroom placements would influence the work completed in the course.

Participants

The participants in this study were undergraduate students enrolled in Secondary Curriculum and Instruction in the spring of 2014. A total of 19 students were enrolled in this course and all of them agreed to be participants in this study. Of the 19 participants, 14 were English majors, three were Math majors, one was a History major, and one was an Hispanic Studies major. Further, two participants were male while the rest were female. Most participants self-identified as White or Caucasian, with one identifying as Asian and one as multi-racial. Table 1. Participant Demographics.

Table 1

Participant Demographics

Major	English	Math	History	Hispanic Studies	Total
	14	3	1	1	19
Race	White or Caucasian	Asian	Multi-Racial		Total
	17	1	1		19
Gender	Female	Male			Total
	17	2			19
Sophomore (2nd year of college)					Total
					19

This was the first identified "methods" course for all participants and the first course in the education school for a few. As stated previously, co-required with this course was a pre-practicum at a nearby high school (which was the first teaching experience for all participants).

While a few had volunteering experience in elementary, middle, or high school settings, this was the first time all participants had been in a structured setting in a school in a content area related to their major with guidance and support around planning and teaching lessons by a vetted and trained university supervisor.

All participants were expected to complete the assignments of the course, as it is a requirement for their education licensure program; therefore, participants were not compensated for participation. All 19 participants signed a consent form at the start of this study, allowing for their data to be used as a part of this dissertation. While data on all 19 participants will be presented in this dissertation, an additional focus group of four students was selected to highlight their knowledge of social justice and UDL. Those participants were not selected until the end of the semester-long course so that instructional practices were consistent for all enrolled in the course. Further, those participants were not selected until data on all 19 had been coded and four participants emerged as cases to further analyze (see coding section below).

While the participants in this study were enrolled in a pre-practicum placement in a classroom, the researcher did not collect data on the work in the classrooms (i.e., lesson plans, meeting with teachers, observations). This was a strategic decision for two reasons: 1) the participants in the study had one of three supervisors which would influence the type of feedback and practice suggestions provided and 2) participants were placed with various full-time teachers who had different views on the issues critical to this study. If data had been collected on the practicum experience, then both the supervisors and the classroom teachers should have been a part of the data collection to develop a richer picture. Therefore no participants received individual feedback or commentary from the primary researcher on their classroom practices that might influence their work beyond others enrolled in the course.

Role of the researcher

I have taught undergraduate students twice at the university level, in the Fall of 2014 and in the Spring of 2014, both times teaching the same course: Secondary Curriculum and Instruction. Previously, I had taught graduate-level students and in-service teachers both in university sites and professional development programs. Teaching undergraduate students was a different experience due to four main reasons: the age, course requirements, overall professionalism, and background experiences of the students. The students enrolled in Secondary Curriculum and Instruction are, at most, two years older than the students with whom they are placed in a student teaching placement. Some are, in fact, younger than this high school's students as the school enrolls students up to 20 years, 11 months of age. Additionally, as mentioned above, Secondary Curriculum and Instruction is the first course students enroll in for their education program and for some this course becomes a deciding factor in whether or not they chose to continue within the field of education or not. Unlike graduate students or in-service teachers who have, for the most part, completely committed to the profession, undergraduate students are experiencing the world of teaching for the first time. This initial experience in teaching is their first 'work' role and therefore issues around professionalism must be explicitly discussed and taught.

The background experiences of the students in Secondary Curriculum and Instruction are very different from many of the other students I have taught. Most identify as Caucasian from a high socio-economic status, suburban neighborhoods, and many attended private or Catholic school. Their experiences in high school were heavily influential (Lortie, 1977), especially since it had been less than two years since they were enrolled. These factors were exceptionally interesting when considering the course goals around identifying and critiquing diversity, which

many—by their own account—have not experienced much of. I think this makes their responses to social justice and UDL, both which are strongly connected to diversity, influential to the field of initial teacher preparation.

Qualitative Research

Qualitative research is a "systematic approach to understanding qualities, or the essential nature, of a phenomenon within a particular context (Bratlinger, Jimenez, Klingner, Pugach, & Richardson, 2005). This qualitative study aligns with the qualities that Creswell (2003) identifies as essential components: a) the research takes place in a natural setting, b) the methods are interactive, c) the data is emergent, not "tightly pre-configured", d) analyzing the research is an interpretive process, and e) the role of the researcher is reflected upon as it relates to the study. Four focal participants will be selected for in-depth case studies and surveys from the entire course will be used to supplement larger themes.

Case Study

A case study allows for data collection in a real-world setting with many variables of interest (Yin, 2014). While the case study is sometimes viewed with great caution due to the specificity of its data, perhaps having minimal scientific value to the field at large (Kratochwill, 1978), case study research can allow the researcher to develop greater and deeper understandings of concepts researched (Maoz, 2002). The case study has even been likened to that of an artistic process—developing pictures that are able to convey the truth (Waller, 1934 [in Gerring, 2007]). As such, a case study is "the intensive study of a single case where the purpose of that study is— at least in part—to shed light on a larger class of cases, namely "a population" (Gerring, 2007). Further, while providing the researcher with the ability to explore a concept in depth, cases "are bounded by time and activity, and researchers collect detailed information using a variety of data

collection procedures of a sustained period of time" (Creswell, 2003). The particular case study included here focused on four participants within the larger context of 19 participants, as the analytic benefits of more than one case is substantial (Yin, 2014).

Survey

Supplementing the case studies were pre- and post-surveys administered to all 19 participants. A survey is a "systematic method for gathering information from (a sample of) entities" (Groves, et al., 2004). While Groves and colleagues (2004) typically discuss the purpose of a survey as it relates to quantitative research, Jansen (2010) explains that—

> "The qualitative type of survey does not aim at establishing frequencies, means or other parameters but at determining the diversity of some topic of interest within a given population. This type of survey does not count the number of people with the same characteristic (value of variable) but it establishes the meaningful variation (relevant dimensions and values) within that population."

The surveys used in this study have been pre-structured and analysis was carried out via coding which is described below. Survey data was collected for all participants to develop an understanding of the knowledge and beliefs of all; for the four focal participants it became a part of their individual case studies, supporting and highlighting features found in other sources of data.

Data Collection

Throughout the 17 weeks of this study, a variety of data was collected at different times: journals, a pre- and post-UDL knowledge survey, a pre- and post-social justice knowledge survey, daily reflections, and the final advocacy project. Additionally a demographic survey was administered at the start of the course. These sources of data were collected as components of the

course in which participants were enrolled and all students were required to complete them. A timeline for data collection is presented at the end of the dissertation (Appendix C).

Demographic survey

The demographic survey for this course was developed by a previous instructor and had been used for multiple years with respect to this course (Appendix D). The survey collected general information about students' background, including their high school experiences, their educational experiences, and their purpose for entering the field of education. The demographic survey was used primarily to get to know the students; however, additional demographic factors about students typically are presented as they complete journal requirements.

Journals

Journals were submitted approximately every other week and were based on a set of pre-determined topics that allowed the participants to reflect upon and discuss their experiences, knowledge, and beliefs (Appendix E). Journal topics have been developed over the course of three years through work with the practicum office at the university and have been approved by the assistant director of the practicum office.

UDL knowledge, practice, and beliefs survey

The UDL Knowledge, Practice, and Beliefs Survey was developed by researchers at CAST to collect data on schools and districts that were implementing UDL (Appendix F). While developed as a professional development survey tool, the purpose for employing the survey in this study was slightly different. The survey was administered at the start and at the end of the study to gauge knowledge as well as growth of knowledge on UDL-related terminology.

The survey was shared with the PI as a way to continue to collect data on the concepts of UDL. The survey was not changed and all of the questions were asked in the same order as they

are when administered by CAST. The survey was administered online through Google Forms

and the data was not reviewed or analyzed until the end of the course.

Social justice survey

As discussed in the introduction and the literature review, social justice is a critical

component not only of this study, but—as this research hopes to illuminate—in all educational

settings. Villegas (2007) believes the following:

> "[The overriding] goal of the social justice agenda in teacher education is to prepare
>
> teachers who can teach all students well, not just those traditionally well served by
>
> schools, so that as adults, all are able to participate in the economic and political life of
>
> the country … teachers … have a moral and ethical responsibility to teach all their pupils,
>
> fairly and equitably."

The data tool used to gauge the participants' knowledge of teaching for social justice was

the *Learning to Teach for Social Justice—Beliefs Scale* developed by the Survey Team of the

Boston College Teachers for a New Era Project (Ludlow, Enterline, & Cochran-Smith, 2008).

The survey conceptualized social justice across six concepts: "teachers' knowledge, skill, and

interpretive frameworks; teachers' beliefs, attitudes, and values; classroom practice and

pedagogy; community participations; teachers' learning in inquiry communities; and promoting

pupils' academic, social-emotional, and civic learning" (Ludlow, et al., 2008). The survey

consists of 12 statements on social justice answered using a 5-point Likert scale (Appendix G).

At Boston College, where this survey was developed, the teacher preparation program is

undergirded by the concepts of social justice; therefore the higher the cumulative score, the

higher the commitment to social justice the participant is assumed to possess. The development

of the survey assumed that "teaching for social justice is a legitimate and measurable outcome of

teacher education" (Ludlow, et al., 2008). Their study used a Rasch rating scale to develop this

range of weak to strong commitment of teaching for social justice in the survey, which has been

repeated in other studies (Roseboro, Parker, Smith, & Imig, 2012) to develop the reliability of

the survey. The survey was administered online through Google Forms and the data was not

reviewed or analyzed until the end of the course.

Advocacy project

The final major assignment in the course was to develop an action plan (Appendix H).

Participants were to identify an area of educational injustice in classroom or school settings,

complete a literature review about the topic, and develop a plausible action plan. The action plan

did not need to be implemented, but the development of one was a requirement for the course.

Daily reflection

In addition to journals, short written reflections were completed every session the course

met. The purpose of this assignment was to understand how students were responding to the

class readings, discussions, activities, and concepts. Participants were given the option to write

their reflection during the school day or to submit it via the online course management system

before 5:00 p.m. However, all participants opted to submit entries before the end of the course

meeting time every week. Written reflections were related to the topic discussed in class (see

syllabus for prompts guidelines). The reflection did not have a length requirement. As such,

participants' responses ranged greatly throughout the course.

Data Analysis

Data were collected throughout the study but not analyzed until after the study was

completed so as not to influence the researcher in work with any participants. As mentioned

above, while all participants were expected to complete all assignments, a stratified sample

(Gerring, 2007) of four cases were selected to describe and analyze potential types of participants for greater implications.

Coding

No analysis was completed until participants had completed the study. All data was collected electronically by the PI throughout the study and was stored on an external hard drive in separate folders for each participant. At the close of the study, the PI replaced names of all participants with pseudonyms, kept in a separate file.

Prior to the first round of coding, all data was 'digested and reflected upon' as Clarke (2005) suggests. Data sources for the four focus participants were re-read for a general overview and reflection. Prior to coding, all documents were printed out for manual coding so that the PI could "touch the data" (Graue & Walsh, 1998). As coding is a complex process, Saldana (2012) cautions that the use of programs may lead to "mental energies [being] more focused on the software than the data." Codes discovered through handwritten coding were organized on color-coded sticky notes. For the four main cases, codes were then entered into a Microsoft Excel document. Since coding was done solo, there were periodic check-ins around data with the Chair for this dissertation.

Analytic memos are important to ensure trustworthiness of the PI account of the data (Ezzy, 2002; Miles & Huberman, 1994). Therefore, analytic memos were kept reflecting upon the PI "coding processes and code choices; how the process of inquiry is taking shape; and the emergent patterns, categories and subcategories, themes, and concepts in [the] data" (Saldana, 2012).

Coding was conducted in multiple stages as represented by the diagram below.

Stage 1: Holistic Coding

•Descriptive Data: Coding for 19 participants
 •Demographic Survey
 •Universal Design for Learning Survey
 •Social Justce Survey

Stage 1.5: Selecting Case Studies

•Identify the relationships between three surveys
•Sampling cases based on trends in 19 participants
•Identify four cases for second-stage coding

Stage 2: Structural Coding

•Representing Narrative Profiles: Coding for 4 participants
 •Journals
 •Exit Tickets
 •Discussion Board Postings

Figure 3. Coding diagram.

The first cycle of coding was holistic coding (Dey, 1993) which is an attempt to "grasp

basic themes or issues in the data by absorbing them as a whole [the coder as 'lumper'] rather

than by analyzing them line by line [the coder as 'splitter']" (ibid.. Major themes had already

been established (social justice and UDL) and the researcher was, at this point, trying to develop

the groundwork for the four cases to be highlighted.

The second round of coding was structural coding (Namey, Guest, Thairu, & Johnson,

2008). Structural coding "applies a content-based or conceptual phrase [which represents] a topic

of inquiry to a segment of data that relates to a specific research question" (Saldana, 2012). The

content-based phrases were developed from the UDL framework as well as key language from

the Social Justice Beliefs Scale. As structural coding acts as a "labeling and indexing device"

(Namey et al., 2008), this allowed data to be organized according to the major themes which

drove the purpose of this study as well as the study questions. Structural coding was also used as

first-cycle coding for the pre- and post- surveys for the class as a whole in order to understand the class growth of knowledge as a whole.

Validity and reliability

Construct validity establishes a "chain of evidence" (Yin, 2014) regarding the data collection process. Therefore, multiple sources of evidence were used, as described above. To increase the validity of this study, two forms of triangulation were integrated into this work: data triangulation and methodological triangulation (Denzin, 1970; Guion, Diehl, & M[c]Donald, 2011). Data triangulation involves looking for different sources of data to find similar outcomes. In this study, this would include journals and daily reflections. Methodological triangulation involves the comparison of different methods. In the case of this study this would be a comparison of findings from surveys, journals and reflections, and action plan projects.

Reliability was maintained through the use of explicitly stated steps throughout the data collection and analysis process so that any readers of this dissertation would be able to conduct the study in the same process and, hopefully, reach the same results (Yin, 2014).

Limitations

While all studies are limited, there are four limitations to consider with this study: (a) theoretical frame, (b) UDL survey, (c) participants enrolled (generalizability and exploratory), and (d) my positionality as a researcher. Each of these limitations does not negate the study as a whole but should be taken into consideration when reviewing the findings and discussion of this dissertation.

The sociocultural theoretical frame, as all theoretical frames, emphasizes and values certain factors to a greater degree than others. Sociocultural theories "examine the roles of social and cultural processes as mediators of human activity and thought … [the theory locates] the

fundamental unit of analysis for the examination of human behavior as activity, or cultural practices" (Nasir & Hand, 2006). As such, the analysis in this study does not include an explicit inclusion of the school in which participants were completing their pre-practicum (where this study was conducted). Rather, questions posed for exit tickets, journals, and discussion board postings required students to refer back to their own behaviors and thoughts as the unit of analysis.

As discussed above, the UDL survey used for this study was developed for in-service teachers. Therefore, many of the questions presented on the survey assume greater classroom-based teaching time than the students of this study had experienced. This limitation is addressed in that all the students in this study had the same amount of classroom time in this study (as compared to a graduate course, for example, where classroom teacher experience could vary greatly). Further, as the UDL survey had only been used for in-service teachers up until this dissertation, it can influence the future usage of this survey for purposes of teacher preparation.

While I briefly discuss the participants in describing my own positionality, it is critical to review their role when addressing study limitations. The participants of this study were greatly homogenous: most were white and female, many were upper or middle class, they were all accepted into a rigorous private university teacher preparation program, and the majority of them had not considered issues of social justice prior to the beginning of this course (as identified in their own journals or exit tickets). In some ways, this mirrors much of the research on teachers in the United States, yet this limits the greater generalization of this study as the participants do not represent a larger population of potential teacher candidates across the country. Beyond the homogeneity of the participants, only 19 were included in this qualitative study. As such, generalizability is minimized; however, the study is presented as an exploratory study and does

not seek to make generalizable findings across teacher preparation at large. However it does seek to make recommendations for teacher preparation programs where applicable. The data on participants in this study seeks to contribute to the growing field, as opposed to making claims about trends in the field at large.

Finally, my own positionality is a limitation in this study. My bias is multi-fold: I am a researcher of Universal Design for Learning, I am very close to this study as both the PI and the instructor of the course, and I have taught this course before with a similar group of students (which would have subconsciously filtered my view of this current group of participants). I account for this positionality by being straightforward about where my biases and beliefs are influencing the analysis and where the research is.

CHAPTER 4

FINDINGS

This Chapter focuses on the findings derived from the participants in this study. Findings are presented in three sections: overall response to stated research questions, survey data for all 19 participants, and in-depth case studies on four. Responses to the questions are presented first to provide a context for the survey and case study data. Prior to identifying and analyzing the data on the four focused case studies, survey data for all nineteen participants[1] was analyzed. The analysis of these data led to the selection of four case studies in an attempt to identify different responses to and understandings of UDL and social justice. As stated in the methodology, the participants completed two surveys: one on UDL and another on social justice, twice throughout the semester (as detailed in the methodology section in Chapter 3). The survey documents and the tables with findings are listed in the appendices. The social justice survey data are presented for all twelve statements from pre- to post-administration. The UDL survey is broken up into two separate sections: a) knowledge and beliefs and b) practice, from pre- to post-administration as well. Based on this data, three main findings are discussed: 1) variance in the social justice survey responses, 2) positive change in all UDL survey responses, and 3) survey statements that seem to overlap conceptually across the two surveys. After the survey findings, data for the four focused case study participants are presented. Each participant is detailed individually in the findings chapter, but will be analyzed as they related to the literature in Chapter 5.

Responses to Research Questions

This dissertation presented two research questions: one exploring the change in beliefs for participants in UDL and social justice, the other exploring how participants connected the two concepts. The data used to answer these two questions are the survey responses (for change)

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[1] Names have been changed.

and the case study details (for connection). Based on the survey data, the participants in this study changed their beliefs on social justice and UDL throughout the time spent engaged in the course. Specific findings are presented in the following sections on surveys with further analysis in Chapter 5. However, the participants did not find a deep connection—or any connection, for some participants—between the two concepts. Findings are presented below, while an analysis and implications are detailed in the final chapter.

Social Justice Survey

Certain statements on the social justice survey had similar concepts and could be grouped together. There were pockets of questions that focused on the following ideas related to social justice: teacher responsibilities, teacher beliefs and actions, and experiences and opportunities for students (see Figure 4). The groupings allowed for a deeper understanding of how participants understood concepts situated within social justice. While Ludlow, Enterline, and Cochran-Smith (2008) did not originally organize the survey questions as such, throughout the process of coding and analyzing it was clear that responses could be grouped and allow for an additional layer of analysis as it relates to the questions posed at the start of the dissertation.

Teacher Responsibilities

- Statement 2: Issues related to racism and inequality should be openly discussed in the classroom
- Statement 3: For the most part, covering multicultural topics is only relevant to certain subject areas, such as social studies and literature.
- Statement 4: Good teaching incorporates diverse cultures and experiences into classroom lessons and discussions.
- Statement 5: The most important goal in working with immigrant children and English language learners is that they assimilate into American society.
- Statement 7: Part of the responsibilities of the teacher is to challenge school arrangements that maintain societal inequalities
- Statement 12: Realistically, the job of a teacher is to prepare students for the lives they are likely to lead.

Teacher Beliefs and Actions

- Statement 1: An important part of learning to be a teacher is examining one's own attitudes and beliefs about race, class, gender, disabilities, and sexual orientation.
- Statement 6: It is reasonable for teachers to have lower expectations for students who don't speak English as their first language
- Statement 8: Teachers should teach students to think critically about government positions and actions.
- Statement 10: Although teachers have to appreciate diversity, it's not their job to change society.

Student Opportunities and Experiences

- Statement 9: Economically disadvantaged students have more to gain in schools because they bring less to the classroom
- Statement 11: Whether students succeed in school depends primarily on how hard they work.

Figure 4. Social justice question organization.

While most participant responses appeared to move towards beliefs more closely aligned with social justice, the findings from this survey were a bit more inconsistent with abstract statements as it relates to pre-service teachers' reactions to social justice. Each of the 19

statements are presented in this section with a brief analysis of the findings. Following the individual survey findings, specific cases that stood out during analysis are presented.

Teacher Responsibilities

In statement two, the participants were asked about their agreement with issues to be discussed in the classroom. Specifically, racism and inequality—something that research has identified yet is typically not addressed in classrooms (Pollack, 2012). At the start of the study in January, 78.9% of participants felt strongly that these types of issues should be openly discussed in class, while 21.1% of participants were uncertain if these concepts should be addressed in the classroom. These numbers changed minimally in May, as 89.5% of participants agreed to some level while only 10.5% of participants were uncertain. Only one participant was uncertain in both the January and May administration of the survey. All other participants had changed their beliefs during the course of the study.

Similarly to statement two, statement three identifies the location in which certain topics should be discussed: specifically, whether or not multiculturalism should be discussed solely in social studies and literature classes. At the start of the study, 68.4% of participants disagreed that social studies and literature were the only location for multicultural topics while 31.6% of participants were uncertain. No participants agreed that multiculturalism should fall within a specific content area. At the close of the study, 89.5% disagreed to some level that multiculturalism belongs couched within social studies or history while 10.5% were uncertain. Again, no participants agreed that multiculturalism belongs in a sole content area.

Statement four asked participants to identify if the incorporation of diverse cultures and experiences made for good teaching. In both January and May, 100% of participants agreed to some degree that lessons and classroom discussions should incorporate experiences of diverse

cultures. While there was a slight difference between agree and strongly agree (only one participant changed from agree to strongly agree), overall, all participants were in agreement.

Statement five focused on assimilation for immigrant and non-native English speakers. In January, 63.2% of participants disagreed that the most important goal in working with immigrant or English language learner students is assimilation into the American society, while 26.3% were uncertain and 10.5% agreed that it was the most important goal. In May, 84.2% of participants disagreed that assimilation was the most important goal when working with students who are immigrants or English Language Learners, 15.8% were uncertain, and no participants agreed that it was the most important goal.

Statement seven referenced the responsibility of a teacher in the classroom to challenge school configurations that maintain an unequal status quo. In January, 89.4% of participants agreed that one responsibility of an educator is to challenge the status quo in school settings, while 10.5% were uncertain. This changed in May, as 100% of participants agreed to some level. While the overall change between January and May was minimal, the individual change amongst participants (especially from agree to strongly agree, or vice versa) was one of the largest amongst the surveys. This will be discussed in the following section.

Regarding statement twelve, in January 47.4% of participants disagreed that it is a teacher's job to prepare students "for lives they are likely to lead," 31.6% agreed that it is, and 26.3% were uncertain. In May, 47.4% of participants still disagreed that it is the responsibility of a teacher to prepare students for the lives that they are likely to lead, while 21.1% were uncertain, and 31.6% of participants agreed to some degree that it is a teacher's job to prepare students for the lives they are likely to lead.

Teacher Beliefs and Actions

Statement one refers to a teacher's own beliefs and attitudes towards diversity. This statement focuses on the belief that teacher practice should include a thorough analysis of personal attitudes and perceptions as it relates to traditionally marginalized student populations. In January, 94.7% of students agreed to some degree that teachers should examine their own beliefs as it relates to diversity, while 5.3% disagreed. In May, these numbers shifted slightly and 100% of participants agreed or strongly agreed that this is an important aspect of teacher practice. More specifically, while only 52.6% strongly agreed in January, 89.5% strongly agreed in May.

Statement six focused on lowering expectations for students who do not speak English as a first language. In response to expectations for students who do not speak English as a first language, in January 63.2% believed it is not reasonable for teachers to lower expectations for students who don't speak English as their first language while 36.8% of participants were uncertain. In May, these numbers shifted, as 78.9% did not think it was reasonable, 5.3% were uncertain, and 15.8% believed it was reasonable for teachers to have lower expectations for students who did not speak English as a first language.

Statement eight, which focused on teachers' roles in supporting students to think critically about the government, had large numbers of individual change from January to May, even though the overall responses did not reflect this. In January, 78.9% of participants agreed that thinking critically about the government should be something teachers teach their students while 21.1% were uncertain. In May, 89.5% agreed while 10.5% were uncertain.

Statement ten indicated beliefs about the level of the role of a teacher to change society. In both January and May, 94.7% of participants disagreed that teachers must only appreciate

diversity, while 5.3% were unsure. In other words, the majority of participants believed that

teachers play a role in changing society beyond appreciating diversity in their own classrooms.

Experiences and Opportunities for Students

Statement nine focused on the experiences of economically disadvantaged students in

schools—specifically the idea that the more disadvantaged a student is the more they can gain

from school. While 100% of participants disagreed that economically disadvantaged students

have to more to gain in school in January, 94.7% disagreed in May while 5.3% were uncertain.

Statement eleven focused on the relationship between success and hard work while

statement twelve focused on the responsibility of teachers to prepare students for lives they are

most likely to find themselves leading. In January, 57.9% of participants disagreed that success

is based on how hard students work in school while 31.6% agreed and 10.5% were uncertain. In

May, these numbers only slightly changed with 68.4% disagreeing that hard work begets school

success, 21.1% agreeing, and, again, 10.5% uncertain.

Summary of Social Justice Survey Statements

Enterline and colleagues (2008) hypothesized that the scale they developed would allow a

measurement of levels of belief and therefore "teacher candidates exiting from a program with an

explicit social justice agenda should score higher on a scale of social justice beliefs than teacher

candidates just entering the program." As the participants in this study were neither entering or

exiting a program, but halfway through, Table 2 below indicates the change from their first

survey response score to their last (calculated as May score minus January score). Participants

are organized from highest change to negative change.

