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Content Analysis of New Teacher Induction and Mentoring Documents in Five Partnership

Districts: Reflections and Acknowledgments of Complexity

Carol S. Larsen

A thesis submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of

Master of Arts

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ABSTRACT

Content Analysis of New Teacher Induction and Mentoring Documents in Five Partnership Districts: Reflections and Acknowledgments of Complexity

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The purpose of this study is to examine how documents used in new teacher induction and mentoring programs from five different school districts reflect and acknowledge the complexity of the programs of which they are a part. Extensive research has been conducted regarding various aspects of these two programs, often utilizing linear approaches to these programs. Research has called for analysis of the complexity of these programs. New teacher induction and mentoring documents were collected from each of the five districts, resulting in approximately 76 documents total. Documents were categorized into three main groups: mentor documents, mentee documents, and district documents. Each document was read and analyzed through two phases of data analysis. Phase I of analysis reports on the language contained in the documents related to seven emergent categories. Phase II of analysis connects the language of the documents of the seven emergent categories to the eight indicators of complexity as outlined by Davie and Sumara (2006). Two appendices contain the details of analysis, one appendix for each phase. Findings suggest that most documents contained elements reflecting and acknowledging the complexity of the two programs as well as elements of linear thinking. Lack of reflection of complexity is addressed. Suggestions for further research are given.

Keywords: new teacher induction, mentoring program, complexity theory, document analysis

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Chapter 1

Introduction

In my teaching methods course my professor emphasized some job-seeking strategies for when we were ready to enter the teaching profession. I clearly remember her instructing us to make sure that if we were offered a job, we should be sure that we would be assigned a mentor. Though I did not really know what that entailed, I tucked that piece of information away for later use. A year later, after student teaching, I was offered and accepted a teaching position, and I remembered my professor's advice and asked my principal if I would be given a mentor. He said that I would and that she would be another teacher in the department.

Through my years in a mentor program I came to perceive and experience both the positive and the negative aspects of the mentoring program in my school. For the duration of the three and a half years in the program I attended monthly meetings and completed a required portfolio of goals and experiences. This work was done with the help of my assigned mentor. I was assigned three different mentors—one per school year. My first mentor was from my department and had been teaching for more than 25 years. We established a close relationship and I found her a valuable support, resource, and friend. This first mentor was located close, she was experienced, she really knew how to teach my subject since she had taught it before, and she was always willing to listen and discuss with me even though it took a lot of time. My other two mentors over the next years were capable teachers, but they did not know how to help me in my subject area very much. Both of them were very busy, located farther away in the school, and my relationship with them was one of crossing off the tasks we were supposed to accomplish throughout the year as part of the mentor program. Though my first mentor was not my officially-assigned mentor the next two and a half years, I rarely went to my assigned mentor

when I needed help and instead went to my "real" mentor, my first mentor. I always felt that what I did with this first mentor throughout the entire program was my real mentoring experience and that the other program tasks were hoops to jump through.

My experiences through a mentor program showed me what was good, valuable, and important about mentoring. Mentoring programs can provide emotional and academic support for new teachers when mentors offer not just a listening ear, but also advice, genuine care and concern, and when they use their experiences to guide a new teacher. On the other hand it showed me that mentoring can be turned into an experience with good intent but check-list actions. When my mentors came around only when they needed to complete a district-mandated mentoring assignment, it became a hoop to jump through. I value the strengths of mentoring programs and seek ways to improve them and ways to prevent them from turning into check-list programs.

Mentoring and new teacher induction programs are becoming a widespread component throughout the field of education (Resta, 2006; Zeek & Walker, 2006). A significant reason these programs are employed is because of high attrition rates for new teachers and the costs associated with those attrition rates (Basile, 2006; Hayes, 2006; Ingersoll & Kralik, 2004; Resta, 2006; Wood & Waarich-Fishman, 2006; Zeek & Walker, 2006). When new teachers participate in new teacher induction and mentoring programs, attrition rates decrease significantly and new teachers are aided in the process of becoming teachers of students (Hayes, 2006; Ingersoll & Kralik, 2004; Resta 2006; Wood & Waarich-Fishman, 2006; Zeek & Walker, 2006) as they develop their own sense of professionalism and sense of self as teacher (Ashdown, Hummel-Rossi, & Tobias, 2006; Flores, 2006; Wood & Waarich-Fishman, 2006).

Statement of the Problem

The studies and literature surrounding the topics of new teacher induction and mentoring programs are extensive. A general topic search on ERIC EBSCOhost for "new teacher induction" and "new teacher mentoring" reveals that the focus of these topics includes the following: effectiveness of induction, approaches to induction, administrative roles in induction, socializing teachers through induction, purposes of mentoring, mandates and policies related to mentoring, role of mentoring in educational reform, best practices in mentoring, effects of mentoring on new teacher retention, supporting new teachers through mentoring, and mentoring relationships, just to name a few. Each of these broad topics has been studied in great depth.

However, researchers (Davis & Sumara, 2006; Jones & Brown, 2011) are calling for the need to analyze educational issues through the lens of complexity theory. Educational issues, including new teacher induction and mentoring programs, are part of complex systems (Davis & Sumara, 1997, 2001, 2006, 2012; Jones & Brown, 2011; Kalin, Barney, & Irwin, 2009; Waterman, 2011; Waterman & He, 2011) and should be studied as such. Mentoring does not take place within an "insulated dyad" (Bullough, 2012, p. 70) in which the mentor and the mentee and their relationship with one another are the only components. Instead, mentors and mentees are only a smaller part of a larger complex system. The complexity surrounding them includes the rules and mandates of the state, district, and school to which they belong, as well as their individual educational backgrounds, purposes for teaching, personalities, and experiences. Each mentor/mentee is assigned a unique group of students whose interactions with one another and the teacher create a unique classroom dynamic. Parents and the community are part of the complex system too and are very integrated in the dynamics surrounding the students, the classroom, the school, and the educational policies teachers face on a day-to-day basis. In

studying new teacher induction and mentoring programs, the complexity of the system must be acknowledged. Too often, however, new teacher induction and mentoring programs are viewed and approached linearly with little acknowledgement of the complexity of the system of which they are part. Linear approaches to educational issues will be discussed in more detail in the Literature Review in Chapter 2.

New teacher induction and mentoring programs are part of a complex system. Not only are these programs part of a complex system, but they are part of several inter-connected complex systems and new teacher induction and mentoring programs are complex systems in and of themselves. Those who design and engage in the new teacher induction and mentoring programs should be approaching the creation and implementation of these programs as complex, not as linear systems.

Given that these programs are complex systems and are part of larger complex systems, it can be stated that the components of these programs should reflect and acknowledge the complexity of the systems. There are many components of the new teacher induction and mentoring programs that should reflect the complexity of the systems, one of which is the documents that are used throughout the programs for both the