Table 2

Participant Response Change

Participant (pseudonym)	Response Change
Helen Chen	6

Uli Hoffman	5
Susan Schmidt	4
Ona Kane	3
Miriam Keller	2
Betsy Allen	2
Denise Atkins	1
Rebecca Cash	1
Jack Dennis	1
Mary Egan	1
Genevieve Marten	1
Dina Jenkins	0
Wendy Kruger	0
Kelly Matthews	0
Dahlia Lando	-1
Heather Andrew	-2
Andrea Alexander	-2
Greg Smith	-4
Rachel Linden	-11

It is important to note that some participants had a lower change rate due to their entry response. For example, Genevieve Marten, one of the four case studies discussed below, had a change of only 1; however, her January response was one of the highest in the course. Therefore, she had minimal opportunities to increase in her response. Alternatively, Uli Hoffman (not a case study) had the lowest January score, so her positive change was higher.

Universal Design for Learning Survey

The UDL survey responses have been divided into two sections: knowledge and beliefs in section one and practice in section two. As discussed in the methodology section, this UDL survey was developed by CAST for in-service teachers engaging in school or district shifts towards UDL-embedded practice. As such, section two, practice, is relative to the minimal experience that undergraduate students in a pre-service teacher preparation program actually have. Similarly to the social justice survey findings above, each statement is presented with a brief analysis of the findings followed by an in-depth detail of specific cases.

Survey Statements

The UDL survey presents groups of relevant concepts, starting with general beliefs about learning and moving towards specific learning with a UDL perspective. Statements one, two, and three focus on the theoretical underpinnings of the UDL framework but do not identify it by name. Statement one begins with the overall belief that all students can learn in general education settings. In January, 36.8% of participants agreed to some level that all students can learn in general education settings while 63.2% of participants disagreed to some extent. In May, those numbers only slightly shifted, with 42.1% of participants agreeing and 57.9% of participants disagreeing. Statement two focused on the variability in educational settings, a core concept to the UDL framework. In both January and May, 100% of participants agreed that there is a range of learner variability within any setting, though two more strongly agreed in May than in January. Similarly, statement three, which identified learning as the dynamic interaction of the individual with the environment, had 100% of participants agreeing, to some extent, from January to May. As the university where this study took place requires pre-service teachers to take an introduction to special needs course (which some study participants had taken, identified in Chapter 3, it is not surprising that they agreed with statements two and three, both of which can connect to supporting individualized learning needs.

Statements four and five focus on the UDL framework by name and had more variance in responses from January to May. In January, 36.8% of participants agreed to some level, 26.3% disagreed, and 36.8% were not sure that "the implementation of UDL will lead to better achievement for all students." The fact that seven students (36.8%) were unsure at the time was reasonable since this was the first deep exposure to UDL that the students had had. These responses changed in May, when 5.3% of students disagreed while 94.7% agreed. Participants, however, were split more consistently in both January and May for statement five. Statement five

focused on the need for technology in order to implement UDL. Specifically, this statement makes the assumption that technology is not a requirement for UDL. This is a critical concept because UDL is frequently discussed in light of assistive technology, but research and practice have shown UDL implementation can be completed without the need for technology. In January, 42.1% of participants agreed that UDL can be implemented with or without technology; 21.2% of participants disagreed, believing that technology is critical for successful implementation of UDL; and 36.9% of participants were unsure of the role of technology in UDL. In May, 57.9% of participants agreed that technology was not critical for UDL implementation; 21.6% disagreed, assuming technology was essential; and 10.5% were still unsure.

Statements six through ten focus on the four tenets of UDL: goals, methods, materials, and assessments. While these statements do not address UDL by name, similar to statements one through three they lay the foundational beliefs for the framework. Statement six focused on disentangling the means from the goals for student mastery. Underlying this statement is the belief that the means by which to master a task (goal) should not be interfered with by said means. For example, if a student knows the content but is unable to spell, incorrect spelling should not influence their mastery of the content. In January, 21.1% of participants agreed that goals and means should be disentangled, 47.4% disagreed that they should be separate, and 31.6% were unsure. In May, 31.6% of participants agreed, 47.4% of participants still disagreed, and 21.1% of participants were unsure.

Statement seven presents the belief that all students can benefit from having multiple curricular options or learning pathways. Not surprisingly, 100% of participants agreed with this statement in both January and May. Similarly, 100% of participants agreed in both January and May with statement eight, which expressed that methods and materials should recruit and sustain

student engagement and statement nine which stated that assessments, methods, and materials should be aligned with curricular goals. While 100% of participants agreed with statement 10, the belief that assessments should reduce barriers to ensure accurate measurement, in May; 5.3% of participants were unsure in January. This could be due to confusion around the statement or a true uncertainty of beliefs.

Finally, statement 11 goes back to the overall perspective of UDL. Eleven states a belief in supports and scaffolds being present in assessment as well as during instruction and practice. In January, 74.7% of participants agreed, while 10.5% disagreed, and 15.8% were unsure. In May, these numbers slightly changed with 84.2% of participants agreeing, 5.3% disagreeing, and 10.5% unsure.

Section two of the UDL survey asks participants about their belief in their own knowledge and competency in practicing the concepts critical to UDL. Rather than responding to statements by varying levels of agreement or disagreement, questions 12 through 17 required participants to respond with one of six potential responses:

- I don't know what this is

- I have heard of this before but I am unsure of how to do this

- I have some knowledge about how to do this but don't feel I am competent

- I am probably competent in my current knowledge of how to do this and would like to learn more

- I am quite competent in my current knowledge of how to do this

- I am very knowledgeable about how to do this and feel competent in my ability to teach others.

For purposes of these findings, these response options will be coded as follows: no knowledge, unsure, some knowledge, probably competent, quite competent, very competent. Further data analysis and discussion separate these codes as a) lack of competence (no knowledge, unsure, some knowledge), and b) levels of competence (probably competent, quite competent, and very competent).

All six statements are presented as concepts that should be carried out in practice in the classroom, with participants ranking their ability to do so. Statement twelve suggests that learners should be provided with a variety of ways for recruiting and sustaining engagement in the classroom; in January, 15.8% of participants stated they did not know what it was, 26.3% had minimal knowledge but were unsure of practice, 36.8% had some knowledge but did not feel competent, and 21.1% of participants were probably competent but would like to learn more. There seemed to be a slight increase across participants' responses in May as 5.3% did not know, 15.8% had some knowledge but did not feel competent in practice, 52.6% felt relatively competent and wanted to learn more, 26.3% of participants felt quite competent, and no participants felt very competent.

Statement 13 focused explicitly on the concept of self-regulation and the need to provide learners with strategies such as coping skills, self-assessment, and reflection. In January, 21.1% of participants had heard of this before but were unsure of how to do it, 36.8% of participants had some knowledge but did not feel competent, and 42.1% of participants identified as being probably confident but would like to learn more. Responses shifted to more knowledge in May with 15.8% of participants having some knowledge, 42.1% wanting to learn more, and 21.1% feeling quite competent as well as very knowledgeable to the point of having the ability to teach others.

As expected, there was an increase from January to May in responses for statement 14—that learners should be provided with multiple means to access information. In January, 10.5% had heard of this concept before but were unsure how to do this, 31.6% had some knowledge but not to the point of competency, 47.4% felt they were probably competent but wanted to learn more, and 10.5% felt quite component in their knowledge and ability to do this. In May, these numbers positively increased with 5.3% having some knowledge, 36.8% believing they were probably competent but wanting to learn more, 42.1% feeling quite confident, and 15.8% feeling very knowledgeable in their ability to teach others.

Statement 15 focused on strategies that should be provided to support comprehension and understanding for the range of all learners. Again, an increase in knowledge and practice was noted. In January, 5.3% of participants had heard of this concept but were unsure of how to do it, 47.4% of participants had some knowledge but did not feel competent, 42.1% of participants were probably confident but wanted to learn more, and 5.3% of participants were quite confident in their knowledge on how do to so. In May, 10.5% had some knowledge, 57.9% felt probably confident, 26.3% were quite confident, and 5.3% were very confident.

Finally, statements 16 and 17 focused on options which should be made available for learners. Statement 16 emphasized action, expression, and communication integrated into the teaching and learning structure while statement 17 prioritized goal setting, strategy development, and overall progress monitoring. In January, 47.4% of participants had some knowledge, while 36.8% and 15.8% felt they were probably competent and quite competent, respectively, in their ability to ensure learners are provided with options for action, expression, and communication. In May, 10.5% had some knowledge, 36.8% felt they were probably competent, 36.8% were quite

competent, and 15.8% were very competent. Similar changes were found relative to statement 17 as 26.3% were unsure, 52.6% had some competency, and 21.1% were probably competent in January; while 21.1% had some competency, 42.1% were probably competent, and 36.8% were quite competent in May.

Summary of UDL Survey

Regarding the UDL practice survey, overall participant responses moved from lack of competency to levels of competency. As indicated in Table 2 below, there was a noticeable increase in participants' beliefs in their own practice. The change in responses can most likely be attributed to the course in which the participants were enrolled which provided focused instruction on Universal Design for Learning and guidance for practice.

Table 3

UDL Survey: Top Three Levels of Competency

UDL Survey (Practice)	January 16th Responses: Top Three Levels of Competency	May 1st Responses: Top Three Levels of Competency
12. Learners should be provided with a variety of ways for recruiting and sustaining engagement in the instructional environment.	4 participants (21.1%)	15 participants (78.9%)
13. Learners should be provided with strategies for personal coping skills, self-assessment, and reflection in support of self-regulation.	8 participants (42.1%)	16 participants (84.2%)
14. Learners should be provided with multiple ways to access information including text, oral presentation, and visuals.	11 participants (57.9%)	18 participants (94.7%)
15. Varied strategies for a range of learners should be provided to support comprehension/understanding.	9 participants (47.4%)	17 participants (89.5%)
16. Learners should be provided with options for action, expression, and communication during instruction/teaching.	10 participants (52.6%)	17 participants (89.5%)
17. Learners should be provided with options that support goal setting, strategy development, and progress monitoring.	4 participants (21.1%)	15 participants (78.9%)

Findings for four participants

To understand the findings of this study in a deeper manner, four participants were selected to highlight various experiences, backgrounds, and survey findings across the larger sample of participants as it relates to their conceptualization of UDL as a framework for social justice. These participants were selected after initial data analysis to ensure that each focused case study represented a unique perspective (as discussed in Chapter 3, Methodology). The participants selected were Andrea Alexander, Dina Jenkins, Genevieve Marten, and Greg Smith (pseudonyms).

Findings are framed by the research questions set forth at the start of this dissertation: In a four-year, private university teacher preparation program, this study focuses on college sophomores in the initial stages of their degree program. Regarding these students—

- o How do these pre-service teachers' beliefs about UDL and social justice change over the course of a 6-month study?

- o How do these pre-service teachers connect UDL and social justice in their initial development as educators?

As these questions are rooted strongly in the research of each respective field (see Chapter 2), major trends and themes in the data are identified for each of the four participants. These trends align with conceptualizations in the literature for each respective field. For the participants in this study, the three identified themes were school culture, equity, and inclusion. Each participant's findings are discussed as to how they conceptualized, discussed, or changed over time with respect to each of these three categories.

The findings for each participant include their survey responses, select findings from their journals and exit tickets, and a complete transcription of their end of semester summary.

Following the presentation of the findings in Chapter 4, Chapter 5 will discuss these data in light of the literature on teacher preparation, social justice, and UDL.

Why school culture, equity, and inclusion?

At the start of the study, each participant was asked to respond to a journal prompt on school culture (see Appendix E for complete prompt). This was to be done prior to the participants actually entering the high school where they would be completing their pre-practice experience. The timing of this was deliberate: participants were asked to write about their assumptions, where those assumptions stemmed from, and what the data on a school might suggest to them. This was followed up with a similar prompt (see Appendix E for complete prompt) about school culture six weeks later with the goals of participants reviewing, revising, and deepening their beliefs after the course and their practicum experience. In light of their own K–12 experiences, each participants' beliefs about and experiences of school culture are discussed as well. Of the four participants, there were drastically different experiences in their own K–12 school culture which has impacted how they view school culture in the context of this study.

The guiding premise of social justice that grounds this study is one of "full and equal participation … in society" (Adams, Bell, & Griffin, 2007) and further that all members of a society have a sense of social responsibility that goes beyond his or her individual community towards the larger world community. In this study, participants were asked about social justice both in journal prompts (see Appendix E for complete prompts), as well discussion board posts (see Appendix B for schedule) and assignments (see Appendix B). Social justice, however, has many definitions, and while this study presumes one definition it does not suppose that all participants abide by the same one. Therefore, this study identified equity as the key concept that

appeared around conversation about social justice. Therefore, the experiences, knowledge, and beliefs around equity are discussed for each of the four participants as they relate to social justice.

This study stands by the idea that UDL is a framework that can lead towards goals of social justice. As discussed in the literature in Chapter 2, UDL grew out of the world of special education but is being accepted as a research-based premise for full inclusion for all students. Therefore, inclusion is the third theme that each participant discussed. Similar to equity, inclusion has multiple meanings, so each participant's understanding is highlighted a bit differently as it is specific not only to their experiences during the course of this study but also to their own K–12 experiences around inclusive practices.

An important note

School culture, equity, and inclusion are not necessarily mutually exclusive. Rather, these concepts overlap, and, specific to this study, overlap in a sub-set of the literature, in research, and in actual practice. However, in acknowledging that for many participants this was their first encounter with these concepts they are presented individually but will be analyzed holistically in Chapter 5.

Participant 1: Andrea Alexander

Andrea Alexander was a secondary education and English major who had recently transferred into the university from a private Jesuit University in the southern United States. The duration of this study was her first semester in both the teacher education program and the university. Andrea was originally from the mid-west and attended what she referred to as a "public school that thinks it's a private school," situated in an "affluent community" (Demographic Survey, January 16). She identifies as "White" and indicated that her high school community consisted mostly of students who were similar to her in race. Simultaneously with attending the course, Andrea was placed in three classrooms for her pre-practicum placement: two Level 3 English as a Second Language courses with students in various grades, and one 10th-grade Special Education English Language Arts class.

At the end of each course session, participants were asked to complete an exit ticket with no prompt: an honest reflection on their thoughts as they continued throughout the semester. After the first day of class Andrea immediately presented as a participant who was struggling with many concepts, all stemming from the teaching profession. She began her first exit ticket by explaining the following:

> "Well, I'm scared. I've been worrying about my future a lot lately. I really want to be a teacher, so badly. Most of my fear stems from doubt in myself. I'm worried I'm not knowledgeable enough about both my subject [English] and teaching; I don't like hearing that teaching is nothing like I thought it would be…. I'm worried about not living up to the image I've always had of my future self. That's the scariest part. Am I on the right track?" (Exit Ticket, January 16)

This tone of fear, concern, and self-doubt continued throughout the semester in various contexts (journals, assignments, class discussions, and presentations). While other participants in this study commented on moments of concern, Andrea was much more explicit in describing it. While discussing school culture, equity, and inclusion, this tone manifested itself in an inward-facing manner. Andrea appeared to connect everything to her own feelings and thoughts and not to larger societal concepts. This reflection was apparent throughout the semester, but from the first course session to the final course session there appeared to be minimal change in her actual understanding around social justice or UDL as having larger societal or educational impact; rather, there was a lot of discussion around her own K–12 educational experiences.

School Culture

At the start of the study, Andrea discussed school culture at Warren High School through the lens of her understanding of the concept of "urban" schools (which she used inconsistently with and without quotation marks throughout her journal). Andrea discussed urban schools as having buildings that are "run-down, made of brick or concrete, and sometimes have bars on the windows" (Journal, January 28). She expanded upon this by discussing the student and teacher population as follows:

> "I assume that the students have a harder time learning or earning good grades than in
>
> affluent or suburban schools. I believe teachers in urban high schools can fall into two
>
> extremes: very passionate about social justice and their students or very apathetic and at
>
> their wits' end. I believe that these ideas—that I am very aware are prejudices and most
>
> likely inaccurate—come from media, from movies, to [hometown in Ohio]'s local news,
>
> and from my time in a secluded, affluent suburb in which many people seem to feel

afraid of an urban setting and look down upon less prestigious educational institutions"

(Journal, January 28).

She acknowledged in her journal that these beliefs are prejudicial and stems from potentially

inaccurate contexts, but after reviewing the details of the school via their web site admits that she

was "even more ashamed" that she had those beliefs up front. As she continued to discuss school

culture throughout the semester, Andrea was honest and conceptualized her thinking via pictures

and diagrams in an attempt to make sense of what she believed, what she experienced, and what

she learned.

Throughout the semester, Andrea discussed school culture as it pertained to her own

experiences: high school, her original university (a private Jesuit university in the U.S. South)

and her current university (the one where this study took place) but explains that "she never had

a word for it" until enrolling in this course. After reading *The Hidden Curriculum* (Jerald, 2006),

she explained that while she was originally stunned that a high school would require a summer

program to build atmosphere and expectations that she had in fact completed the same type of

program as a transfer student to [University]. She further explained that by attending this

program, which was focused on academic goals and personal growth, that "[it] was my very first

time on campus and I could not have received a warmer welcome; it made me much more

satisfied with my choice and excited for the school year." She compared this to the culture she

had experienced at her former university, [Former University], which she describes as "Go

football! Let's get wasted! Oh, and community service is really good, you should do that too".

She expressed her exceptional concern with the school culture at [Former University] in light of

Gorski's (2008) commentary around eliminating societal gaps, given the context of the city of

New Orleans. To extend this, she described the culture around race at [Former University] as

"the relationship between the privileged students and the Afro-American employees in the dining and residence halls was often tense and an uncomfortable topic on campus. Too many students pitied those of low socioeconomic status instead of empathizing and taking action."

When discussing Jerald (2006) and Haberman (2013), she explained that she would like to become a principal where she could form school culture from that perspective and role. As she compared this to the role of the teacher, she focused on how classroom management builds culture with an individual teacher. She identified relationship building as critical in building a mutually respective culture within a classroom, though speculated after learning about higher rates of suspension and expulsion for Black and Latino/a students that since "[My cooperating teacher] is an ESL teacher, I wonder if she has simply had more experience with and exposure to students that learn in ways that differ from the classic European-American teaching methods and therefore learned the most effective means of discipline through practice."

Towards the end of the course, Andrea detailed examples of practice that she witnessed through the lens of what she was impressed or unimpressed with. Yet, she came to the following conclusions on school culture and the influence it has on students:

"So much of what the students decide to put into their academics depends on their

teacher, which I believe both of the classrooms that I have observed have proved,

especially when comparing the two. Every student has the ability to succeed and go on to

college or the vocation of their choosing, as long as the school continues to provide the

right resources and encouragement that they need to get there. There are individuals with

intelligent and creative minds and warm hearts, and they can help us achieve our personal

goals as much as we can help them achieve theirs. Looking back on my reflection in the

first journal, I am still ashamed to admit the prejudices that had been residing in my own

mind, no matter how self-aware I was. I admire [Warren's] academics and social

missions even more now that I have seen the obstacles we all must face in order to

achieve them" (Journal, April 15).

Her journal indicates a few points in contradiction to ideals of social justice and UDL,

specifically that the right resources and encouragement is all that is needed for a student to reach

their goals. Yet, as the semester came to a close two weeks later, Andrea brought social justice

and school culture together beyond the work of educators, and towards what students should be

learning:

> "Through our readings, I have developed a strong interest in restructuring the culture and
>
> curriculum of both middle schools and high schools in order to implement stronger social
>
> justice teachings and to better education through psychological research. Hopefully this
>
> will happen after I have taught my own classroom for many years. I would love to one
>
> day return to my high school alma mater both as a teacher and possible administrator in
>
> order to help them develop a stronger, more welcoming school culture in which all
>
> individuals can feel safe and happy in environment based in social justice." (Exit Ticket,
>
> April 24).

Yet, throughout her discussions, beliefs, and questions around social justice Andrea appeared to

be more focused on her own personal abilities and concerns while not necessarily tying them to

the larger themes expressed. Specifically, Andrea was able to explain what she has done, or

would like to do, that might lead to equity but did not discuss this in light of larger themes of

social justice in society.

Equity

Andrea was one of the few participants in the study that referred to social justice by name and not by the ideals it espouses. Equity, as such, came up only in the context in which it was specifically asked about as opposed to alluded to within the larger frame of social justice. At the very start of the study, Andrea responded to two articles grounded in social justice by connecting them to her own experiences, which was in line with her entire thought process this semester as it was for many other participants in this study:

> "As embarrassing as it is to admit this, I have very little experience with racial and economic diversity in my past. I can literally count the number of non-white students from my high school of 400 students on two hands— perhaps even non-Christian students as well. Most of my experience with different ethnicities comes from my time working at my local daycare/pre-school, my time in college, and my mother's involvement in the Adoption Network's mentoring program. However, I have always been vocal about equity for the queer community and take the time to read articles concerning gender inequality. Despite my very strong opinion on equality for humans— "Others" or not—I have never really been forced to confront issues of (at least racial) oppression directly and certainly not as an authority figure. Reading these articles was both refreshing and humbling. I am surprised and pleased by my extreme interest in the subject, but I cannot get past how lost I felt when I asked myself how I would approach oppressive situations as a teacher instead of as a peer or friend. I have a lot to learn, but I am very eager to do so." (Discussion Board Post, January 22).

Her own background and experiences have given her insight on what equity looks like in some contexts, but raises questions on what lack of diversity may do to students who do not receive an education that explicitly calls for social justice.

> "[Towards a Theory of Anti-Oppressive Education {Kumashiro, 2011}] also piqued my curiosity about whether or not White-Christian-dominant schools' lack of diversity more commonly perpetuate harmful ways of thinking or inspire students to seek that which they have been deprived [of], since I have observed both effects. I believe I would have greatly appreciated the anti-oppressive teaching methods of which Kumashiro approves in my high school; I feel rather swindled after being thrown out of The Bubble and into the real world." (Discussion Board Post, January 22).

In her final reflection for the semester, Andrea summarized her newfound belief in social justice as one that had changed due to the course and pre-practicum aligned with this study.

> "Social justice to me means creating a safe environment in which everyone has a chance to demonstrate his or her strengths without fear of condemnation or being outcast. I think of social justice as a quieter concept that implies dedication to becoming a better person and helping others better themselves as well. When discussing social issues, I think it is just as important to consider why individuals feel the way they do as it is to confront your own biases. Many times people hold certain opinions or act in certain ways simply because they are unaware of other existing information or they do not realize that they are acting in an offensive manner. For these reasons, it is very important to exercise patience when confronting an opposing opinion or offensive behavior. We have learned to take the time to listen to the reasons behind their assumptions and calmly explain your own—to create a discussion, not an argument. These methods of interaction can always be applied

to one's own classroom, helping students constructively discuss ideas and form opinions

(of which there will always be many)." (Journal, May 5).

Throughout the semester, Andrea identified aspects of equity and social justice in pockets but

was not able to articulate what this might mean at large until the end of the semester.

Inclusion

Andrea discussed concepts related to inclusion, such as student needs, through the lens of

her own K–12 experiences as well as her time at Warren High School. Of her own experiences,

she expressed the following:

> "My school had very inclusive practices since we were in kindergarten. I frequently saw
>
> special education students in hallways and classes; many regular students had personal
>
> relationships with them and, in cases of students with severe mental disabilities, learned
>
> to accept and be respectful of behaviors these students could not control. Because our
>
> school allowed SPED students to advance with his or her grade, students grew up
>
> together, creating an environment particularly conducive to camaraderie." (Journal, May
>
> 5).

This is consistent with many of Andrea's understandings throughout the study—she discusses

what she experienced and, in an attempt to connect it to the larger learning, dives into details of

her own K–12 experience without a connection to her current or future practice. She continued

with an example of her experiences working with a student with autism during her high school

tenure. She explains, "Every day we would walk to the connected middle school with our

instruments to perform music, play games, teach manners, and get to know Alex. The experience

was not only rewarding, but fun, and greatly appreciated by his aids and family" (Journal, May

5). In discussing inclusion, Andrea gives multiple examples of people she knew with various

disabilities (autism, dyslexia, and general learning disabilities) and how they experienced school. Through these examples, Andrea comes to the conclusion that schools must incorporate inclusive practices to "integrate both regular and special education methods—and students—from a young age" (Journal, May 5). However, Andrea did not describe what these methods or practices may look like beyond additional supports and services, stating, for example, "SPED departments should be well-staffed, educated, and readily available as a helpful resource for all students. Regular teachers and staff should interact and learn from SPED students, their aids, and even their families" (Journal, May 5). While, in this excerpt, Andrea expressed the need to support all students, she identified in a separate exit ticket the importance of getting to know students: "I wish I could get to know the students better because they're all on very different levels. I'm less confident when I don't know who I'm working with" (Exit Ticket, February 13).

At the end of the study, Andrea expressed that the concept of UDL was "quite possibly … the most useful teaching technique we have learned this semester [as] it is the perfect way to carry out my understanding of social justice" (Journal, May 5). Andrea continued this line of thought both theoretically as well as what it may mean for her own practice one day.

> "It equalizes the playing field and allows students to demonstrate their own individual takeaways in a way that suits them best. Additionally it allows the teacher to have more fun with the lessons. I am very excited to plan UDL lessons and intend to get as creative as possible in order to keep the students engaged; this was my favorite part of planning our lessons and completing the Academic Language Projects. Individual attention is so important to me. I never had a real mentor or any true push toward a singular goal, and I really wish I had. I feel like I could have had more self-esteem and confidence and a stronger identity if an adult had encouraged me to continue any of the personal projects

that I always started and never finished. Because of this I plan to create a safe and

supportive classroom culture by being a resource to my students by scheduling individual

appointments and taking an interest in their interests too. When it comes to being a

teacher, I am most looking forward to getting to know my students and helping them

become the best versions of themselves as their mentor." (Journal, May 5).

She expanded upon this by expressing that inclusion is the right way to lead towards social

justice as it ensures equal opportunities for all. For Andrea, inclusion is less about practice and

more about acceptance and respect.

Summary

Towards the end of the semester, Andrea reflected upon the experience of being a

transfer student as being marginalized in the college experience. She expressed that while she

knew "this is very different than being of color, a minority religion, or having a disability" she

believed there is a similar sentiment of being an outsider that is prevalent regardless of the reason

why. Of these four participants, Andrea represented a sense of understanding and reflection that

is significantly more self-centered with minimal connections towards practice she has seen.

Rather, she identified experiences in her own K–12 years or ideals she would like to continue to

learn more about.

Throughout the study, Andrea was very reflective on the concepts presented but largely

in the context of her own life—both her K–12 education and her current college education.

While Andrea made connections and pushed her thinking as it related to topics surrounding

inclusion and equity, she did not do much reflection on what this meant beyond her own life.

Andrea's responses were tied to her self and her experiences as opposed to the larger societal

implications. Interestingly, throughout the semester Andrea made references to wanting to be a

principal or a superintendent instead of being a teacher; however, she was unable to state what actions and beliefs would play a role in fulfilling these positions.

Tables 3 and 4 below represent Andrea's responses on the pre- and post-surveys on social justice and UDL. A few survey statement responses stood out more than others: specifically, those where she moved from one end of the response scale to another. For statements three, five, and six in the social justice survey, Andrea began the semester uncertain but the experience she gained through this study caused her to have stronger beliefs—one way or another. At the start of the semester she was unsure of where multicultural topics should be taught but by the end of the semester Andrea disagreed that they belonged only in social studies and literature classes. At the start of the study, Andrea was unsure if assimilation was the most important goal when working with children who were immigrants or English language learners, but at the end of the study she disagreed that it would be. Finally, Andrea was unsure if it was reasonable for teachers to have lower expectations for students who do not speak English as a first language, but by the end of the study she believed that it was reasonable for teachers to have lower classroom expectations for students who do not speak English as a first language. This is an interesting contrast to many of her journal or exit tickets that express an importance of equity. This is further explored in Chapter 5 in light of the current research on teacher preparation.

With respect to the UDL survey, major trends from the beginning to the end of the study for Andrea included her understanding of UDL by name. Statements four and five referred to UDL by name; as such, Andrea—like many other participants—was unsure at the time of the initial survey but developed an understanding as the study progressed. For all practice statements, Andrea increased in her belief in her own competency of practice, even though her journals and exit tickets did not necessarily reflect that. However, as mentioned above, Andrea

did not speak much to her practice throughout the study, similar to other participants, and

therefore it is difficult to identify this component clearly.

Table 4

Andrea's Social Justice Survey Responses

	1/16/2014	5/1/2014
1. An important part of learning to be a teacher is examining one's own attitudes and beliefs about race, class, gender, disabilities, and sexual orientation.	Agree	Strongly Agree
2. Issues related to racism and inequity should be openly discussed in the classroom.	Agree	Agree
3. For the most part, covering multicultural topics is only relevant to certain subject areas, such as social studies and literature.	Uncertain	Disagree
4. Good teaching incorporates diverse cultures and experiences into classroom lessons and discussions.	Agree	Strongly Agree
5. The most important goal in working with immigrant children and English language learners is that they assimilate into American society.	Uncertain	Disagree
6. It's reasonable for teachers to have lower classroom expectations for students who don't speak English as their first language.	Uncertain	Agree
7. Part of the responsibilities of the teacher is to challenge school arrangements that maintain societal inequities.	Strongly Agree	Agree
8. Teachers should teach students to think critically about government positions and actions.	Strongly Agree	Agree
9. Economically disadvantaged students have more to gain in schools because they bring less to the classroom.	Disagree	Strongly Disagree
10. Although teachers have to appreciate diversity, it's not their job to change	Disagree	Disagree

society.		
11. Whether students succeed in school depends primarily on how hard they work.	Strongly Agree	Disagree
12. Realistically, the job of a teacher is to prepare students for the lives they are likely to lead.	Agree	Strongly Agree

Table 5

Andrea's Universal Design for Learning Survey Responses

	1/16/2014	5/1/2014
1. I believe that all students can learn in general education settings.	Somewhat Agree	Somewhat Agree
2. I believe that there is a range of learning variability in students in any education setting.	Strongly Agree	Strongly Agree
3. I believe learning occurs as a dynamic interaction of the individual with the environment.	Agree	Strongly Agree
4. I believe that the implementation of Universal Design for Learning will lead to better achievement for all students.	Am not sure at this time	Strongly Agree
5. I believe Universal Design for Learning implementation can occur with or without technology.	Am not sure at this time	Agree
6. I believe goals should not include the means by which mastery can be attained and demonstrated.	Strongly Disagree	Strongly Disagree
7. I believe all students can benefit from having multiple curricular options or learning pathways.	Strongly Agree	Strongly Agree
8. I believe curricular methods and materials should recruit and sustain student engagement in learning.	Strongly Agree	Strongly Agree

9. I believe assessment, methods, and materials should be clearly aligned with the curriculum goals.	Strongly Agree	Agree
10. I believe assessments should remove or reduce barriers for more accurate measurement of learning knowledge, skills, and engagement.	Agree	Strongly Agree
11. I believe supports and scaffolds available during instruction and practice should also be available during assessment when not related to the construct being measured.	Agree	Strongly Agree
12. Learners should be provided with a variety of ways for recruiting and sustaining engagement in the instructional environment.	Some knowledge	Quite competent
13. Learners should be provided with strategies for personal coping skills, self-assessment, and reflection in support of self-regulation.	Some knowledge	Very competent
14. Learners should be provided with multiple ways to access information including text, oral presentation, and visuals.	Probably competent	Very competent
15. Varied strategies for a range of learners should be provided to support comprehension/understanding.	Probably competent	Very competent
16. Learners should be provided with options for action, expression, and communication during instruction/teaching.	Probably competent	Very competent
17. Learners should be provided with options that support goal setting, strategy development, and progress monitoring.	Probably competent	Quite competent

Finally, in Andrea's depiction (Figure 5) of how she integrated all the concepts from the study, she included multiple words connected to one another yet there is no clear cohesion to all the concepts—rather it appears to be a diagram of critical buzzwords addressed throughout the study. She includes wishes that she has (such as "I want to build a high school that…") but does not give any practical explanation of how this might happen. This is not surprising, as mentioned

before, because of Andrea's internal reflection rather than big-picture, societal understandings of

UDL or social justice.
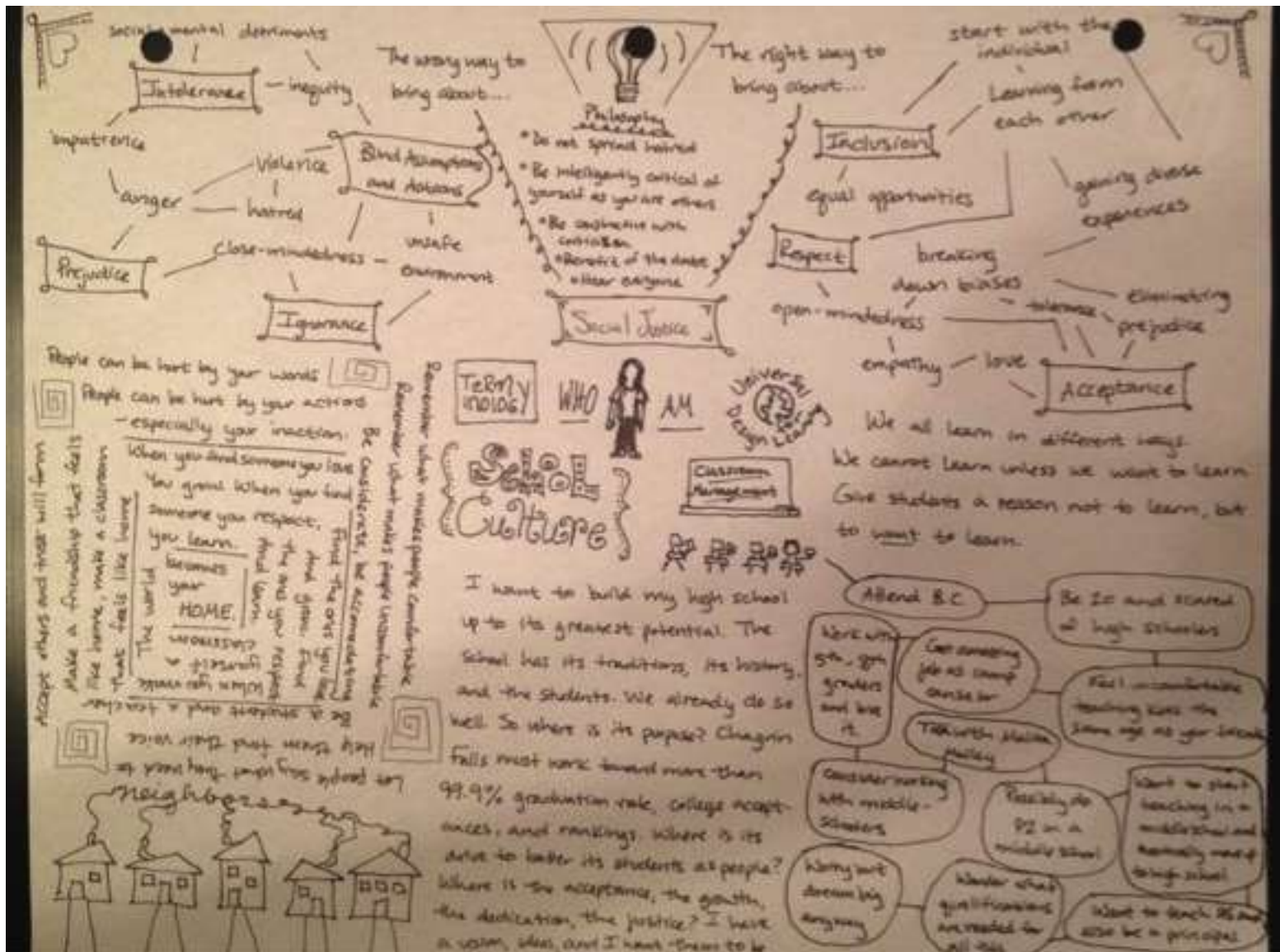
Figure 5. Andrea's final diagram

Participant 2: Dina Jenkins

Dina Jenkins was also a secondary education and English major. Unlike the other three case study participants, Dina is multilingual at intermediate or advanced levels of both Spanish and Italian. She identified as Italian-American and also indicated that since one of her parents was Argentinean she grew up "surrounded by [the] Spanish language and culture." Dina indicated that while she loves academic settings and excelled in English in high school she often struggled with both math and science; further, she felt that her high school experience lacked diversity. Dina's pre-practicum placement was the most diverse as it was changed twice throughout the first two weeks of the semester due to factors outside of the control of the study. Dina was finally placed in two ESL classrooms (with two different teachers) as well as a high school theater elective class that was taught by an English teacher. Among the study participants, Dina fell in the middle range of change for the UDL survey and showed no change on the social justice survey. In other words, when compared to fellow participants, the changes in Dina's responses were approximately in the middle—about half the participants had more response changes than Dina while the other half had fewer changes. Yet Dina's responses stayed consistent from pre- to post-administration of the social justice survey.

In the Demographic Survey, Dina expressed that she was fearful that she would not be "taken serious in the classroom because I am just 19 years old;" however, she was excited "to observe and learn classroom strategies to build relationships with the students and to gain confidence in the classroom"

(Demographic Survey, January 16). She identified her reasons for wanting to be

a teacher stemming from the overall process of learning: "I have always loved

being an aid in the learning process of others and showing others what they are

capable of. I love the discussion that occurs specifically in English classrooms

and the personal reflection literature evokes" (Demographic Survey, January 16).

At the start of the study, Dina expressed her concerns around stereotyping,

biases, and oppression in the classroom setting. Dina represented many

participants in that she came into the study with strong beliefs on social justice;

however, she responded consistently at one end of the survey when compared to

other participants—essentially, Dina responded by strongly agreeing or

disagreeing in response to many of the survey questions while other participants

did not.

School culture

  At the start of the semester, Dina discussed school culture mostly in

terms of her theoretical ideas. Dina explained that she has had a few experiences

in urban and suburban schools in a volunteer role but did not give any additional

information. When discussing what she believes makes up the culture of Warren,

Dina began with discussing the values and then moved into discussion of some

of the stereotypical characteristics (which she notes as so):

    "[Warren's] values include an inclusive community that encourages civic

    excellence, mutual respect among community members, and an

    academically rigorous and challenging environment, in which students

    are taught to demonstrate knowledge in various formats. Students are also

held to a number of academic learning expectations, mainly revolving

around critically interpreting information, writing effectively in each

content area, communicating effectively, and having the skills to collect,

analyze, and communicate research. In regard to civic and social learning

expectations, students will be able to participate in multi-cultural learning

experiences while interacting with others in a 'rich linguistic and

ethnically diverse community.' (Journal, January 29).

Dina expressed that this expectation embraces multiple cultures represented at

Warren which she felt was critically important in developing the community at

the school. Dina identified the individual cultures and "set of experiences" that

each participant brings as characteristics that should be acknowledged, valued,

and embraced at Warren.

Dina shifts a bit away from the description of school culture at Warren to

the impact of the word "urban" on schools. Dina acknowledges that a school

cannot be characterized or categorized based on the fact that it is urban, yet many

prior assumptions— most negative—about an urban high school were debunked

when she did her initial research on Warren. Specifically, Dina points to two

examples: "[the] assumption that all urban schools are located in impoverished

areas is clearly false. The low teacher-to-student ratio in WHS defies the

stereotype (which is often dramatized in films, as well) that urban schools are

overcrowded with classes of thirty students and one teacher" (Journal, January

29) which are counter-narratives to stereotypical views on urban schools.

Finally, in her initial journal entry, Dina briefly discusses what she learned about the mission and overall expectations based on the school's web site.

"[Warren's] culture is comprised of the academic, civic, and community standards enforced in the school. School culture varies in every single district because each district has different demographics with a separate group of unique individuals. Thus, the mission and expectations of a school set the stage for a culture, but the school's respective population carries out those expectations while adding their personal stories into the mix. This population includes the students *and* the staff, because the interactions that occur between both groups are what creates a community. One can make some assumptions about urban schools based on trends of demographics and data, but one can never assume to know a school culture without having researched and, most importantly, spent time in the school." (Journal, January 29).

These beliefs set the stage for how she entered her experience at Warren; however, a few months into the study her reflections were very critical of her own assumptions without having "proof" of what culture at Warren High School was.

As the study progressed, Dina stated that while factual information is part of the story of school culture it can only be helpful "as a starting point" (Journal, April 20). She maintained that the relationships and interactions of both students and staff are critical in understanding the culture that comprises a school but that

her first written observation of culture lacked a deep understanding since she had not yet spent time in the school. By April, four months into the study, Dina wrote "a cover definition [meaning the web site] can be used to describe school culture, but one can only know a specific school's culture by extensively observing and interacting with the students, teachers, administration, and staff" (Journal, April 20). She also deepened her own belief in what a school culture is through the work of Elizabeth R. Hindi, quoting culture as "the stream of norms, values, beliefs, traditions, and rituals built up over time … [and specifically, school culture is] a set of tacit expectations and assumptions that direct the activities of school personnel and students" (Journal, April 20). Dina, however, was consistent in her new-found belief that while definitions and factual data can guide the understanding of a culture it is not yet determined until you have experiential proof to hinge data on. Additionally, Dina pushes back on the idea that a type of school—public, suburban, or urban—can be defined by one type of culture:

> "One cannot assign a school culture to different schools that share certain aspects in common, such as being an urban, private, public, or charter school. There are as many facets of school culture as there are individuals in a school. Furthermore, the "atmosphere" can vary between classrooms in the same school. The atmospheres collectively form a school culture based on the attitudes and emotions they promote. If teachers and staff do not operate according to a shared purpose or set of values, they will create an in-cohesive school culture." (Journal, April 20).

As she continued to explain what culture means for her through her time at Warren High School, Dina cited Hinde again, explaining, "the interactions between a school's personnel shape culture and conversely, the actions of the personnel are directed by school culture … [and therefore], it is difficult to introduce change because it requires an interruption of this 'self-repeating cycle'" (Journal, April 20). She further detailed what the role of educators are in school culture: "If teachers share a common goal, set of values, and recognize the cultural differences that exist, they can collectively foster a school culture in which all students feel valued and, in turn, teachers feel appreciated and productive. In order to do so, school professionals must have a deep understanding of the student body and students' individual characteristics" (Journal, April 20). Beyond the direct role of educators, Dina referred to the link between school culture and academic achievement. Dina conceptualized this by explaining that "students who do not feel ethnically or personally validated are at a higher risk of academic failure. Thus, it is crucial for educators and school personnel to promote a school culture that is grounded in acceptance and celebration of personal differences" (Journal, April 20).

Throughout the study, Dina's beliefs on school culture did not change, yet she was able to connect her beliefs deeply with practice at Warren High School and to research on development and sustainability of culture in schools. She concluded her beliefs on school culture by stating—

"School culture affects *all* members of a school and it should therefore be a top priority for school professionals to foster one that is positive.

> Students will, for the most part, react positively if they believe their needs
>
> and interests are taken into account—I can attest to this because I have
>
> been a student. This is not to say that school professionals are the only
>
> individuals that play a role in creating a school culture; students come to
>
> school with their own pre-conceived notions of academia, their peers and
>
> society, and society also affects schools in general. Yet, school
>
> professionals must work with their students and act as positive models of
>
> academic achievement, motivation, and behavior, for this promotes
>
> positive school values and encourages students to do the same." (Journal,
>
> April 15).

Dina continued by detailing her thoughts on what school culture is and how

students and teachers interact and make sense of the real impact of culture on all

those who are part of the community.

> "School culture pervades a school's classrooms and hallways. Although
>
> one can construct a vague definition to communicate the meaning of
>
> school culture, it is impossible to know an individual school's culture
>
> without spending time in the actual environment. School professionals
>
> must be wary of the reality that school culture is produced by a cycle
>
> driven by the interactions of school personnel and students with real
>
> academic and emotional implications. It is crucial to foster an
>
> environment in which students feel as if their identities and beliefs are
>
> seen, heard, and responded to. For some, school culture can evolve into a

riptide, sucking the entire school population into a spiral of negativity, if

a positive school culture is not enforced." (Journal, April 15).

Equity

As mentioned previously, Dina had some of the strongest ideals around

social justice of all study participants prior to entering this class. She spoke

openly about equity, anti-oppression, and campus groups that centered on social

justice; however these were not ideals she had always discussed but rather

concepts that were deepened over her first year and a half in college. She

described her acceptance of beliefs in high school through the lens of texts: "In

my own experience in high school … I often accepted what I read in books and

heard from teachers without personally interpreting them. This left me with a

surface-level understanding of subject matter and I felt unattached from my

work" (Discussion Board Post, January 21). A few weeks later, she deepened

this thought by saying that while she volunteered in "schools and youth resource

centers for underserved students" that doing so was more of a reflection upon her

opinion of the educational system and not social justice or equity at large.

Dina described a very specific time that she had a deep conversation

around inequity as it relates to education. Dina worked with a group of 10th-grade

students through a program called College Bound during her first year and a half

at the university. Dina retold the experience as follows:

"One of the many wonderful components of College Bound is the social

justice class, which all students participate in and discuss issues of social

justice that directly [affect] their lives. This experience opened up my

eyes. Volunteering in academic settings with students who do not always

have access to adequate educational resources has always been an

important part of my life, but I never had the chance to hear from these

students. Many of the issues discussed in class revolved around academic

inequality that the students experienced on a daily basis. These were

students who were chosen to participate in College Bound because of the

immense potential they showed. The majority of these students, however,

were on the fence in terms of going to college … during this discussion, I

heard the frustration that they feel in school and in regard to their futures.

They spoke about how it was unfair that they did not have access to the

same resources that students from wealthy families do. They discussed

how hopeless they feel in school because they feel as if no one believes in

them. Even though volunteering had always been a huge part of my life, I

never fully grasped the feelings that the students discussed because I have

been fortunate enough to attend schools that are known for their

outstanding resources and teachers." (Journal, February 18).

Dina continued to explain that she feels embarrassed not to have considered

concepts of equity seriously prior to her time working with College Bound,

though the experience was a "source of inspiration and realization" for her.

Dina discussed throughout the study that her future role as an English

teacher extends beyond content. She identified social justice in her world as

being specific to "educational equity and equality" because "it has always been

extremely important to me that I help others who may not have had access to the

same opportunities I have because every individual has strengths and the

capacity to reach their full potential if placed in the right circumstances" (Journal

2, February 18th). She further explained that in her future classroom she intends

to create a community in which diversity is embraced and students "are

compelled to explore academics in a personal way" because she worries that

social justice does not accomplish its goals if it is only discussed and not actually

acted upon.

      For Dina, labeling is one component of equity in educational practice.

She expressed her concern around labeling students due to her brother's

educational experience: "[My brother] and I have suffered academically because

of characteristics that comprise who we are. My older brother has ADHD and

was constantly criticized and marginalized by his teachers for this. I have always

been equity in class and have been accused of being passive, not engaged, and

[not] interested, even though I *always* think deeply about content and take

notes…. Being quick to judge a student can change his/her perception of

themselves and their academic potential" (Exit Ticket, April 10). Throughout the

semester, Dina related many of her beliefs and experiences around equity to

those that happened prior to beginning this study, though concepts around

inclusion seemed to have a bigger impact on her during this time.

Inclusion

      Dina identified the need to support students who are typically

marginalized through the UDL framework but explained that she had little

experience with students with disabilities in her own educational experience

because, while there weren't many students with identified and labeled disabilities in her high school, "the main resource for them was the Resource Room [where they] would attend classes and then spend a couple of periods at the end of the day with their resource teacher" (Discussion Board Post, February 10). She compared her older brother, who had teachers who were unsuccessful in "adjusting the curriculum to meet his needs" (Journal, March 22), with one of her cooperating teachers, [Ms. Cadwell], who "uses the projector to provide visuals … provides the students with note sheets (which require them to participate), and she allows the students to collaborate and discuss work [which] allows for the student to learn through various styles" (Journal, March 22) ensuring all students have access to the curriculum. Dina explicitly identified inclusion as a driving force for UDL in order to develop a classroom environment that accounts for various learning styles.

Dina expressed a fear of planning for inclusion, though, because of the "huge spectrum of needs" within any given classroom. She discussed that it requires an "extreme amount of creativity and thought to account for all of the different learning styles" in all classrooms, but by doing "the hard work early on, [instructional] units will be better" for all students. For Dina, however, the root of inclusion and UDL is getting to know students well to provide the appropriate types of options for students in classrooms. She explained that while she feels it is "impossible to account for *all* student needs when you are designing a unit … personal communication enables teachers to assess disposition, a factor that is

equally [as] important as academic potential [because it] enables teachers to know students on a personal level" (Journal, March 22).

Summary

At the start of the study, Dina made it clear (in her journals, discussion posts, and exit tickets) that she had strong beliefs regarding equity and social justice in society. Throughout this study, Dina felt that her beliefs were further validated by research and the experiences she and her fellow participants went through during the five months of the study. Dina's strong beliefs in social justice, however, only slightly related to her learning and beliefs about UDL. By the end of the study, Dina still relied heavily on social justice as the driver of her beliefs. Of the four case study participants, Dina represented a sense of social justice and equity that was unwavering throughout the study. Dina connected with concepts of social justice strongly in her own learning which may have impacted how she understood and integrated UDL in her practice or beliefs.

While Dina had a strong perspective on social justice prior to starting the semester, she did reflect upon what this meant for her beyond the role of an educator:

"Prior to coming to [Warren High School], I was not aware of the extent to which we would focus on social justice throughout the semester. I thought that I had a solid understanding of social justice but quickly realized that it spans farther than I had imagined. Social justice is not just being respectful of one's peers, other cultures and beliefs; rather, it is a concept which one must actively consider in the course of their daily

lives and adjust practices and beliefs to. Social justice in the context of a

school is different than social justice in general because it revolves

around implementing certain strategies that promote learning in terms of

the self, one's relationship with others; and one's relationship with trends,

laws, and the greater beliefs of society." (Journal, February 14).

Dina's beliefs on social justice deepened as she was able to make connections in

multiple aspects of society. Specifically, the role of an educator in addressing the

status quo is an area which Dina had not previously considered. Dina expressed

that she was beginning to understand that educational paths vary with many

people but that the role of an educator is to ensure that students have whatever

skills they need so that they can make decisions about their educational futures.

Dina expressed the following:

"Talking and interacting with students at [Warren High School] solidified

my previously vague understanding of the reality that not all students

have the same educational path. Furthermore, not all students *want* to

pursue this path and this is okay. Some students simply do not want to go

to college, for example, and social justice does not mean that it is my job

to convince students to do so. Rather, it is my job to provide students

with an environment in which they have the tools to contemplate the

paths that will bring them the most fulfillment and happiness." (Journal,

April 15).

Tables 6 and 7 below represent Dina's responses on the pre- and post-

surveys on social justice and UDL. As noted at the start of this case study, there

were no changes in Dina's responses to the social justice survey from the start to the end of the study. However, while her overall responses may not have changed, Dina was able to identify how components of her beliefs and eventual practice were impacted along lines of social justice.

Alternatively, Dina had more variation in her responses for the UDL survey. While some of her responses moved slightly on the scale, two responses stood out more than others: statements four and six. Statement four refers to UDL by name and as Dina—similar to other participants—had not head of UDL before, this may explain the movement from "somewhat disagree" to "agree." Her change in response to statement six, which suggests a detangling of goals and means, may indicate that while she originally disagreed that they should be separate she is now unsure of what this may mean for teacher practice. The response to this statement seems a bit at odds with the rest of her responses, which may suggest that she was unsure of the statement.

Table 6

Dina's Social Justice Survey Responses

	1/16/2014	5/1/2014
1. An important part of learning to be a teacher is examining one's own attitudes and beliefs about race, class, gender, disabilities, and sexual orientation.	Strongly Agree	Strongly Agree
2. Issues related to racism and inequity should be openly discussed in the classroom.	Strongly Agree	Strongly Agree
3. For the most part, covering multicultural topics is only relevant to certain subject areas, such as social studies and literature.	Disagree	Disagree
4. Good teaching incorporates diverse cultures and experiences into classroom lessons	Strongly	Strongly

and discussions.	Agree	Agree
5. The most important goal in working with immigrant children and English language learners is that they assimilate into American society.	Strongly Disagree	Strongly Disagree
6. It's reasonable for teachers to have lower classroom expectations for students who don't speak English as their first language.	Disagree	Disagree
7. Part of the responsibilities of the teacher is to challenge school arrangements that maintain societal inequities.	Strongly Agree	Strongly Agree
8. Teachers should teach students to think critically about government positions and actions.	Strongly Agree	Strongly Agree
9. Economically disadvantaged students have more to gain in schools because they bring less to the classroom.	Strongly Disagree	Strongly Disagree
10. Although teachers have to appreciate diversity, it's not their job to change society.	Disagree	Disagree
11. Whether students succeed in school depends primarily on how hard they work.	Strongly Disagree	Strongly Disagree
12. Realistically, the job of a teacher is to prepare students for the lives they are likely to lead.	Uncertain	Uncertain

Table 7

Dina's Universal Design for Learning Survey Responses

	1/16/2014	5/1/2014
1. I believe that all students can learn in general education settings.	Strongly Disagree	Strongly Disagree
2. I believe that there is a range of learning variability in students in any education setting.	Strongly Agree	Strongly Agree

3. I believe learning occurs as a dynamic interaction of the individual with the environment.	Strongly Agree	Agree
4. I believe that the implementation of Universal Design for Learning will lead to better achievement for all students.	Somewhat Disagree	Agree
5. I believe Universal Design for Learning implementation can occur with or without technology.	Somewhat Disagree	Strongly Disagree
6. I believe goals should not include the means by which mastery can be attained and demonstrated.	Strongly Disagree	Am not sure at this time
7. I believe all students can benefit from having multiple curricular options or learning pathways.	Strongly Agree	Strongly Agree
8. I believe curricular methods and materials should recruit and sustain student engagement in learning.	Strongly Agree	Strongly Agree
9. I believe assessment, methods, and materials should be clearly aligned with the curriculum goals.	Strongly Agree	Strongly Agree
10. I believe assessments should remove or reduce barriers for more accurate measurement of learning knowledge, skills, and engagement.	Strongly Agree	Strongly Agree
11. I believe supports and scaffolds available during instruction and practice should also be available during assessment when not related to the construct being measured.	Agree	Strongly Agree
12. Learners should be provided with a variety of ways for recruiting and sustaining engagement in the instructional environment.	Probably competent	Quite competent
13. Learners should be provided with strategies for personal coping skills, self-assessment, and reflection in support of self-regulation.	Probably competent	Very competent
14. Learners should be provided with multiple ways to access information including	Quite	Very

text, oral presentation, and visuals.	competent	competent
15. Varied strategies for a range of learners should be provided to support comprehension/understanding.	Probably competent	Quite competent
16. Learners should be provided with options for action, expression, and communication during instruction/teaching.	Quite competent	Quite competent
17. Learners should be provided with options that support goal setting, strategy development, and progress monitoring.	Probably competent	Quite competent

Finally, aligned with many of the core beliefs described in her journals and discussion posts, Dina's final depiction (shown below in Figure 6) centers strongly on social justice with five linking concepts: a) society and history, b) representing and welcoming all discourses, c) promoting self to world connections, d) current curriculum strategies, and e) school culture. At the center of her drawing, Dina has an individual who she does not name as an educator or a student. However, language around the figure indicates that they may represent a teacher and the work they must engage in to ensure equitable educational experiences for all of their students. Unlike the other participants, Dina focused deeply on one concept from the study—social justice—but did not attend much to core concepts of UDL (or inclusive educational practices).
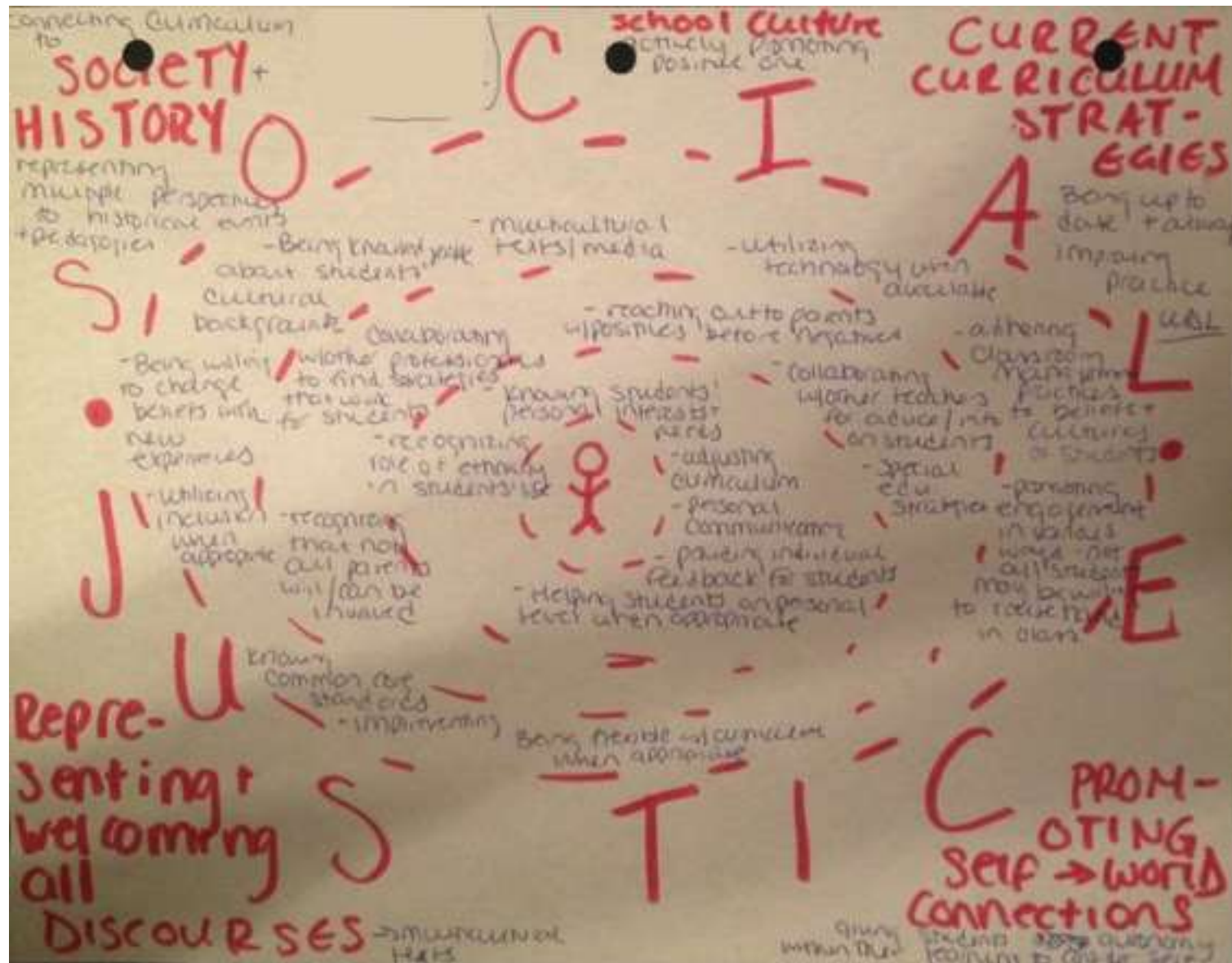
Figure 6. Dina's final diagram.

Participant 3: Genevieve Marten

Genevieve Marten was a secondary education and math major enrolled in the program. Genevieve identifies as "Caucasian" but indicated that she speaks "a little French" (January 16). Genevieve indicated that while high school was very challenging academically and presented stressors that were difficult to balance, she had a positive experience throughout her Catholic secondary education. For her pre-practicum placement, Genevieve was placed in two 10th-grade Advanced Algebra classes as well as a Special Education Physics class due to scheduling issues beyond the scope of this study. When compared to the other participants, Genevieve's responses on the pre- to post- surveys changed somewhat in the middle; in other words, approximately half of the participants had more changes in their responses from first to last survey administration and half the participants had fewer changes. For Genevieve, this was consistent with both surveys.

At the beginning of the study, Genevieve expressed that she wanted to be a teacher because "I have a real passion for education and I find it very rewarding to feel like I have helped someone. I also really enjoy working with children" (January 16). She was fearful that she "might feel unsuccessful as an educator and … that being an educator is not for me" yet was excited "to be in a classroom and have more hands-on learning" (January 16). At the start of the class, Genevieve set the goal to recognize when she might be making judgments based on stereotypes. The impetus for this goal was her awareness that she was labeling the school based on her assumptions of urban schools.

School Culture

Genevieve's beliefs about school culture at the start of the semester were highly theoretical in nature. She expressed that "until teachers and administrators believe in every

child's potential for success, I do not think attempts to change school culture will take place."

She further punctuated this by explaining further:

> "When the environment that students are taught [in] is supportive yet challenging;
> nurturing yet promotes independence and responsibility; and seeks to foster a good
> relationship between students, teachers, and parents; then the results will reflect
> positively in the children's academic progress…. I believe administrators and teachers
> should examine closely the steps they have taken to improve student achievement that
> have not been successful and realize that changing school culture is not only more
> worthwhile but also not impossible. Though it is certainly a process that will take time,
> adjusting the school culture is something that occurs when each person in the school
> setting does his or her part." (Journal, January 30).

Genevieve expressed her strong belief in the importance of reflecting upon the actions taken to

ensure academic success for all students; yet this requires time. She also insinuated the

importance of consistent messaging and values—perhaps the school mission and vision—across

all staff in order to see change in both culture and student academic progress.

Genevieve is not naïve regarding the financial realities of school systems but argues that

this work is not something that costs more money but is part of the job itself. She explains:

> "Teachers taking the time to get to know and understand [their] students, enforce positive
> visions and values to motivate students, and constantly act as a support system that
> challenges students to reach their full potential are key components of creating a positive
> school culture—all of which do not cost a dime. Similarly, the administration and parents
> can do their part as well, and when all parties are working together change will occur
> more quickly and more effectively. One major step that I think is crucial to accomplish

[this] comes from Gorski's article about the myth of the "culture of poverty." One barrier

that may be blocking people from investing in changing school culture is the stereotypes

and judgments about people with low socioeconomic status." (Discussion Board Post,

January 29).

While she understands that there are barriers to shifting this culture, she believes that a single

message and focused vision can support the changing educational environment for both students

and teachers.

In order to address these issues of school culture, Genevieve believed that there was a

strong need for individuals to think differently, to get to know one another, and to acknowledge

that this will take time to change. Four weeks into the study, Genevieve observed a new teacher

for the first time and found her teaching style to hinge upon getting to know students in order to

build this culture. She wrote, "I especially liked her style of getting students to stay focused and

quiet. She was very insistent that students pay attention but stay light-hearted and used a joking

tone when asking students to re-focus, which the students seemed to respond to really well."

As the semester progressed, Genevieve's beliefs about school culture began to

incorporate various aspects of classroom instruction. On April 10th she expressed her concerns

around homework and how that can negatively impact students and the overall school culture.

While she believes studying and homework are important, she cautions that focusing too much

on this can be detrimental to students.

"In high school, my teachers assigned a lot of homework and would tell students to make

sure they study a lot. While this is good in many ways, to some extent it can start to

communicate to students that if they study enough they should be able to get straight A's.

For me, this implication extended to if I was not getting a good grade it was because I

was lazy and not putting forth all my effort. I think it is important for teachers to realize

bad grades do not always reflect a student's effort and to make sure students don't think

that either. This relates a lot to teachers knowing their students well, so that they can

properly recognize the source or reason why a student might be doing poorly in a class."

(Journal, April 10).

Yet, as the semester progressed, Genevieve began to identify a variety of factors as

critical to school culture as they manifested themselves in different ways. She felt that peer

influence, disciplinary policies, support for students, and teacher-student relationships were the

most important aspects of the culture of a school. Peer influence, Genevieve explained, was

present in the hallways as often as in the classrooms. She identified the "social scene" as one she

had never witnessed before:

"Hardly anyone travels to class alone, and groups are often gathered together in the halls.

Inside the classroom, the same students sit together, and it is often students they spend

time with outside of class. Many students text during class and engage in conversation

with one another … [there is an] increased time spent with peers. [For example] there are

... girls that sit together in the back corner who constantly speak in Spanish to one another

and text on their phones. I realize this provides a large distraction from listening and

participating in class." (Journal, April 20).

Genevieve also acknowledged that it is this same socialization amongst peers can be

exceptionally beneficial if addressed in a positive manner. For example, she shared how three

boys in an advanced algebra class frequently sat together and would talk but would also "help

one another during activities and lectures when one of them does not understand a concept or

problem" (Journal, April 20).

Genevieve identified the policies around school discipline as another aspect that makes up the culture in a school. Throughout the semester, Genevieve wrote many times about student behaviors and teacher responses. Many of her journals and discussion posts indicated a bit of confusion around the lack of consistency around expectations for students and the issues this might cause school-wide. Towards the end of the study's duration, Genevieve, who was unaware at the start of the semester that there would be school-based police officers, said, "I imagine for some students the presence of police officers makes them feel safe, but knowing that there is even a need for police officers may instill fear. Students might sense discomfort out of fear that the police might actually be the ones to harm them" (Journal, April 20). Her commentary and belief around police is indicative of her very different experience and upbringing around police; yet she is aware that in other contexts, police are viewed in an alternate lens.

In Genevieve's introduction survey, she indicated that while school was very difficult for her she enjoyed it because of the relationships and supports that she received from her educators. Towards the end of the semester, Genevieve came back to this concept from the perspective of an educator. As Genevieve observed three teachers throughout her time at Warren High School, she identified three very different personalities: one she identified as being very professional, but not strict on policies; another as casual, but very close with students; and the third as being professional, but developing casual relationships with students. Genevieve rationalized that these three types of relationships will have drastic outcomes on the way a student might react or learn in a classroom. Further, she stated that these individual relationships extend beyond the classroom into the overall culture developed in a school. Genevieve's biggest take-away on school culture was that it is a constantly changing entity as the factors that influence it "are never static" (Journal, April 20).

Equity

Much of Genevieve's identity stemmed from her Catholic school upbringing. She explained that her entire schooling, from kindergarten through college, was in Catholic schools and she expressed an interest in becoming a Catholic school educator after she completed her undergraduate degree. Genevieve attributed her beliefs in equity to her Catholic upbringing:

"I grew up attending Catholic school and going to weekly Mass, so when I was in grade school, my grasp of social justice focused around the religious values that I learned in class and at church. Jesus' message of loving our neighbor and the Golden Rule of treating others as I wished to be treated were the reasons behind treating others with respect and helping the poor. I had not learned the term social justice, so I likely did not make the connection that what my religious values are actually supporting is social justice. As I entered into middle school, I was exposed more to service, but high school is really when I began learning my opinions and beliefs as they related to social justice. I took a social justice class my senior year of high school and that is when I learned the most about social injustices around the world, and how, as a Catholic, I am called to respond to instances of social injustice." (Journal, February 15).

At the start of the study, Genevieve identified that it is "imperative that students be able to be aware of harmful structures, question and challenge these structures, and be motivated to take action against those structures [because] when a collective community behaves in this way, noticeable change will take place" (Discussion, January 22). However, throughout this study, Genevieve identified that her beliefs around equity and social justice were strongly rooted prior to enrollment in the course and pre-practicum experience. She identified this further by re-telling

an experience she had during her freshman year in a course called "Challenges of Justice" and

the high levels of commitment it takes to reach equity and ideals of social justice.

> "Sometimes, the demands that the [experts] make of people who truly want to propel
>
> social change were too large a commitment to take on, but then this felt as though I was
>
> in a way saying that there are some things that I put above the life of another human
>
> being. One part of [the previous course] that I particularly liked, and that has become a
>
> strong part of my understanding of social justice, is preferential option for the poor.
>
> Preferential option for the poor essentially implies that with every decision I make, I am
>
> keeping in mind the effects my choices have on the most marginalized in society."
>
> (Journal, February 15).

Genevieve explained that this made the concept of social justice more tangible for her.

Discussions around laws, policies, supplies, and money to systemically fix injustices are

overwhelming and disconnect from personal experiences. Yet, by focusing on "preferential

option for the poor," she is able to make this personal and consider this in every decision she

makes. She dives deeper, explaining:

> "It causes me to reflect on my decisions as they affect not only my local community but
>
> also my community around the world. I am more conscious of making decisions that do
>
> not promote social injustices, and it brings in another component of social justice that I
>
> really value which is solidarity. Making decisions to live more simply and less
>
> materialistically keeps me more in touch with the parts of life that are truly valuable.
>
> While this component of social justice is not obvious always, and may not even exist in
>
> some people's understanding of social justice, I find it an extremely significant
>
> component." (Journal, February 15).

At the close of the study, Genevieve felt that her understanding of social justice had developed; however, this development was less a conceptual matter and more of a school-based practical matter.

> "I used to only see a need for social justice in schools where there was [an] issue with status, resources, funding, or achievement gap. Essentially, public schools—typically in an urban school—were schools I imagined when I thought of the types of schools in which social justice is needed. I realize now that social justice needs to be the foundation of every school because the mission of every school should be to take all steps to effectively educate its students. In order to do this, teachers should be properly trained to design their classrooms to best support students and cater to their specific needs. Students with unique backgrounds and needs exist in every school; regardless if it is an urban school, or a suburban private school, social justice principles are present." (Journal, May 5).

Inclusion

Genevieve was placed in a special education classroom for one of her placements, so concepts of inclusion were prevalent throughout the semester. At the start of the semester, she expressed surprise in being told not to make assumptions about students' knowledge of a concept even at the high school level. She reflected that this lingered in her mind and that, even in the Advanced Algebra classroom, she was "using a particular concept without thinking that the student might not know what it meant [because] to me it seemed so simple … [but] I did not stop and explain it until the student asked me what it meant" (Exit Ticket, February 6). This was the first time Genevieve had to consider how language and practices need to address all learners in a classroom. She documented that she left that class realizing that her language needed to be clear

for all learners to access the content. Within two weeks, she felt she had "developed a stronger ability to notice specific needs of students" within the classroom setting.

"I was assigned two students to work with as they completed a packet. I noticed [student name] was having a more difficult time staying focused, so I used a strategy of using my finger to point to the sentences he was copying into his notes to help him stay on task. In [Teacher]'s class, I had a bigger group to work with for the worksheet, and I realized how much of a difference it makes to have a larger class. By adding only a few students, it was more difficult to make sure they were all on the same step, so it was something I had to adjust to." (Exit Ticket, February 27).

The UDL framework appeared to be an eye-opening concept for Genevieve. After the first lecture on UDL, she reflected—

"I really liked that we were given the task of examining a "what, why, and how" of a learning situation as we went on to our classrooms. I was able to understand the concept of the what, why, [and] how of learning when we went over it this morning but getting to identify them in a real setting led to an even deeper understanding and cleared up some of the parts I was unsure about. Being more away during the day to recognize examples made me even more engaged in watching the teacher and the classroom. So, I felt like today was very productive overall in learning from the classroom setting and understanding more why a teacher did certain things." (Exit Ticket, February 13).

At first, Genevieve identified the components of UDL without acknowledging it by name, but as the semester progressed she was able to identify UDL more explicitly. Specifically, she expressed that she "[liked] the idea of beginning with the motivation component of UDL as the

foundation for a classroom" (Exit Ticket, March 27). She understood engagement in UDL as critical for lesson planning and implementation:

> "Before a teacher can even try to teach a lesson or concept, students must be engaged and invested enough to listen to the teacher. Working on inspiring students to put effort and interest into the class in an ongoing task and requires teachers to constantly show students why they should care about what they are learning. This is especially relevant in a math classroom. If students do not think the material is useful, their motivation to master the content will likely suffer, so it is essential that teachers make connections [to] and applications of the material to everyday life. I think this will be a big lesson for me to learn—namely, showing how every topic learned appears in our lives beyond the classroom." (Exit Ticket, March 27).

When given more time to reflect upon the framework of UDL, she identified the uniqueness of students as it pertains to inclusive practices more clearly. Genevieve was impacted by the idea that "a student's learning style is as unique as her thumbprint" (Journal, March 19). She explained that this "seemingly simple claim" has many implications for educating all students successfully.

> "Even if you have the same students taking all the same subjects together, each class is going to look different based on the teacher, the subject, the context, and the students' reaction to each of these. Because no two classrooms are the same, it is impossible to implement universal goals, methods, materials, and assessments that can be used by all educators. Rather, a flexible blueprint that can assist teachers in creating the most appropriate curriculum, instruction approaches, objectives, tools, and evaluations is more conducive to creating classrooms in which all students are given equal opportunities to

learn and progress…. The Universal Design for Learning framework allows teachers to

address the diversity in their classrooms that goes beyond variations in learning styles.

Students come from different backgrounds; each child's familial and social

circumstances, linguistic and cultural traditions, motivations and attitudes towards

education, skills, and disabilities are all factors that affect how they behave and respond

in the classroom. With the outline that UDL provides, educators can construct their

teaching practices, techniques, and content to best meet the needs of each student."

(Journal, March 19).

Beyond the theoretical basis for inclusive practices through the UDL framework, Genevieve

identified practices that she witnessed classroom teachers engaging in as well. She identified

setting up classroom structures and expectations, highlighting notes in various colors, forming

relationships to motivate students, and clarifying vocabulary and language so that all students

can access the curriculum. She reflected upon her own educational experiences as one in which

teachers used "many mediums of communicating the content [and that] using a combination of

[instructional] methods was very helpful, particularly with more complex topics in math"

(Journal, March 19).

   At the close of the study, Genevieve reflected upon the influence of UDL as it pertains to

planning instruction and identifying student needs.

   "This semester was the first time I have been introduced to the concept of Universal

   Design for Learning, but it is one that I liked learning about most and I will continue to

   explore in the future. I remember in high school when we would be asked to fill out

   evaluations for teachers there was a question that asked how often the teacher changed

   her method of instruction (i.e., lecture, game, PowerPoint, etc.). At the time, I did not

think too much about this question; I thought the question was essentially asking how creative was the teacher and how much effort did she put into her class. Now I see this question more as it relates to Universal Design for Learning. I think it is critical for teachers to use a variety of instruction methods and representations for concepts to cater to all their students' needs and learning styles."

Summary

At the end of the study, Genevieve's outlook on education changed due to her experiences at Warren High and through the course, as she stated. She further explained that each subsequent experience would shift her views even more. In her final journal for the study, she reflected upon the experience as a whole as well as what impacted her the most: "[on] the first day of this course, we learned what is the single most important task for teachers on the first day of school: establish a community of learners" (Journal, May 5). She expanded upon this by explaining further:

"This is definitely a concept I kept in mind throughout the semester as I visited each class at [Warren High School]. I noticed the effects of building a comfortable learning environment for students. When students are at ease in the classroom, they have a more positive and respectful relationship with the teacher and they are not afraid to ask questions when they do not understand a concept. I have realized though that a teacher must continue to make efforts to developing their community of learners—the attempt cannot stop after the first day of class. Learning how to creating a strong community of learners is a goal that I value and hope to achieve as I continue in my preparation to be an educator. Through my future practicums and courses, I will use my experiences,

knowledge, and exposure to different classrooms to enrich my understanding of growing

a community of learners." (Journal, May 5).

Of the four case study participants, Genevieve was identified by her religious faith

guiding her beliefs and experiences. She entered the study with strong beliefs on equity, as

related to her church, though these beliefs expanded throughout the study. Genevieve showed a

large change in her belief as it relates to the outside world. She came in with strong beliefs

around equity and inclusion, yet they were more theoretical; as the study progressed, Genevieve

identified her ability to consider what these concepts meant both in practice as an educator but

also as societal needs.

Genevieve's survey findings were the most typical of the larger participant pool of 19

than the other three case study participants. In the social justice survey, two responses stood out

more than others: statement six and twelve. In both statements, Genevieve was uncertain at the

start of the study but agreed at the end. For statement six, this meant that Genevieve was

uncertain if teachers should have lower classroom expectations for students who do not speak

English as their first language but by the end of the study she agreed that teachers should have

lower expectations for that population of students. At the start of the study, she was also

uncertain if it was a teacher's role to prepare students for the lives they are likely to live, but by

the end of the study she agreed that that is the role of the teacher. The responses to both of these

statements are out of line with the rest of her responses, yet consistent with one another.

Throughout her journal entries and discussion posts, Genevieve spoke against stereotyping, yet

this was inconsistent with her responses to these two statements. This will be discussed in light

of the research around teacher knowledge in the next chapter.

Table 8

Genevieve's Social Justice Survey Responses

	1/16/2014	5/1/2014
1. An important part of learning to be a teacher is examining one's own attitudes and beliefs about race, class, gender, disabilities, and sexual orientation.	Strongly Agree	Strongly Agree
2. Issues related to racism and inequity should be openly discussed in the classroom.	Agree	Strongly Agree
3. For the most part, covering multicultural topics is only relevant to certain subject areas, such as social studies and literature.	Strongly Disagree	Strongly Disagree
4. Good teaching incorporates diverse cultures and experiences into classroom lessons and discussions.	Strongly Agree	Strongly Agree
5. The most important goal in working with immigrant children and English language learners is that they assimilate into American society.	Disagree	Disagree
6. It's reasonable for teachers to have lower classroom expectations for students who don't speak English as their first language.	Uncertain	Agree
7. Part of the responsibilities of the teacher is to challenge school arrangements that maintain societal inequities.	Agree	Strongly Agree
8. Teachers should teach students to think critically about government positions and actions.	Strongly Agree	Agree
9. Economically disadvantaged students have more to gain in schools because they bring less to the classroom.	Strongly Disagree	Strongly Disagree
10. Although teachers have to appreciate diversity, it's not their job to change society.	Disagree	Strongly Disagree

11. Whether students succeed in school depends primarily on how hard they work.	Strongly Agree	Agree
12. Realistically, the job of a teacher is to prepare students for the lives they are likely to lead.	Uncertain	Agree

Table 9

Genevieve's Universal Design for Learning Survey Responses

	1/16/2014	5/1/2014
1. believe that all students can learn in general education settings.	Strongly Disagree	Strongly Disagree
2. I believe that there is a range of learning variability in students in any education setting.	Strongly Agree	Strongly Agree
3. I believe learning occurs as a dynamic interaction of the individual with the environment.	Strongly Agree	Strongly Agree
4. I believe that the implementation of Universal Design for Learning will lead to better achievement for all students.	Strongly Disagree	Strongly Agree
5. I believe Universal Design for Learning implementation can occur with or without technology.	Somewhat Agree	Agree
6. I believe goals should not include the means by which mastery can be attained and demonstrated.	Agree	Somewhat Disagree
7. I believe all students can benefit from having multiple curricular options or learning pathways.	Strongly Agree	Strongly Agree
8. I believe curricular methods and materials should recruit and sustain student engagement in learning.	Strongly Agree	Strongly Agree

9. I believe assessment, methods, and materials should be clearly aligned with the curriculum goals.	Am not sure at this time	Agree
10. I believe assessments should remove or reduce barriers for more accurate measurement of learning knowledge, skills, and engagement.	Agree	Strongly Agree
11. I believe supports and scaffolds available during instruction and practice should also be available during assessment when not related to the construct being measured.	Am not sure at this time	Somewhat Disagree
12. Learners should be provided with a variety of ways for recruiting and sustaining engagement in the instructional environment.	Some knowledge	Probably competent
13. Learners should be provided with strategies for personal coping skills, self-assessment, and reflection in support of self-regulation.	Some knowledge	Probably competent
14. Learners should be provided with multiple ways to access information including text, oral presentation, and visuals.	Some knowledge	Probably competent
15. Varied strategies for a range of learners should be provided to support comprehension/understanding.	Some knowledge	Probably competent
16. Learners should be provided with options for action, expression, and communication during instruction/teaching.	Some knowledge	Probably competent
17. Learners should be provided with options that support goal setting, strategy development, and progress monitoring.	Some knowledge	Probably competent

Finally, in finding a way to connect all of her learning throughout the semester, Genevieve

visualized these concepts as the blueprints leading to the development of a school. This blueprint

considered foundational beliefs of equity and inclusion, integrated and deepened with UDL and

teacher preparation, which can lead to the development of a school. For Genevieve, it appears

that school culture is the last piece of this work but that it must be built upon equity and

inclusion and similar, consistent beliefs and actions across teachers and school leaders—

including academic language, clear values, and conscious lesson plans.
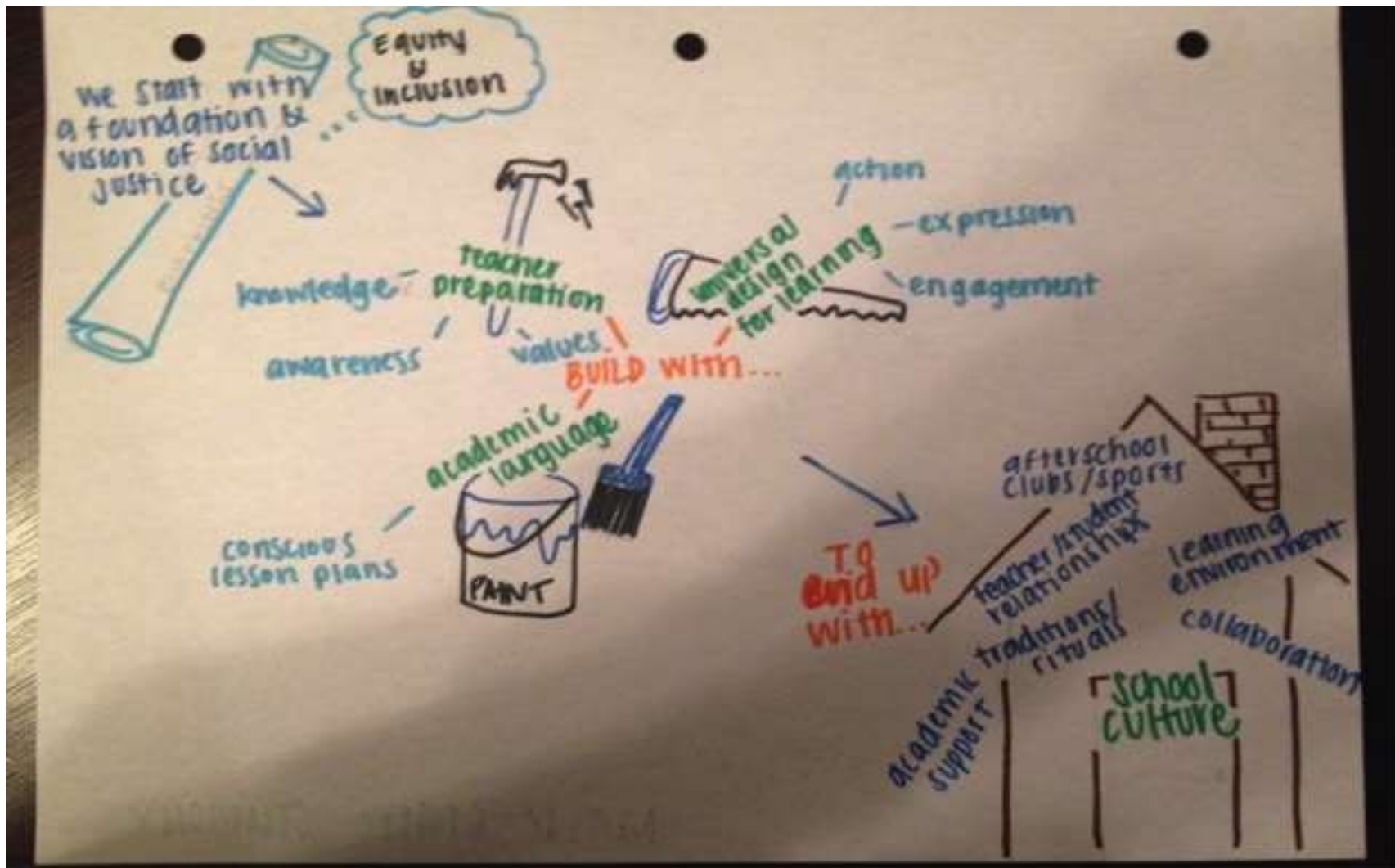
Figure 7. Genevieve's final diagram.

Participant #4: Greg Smith

Greg Smith was also a secondary education and English major. Similarly to Andrea, Greg identified as "White" but further indicated "Irish/Scottish" and "Catholic." Greg was one of the two male participants enrolled in this study. Greg had a variety of schooling experiences prior to enrolling in college, including public school and boarding school. Similarly to Andrea, Greg indicated that he did not speak any other languages besides English. Greg was placed in three separate pre-practicum classrooms for his placement: AP Literature, 11th-grade Special Education English Language Arts, and Level 4 English as a Second Language. While it was not able to be honored, Greg indicated on his demographic survey that he was not interested in observing an ESL or a special education classroom which was an uncommon response amongst this group of nineteen participants. When compared to the other participants in the survey, Greg had more changes in his UDL responses from pre- to post-administration than many others but had a moderate amount of changes when compared to the rest of the participants on the social justice survey.

At the start of the study, Greg identified that he had a few experiences in school settings beyond his own educational career, including tutoring 3rd through 5th grade and volunteering at a middle school with 7th and 8th graders. Greg listed that he wanted to become a teacher because "I really enjoy working in the classroom and feel a lot of fulfillment from helping kids" (January 16). Greg explained he felt that it would be a rewarding, though tough, experience in the classroom, and he was both excited and fearful about planning his own lessons.

School Culture

Greg had some very strong beliefs on school culture at the start of the semester. He explained:

"I always kind of thought that the atmosphere and overall feel of a school was important for student success, but I didn't know that it was actually a major focus for some schools. After reading these three articles, I now have a way better understanding of school culture and what it means in relation to the overall achievement of students. School culture seems to play a major role in creating an effective school, even in low-income neighborhoods. This makes a lot of sense to me. Just thinking back on my own learning experiences throughout my life, the better the atmosphere of the classroom or school was, the more I got out of my experiences. If I felt comfortable and happy in a certain environment, I actually enjoyed, or at least didn't dread, going to school every day to learn." (Journal, January 19).

With most concepts throughout this study, Greg made personal connections before identifying what the major take-away for his future practice (or school practice, in general) was. In this case, Greg strongly believes that the environment in which one is placed will force the individual to adapt and conform to fit into that environment. Beyond himself, he expresses what this may mean for students in other contexts:

"[If] you toss a formerly underachieving student with a negative attitude towards school into a new school with a strong, positive culture then he or she will succumb to the new school's culture. However, this works both ways. If students are in a school with a culture that doesn't place enough emphasis on all the components, then the student's success is at risk." (Journal, April 20).

Greg cites an example in Jerald (2006) as exemplifying the importance of school culture:

> "I was shocked by how much higher students at this school scored in proficiency tests compared to the state average. One would expect a school with three quarters of its student body being low-income to score on the lower side, but Principal Eressy and the University Park team found a way to disprove the stereotype. Overall, these readings helped to me to gain a much better understanding of what school culture is, the work that goes into establishing a strong culture, and how influential school culture can be on student success."

While these examples are more theoretical in nature, Greg gave pointed examples of his time at a K–8 school in the same public school system where he was placed for the duration of the study. As a volunteer in a 7th-grade classroom, Greg explained—

> "There probably wasn't much that could have prepared me for what I encountered once I started working at [school]. I have never seen students behave so poorly, blatantly disobey authority figures, or show such a lack of interested in their schoolwork…. However, over the course of my work, I discovered that most of these students actually want to get an education and succeed in the future. Most want to make a better life for themselves. That is what I think of when I think of urban schools: students with the potential and the desire to achieve success that just need the proper guidance." (Journal, January 28).

Greg's beliefs around school culture focus strongly on the role of the educator in creating the right environment and the student reacting and responding to that environment. In Greg's examples, he reasoned that if educators (teachers and school leaders) set up the right

environment, it is the responsibility of the student to react and respond in a positive way for their own educational and professional future.

As it relates to Warren, Greg explained that he had a sense that the culture is very strong, but that he needed to experience it first-hand to really understand the impact of culture. Specifically, Greg explained that he had his stereotypes around Warren, as it was an urban high school, but that after he was able to spend a few weeks there, he revised his beliefs. At the start of the semester, he felt that the school had all the right ideals, intentions, and motivations, but "the attitudes of many of the students seem to be holding [Warren] back as a whole" (Journal, April 15). Greg further explained that had he not spent time at Warren he would not have experienced the actual implementation of the school's vision. He states, "It is clear that many of the teachers and a portion of the students are willing and able to propel [Warren] High into the next stratosphere of education" (Journal, April 15).

Greg attempted to connect his beliefs and experiences with school culture at Warren High School with what research on school culture expresses. Greg seemed to be attempting to reconcile how his initial view of Warren was so different from his view once he spent some time there. He used Deal and Peterson's (1999) definition of school culture as his foundation. Deal and Peterson say that school culture is an "underground flow of feelings and folkways wending its way within schools. These feelings appear in the form of values, history, physical symbols, beliefs, rituals, and vision". Greg explained that there is inconsistency in how these feelings appear at Warren High School. He stated, "I thought I had a fairly accurate idea of what [Warren High Schools'] school culture would be like just from our first visit to the school ... [however], I quickly realized just how difficult it is to get a clear picture of what a school is all about" (Journal, April 15). Greg explained that the mission and "official beliefs"

of the school are actually only that of the administration and that he had a much better sense from teachers who are "on the front line" of the work (Journal, April 15).

While Greg stated in this journal the importance of school culture aligning with the beliefs of teachers, he noted that the students at Warren High play a very large role in both the culture and reputation of the school. He explained that it is very clear that within the confines of the school culture, "success only comes from hard work" and that, while the teachers and administrators have done an excellent job in presenting this message, "the only issue is getting all of the students to buy into this idea" (Journal, April 15). Yet Greg acknowledged the fact that "so many different aspects of a school community play pivotal roles in determining the school's culture" and that Warren High School needs to continue to progress towards a more positive school culture to "strive to improve [educational experiences] of every student" (Journal, April 15).

Equity

At the start of the semester, Greg explained that he never before understood "the extent to which some groups are discriminated against in the classroom" and that he is "beginning to understand just how tricky it is to create a classroom environment and curriculum that doesn't marginalize any one group while making every student feel comfortable and appreciated" (Discussion Board Post, January 22). When reflecting upon equity, social justice, and injustices in the world and in his personal experience, Greg stated that he believes "every person has an equal opportunity to achieve access regardless of race, class, gender, or any other trait that may bring about discrimination" (Journal, February 14). However, Greg acknowledged that he is in a position that has not been impacted negatively by inequity.

"I'm going to be honest. When I first sat down and started to think about what social

justice meant to me I struggled to find a meaning. Then, all at once, a million thoughts

came into my head about the meaning of social justice, and now I'm finding it difficult

to focus in on the most important aspects and form a clear definition. I almost looked

up the meaning of social justice online, but I decided it would be much more

interesting and helpful for me to reflect on what it means to me, and only me. I'm

positive that I have seen many instances of social injustice throughout my life.

Chances are I've benefited from a lot of social injustices. At least, I'm pretty sure I've

benefited from more than I've suffered from. I think that as a white, upper-middle-

class male I probably don't have a very accurate picture [of] just how many social

injustices litter our society. I remember reading an article about white privilege where

each line began "I have the privilege…" and it really opened my eyes as to how many

injustices go unnoticed by average citizens every day. In truth, some of the examples

they gave kind of rubbed me the wrong way. I am by no means trying to say that white

males suffer from any serious social injustices that heavily inhibit our ability to

succeed, but there is definitely a point where stereotyping occurs. Altogether, it is

clear that there is a plethora of social *in*justices in society, but what about social

justice?" (Journal, February 14).

As the semester progressed, Greg was able to consider issues of equity and social

justice as they connect to his own time in the classroom. After a session on labeling, Greg

expressed the following:

"I think it was really important to learn not to refer to a student by a label but rather as

a person. I know I wouldn't have liked it if my teachers just referred to me … as

something that's just a fraction of who I am as a person. I also thought it was helpful

reflecting on my own life and thinking about what was 'normal' in my parents'

opinion. I now recognize how beneficial it is to support someone even if they begin to

break away from whatever your personal concept of normal is." (Exit Ticket, April

10).

By the end of the semester, Greg identified equity as one piece of the larger social justice

system, specifically as it relates to thinking about diverse student needs.

Inclusion

In his own educational experience, Greg was reminded of a classmate of his in

elementary school who had disabilities. He remembered this as a positive experience due to

his teacher's actions.

"Our teacher never really made a big deal about it and after a short time she fit into the

class like everyone else and no one treated her differently. I think the reason it was so

easy for both her and us to become comfortable with each other is because of how

welcoming our teacher made the classroom environment. There wasn't an additional

special education teacher in the classroom with us, but I think that that actually helped

to make everything feel as normal as possible. Altogether, I think the task of

successfully and appropriately including students with disabilities in the classroom is

difficult, but definitely achievable." (Discussion Board Post, April 9).

From this, Greg wondered about his own practice and "how well I will handle [things] if and

when the time comes" (Discussion Board Post, April 9). Greg drew upon the experience of his

cousin, who was identified as gifted, and the lack of an inclusive setting for him. Greg

explained, "[He] just couldn't learn in the typical way … in the end, he and his parents

decided homeschooling was the best option [but] he missed out on the school experiences …

because the learning system we have now doesn't cater to the needs of every student, just the

average one" (Journal, March 21).

Special education, as it relates to equity and social justice, seemed to resonate with

Greg the most throughout this study. When reading about special education legislation, Greg

wrote:

"One of the first things that stood out to me in this reading was how recent all of the

legislation came about regarding special education for students with disabilities. It's

pretty crazy to think that, for some of our parents, special education wasn't really a

thing; and if their school actually had it, it was very separate from everything else. I'm

glad there aren't segregated schools for students with disabilities now because I know

that a lot of these students can not only function but actually succeed in regular classes

if they receive the proper assistance. I know that at least one or two of my friends at

[University] were on IEPs in high school, and they're doing just fine here. It was

pretty interesting to read about the actual legislation that brought about IEPs, since

they're becoming such a normal term to use and hear as we come closer to becoming

teachers." (Discussion Board Post, April 9).

Greg's learning around special education legislation came full circle to his own knowledge

and experience with his friends. Similar to Dina, though, Greg did not identify inclusion as

clearly as social justice or school culture through his journals, exit tickets, or discussion posts.

Summary

At the end of the semester, Greg listed his major take-aways as school culture and

classroom experience. Greg reflected, "I always kind of knew that there was an atmosphere in

a school that at least somewhat determined the dispositions of the students and faculty, but now I know that atmosphere is school culture. I definitely think that when I begin my education career I will constantly be thinking about the culture of whatever school I am in and how that culture can be improved" (Journal, May 9). However, Greg did not discuss equity, inclusion, or UDL in his final semester journal reflection. While he did not discuss social justice in his final journal reflection either, Greg briefly mentioned it as it related to Catholic education and his newfound desire to teach in a Catholic school—something he had never considered before the end of the study.

As evidenced in this section, I had the least amount of data on Greg. While Greg completed all the same assignments as the other participants, he, ultimately, wrote less. Greg identified both social justice and UDL as ideals in education but focused heavily on the inability to make change in a school culture where students lack respect. Greg represented a resistant participant characteristic, which was unique amongst these four cases, but not uncommon to find during research on social justice at large.

With respect to the survey findings, a few of Greg's responses were noticeably different between pre- and post-administration. In social justice statements five and eleven, Greg seemed to switch sides on his beliefs. Statement five was around assimilation for ELLs and immigrant students. At the start of the study, Greg agreed that assimilation was the most important goal, but at the end of the study he disagreed. Given that Greg did not write much about immigrant students or ELLs, it is difficult to triangulate this data with anything else he had written about. Statement eleven focused on student success depending on how hard they work in school; Greg's pre-survey response was that he agreed that student success is dependent on how hard they work in school, while his post-survey response was that he

disagreed. This is in strong contradiction to Greg's own words in journals, discussion posts, and exit tickets. This inconsistency is interesting as Greg seemed to feel strongest about student motivation in school leading to their success. This will be discussed in light of the research on knowledge in teacher preparation in Chapter 5.

For the UDL surveys, all but one of Greg's responses moved in a direction expected based on the content of the course he was enrolled in. Greg was not sure if students should be provided scaffolds and support during instruction (UDL survey statement eleven), which seemed to be in contradiction to his other survey responses. But since Greg's qualitative data—journals, exit tickets, and discussion points—was scarce, there is not much data to triangulate his responses.

Table 10

Greg's Social Justice Survey Responses

	1/16/2014	5/1/2014
1. An important part of learning to be a teacher is examining one's own attitudes and beliefs about race, class, gender, disabilities, and sexual orientation.	Agree	Strongly Agree
2. Issues related to racism and inequity should be openly discussed in the classroom.	Agree	Agree
3. For the most part, covering multicultural topics is only relevant to certain subject areas, such as social studies and literature.	Disagree	Disagree
4. Good teaching incorporates diverse cultures and experiences into classroom lessons and discussions.	Strongly Agree	Strongly Agree
5. The most important goal in working with immigrant children and English language learners is that they assimilate into American society.	Agree	Disagree

6. It's reasonable for teachers to have lower classroom expectations for students who don't speak English as their first language.	Uncertain	Disagree
7. Part of the responsibilities of the teacher is to challenge school arrangements that maintain societal inequities.	Agree	Strongly Agree
8. Teachers should teach students to think critically about government positions and actions.	Agree	Agree
9. Economically disadvantaged students have more to gain in schools because they bring less to the classroom.	Disagree	Strongly Disagree
10. Although teachers have to appreciate diversity, it's not their job to change society.	Disagree	Disagree
11. Whether students succeed in school depends primarily on how hard they work.	Agree	Disagree
12. Realistically, the job of a teacher is to prepare students for the lives they are likely to lead.	Uncertain	Uncertain

Table 11

Greg's Universal Design for Learning Survey Responses

	1/16/2014	5/1/2014
1. I believe that all students can learn in general education settings.	Somewhat Disagree	Strongly Agree
2. I believe that there is a range of learning variability in students in any education setting.	Agree	Strongly Agree
3. I believe learning occurs as a dynamic interaction of the individual with the environment.	Agree	Agree

4. I believe that the implementation of Universal Design for Learning will lead to better achievement for all students.	Am not sure at this time	Strongly Agree
5. I believe Universal Design for Learning implementation can occur with or without technology.	Somewhat Agree	Somewhat Agree
6. I believe goals should not include the means by which mastery can be attained and demonstrated.	Am not sure at this time	Agree
7. I believe all students can benefit from having multiple curricular options or learning pathways.	Agree	Strongly Agree
8. I believe curricular methods and materials should recruit and sustain student engagement in learning.	Agree	Strongly Agree
9. I believe assessment, methods, and materials should be clearly aligned with the curriculum goals.	Strongly Agree	Strongly Agree
10. I believe assessments should remove or reduce barriers for more accurate measurement of learning knowledge, skills, and engagement.	Agree	Strongly Agree
11. I believe supports and scaffolds available during instruction and practice should also be available during assessment when not related to the construct being measured.	Somewhat Agree	Am not sure at this time
12. Learners should be provided with a variety of ways for recruiting and sustaining engagement in the instructional environment.	Unsure	Quite competent
13. Learners should be provided with strategies for personal coping skills, self-assessment, and reflection in support of self-regulation.	Probably competent	Probably competent
14. Learners should be provided with multiple ways to access information including text, oral presentation, and visuals.	Probably competent	Very competent
15. Varied strategies for a range of learners should be provided to support comprehension/understanding.	Probably competent	Quite competent

16. Learners should be provided with options for action, expression, and communication during instruction/teaching.	Probably competent	Very competent
17. Learners should be provided with options that support goal setting, strategy development, and progress monitoring.	Some knowledge	Probably competent

For his end of study diagram, Greg identified social justice as the sun by which all

other concepts (planets) revolve. He identified these concepts as lesson planning, academic

language, classroom assessments, UDL, school culture, equity and inclusion, and classroom

management. As discussed above, Greg had not really identified social justice as critically

important throughout this study, so the fact that he placed it at the center of his diagram seems

at odds with his stated beliefs. However, another explanation could be that Greg was still

making sense of his learning around social justice and UDL and was not yet able to put in

words how these concepts relate to one another and the impact they may have on his own

practice.
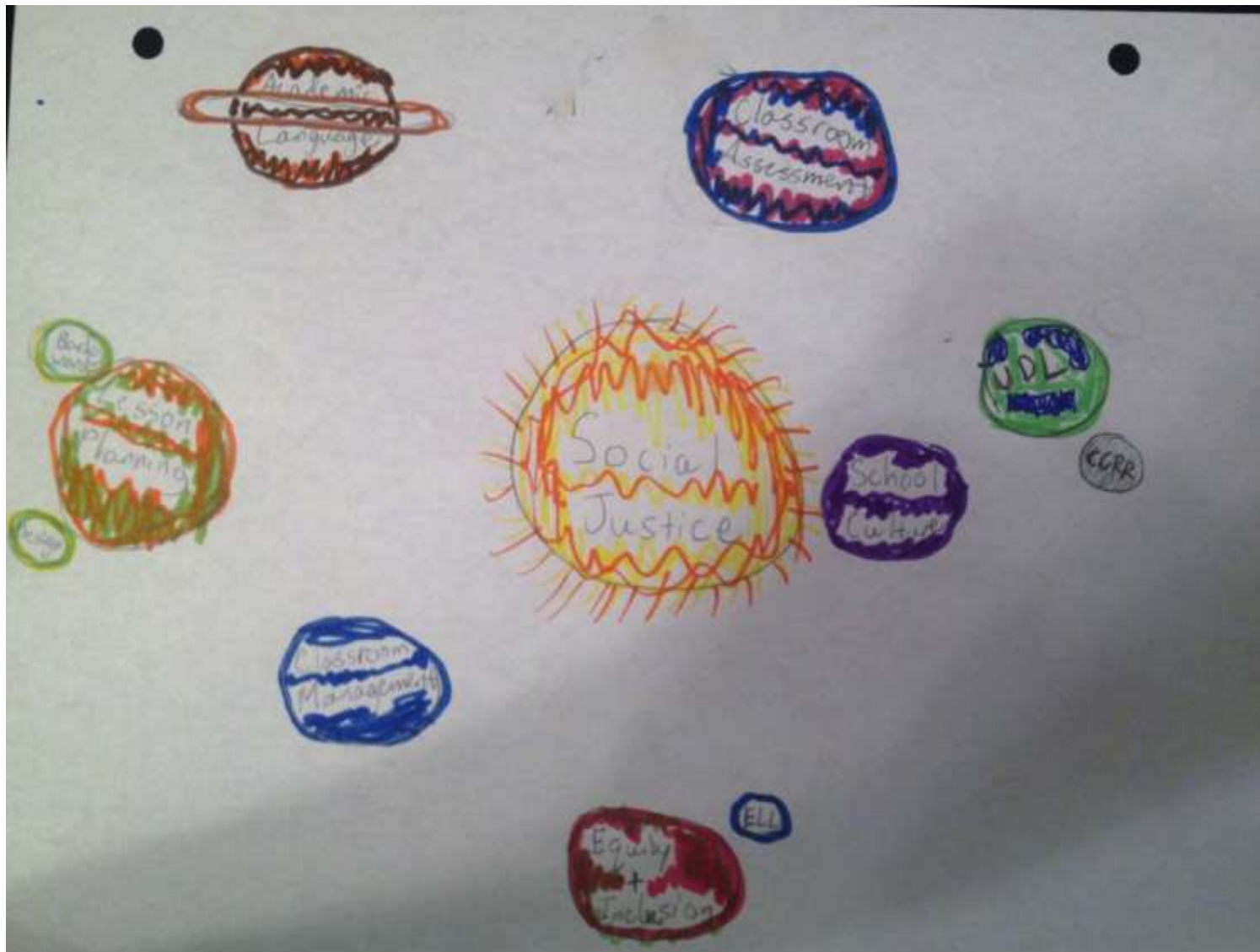
Figure 8. Greg's final diagram.

CHAPTER 5

DISCUSSION AND IMPLICATIONS

Introduction to Discussion

In this study, I explored the changing perceptions of pre-service teachers early in their

preparation program as they learned about social justice and Universal Design for Learning. To

better understand their beliefs, perceptions, and changes over time I aimed to answer the

following questions:

In a four-year, private university teacher preparation program focusing on college

sophomores in the initial stages of their degree program—

- o How do these pre-service teachers' beliefs about UDL and social justice change
  over the course of a 6-month study?

- o How do these pre-service teachers connect UDL and social justice in their initial
  development as educators?

As noted in the literature review, teacher preparation, social justice, and UDL may be isolated in

fields of research but not in practice. This study recognizes that there has not been identifiable

research conducted on the integration of social justice and UDL in teacher preparation. As such,

this dissertation provides a lens into a perspective which has not been investigated previously. In

this Chapter, findings from the surveys and case studies are summarized and discussed in light of

previous research. Following this, I present major implications for practice and future research.

Teacher Knowledge and Training

The field of teacher training has been divided into those who believe it is a craft *versus*

those who believe it is a profession (Alter & Coggshall, 2009; Levine, 2006); however, some

leaders in the field have proposed that teaching "should be properly conceived as an

academically taught, clinical practice profession, similar to clinical psychology and medicine"
(Alter & Coggshall, 2009). The participants in this study were enrolled in an academically taught
program and had a concurrent clinical opportunity; as mentioned previously, this is the only
course in the university in which all participants are enrolled in the same course and conduct
their clinical training as a group in a single school placement. This study contends that in order to
develop strong educators teacher knowledge should stem from both the "academically taught"
and "clinical practice" aspect of a training program.

All participants in this study were enrolled in a semester-long (17 weeks) course at a
university. As described in Chapter 3, the course met weekly and participants were required to
complete day-off reflections (exit tickets), journals, and to engage in online discussion board
conversations with their classmates. Alongside the course, all participants took part in a full-day
practicum experience: placed in classrooms with full-time, licensed teachers. As discussed in
Chapter 3, data was not collected on the practicum; however, the participants' reflections
throughout the semester did include commentary on their experiences in their practicum
placements. As the participants in this study continued to engage in experiences that would
extend their previous way(s) of thinking, their reflections played a key role in their own
development as educators with respect to concepts such as UDL and social justice embedded
within introductory methods on teaching. The importance of reflection is identified in the
literature—as Gore and Zeichner (1991), leaders in this field, explain, reflection is a key
component in the preparation of teachers. It is clear in the findings presented above that not all
four case study participants reflected on the course content and concepts to the same degree or to
the same depth as one another, which is as to be expected given individual variation.

All participants acknowledged the important role of their previous educational experiences and teachers in their educational history. While participants' personal experiences may always bear some weight on their work and impact how they view their role as an educator, each participant in this study had different influences on their development of knowledge as a teacher. Genevieve's Catholic education impacted her belief that educators have influence upon many generations of students; Greg's diverse, international education impacted his view of motivation and perseverance for students; and Dina's educational upbringing connected to the importance of educators supporting the development of all students, especially those less fortunate. But the case of Andrea showed the strongest connection between her previous background and the setting she was placed in during the course of this study.

Andrea's level of reflection was very personal, to the point of her reflection being less about her skills and practice as an educator and more about her own K–12 education experience. Andrea represents a type of teacher candidate who is not yet able to bridge her newfound teacher knowledge with her eventual practice in the classroom. Even though she is clearly developing— as evidenced by her critical reflection—she does not yet apply this learning to her practice. This is not to say that Andrea would not be a successful educator—I have no way of knowing that— but it does bring up the critical aspect of how participants view their own educational background as they are preparing to be educators. In the case of Andrea, her previous educational experiences gave her an idea of what classroom routines, procedures, and instructional strategies should look like; however, during the course of her *actual* teacher preparation program (the course embedded in this study and beyond) she critically reflected upon those experiences from a new light and came to develop a list of things she believed her educators *should* have done. As noted by Lortie (1977) the "apprenticeship of teaching" plays a

large role in the development of the educator. This is addressed in another manner by Pugach (2009) who explains that while other professionals have a single "master craftsman" to learn from, pre-service teachers have multiple teachers over the course of the course of 13+ years to learn about their craft. The biggest challenge in reflecting upon practice and learning regarding the skills needed to be an educator when compared to one's "apprenticeship of teaching" is that these are fundamentally two different things: specifically, a "beginning teacher must try to assume a new—but familiar—role in a familiar setting" (Florio-Ruane, 1989). Unlike other professions in which apprenticeship begins at a later age, educators, as Pugach states, have their entire schooling experience in front of potential "master" craftsmen. This has led to suggestions by Bramald and colleagues (1994) that pre-service teachers need to increase their amount of reflection—and I would argue time in varying classroom experiences—to develop their thinking about teaching and learning.

Another key aspect of learning to be a teacher is the role of observation—in a critical manner. As Erickson (1973) describes it, the act of "making the familiar strange." Similar to learning from one's own educational experiences, making the familiar strange requires deliberate observational strategies and protocols that require participants to document "concrete details of practice" (1986). All 19 study participants were required to conduct observations in the classroom which were included in their journals and in-class discussions and reflections. All participants noted specifically how teachers interacted, planned, and taught all learners with a specific focus on English Language Learners and students with disabilities. Each of the four case study participants described in Chapter 4 provided examples of teacher practice they had observed over the course of the study and their perceived impact of those practices on students. While the observations and specific focus of each participant varied, participants' observations

served as the foundation for how they viewed the role of a teacher, as evidenced in their journals and exit tickets.

Another striking fact around teacher knowledge is the inconsistency of ideas related to data sources over time. In analyzing data, some data sources for individual participants are inconsistent with one another—essentially pointing to the fact that the participants' thoughts are at odds with one another over time. In some facets of research around reflection for teacher preparation, experts explain that this disconnect is due to either a lack of environment of trust between the pre-service teacher and their coach/supervisor or the lack of a context which is unique to the pre-service teacher (Boud & Walker, 1998). Alternatively, this can be explained by the field of research which compares beliefs in actions and indicates that some pre-service teachers need the be inconsistent to develop their voice (Jagla, Erickson, & Tinker, 2013) or that they develop their own "sub-universe" where they work, creating their own sets of knowledge and belief (Simmons, et al., 1999).

Regardless of the reason for inconsistency across words (or a developing belief system) over time, Greg's commentary during reflective journal entries and online discussions varied the most over time in this study. Specifically, Greg made comments which were in direct opposition to each other over time as it related to the role of the teacher and how students act in response to an educational setting. However, it appears that by the end of the course Greg was more consistent in his beliefs around the importance of hard work above all. Greg epitomized one perspective in developing teacher knowledge: the belief that hard work is key and those who do not work hard do not want to achieve success. While Greg was one of very few participants in this study who believed this, research at large shows that in-service and pre-service teachers maintain this similar perspective nation-wide. Yet, Peske and Haycock (2006), amongst others,

have detailed the truth that hard work is not the only thing that matters for ensuring more educational opportunities. Structures in society—especially in urban settings—impact these opportunities for all students.

Moreover, this study focused on aspects of social justice and UDL as pedagogical knowledge but did not address specific content knowledge of the participants (English, Math, History, and Spanish). Since Shulman's seminal piece in 1986 on the importance of merging both pedagogical knowledge (how) and content knowledge (what) of teaching, teacher preparation programs and professional development supports for in-service teachers have struggled with finding the right balance. This study was situated in a university context in which there is a division between methods courses and pedagogical content courses. Participants enrolled in this program take courses in content, courses in pedagogical knowledge, and one method course in their focus area (e.g., mathematics) with a focus on pedagogy and content. The structure of the program could have contributed to how participants discussed pedagogy. While all four case study participants spoke of their content when discussing students, curriculum, and classroom teachers, none of the participants discussed their content area in relation to the pedagogical and fundamental perspectives that influence their work at large. For example, while Genevieve had strong beliefs in social justice and a strong mathematical content knowledge, there was no discussion of the impact of pedagogical structures as it relates to her practice as a future mathematics educator.

In sum, knowledge developed over the course of a teacher preparation program is going to vary based on the backgrounds, experiences, understanding, and reflectivity of all participants (Pugach, 2009). This is why the case study approach is the ideal methodology for exploring the

connection and learning for pre-service teachers. In relation to one another, participants may have different reactions and responses yet they are reflective of much of the literature at large.

Social Justice

Experts in the field believe that teacher training programs should focus on social justice as it would support future educators in classrooms with diverse populations (MacDonald, 2005; Nieto, 2000; Villegas & Lucas, 2002). The inclusion of concepts of social justice within a teacher preparation program is still gaining traction, with programs such as that at Boston College being one of the few that has an emphasis beyond multiculturalism and towards the development of perspectives and practices that align with social justice (Cochran-Smith, et al., 2003; Ladson-Billings, 1999). Cochran-Smith and colleagues (1999) found, after a multi-year collaboration, that in order for a program to come to agreement on the foundation belief of social justice it was not consensus but willingness to engage in deeper conversations that set the program up for success. Yet, this willingness may not actually ensure that the participants in the program (or the teacher educators leading the program) are in agreement on foundational tenets of social justice. Specifically, as a teacher preparation program, what do we mean by social justice? And, do we all have the same meaning? More importantly, over the course of four years in a program, how many contradictory messages might our pre-service teachers receive with respect to social justice? While the context of this study remained constant in its definitions and beliefs of social justice, external factors (other courses, societal definitions, previous experiences by participants) suggests that abstract concepts need some level of agreement not only in definition—as the program has one—but in practice by teacher educators as well. This dissertation abides by Adams, Bell, and Griffin's (2007) explanation that the goal of social justice is "full and equal participation of all groups in a society that is mutually shaped to meet

their needs … social justice includes actors who have a sense of their own agency as well as a sense of social responsibility toward and with others, their society, and the broader world in which we live."

In preparing teachers for equity in the classroom, Kugelmass (2000) suggests that this "requires developing new teachers' belief in their own power to effect change. This requires more than the development of pedagogical knowledge and skills, social-political expertise and a commitment to educational equity." All four case study participants shared—to different degrees and understanding—their personal development over the course of the 17 weeks of the study. At the start of the study, Andrea was inconsistent in her beliefs on many aspects of social justice, but gave strong unsure or "uncertain" responses with respect to English language learners and multicultural education, possibly indicating that she did not reconcile multiculturalism and ELLs with larger issues of social justice. However, there is one outlier in Andrea's responses which do not appear to fall in line with the remainder of her responses or her exit tickets and journal entries throughout the study. Specifically, Andrea agreed that it was reasonable for teachers to have lower expectations for students who do not speak English as a first language. There are a few potential reasons for this response. Andrea may have believed that while the goal of educating immigrants or English language learners was not assimilation that teachers should have lower expectations for students who do not speak English as a first language. As an aspiring secondary teacher, Andrea may have experienced the result of what research has shown for decades: English language learners are taught in a "reductive" manner which does not allow for rich engagement with literature and content. As such, by the time these students enter high school, their literacy achievement is far lower than their English (as a first language) peers (Garcia, 1999; NCES, 2013; Shleppegrell, 2002). Andrea may be responding to the practice that

she was already witnessing in the classroom; so, while Andrea is showing some level of

sensitivity towards English language learners, her responses do not appear to be fully aligned

with the social justice framework. Another potential reason for her misaligned response could be

that Andrea felt that English language learners were unable to thrive at grade-level instruction

due to factors out of her control such as their educational history or transient status. As noted by

DeWitt (2011), these factors can impact the perceptions or beliefs that an educator may have

about their immigrant or bilingual students. Andrea is progressing in some areas with respect to

social justice, but she does not yet show a cohesive picture, most likely due to the fact that she is

still in the early stages of her teacher preparation program.

     For Andrea, her growth in social justice understanding has shown that she is beginning to

form strong opinions on the impact of her practice though she is still at the beginning phase of

her teacher preparation program. Given that this was the first time Andrea had to think deeply

and at length about social justice, she may continue to develop these thoughts over the remainder

of her program in a similar manner to Genevieve, Dina, and Greg. Genevieve and Dina

exemplify a different type of pre-service teacher: one who has been seeped in concepts of social

justice over time; while Greg represents the case of a student who had thought less about social

justice and issues of privilege prior to the start of the study. At the start of the study, Genevieve

and Dina had previous experiences—through coursework or church—with a foundation in social

justice. Both of these participants identified the role of social justice as it relates to levels of

equity (or inequity) in school contexts, but throughout the semester they were able to deepen

their beliefs about social justice as it relates to larger structural settings. Genevieve, for example,

continued to reflect back upon her Catholic upbringing and the Church's encouragement for

"preferential option for the poor" as part of a societal change that must occur. As Marquez-

Zenkov, Corrigan, Brocket, and Lehrian (2008) explain, the ability to understand more about students and their communities is a "required element" for pre-service teachers' curricula and pedagogical knowledge development.

Unlike Dina and Genevieve, Greg approached social justice with a mentality of questioning the motivations and desires of the students in the classrooms. As Causey, Thomas, and Armento (2000) share, "one factor that makes the task of influencing attitudes about diversity difficult is the tenacity with which pre-service teachers cling to prior knowledge and beliefs about other people." They go on to explain that some enter preparation programs "believing strongly in optimizing individualizing the inevitability of triumph over any obstacle through hard work and individual efforts" (Causey, et al., 2000). This describes Greg's beliefs towards social justice and equity appropriately. Throughout the semester, Greg repeatedly suggested that greater motivation on the part of the students would impact their school success and achievement and the lack of that motivation is something that students need to address if they want success. Greg's beliefs, while an outlier in this study, are consistent with the public narrative that hard work begets success and all other factors pale in importance.

What seemed like a contradiction to these beliefs, though, was Greg's acute awareness of his levels of privilege—racial, gender, and socio-economic. While Sleeter (2001) shares the concern that many teacher preparation programs do not deeply address issues of privilege, Greg entered this teacher preparation program understanding that he has had opportunities far greater than those of others. Yet this acknowledgment of privilege did not impact the way he viewed others' experiences. Findings on Greg provide a case that has initial beliefs that need to be further investigated and connected to larger societal and structural issues (as Genevieve and Dina were able to do) in order to impact practice.

These four case studies provided examples of participants across the larger study: those who came in with preconceived notions that guided their thinking, those that came in as a "blank slate," and those who came in with strong beliefs about social justice. It is possible, and expected, that in any setting of pre-service teachers (such as a course in a teacher preparation program), a wide variety of participants will be present. The four case studies show both similarities and differences amongst participants as they understand social justice in the context of schooling both theoretically and practically. In order to construct a "personal and social understanding of social justice" (Lee, 2011), participants must engage in a complex process which includes their background experiences, challenging preconceptions, and experiencing of new opportunities which may counter narratives they see regularly. While participants enrolled in this program for teacher preparation have been made aware of the foundation of social justice throughout their coursework and experiences, this was the first exposure most participants had connected to practice. As Gates and Jorgensen (2009) would describe, the candidates responses and reactions to social justice were of a moderate form—primarily focusing on issues of equity, but not challenging (or even addressing) structural inequalities. I argue that the readiness of the participants, in part due to the initial stage of their preparation program, did not take them to deeper levels of understanding regarding social justice. However, as suggested in implications below, the integration of social justice coherently across a program might lead to liberal or radical levels of understanding as participants learn and experience more.

Universal Design for Learning

Universal Design for Learning in teacher preparation programs has been investigated minimally; as such, this study seeks to build some of the foundation of this critical field. While research on UDL does address the need for equitable access for students with regard to

curriculum, materials, methods, and goals (Hitchcock, et al., 2002; Pisha & Coyne, 2001; Rose & Meyer, 2002), there has not been much research conducted on what this means during teacher preparation. Further, the discussion of this framework in the literature has primarily been in the field of preparation for special education teachers (Hitchcock, et al., 2002; Holdheide & Reschly, 2008). This study operates on a newer perspective for UDL in teacher preparation—one which fundamentally views UDL as a framework for all learners and is connected to a perspective rooted in social justice.

In the process of supporting pre-service teachers in developing knowledge of UDL, issues of inclusion and special education still dominated as much of the readings assigned to participants were from this perspective. Genevieve focused on UDL in varying ways throughout the semester. As she was placed in a special education classroom, Genevieve talked about the needs of students being as unique as a thumbprint. As the semester progressed, Genevieve identified UDL as something critical for lesson planning as well. Similarly, Dina acknowledged the uniqueness of learners in the classroom and the need for UDL to address learning in a way that is equitable for all students (Rose & Meyer, 2002).

Neither Genevieve nor Dina had much experience with students with disabilities prior to their experience in this practicum. Dina explained that in her past experience most students with special education services received those in separate resource room classrooms, including her own brother whose needs were not addressed in the general education classroom. This lack of background knowledge of what inclusive practices may look like allowed this practicum experience to be the first opportunity for these two participants to learn about alternate forms of teaching all learners. Yet both participants identified that in order to do so planning for appropriate lessons was the first step.

Even though Genevieve was at the start of her understanding of UDL, her belief in lesson planning stemmed from her belief in addressing all learners. For Dina, planning for the diverse needs of students in the classroom was the area of her future practice she felt she needed the most support on. While research on lesson planning is consistent with Genevieve's understanding (Lynch & Warren, 2008; McGuire, Scott, & Shaw, 2006), a lesson planning template that specifically addresses components of UDL might be more supportive in addressing all learners and educators (Courey, et al., 2012). A structure suggested by Courey and colleagues would be beneficial for both Genevieve and Dina as it would support Genevieve in addressing the needs of all in her future classroom and would support Dina with structures for setting up classroom instruction as identified by student needs.

Greg, unlike Genevieve and Dina, did not identify any component of UDL throughout the study; however, he appeared to have a sense of frustration towards issues of special education legislature—particularly how recently it had been enacted. For Greg this was personal, as he has family members and friends who have received the required support by law, but he was concerned that prior generations would not have received the same legal supports. Yet, throughout the semester, Greg only responded to issues of UDL when explicitly asked—and even then, Greg was unable to put in writing what UDL meant in relation to equity and inclusion for all students. Unfortunately, as stated in Chapter 2, there is limited research in the UDL field and no literature on cases similar to Greg. However, Eisenhart and colleagues (1991) suggest that without basic knowledge of educational practices (such as classroom management), pedagogical and academic tasks cannot be attended to by pre-service teachers; further, they struggle in obtaining the knowledge needed to practice effectively in the classroom. As such, there are a few potential reasons for Greg's lack of response to UDL. Firstly, Greg may not have understood the

UDL framework. As he stated during a mid-study journal entry, he is aware of his privilege and

the opportunities he has been afforded accordingly; however, this did not necessarily translate

into impacting his practice or the way he viewed the students at Warren High.

In fact, educators must understand the usefulness of the UDL framework prior to relying

on it in their practice. In McGuire-Schwartz and Arndt's 2007 study, participants identified the

need for UDL through their own practice by reflecting upon the needs of their students as well as

their own needs to best provide support and access to all. Greg, however, did not acknowledge

this need (for students or himself) for UDL in theory or practice. A final reason for Greg's

response to UDL might be due to the preparation program and related placement that he was

enrolled in. The teachers with whom the participants were placed with were not vetted for their

beliefs about UDL or social justice, and Greg may not have been in an environment that

encouraged him to think about UDL in theory or practice. For Greg, the issue might not be that

he was not open to the learning theoretically, but the basis of the framework did not align with

his beliefs about what is the most important factor for educational success. Greg put the

emphasis on students' motivation which is contradictory to much of the foundational core of

UDL which puts responsibility for educational opportunities on the educator to ensure the

appropriate methods, materials, goals, and assessments are provided to all students (Rose &

Meyer, 2002).

Andrea, however, stood out from most of the participants when she identified UDL as

"the perfect way to carry out my understanding of social justice" (Journal, May 5). Andrea

extended this by explaining that she views UDL as a way to level the playing field for all

learners so that they are able to demonstrate their knowledge in a way that best suits them. For

Andrea, UDL is not specifically for special education and inclusion for students with disabilities

but rather something that allows all students opportunities in the classroom they may not have otherwise had (access to learning). Andrea's explanation of the use of UDL in practice underscores the importance of UDL as a critical aspect of planning in the classroom.

Similar to other participants, many of Andrea's responses on the surveys did not necessarily align with her journal and exit tickets. For example, while Andrea responded that she believed her practice improved, she did not actually address her practice at any point in writing. Like Greg, the experiences in this study—coursework and practicum—may not have actually been enough for Andrea to change her practice. Given that Andrea was only able to teach two lessons throughout her practicum and the course she was enrolled in covered UDL as one of many topics, her knowledge of the topic as it relates to the classroom may not have actually translated to her actions as an educator.

Finally, in reflecting on her own K–12 education, Andrea believes that the inclusive nature of her schooling and teachers' practices ensured that students were able to learn and grow together. These experiences encouraged Andrea to better understand UDL as it relates to supporting all learners in the classroom. As Orkwis and McLane (1998) explain, it is critical for all students to have access to curriculum, regardless of "disability, difference, or diversity." Andrea exemplifies the participant who sees an overlap in UDL and social justice. She discussed throughout the study that in order to reach goals of equity and access for all students inclusive practices that consider the needs of all learners are critical. Even at the start of the study, Andrea showed a bit of anxiety in getting to know her students. Prior to her first lesson—or even getting to know the students in the classroom—Andrea shared that she was worried she might not get to know students well and this would negatively impact her practice as a teacher. Andrea seemed to

identify that knowing all your students is critical in order to develop an environment where all students have access to educational opportunities.

Synthesis of Discussion

The trends demonstrated by the four case study participants reflected patterns evidenced in the other 15 cases in the study. Participants reacted differently based on their background experiences, knowledge, and biases (Carter, 1990; Pugach, 2009; Shulman, 1986). Also, participants responded based on the experiences they engaged in during the course of this study (Cochran-Smith & Lytle, 1999; Gore & Zeichner, 1991; Shapiro, 1991); and finally, the structure of the course participants were enrolled in focused on a wide variety of topics without the guarantee that these concepts will be continued throughout the remainder of their preparation program. There are major implications for this research as we determine how best to prepare our future teachers for the diverse population of students they will encounter as well as pedagogical skills they will need in the classrooms they will enter.

The participants in this study were a targeted group of pre-service teachers enrolled in a selective, private Jesuit university completing their first pre-practicum teacher experience in an urban high school setting. As such, there are questions as to their readiness for complex topics such as social justice or UDL, for being placed in an urban secondary school, and the combination of all these factors. As discussed below, in responding to the research questions and in stating implications of this study, I argue that participants had a varied level of readiness due to factors such as their age, prior experiences, exposure to these concepts, and the structure of the program in which they were enrolled.

Change in Beliefs

The first question proposed in this dissertation asked, "How do these pre-service teachers' beliefs about UDL and social justice change over the course of a 6-month study?" As a whole, participants increased their understanding of both UDL and social justice as they progressed throughout this study as evidenced by their survey and written responses. While participants generally did increase their understanding, there was limited exposure to each topic when placed within the larger context of their teacher preparation program. As such, a change in beliefs might not be sustainable throughout the remainder of their program if consistent follow-up is not incorporated.

Additionally, while this study did not collect data on the characteristics of classroom placements in which participants were placed, classroom teachers were not vetted for their understanding or integration of social justice of UDL in their practice. As mentioned previously, clinical practice plays a role in the preparation of teachers; a placement that does not support what is being taught in the academic setting can impact participants' development of their beliefs. Alternatively, if placed with a classroom teacher whose practice is girded by UDL and social justice, participants' understanding would only be stronger.

Finally, the change of beliefs about social justice and UDL are directly related to the content of the course in which participants were enrolled—there was an expectation that the majority of participants would internalize the concepts they were being taught. However, this does not mean that participants had the same readiness for social justice or UDL, or the readiness to combine them as cohesive framework, given how early in their teacher preparation programs it was. Implications for how to address issues such as timing or programmatic structures are presented below.

Connection of UDL and Social Justice

The second question this study sought to answer was, "How do these pre-service teachers connect UDL and social justice in their initial development as educators?" Unlike an obvious change in beliefs found for the first question, this question was unanswered. If participants made a connection between UDL and social justice, they were unable to talk theoretically or practically about that connection. Andrea clearly stated how she believed UDL and social justice connected as she wrote that UDL was "the perfect way to carry out my understanding of social justice" (Journal, May 5); Genevieve, in her end of course diagram, identified that social justice is the blueprint for developing school structures and culture while UDL has the tools used to put the blueprint in action. However, neither of the other two case study participants made such clear connections between UDL and social justice. This suggests, similar to the previous question, that the timing of this study might be too early in the participants' development as educators for them to truly make sense of abstract concepts they might not have thought about prior to the course in which they were enrolled. As such, this finding suggests that if teacher preparation programs (or even in-service teacher preparation) use a framework integrating social justice and UDL, an extensive amount of background knowledge and connection to both theory and practice must be provided. Without such schema, the ability to connect these two frameworks into one is potentially superficial or non-existent.

Implications for Practice #1: Content Knowledge *versus* Pedagogical Knowledge

Based on the experiences of the participants, it is clear that teacher preparation programs need to do a better job connecting content and pedagogical knowledge. The implications and suggestions described here address the support and learning experiences that pre-service teachers need in a rich, cohesive teacher preparation program.

The first set of implications are specific to teacher preparation programs. In this study, participants were enrolled in a methods course which supported their practice as future educators but was not tied specifically to their content area (of the 19 participants, 14 were English majors, three were Mathematics majors, one was a Spanish major, and one was a History major). Pedagogical knowledge was highlighted over content knowledge, or, more importantly, pedagogical content knowledge (Shulman, 1986; 1987). The emphasis on pedagogy did not provide the opportunity for participants to engage in discussion of how the knowledge of their content might be translated into practice that would ensure all learners had access. While this was evidenced in the single course within which this study was situated, there are implications for university preparation programs at large as this is not a rare occurrence.

I focus specifically on implications for university programs where participants enroll in a multi-year educational training program with multiple, varied practicum opportunities as opposed to alternative routes (i.e., urban teaching corps). The time spent in teacher preparation programs with targeted pre-practicum experiences (as opposed to shorter preparation with extended classroom practice) is a main focus of recommendations and suggestions for improvement.

Almost 20 years after Shulman's (1986) article on the importance of connecting content and pedagogical knowledge, we still see many teacher preparation programs separate the two. In this study, all participants were secondary education majors across four content areas: English, Math, History, and Spanish. Pedagogical knowledge took center stage in the course. In this dissertation, there is very little data that focused on the content areas of the courses within which the participants were teaching or observing. Additionally, there is minimal reference to their content courses, given the focus on pedagogy. Even for the participants with the same content

focus (for example, Math), their course layout over their four years is different: while they have one secondary math methods course together—which *do* integrate content and pedagogical knowledge—the remainder of their courses are either content or pedagogical knowledge. For teachers to be successful, though, both content and pedagogy must be simultaneously engaged (Shulman, 1987).

Besides being counter to decades of research on teacher preparation, separation of content and pedagogy causes an additional issue in terms of actualizing pedagogical skills and knowledge as embedded within the content. Future teachers learning about social justice may view it as an "extra add-on" in their practice—as in, something that would be nice to do occasionally—as opposed to a fundamental aspect of their planning. Those learning about UDL might find structural processes to put in place (such as opportunities for students to write, draw, or speak an answer) but may not be able to find content-specific resources that allow students greater opportunities to access the curriculum.

This leads to the big questions around teacher preparation: what aren't we doing and what can we do better? Based on findings from this study, we are not providing settings that are cohesive for all types of knowledge. The benefit here is significant: we do not throw our pre-service teachers to the wolves, requiring them to figure out how to do everything up front. There is much-needed scaffolding built in to the structure of a four-year teacher preparation program. However, the down side to this is that some pre-service teachers never reconcile the various aspects of knowledge required to be a teacher and instead continue with the status quo of teaching from traditional textbooks without considering how to include all learners. What we can do better as teacher educators is ensure that our pre-service teachers understand the cohesive nature of their preparation program as they progress over the four years.

Implication for Practice #2: Integration of Concepts Throughout a Teacher Preparation Program

As evidenced by these findings, concepts need to be systematically integrated within a program and seen as reflected across the program as a whole. This leads to the second set of implications from the perspective of a teacher preparation program. This study focused on two main concepts: social justice and UDL. As stated previously, the university in which this study is situated has a fundamental belief in social justice, integrating tenets in every course. However, the extent to which that is done varies from course-to-course and professor-to-professor. I can only speak for myself; while all courses have the same core values on syllabi, including social justice, this does not mean it is integrated by similar means. Courses with an explicit focus on English language learners, for example, may dig deeper into social justice and issues of equity than others. As Marquez-Zencov and colleagues (2008) share—

> "Until a social justice concept of teacher quality is foundational for all pre-service and in-service teachers and teacher educators, it is unreasonable that the potential of such a notion or assessment systems oriented around it will be realized. Urban school districts demand a unique population of classroom educators who we believe should be required to concentrate on a broader, social justice-oriented notion of "quality"—both in their professional roles and their curricular objectives."

Secondly, as of the publication of this dissertation, UDL is addressed in only two courses at the teacher-preparation level at this university and, again, implementation varies based on the instructor (for example, the current instructor of this course does not have a background in UDL and therefore removed much of its UDL content). This turns concepts into novelties, or "agendas" of a professor, as opposed to a fundamental practice of belief for the structure of a

program. For these concepts to truly impact and have a role in forming future pre-service teachers, there must be a university-level agreement on these topics and how they connect with various courses as well as consistent language throughout the program. Further, as evidenced by the impact of participants in the study conducted by McGuire-Schwartz and Arndt (2007), building a broad foundation over numerous courses leads to success in the integration and internalization of concepts for pre-service teachers.

I do not doubt that social justice is a concept that these 19 participants will retain throughout their training due to their future courses, but I question the depth and implementation of practice. Yet UDL will only stay with those who were significantly impacted by the concept or who take courses with other professors who also integrate UDL in their coursework, and findings show that it takes time to develop the skills necessary for implementation of this framework.

Implications for Practice #3: Teacher Practice

The findings reveal that the classroom teacher with whom they were placed influenced the reflections and words of the pre-service teachers. However, when teachers are learning how to be effective educators they should be placed in settings that reflect the qualities of an effective educator. The third set of implications are for the practice of those enrolled in and participating in teacher preparation programs. In this study, placements for part-time pre-service teachers are not vetted as thoroughly as placement for full-time pre-service teachers. As such, varying practice and beliefs exist within a single school and for those placed with many classroom teachers this can impact the messages they are receiving. Additionally, while schools are vetted for their involvement in placing student teachers this does not mean that schools embody social justice or practices of UDL in their culture.

Participants at any university or training program bring with them a set of beliefs, perspectives, assumptions, and stereotypes before they walk through the door. This means that they must have practical experiences in order to understand what concepts look like in practice. Many of the participants of this study were placed in classrooms with teachers who fundamentally believed in their role around social justice and equity in the classroom. For those participants, they had models in their classroom teachers of what practice tied to equity could look like. One participant gave the example of the ESL levels 1 and 2 teacher who had her students read *Hunger Games*—a text that would have been difficult for many students who were still learning to read in English. The participant's reaction was admiration that the classroom teacher encouraged the ELL students to read what their peers were reading and provided them with scaffolds to enable them to do so. This is not what the curriculum called for—rather, it reflected what the teacher believed was equity for her students. Alternatively, there were participants placed with classroom teachers who did not believe in scaffolding for all learners or providing all students access to the content and curriculum. Those participants were unable to see concepts verified in practice. This provided one less opportunity for those participants to deepen their understanding both conceptually and practically. Therefore, placements must be carefully selected and vetted for participants in order to reflect the concepts valued by the program within which the pre-service teachers are placed.

The final set of implications bridges preparation and practice and squarely falls upon the multiple teacher educators that pre-service teachers are bound to encounter: professors, supervisors, mentors, and teachers with whom they are placed. All of these individuals have a large role in the knowledge development of pre-service teachers. All pre-service teachers, especially those at the start of their program, need guidance and support from people who

understand and embody what they are teaching. This deep knowledge by teacher educators is not

solely the practice but also the theoretical underpinnings of the concepts taught. There is a need

for preparation programs to ensure that all who support pre-service teachers, especially

supervisors and teacher mentors, personify the goals of the teacher preparation program. This

means, in the case of this study, that if the university program has an underlying belief of social

justice student teachers cannot be placed with mentor teachers who do not believe in the goals of

social justice. This may vary from program to program, but if we really believe in our role to

develop certain characteristics of future teachers we owe them the contexts which ensure

coherence with the visions set forth in their programs.

Implications for Practice #4: Training Pre-Service Teachers

Just as this study encouraged participants to ensure all secondary students had access to

content based on principles of UDL, teacher preparation must ensure that pre-service teachers

receive an educational experience that may vary from their colleagues. As such, I posit that

based on these findings and discussion there are three types of candidates: those who enter

programs with strong foundational beliefs in social justice or equity (such as Dina and

Genevieve); those who enter programs with minimal knowledge of social justice, but are

encouraged to critique their own experiences to develop an understanding (such as Andrea); and

those who enter programs with beliefs at odds with social justice or concepts foundational to

UDL (such as Greg).

Each of these participants might need something different to support their development as

educators. A participant with fundamental disagreement with the perspective of the program

might need a very strategic placement or inclusive setting. For example, identifying those

participants up front and vetting classroom teachers who align with the beliefs of the program

can support in their development. Alternatively, participants who enter with strong, unified beliefs might benefit from being placed with a teacher who runs after-school programs for students at the school (such as an LGBTQ group). For those whose development is in the middle perhaps developing work groups for them to participate in might help them bridge practice to theory. For teacher preparation programs at large perhaps it is appropriate that they structure the way students are trained: provide multiple opportunities for students to access the most critical concepts (social justice and UDL, as examples) with greater levels of flexibility. If teacher preparation programs are a mixture of "academically taught" and "clinically practiced" (Alter & Coggshall, 2009) then perhaps some participants require more support in academic teaching or in clinical practice.

Recommendations for Future Research

This study adds to the literature of teacher preparation around social justice and UDL, a currently scant field. While social justice integrated in teacher preparation (Cochran-Smith, 1991; Gorski, 2012; Lee, 2011; M[c]Donald, 20015; Villegas, 2007) and UDL in teacher preparation do exist (Hardman, 2009; King, Williams, & Warren, 2011; Jimenez, Graf, & Rose, 2007; Spooner, et al., 2007), few studies integrate these concepts together as part of an introductory teacher preparation program. In light of this, recommendations for future research are suggested in the following three categories: UDL and social justice as a field, teacher preparation, and integration of pedagogy and content.

First, as the field of UDL and social justice combined does not currently exist there is a wide opportunity for research in the areas of coursework of pre-service educators, integration of UDL and social justice into the practice of in-service educators, or the development of a theory of UDL And social justice to frame educational perspectives. Findings from this study have

shown that some participants are able to see a connection between these two topics as they continue to build their practice as educators in diverse educational settings. Questions and topics to explore in the future might include the following:

- How do in-service teachers integrate concepts of social justice into the practice of UDL? What are the impacts on their students?

- How can teacher educators develop a framework of UDL for social justice?

The second recommendation is for teacher preparation. Specifically, further research in this field should extend upon this 17-week study and review long-term research from beginning teacher preparation to the first few years in practice to see how beliefs have developed over time and impact actions in the classroom. This type of a study could truly deepen our understanding of the impact of teacher preparation on the practice of educators once they are in their own classrooms. This goes beyond UDL and social justice and the overall preparation of teachers. Recommended guidance questions for future studies on this topic might include the following:

- How do pre-service teachers' beliefs change from the start of their program through the first year of practice employed in the classroom?

- What pedagogical skills do pre-service teachers learn during a preparation program and implement in their own classroom?

Finally, future research should focus on the integration of pedagogical concepts within and across content preparation courses for consistency and implementation effect. This is not a new concept but rather one that has been underlying many teacher preparation programs for years. However, a study that investigates programs that are successful in incorporating pedagogical skills and content within coursework university-wide could support the development of other programs struggling with this very topic. It might also be beneficial conduct a study on

the content of course syllabi to shed light on the extent to which certain topics are addressed in courses across a single program thereby investigating if the mission and vision of a university is portrayed accurately throughout coursework and practicum experiences.

Finally, across all of these topics, it would be beneficial to draw the connection between in-service practice and pre-service training. Since the goal of teacher training programs is to prepare future educators—as seen fit by the program's perspective—it would be beneficial to see how successful professional development structures impact the practice of teachers in the field and determine if those same systems might impact pre-service candidates in a different way. Yet, regardless of whichever line of study is pursued, it is important to acknowledge that UDL and social justice as an integrated framework is a burgeoning field for both in-service and pre-service teachers and requires greater investigation in the years to come.

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Appendix A

UDL Framework

Universal Design for Learning Guidelines

I. Provide Multiple Means of Representation

1: Provide options for perception

1.1 Offer ways of customizing the display of information
1.2 Offer alternatives for auditory information
1.3 Offer alternatives for visual information

2: Provide options for language, mathematical expressions, and symbols

2.1 Clarify vocabulary and symbols
2.2 Clarify syntax and structure
2.3 Support decoding of text, mathematical notation, and symbols
2.4 Promote understanding across languages
2.5 Illustrate through multiple media

3: Provide options for comprehension

3.1 Activate or supply background knowledge
3.2 Highlight patterns, critical features, big ideas, and relationships
3.3 Guide information processing, visualization, and manipulation
3.4 Maximize transfer and generalization

Resourceful, knowledgeable learners

II. Provide Multiple Means of Action and Expression

4: Provide options for physical action

4.1 Vary the methods for response and navigation
4.2 Optimize access to tools and assistive technologies

5: Provide options for expression and communication

5.1 Use multiple media for communication
5.2 Use multiple tools for construction and composition
5.3 Build fluencies with graduated levels of support for practice and performance

6: Provide options for executive functions

6.1 Guide appropriate goal-setting
6.2 Support planning and strategy development
6.3 Facilitate managing information and resources
6.4 Enhance capacity for monitoring progress

Strategic, goal-directed learners

III. Provide Multiple Means of Engagement

7: Provide options for recruiting interest

7.1 Optimize individual choice and autonomy
7.2 Optimize relevance, value, and authenticity
7.3 Minimize threats and distractions

8: Provide options for sustaining effort and persistence

8.1 Heighten salience of goals and objectives
8.2 Vary demands and resources to optimize challenge
8.3 Foster collaboration and community
8.4 Increase mastery-oriented feedback

9: Provide options for self-regulation

9.1 Promote expectations and beliefs that optimize motivation
9.2 Facilitate personal coping skills and strategies
9.3 Develop self-assessment and reflection

Purposeful, motivated learners

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pdf available at http://www.udlcenter.org/aboutudl/udlguidelines/downloads

Appendix B

Course Syllabus

Syllabus Schedule

Morning Session	Afternoon Session	Assignments
January 16th—9:00 a.m–1:00 p.m.		
Introduction to course Introduction to Canvas Critical Multiculturalism	No afternoon session	
January 23rd—9:00 a.m.–1:00 p.m.		
Frameworks of Social Justice School Culture		DUE TODAY: • Read Social Justice article • **Post a response on Canvas by 11:59 p.m. Jan 22nd**
January 30th—12:00 p.m.–3:00 p.m.		
School Culture Meet and Great at WHS		DUE TODAY: • Read School Culture article • **Submit Journal 1 on Canvas by 11:59 p.m. Jan 29th**
February 6th —7:45 a.m.–9:15 a.m.; 2:00 p.m.–3:10 p.m.		
Academic Language Project	Understanding by Design	DUE TODAY: • Read Understanding by Design chapters 1 and 2 • **Post response on canvas by 11:59 p.m. Feb 5th**
February 13th—7:45 a.m.–9:15 a.m.; 2:00 p.m.–3:10 p.m.		
Universal Design for Learning	Universal Design for Learning	DUE TODAY: • Watch UDL Video • **Post response on Canvas by 11:59 p.m. Feb 12th**
February 20th		
No School: CLOSED FOR FEBRUARY BREAK		
February 27th—7:45 a.m.–9:15 a.m.; 2:00 p.m.–3:10 p.m.		
Social Justice	Social Justice	DUE TODAY: • **Post response on Canvas by 11:59 p.m. Feb 27th**
Mar 6th—7:45 a.m.–9:15 a.m.; 2:00 p.m.–3:10 p.m.		
No School: SPRING BREAK		
Mar 13th—7:45 a.m.–9:15 a.m.; 2:00 p.m.–3:10 p.m.		

Academic Language Project	Student Presentations	
Mar 20th—7:45 a.m.–9:15 a.m.; 2:00 p.m.–3:10 p.m.		
Classroom Management	Student Presentations	DUE TODAY: **Post response on Canvas by 11:59 p.m. Mar 20th**
Mar 27th—7:45 a.m.–9:15 a.m.; 2:00 p.m.–3:10 p.m.		
Universal Design for Learning	Student Presentations	DUE TODAY - Read UDL Article **Post response on Canvas 11:59 p.m. Mar 27th**
Apr 3rd—7:45 a.m.–9:15 a.m.; 2:00 p.m.–3:10 p.m.		
Academic Language Project	Student Presentations	
Apr 10th—7:45 a.m.–9:15 a.m.; 2:00 p.m.–3:10 p.m.		
Making Sense of it All	Student Presentations	
Apr 17th		
No School: EASTER VACATION		
Apr 24th		
No School: APRIL VACATION		
May 1st—7:45 a.m.–9:15 a.m.; 2:00 p.m.–3:10 p.m.		
Goal Setting for the Future		DUE TODAY: Final Advocacy Project
May 8th		
		DUE TODAY: Final Journal

Appendix C

Data Collection Timeline

Table C1

Data Collection Timeline

	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10	Wk 11	Wk 12	Wk 13	Wk 14	Wk 15
Demo-graphic survey	X														
Journals			#1		#2		#3		#4		#5		#6		#8
UDL Survey			Pre												Post
Social Justice Survey		Pre													Post
Daily Reflection	X	X		X	X	X	X	X	X	X	X	X	X		
Advocacy Project				Topic		Meet with instructor		Draft: Lit Review Action Plan		Meet with instructor					Final Plan

Appendix D

Demographic Survey

Student Information Sheet

Name: _____   Nickname: _____

First Language(s): _____

Do you speak a second, third, fourth language? If so, what are they?

How do you culturally, racially, or ethnically identify yourself?

How would you, briefly, describe your high school experience?

Major/Content Area _____

Are you interested in observing an ESL class? _____

Are you interested in observing a special education class? _____

Briefly explain your experiences in the field of education (no need for your entire resume). Have you taken any other relevant courses? Have you worked or volunteered in an educational setting?

Is there anything I should know about you that may help me as your instructor?

What are you fearful about for this course? What are you excited about?

Why do you want to be a teacher?

Appendix E

Journal Prompts

Journal 1: 800–1,000 words
What is school culture?

This journal is composed of two parts and must be submitted before your first day on site at WHS.
- In part one, describe your familiarity with urban schools. Have you attended one? Have you worked in one? Have you visited? What are your beliefs, understandings, and assumptions about urban schools: their buildings, their students, their teachers, etc.? Where did these ideas come from?
- For part two you will need to research the school culture of Warren High. Look at [District and state] web sites, use census information for [City], etc. Use sites such as YouTube to search for the students' perspective. See the Student Handbook for an administrator's perspective (found under the "Student" tab at [school website]). Be sure to compare and contrast the demographics of WHS and the demographics of the community in which WHS resides. ***The Culture of the School*** is a way of thinking about the school as one would a culture—with a history and with particular values, norms, attitudes, and expected ways of acting. It may be helpful for you to consider the following four aspects of school culture:
    - Mission, Values, and Philosophy
    - Demographics and Resources
    - Social, Historical, and Organizational Context
    - Teaching and Learning

How does the culture of Warren High (at least based on your preliminary research) compare to your discussion of Urban Schools from part 1?

Journal 2: 800–1,000 words
What is social justice?

At this point in the semester, we have talked a good deal about the concept of social justice, so I would like you to reflect individually upon what it means. Think about what we have discussed in class, your experiences (educational or not), and your other courses.
- What are your thoughts about the concept of social justice?
- Do they contradict anything you have previously experienced or believed?
- Do you struggle with the concept of social justice?
- Is there anything about social justice you don't believe in?
- Do you think social justice perhaps doesn't go far enough?

Journal 3: 800–1,000 words
What is culturally responsive classroom management?

This journal focuses on classroom management. In completing this journal, observe the techniques your CT uses in order to transition, maintain behavior, maintain momentum, and overlap. In writing this journal, answer the questions found below. You will need to read "Toward a Conception of Culturally Responsive Classroom Management" by Weinstein, et al., found on Canvas.

- After reading "Toward a Conception of Culturally Responsive Classroom Management," do you think that your CT uses culturally responsive classroom management? If so, how do they demonstrate this? If not, what changes could be made to make it more culturally responsive?
- Thinking towards your first lesson, how might you be able to best manage this classroom?

Journal 4: 800–1,000 words
What is UDL?

Based on course readings and discussions, I would like you to compose a journal discussing what you have learned about Universal Design for Learning, where you see it in your CT's classroom, and where you have attempted to include it in your own teaching.

- Are there any components of UDL that you think will be difficult for you as an educator? What are they?
- Are there any components of UDL you experienced in your own K–12 high school experience? Discuss what those are and how they may have met the tenets of UDL.

Journal 5: 800–1,000 words
Profile of a Student

Write a profile of one student whom you have gotten to know well during your time at Warren High. In order to capture a complete description of the student you should rely on your own observations of the student in class and in social settings, discussions with your CT about this student; and, most importantly, conversations with this student. There may be other sources of information available to you: what do the student's peers say? Have you heard other teachers discuss this student? Have there been correspondences with the student's parents?
There are two objectives for this journal:

- Objective 1: Spend time interacting with WHS students! If you are a little shy, this journal is a way to gently push you.
- Objective 2: Work on "knowing" one student well. This objective is much trickier. What does it mean to "know" someone? *The majority* of your journal should focus on this fundamental question. Teachers are always told to "know their students," but what does this mean? Possible questions to consider include—
  - What if I find contradicting pieces of evidence? My CT says one thing about a student, but I observe something else? Or, the student tells me something else?
  - What if students act differently in different classes? In Math she is an angel, but in English she is a troublemaker. Which is the "real" person?
  - How does *my personality, gender, race, culture, or life experience* influence how I label, describe, and feel about this student?
  - How does my role as an authority figure influence our relationship?

Journal 6: 1,500–1,800 words
School Culture Revision

Rewrite, expand upon, and improve in every way your first journal (school culture). Now that you have been at WHS for a few weeks, how has the experience informed what you understand about school culture? In the first journal you were not able to engage in a "discussion" about WHS; but now you are, so what do you notice? What has changed in your assumptions and why? What has stayed the same?

You may choose to do additional research and include more citation, but it is not required. However, citations are required if you are connecting to something you have read or learned about during a class session. This is a formal academic paper. You need to go beyond the "journal response" genre to include a clear and well-considered thesis, a substantiated and focused argument, and adequate supporting evidence. Use APA formatting, including in-text citations, cover page, single-spaced block quotations, etc. I will not review written drafts sent to me via email, but I will review any writing in person. Set up a meeting if you need help with any stage of the writing process.

Journal 7
Lesson Reflection

For the purpose of this study, I will not be reviewing this journal assignment as it is specific to classroom practice but without enough information to make any claims.

Journal 8 Assignment
Final Reflection

This journal is a space for final reflections. Before writing the journal, look back through your portfolio—re-read your previous journals, look over your lesson plans, consider your course work in ED211 and your other [University] classes. This journal is a space for you to articulate THE BIG IDEAS taken away from this experience. What did you learn about yourself as an emerging teacher, as a thinker, as an inquisitive observer/participant? Looking forward, how do you plan to continue this growth?

Appendix F

UDL Survey

1   I believe that all students can learn in general education settings.

Am not sure   Strongly   Somewhat   Somewhat   Agree   Strongly
at this time   disagree   disagree   agree   agree

**2   I believe that there is a range of learning variability in student in any education
          setting.**

Am not sure   Strongly   Somewhat   Somewhat   Agree   Strongly
at this time   disagree   disagree   agree   agree

**3   I believe learning occurs as a dynamic interaction of the individual with the
          environment.**

Am not sure   Strongly   Somewhat   Somewhat   Agree   Strongly
at this time   disagree   disagree   agree   agree

**4   I believe that the implementation of Universal Design for Learning will lead to
          better achievement for all students.**

Am not sure   Strongly   Somewhat   Somewhat   Agree   Strongly
at this time   disagree   disagree   agree   agree

**5   I believe Universal Design for Learning implementation can occur with or without
          technology.**

Am not sure   Strongly   Somewhat   Somewhat   Agree   Strongly
at this time   disagree   disagree   agree   agree

**6   I believe goals should not include the means by which mastery can be attained and
          demonstrated.**

Am not sure   Strongly   Somewhat   Somewhat   Agree   Strongly
at this time   disagree   disagree   agree   agree

**7   I believe all students can benefit from having multiple curricular options or learning
          pathways.**

Am not sure   Strongly   Somewhat   Somewhat   Agree   Strongly
at this time   disagree   disagree   agree   agree

8   **I believe curricular methods and materials should recruit and sustain student engagement in learning.**

Am not sure at this time	Strongly disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree

9   **I believe assessment, methods, and materials should be clearly aligned with the curriculum goals.**

Am not sure at this time	Strongly disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree

10   **I believe assessments should remove or reduce barriers for more accurate measurement of learning knowledge, skills, and engagement.**

Am not sure at this time	Strongly disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree

11   **I believe supports and scaffolds available during instruction and practice should also be available during assessment when not related to the construct being measured.**

Am not sure at this time	Strongly disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree

12   **Learners should be provided with a variety of ways for recruiting and sustaining engagement in the instructional environment.**

- ☐ I don't know what this is
- ☐ I have heard of this before but I am unsure of how to do this
- ☐ I have some knowledge about how to do this but don't feel I am competent
- ☐ I am probably competent in my current knowledge of how to do this and would like to learn more
- ☐ I am quite competent in my current knowledge of how to do this
- ☐ I am very knowledgeable about how to do this and feel competent in my ability to teach others

13   **Learners should be provided with strategies for personal coping skills, self-assessment, and reflection in support of self-regulation.**

- ☐ I don't know what this is
- ☐ I have heard of this before but I am unsure of how to do this
- ☐ I have some knowledge about how to do this but don't feel I am competent
- ☐ I am probably competent in my current knowledge of how to do this and would like to learn more
- ☐ I am quite competent in my current knowledge of how to do this

☐ I am very knowledgeable about how to do this and feel competent in my ability to teach others

14   Learners should be provided with multiple ways to access information including text, oral presentation, and visuals.

☐ I don't know what this is
☐ I have heard of this before but I am unsure of how to do this
☐ I have some knowledge about how to do this but don't feel I am competent
☐ I am probably competent in my current knowledge of how to do this and would like to learn more
☐ I am quite competent in my current knowledge of how to do this
☐ I am very knowledgeable about how to do this and feel competent in my ability to teach others

15   Varied strategies for a rage of learners should be provided to support comprehension/understanding.

☐ I don't know what this is
☐ I have heard of this before but I am unsure of how to do this
☐ I have some knowledge about how to do this but don't feel I am competent
☐ I am probably competent in my current knowledge of how to do this and would like to learn more
☐ I am quite competent in my current knowledge of how to do this
☐ I am very knowledgeable about how to do this and feel competent in my ability to teach others

16   Learners should be provided with options for action, expression, and communication during instruction/teaching.

☐ I don't know what this is
☐ I have heard of this before but I am unsure of how to do this
☐ I have some knowledge about how to do this but don't feel I am competent
☐ I am probably competent in my current knowledge of how to do this and would like to learn more
☐ I am quite competent in my current knowledge of how to do this
☐ I am very knowledgeable about how to do this and feel competent in my ability to teach others

17   Learners should be provided with options that support goal setting, strategy development, and progress monitoring.

☐ I don't know what this is
☐ I have heard of this before but I am unsure of how to do this
☐ I have some knowledge about how to do this but don't feel I am competent

☐ I am probably competent in my current knowledge of how to do this and would like to learn more

☐ I am quite competent in my current knowledge of how to do this

☐ I am very knowledgeable about how to do this and feel competent in my ability to teach others

Appendix G

Social Justice Survey

1   **An important part of learning to be a teacher is examining one's own attitudes and beliefs about race, class, gender, disabilities, and sexual orientation.**

1	2	3	4	5
Strongly disagree	Disagree	Uncertain	Agree	Strongly Agree

2   **Issues related to racism and inequity should be openly discussed in the classroom.**

1	2	3	4	5
Strongly disagree	Disagree	Uncertain	Agree	Strongly Agree

3   **For the most part, covering multicultural topics is only relevant to certain subject areas, such as social studies and literature.**

1	2	3	4	5
Strongly disagree	Disagree	Uncertain	Agree	Strongly Agree

4   **Good teaching incorporates diverse cultures and experiences into classroom lessons and discussions.**

1	2	3	4	5
Strongly disagree	Disagree	Uncertain	Agree	Strongly Agree

5   **The most important goal in working with immigrant children and English language learners is that they assimilate into American society.**

1	2	3	4	5
Strongly disagree	Disagree	Uncertain	Agree	Strongly Agree

6   **It's reasonable for teachers to have lower classroom expectations for students who don't speak English as their first language.**

1	2	3	4	5
Strongly disagree	Disagree	Uncertain	Agree	Strongly Agree

7   **Part of the responsibilities of the teacher is to challenge school arrangements that maintain societal inequities.**

1	2	3	4	5
Strongly disagree	Disagree	Uncertain	Agree	Strongly Agree

8   Teacher should teach students to think critically about government positions and actions.

1	2	3	4	5
Strongly disagree	Disagree	Uncertain	Agree	Strongly Agree

9   Economically disadvantaged students have more to gain in schools because they bring less to the classroom.

1	2	3	4	5
Strongly disagree	Disagree	Uncertain	Agree	Strongly Agree

10   Although teachers have to appreciate diversity, it's not their job to change society.

1	2	3	4	5
Strongly disagree	Disagree	Uncertain	Agree	Strongly Agree

11   Whether students succeed in school depends primarily on how hard they work.

1	2	3	4	5
Strongly disagree	Disagree	Uncertain	Agree	Strongly Agree

12   Realistically, the job of a teacher is to prepare students for the lives they are likely to lead.

1	2	3	4	5
Strongly disagree	Disagree	Uncertain	Agree	Strongly Agree

Appendix H

Advocacy Project Assignment Description

The advocacy project is your opportunity to put social justice rhetoric into action. First you will identify an area of educational injustice as it relates to schools or classroom practice (think assessments, materials, strategies, standards, etc.). Then you will research this topic. Next you will prepare an action plan to address the situation. Finally, and most importantly, you will enact (to the best of your ability) your action plan, keep track of your progress, and critically reflect on the process. Working in small groups is allowed; however, it is more important that you make decisions based on your interests.

Part 1: Proposal
Due: 9/26/2013
Email to: Course Instructor

Submit a 250-word proposal in which you name a specific "educational injustice." Include a short rationale that explains the need for continued study on this topic. Include the site where you plan to intervene (if that is relevant). A proposal is the very first step, so it can change. Still, make sure to consider the practicality of your topic and site. If working in a group, name group members in the proposal. **One proposal per group.**

Part 2: One-On-One Meetings
Due: *Varies based on group*
Meet in groups if working with a group

Schedule a meeting one week before your class presentation. Come prepared to "pitch" your presentation to me.

Part 3: Class Presentation
Due: *Your Presentation Date Will Be Randomly Assigned*
10% of ED211 Grade

Prepare a 15-minute class presentation to be delivered in the afternoon session of ED211. The presentation must touch on the two major objectives: explaining your topic/rationale and your proposed intervention. Obviously, your presentation will only be able to reflect the work you have completed up until that point. I understand the challenge of presenting on one of the earlier dates and will work with you to meet these challenges.

Part 4: Literature Review
Draft Due: Course Instructor and your supervisor
Email to: 10/24/2013
Final Due: As part of the final ED211 Summary
Submit individual papers even if working in a group.

Describe your topic in relation to salient literature and research. Use the literature to help you build a clear rationale for action. A minimum of five "academic sources" is required. 1,500 words in APA format.

Part 5: Action Plan
Draft Due: 10/24/2013
Final Due: As part of the final ED211 Summary

Draft: Develop a plan of action with specific steps and timetable. Use the evidence gathered in part 4 to guide your thinking. 3–5 pages of "memo language"—meaning you can use an outline or bullet point form if it is helpful.
Final: Use a different color font to make changes as to represent what you *actually did* instead of just what you proposed. You may even need to write a completely new document if your project radically shifts. In your critical reflection you may find it useful to discuss how your actions differed from your proposal.

Part 6: Materials and Implementation
Due: As part of the final ED211 Summary

Prepare all necessary materials to meet the objectives of your action plan.
Examples:
- Lesson plans if teaching classes
- Reading list and daily agendas if organizing a teacher study group
- Web site for parents of students
- Notes and fact sheets for meeting with a state representative

Implement your action plan and document your progress. Include dates, notes, artifacts, memos, reflections, etc. Consider using video or digital recorders. Each project will allow for different types of documentation. Check with me if you need guidance on what this might look like.

Part 7: Critical Reflection
Due: As part of the final ED211 Summary
Submit individual papers even if working in a group.

Critically assess your project as a whole. What worked and what didn't? Why? What are your next steps? What did you learn? What impact did you have? Was it worth it? 1,000 words written as a critical self-reflection.

Appendix I

Data Tables

Table I1
Social Justice Survey Data

Social Justice Survey	January 16th Responses	May 1st Responses
1) An important part of learning to be a teacher is examining one's own attitudes and beliefs about race, class, gender, disabilities, and sexual orientation.	Strongly Disagree: 1 Disagree: 0 Uncertain: 0 Agree: 8 Strongly Agree: 10	Strongly Disagree: 0 Disagree: 0 Uncertain: 0 Agree: 2 Strongly Agree: 17
2) Issues related to racism and inequality should be openly discussed in the classroom.	Strongly Disagree: 0 Disagree: 0 Uncertain: 4 Agree: 12 Strongly Agree: 3	Strongly Disagree: 0 Disagree: 0 Uncertain: 2 Agree: 10 Strongly Agree: 7
3) For the most part, covering multicultural topics is only relevant to certain subject areas, such as social studies and literature.	Strongly Disagree: 2 Disagree: 11 Uncertain: 6 Agree: 0 Strongly Agree: 0	Strongly Disagree: 2 Disagree: 15 Uncertain: 2 Agree: 0 Strongly Agree: 0
4) Good teaching incorporates diverse cultures and experiences into classroom lessons and discussions.	Strongly Disagree: 0 Disagree: 0 Uncertain: 0 Agree: 5 Strongly Agree: 14	Strongly Disagree: 0 Disagree: 0 Uncertain: 0 Agree: 4 Strongly Agree: 15
5) The most important goal in working with immigrant children and English language learners is that they assimilate into American society.	Strongly Disagree: 4 Disagree: 8 Uncertain: 5 Agree: 2 Strongly Agree: 0	Strongly Disagree: 3 Disagree: 13 Uncertain: 3 Agree: 0 Strongly Agree: 0
6) It is reasonable for teachers to have lower expectations for students who don't speak English as their first language.	Strongly Disagree: 2 Disagree: 10 Uncertain: 7 Agree: 0 Strongly Agree: 0	Strongly Disagree: 4 Disagree: 11 Uncertain: 1 Agree: 3 Strongly Agree: 0
7) Part of the responsibilities of the teacher is to challenge school arrangements that maintain societal inequalities.	Strongly Disagree: 0 Disagree: 0 Uncertain: 2 Agree: 9 Strongly Agree: 8	Strongly Disagree: 0 Disagree: 0 Uncertain: 0 Agree: 7 Strongly Agree: 12
8) Teachers should teach students to think critically about government positions and actions.	Strongly Disagree: 0 Disagree: 0 Uncertain: 4 Agree: 8 Strongly Agree: 7	Strongly Disagree: 0 Disagree: 0 Uncertain: 2 Agree: 9 Strongly Agree: 8

9) Economically disadvantaged students have more to gain in schools because they bring less to the classroom.	Strongly Disagree: 11 Disagree: 8 Uncertain: 0 Agree: 0 Strongly Agree: 0	Strongly Disagree: 12 Disagree: 6 Uncertain: 1 Agree: 0 Strongly Agree: 0
10) Although teachers have to appreciate diversity, it's not their job to change society.	Strongly Disagree: 4 Disagree: 14 Uncertain: 1 Agree: 0 Strongly Agree: 0	Strongly Disagree: 3 Disagree: 15 Uncertain: 1 Agree: 0 Strongly Agree: 0
11) Whether students succeed in school depends primarily on how hard they work.	Strongly Disagree: 1 Disagree: 10 Uncertain: 2 Agree: 3 Strongly Agree: 3	Strongly Disagree: 3 Disagree: 10 Uncertain: 2 Agree: 4 Strongly Agree: 0
12) Realistically, the job of a teacher is to prepare students for the lives they are likely to lead.	Strongly Disagree: 2 Disagree: 4 Uncertain: 5 Agree: 8 Strongly Agree: 0	Strongly Disagree: 1 Disagree: 8 Uncertain: 4 Agree: 5 Strongly Agree: 1

Table I2

UDL Survey Data

UDL Survey (Knowledge and Beliefs)	January 16th Responses	May 1st Responses
1) I believe that all students can learn in general education settings.	Am not sure at this time: 0 Strongly Disagree: 6 Somewhat Disagree: 6 Somewhat Agree: 4 Agree: 3 Strongly Agree: 0	Am not sure at this time: 0 Strongly Disagree: 5 Somewhat Disagree: 6 Somewhat Agree: 4 Agree: 3 Strongly Agree: 1
2) I believe that there is a range of learning variability in student in any education setting.	Am not sure at this time: 0 Strongly Disagree: 0 Somewhat Disagree: 0 Somewhat Agree: 1 Agree: 6 Strongly Agree: 12	Am not sure at this time: 0 Strongly Disagree: 0 Somewhat Disagree: 0 Somewhat Agree: 0 Agree: 5 Strongly Agree: 14
3) I believe learning occurs as a dynamic interaction of the individual with the environment.	Am not sure at this time: 0 Strongly Disagree: 0 Somewhat Disagree: 0 Somewhat Agree: 2 Agree: 11 Strongly Agree: 6	Am not sure at this time: 0 Strongly Disagree: 0 Somewhat Disagree: 0 Somewhat Agree: 1 Agree: 10 Strongly Agree: 8
4) I believe that the implementation of Universal	Am not sure at this time: 7 Strongly Disagree: 2	Am not sure at this time: 0 Strongly Disagree: 0

Design for Learning will lead to better achievement for all students.	Somewhat Disagree: 3 Somewhat Agree: 3 Agree: 4 Strongly Agree: 0	Somewhat Disagree: 1 Somewhat Agree: 3 Agree: 4 Strongly Agree: 11
5) I believe Universal Design for Learning implementation can occur with or without technology.	Am not sure at this time: 7 Strongly Disagree: 0 Somewhat Disagree: 4 Somewhat Agree: 6 Agree: 2 Strongly Agree: 0	Am not sure at this time:2 Strongly Disagree: 2 Somewhat Disagree: 4 Somewhat Agree: 4 Agree: 6 Strongly Agree: 1
6) I believe goals should not include the means by which mastery can be attained and demonstrated.	Am not sure at this time: 6 Strongly Disagree: 6 Somewhat Disagree: 3 Somewhat Agree: 2 Agree: 2 Strongly Agree: 0	Am not sure at this time: 4 Strongly Disagree: 3 Somewhat Disagree: 6 Somewhat Agree: 4 Agree: 2 Strongly Agree: 0
7) I believe all students can benefit from having multiple curricular options or learning pathways.	Am not sure at this time: 0 Strongly Disagree: 0 Somewhat Disagree: 0 Somewhat Agree: 2 Agree: 6 Strongly Agree: 11	Am not sure at this time: 0 Strongly Disagree: 0 Somewhat Disagree: 0 Somewhat Agree: 1 Agree: 8 Strongly Agree: 10
8) I believe curricular methods and materials should recruit and sustain student engagement in learning.	Am not sure at this time: 0 Strongly Disagree: 0 Somewhat Disagree: 0 Somewhat Agree: 1 Agree: 5 Strongly Agree: 13	Am not sure at this time: 0 Strongly Disagree: 0 Somewhat Disagree: 0 Somewhat Agree: 0 Agree: 6 Strongly Agree: 13
9) I believe assessment, methods, and materials should be clearly aligned with the curriculum goals.	Am not sure at this time: 1 Strongly Disagree: 0 Somewhat Disagree: 0 Somewhat Agree: 2 Agree: 9 Strongly Agree: 7	Am not sure at this time: 0 Strongly Disagree: 0 Somewhat Disagree: 0 Somewhat Agree: 1 Agree: 9 Strongly Agree: 9
10) I believe assessments should remove or reduce barriers for more accurate measurement of learning knowledge, skills, and engagement.	Am not sure at this time: 1 Strongly Disagree: 0 Somewhat Disagree: 0 Somewhat Agree: 2 Agree: 8 Strongly Agree: 8	Am not sure at this time: 1 Strongly Disagree: 0 Somewhat Disagree: 0 Somewhat Agree: 2 Agree: 4 Strongly Agree: 12
11) I believe supports and scaffolds available during instruction and practice should also be available during assessment when not related to the construct being measured.	Am not sure at this time: 3 Strongly Disagree: 0 Somewhat Disagree: 2 Somewhat Agree: 4 Agree: 7 Strongly Agree: 3	Am not sure at this time: 2 Strongly Disagree: 0 Somewhat Disagree: 1 Somewhat Agree: 5 Agree: 7 Strongly Agree: 4

Table I3
UDL Survey (Practice) Data

UDL Survey (Practice)	January 16th Responses	May 1st Responses
12) Learners should be provided with a variety of ways for recruiting and sustaining engagement in the instructional environment.	Unsure: 3 Minimal: 5 Some: 7 Probabl4y: Quite: 0 Very: 0	Unsure: 1 Minimal: 0 Some: 3 Probably: 10 Quite: 5 Very: 0
13) Learners should be provided with strategies for personal coping skills, self-assessment, and reflection in support of self-regulation.	Unsure: 0 Minimal: 4 Some: 7 Probably: 8 Quite: 0 Very: 0	Unsure: 0 Minimal: 0 Some: 3 Probably: 8 Quite: 4 Very: 4
14) Learners should be provided with multiple ways to access information including text, oral presentation, and visuals.	Unsure: 0 Minimal: 2 Some: 6 Probably: 9 Quite: 2 Very: 0	Unsure: 0 Minimal: 0 Some: 1 Probably: 7 Quite: 8 Very: 3
15) Varied strategies for a rage of learners should be provided to support comprehension / understanding.	Unsure: 0 Minimal: 1 Some: 9 Probably: 8 Quite: 1 Very: 0	Unsure: 0 Minimal: 0 Some: 2 Probably: 11 Quite: 5 Very: 1
16) Learners should be provided with options for action, expression, and communication during instruction / teaching.	Unsure: 0 Minimal: 0 Some: 9 Probably: 7 Quite: 3 Very: 0	Unsure: 0 Minimal: 0 Some: 2 Probably: 7 Quite: 7 Very: 3
17) Learners should be provided with options that support goal setting, strategy development, and progress monitoring.	Unsure: 0 Minimal: 5 Some: 10 Probably: 4 Quite: 0 Very: 0	Unsure: 0 Minimal: 0 Some: 4 Probably: 8 Quite: 7 Very: 0

Table I4
Participant Response Change Data

Statement	Names of Participants Who Changed Responses	Changed Responses

5) The most important goal in working with immigrant children and English language learners is that they assimilate into American society.	Dahlia Lando	Uncertain → Disagree
	Heather Andrew	Agree → Disagree
	Miriam Keller	Disagree → Uncertain
	Susan Schmidt	Disagree → Uncertain
	Mary Egan	Uncertain → Disagree
	Jack Dennis	Strongly Disagree → Disagree
	Wendy Kruger	Uncertain → Disagree
	Betsy Allen	Disagree → Uncertain
	Greg Smith	Agree → Disagree
	Ona Kane	Strongly Disagree → Disagree
	Andrea Alexander	Uncertain → Disagree
6) It's reasonable for teachers to have lower classroom expectations for students who don't speak English as their first language.	Susan Schmidt	Uncertain → Disagree
	Jack Dennis	Uncertain → Disagree
	Greg Smith	Uncertain → Disagree
	Wendy Kruger	Disagree → Strongly Disagree
	Betsy Allen	Disagree → Agree
	Genevieve Marten	Uncertain → Agree
	Rachel Linden	Uncertain → Disagree
	Ona Kane	Disagree → Strongly Disagree
	Andrea Alexander	Uncertain → Agree
7) Part of the responsibilities of the teacher is to challenge school arrangements that maintain societal inequities.	Dahlia Lando	Agree → Strongly Agree
	Miriam Keller	Agree → Strongly Agree
	Susan Schmidt	Agree → Strongly Agree
	Jack Dennis	Strongly Agree → Agree
	Genevieve Marten	Agree → Strongly Agree
	Greg Smith	Agree → Strongly Agree
	Rebecca Cash	Uncertain → Strongly Agree
	Andrea Alexander	Strongly Agree → Agree
	Kelly Matthews	Uncertain → Agree
8) Teachers should teach students to think critically about government positions and actions.	Helen Chen	Uncertain → Agree
	Miriam Keller	Agree → Strongly Agree
	Susan Schmidt	Agree → Strongly Agree
	Mary Egan	Agree → Strongly Agree
	Betsy Allen	Agree → Strongly Agree
	Genevieve Marten	Strongly Agree → Agree
	Ona Kane	Strongly Agree → Agree
	Denise Atkins	Uncertain → Agree
	Andrea Alexander	Strongly Agree → Agree
12) Realistically, the job of a teacher is to prepare students for the lives they are likely to lead.	Helen Chen	Disagree → Agree
	Heather Andrew	Uncertain → Disagree
	Miriam Keller	Agree → Disagree
	Betsy Allen	Agree → Disagree
	Genevieve Marten	Uncertain → Agree
	Rachel Linden	Agree → Disagree
	Ona Kane	Strongly Disagree → Uncertain
	Rebecca Cash	Agree → Disagree
	Andrea Alexander	Agree → Strongly Agree

Table I5

Participant Response Change January to May Data

Statement	Names of Participants with Changes Responses	Responses from January to May
4) I believe that the implementation of Universal Design for Learning will lead to better achievement for all students.	Helen Chen	Am not sure → Agree
	Dahlia Lando	Agree → Strongly Agree
	Heather Andrew	Strongly Disagree → Agree
	Susan Schmidt	Agree → Strongly Agree
	Miriam Keller	Somewhat Agree → Somewhat Disagree
	Uli Hoffman	Agree → Strongly Agree
	Dina Jenkins	Somewhat Disagree → Agree
	Mary Egan	Agree → Strongly Agree
	Greg Smith	Am not sure → Strongly Agree
	Jack Dennis	Am not sure → Strongly Agree
	Betsy Allen	Am not sure → Somewhat Agree
	Denise Atkins	Somewhat Agree → Agree
	Ona Kane	Am not sure → Strongly Agree
	Andrea Alexander	Am not sure → Strongly Agree
	Rebecca Cash	Somewhat Disagree → Strongly Agree
	Kelly Matthews	Am not sure → Somewhat Agree
5) I believe Universal Design for Learning implementation can occur with or without technology.	Helen Chen	Am not sure → Somewhat disagree
	Heather Andrew	Am not sure → Somewhat disagree
	Susan Schmidt	Agree → Somewhat Agree
	Miriam Keller	Somewhat Disagree → Am not sure
	Dina Jenkins	Somewhat Disagree → Strongly Disagree
	Mary Egan	Somewhat Disagree → Somewhat Agree
	Wendy Kruger	Somewhat Agree → Agree
	Jack Dennis	Am not sure → Somewhat Disagree
	Genevieve Marten	Somewhat Agree → Agree
	Betsy Allen	Am not sure → Strongly Agree

Table I6

Participant Response Outliers Data

Statement	Names of Participants with Outlying Responses	Responses from January to May
12) Learners should be provided with a variety of ways for recruiting and sustaining engagement in the instructional environment.	Susan Schmidt	Probably → Probably
	Mary Egan	Probably → Probably
	Wendy Kruger	Don't know → Don't know
	Ona Kane	Some → Some
13) Learners should be provided with strategies for personal coping skills, self-assessment, and reflection in support of self-regulation.	Dahlia Lando	Some → Some
	Greg Smith	Probably → Probably
	Wendy Kruger	Some → Some
	Rebecca Cash	Probably → Probably
	Kelly Matthews	Probably → Probably

14) Learners should be provided with multiple ways to access information including text, oral presentation, and visuals.	Susan Schmidt Mary Egan Kelly Matthews	Quite → Quite Probably → Probably Probably → Probably
15) Varied strategies for a rage of learners should be provided to support comprehension / understanding.	Susan Schmidt Uli Hoffman Denise Atkins Ona Kane Kelly Matthews	Probably → Probably Some → Some Quite → Probably Some → Some Probably → Probably
16) Learners should be provided with options for action, expression, and communication during instruction / teaching.	Uli Hoffman Dina Jenkins Jack Dennis Betsy Allen Denise Atkins Rebecca Cash	Some → Some Quite → Quite Probably → Probably Probably → Probably Quite → Quite Probably → Probably
17) Learners should be provided with options that support goal setting, strategy development, and progress monitoring.	Uli Hoffman Jack Dennis	Some → Some Probably → Some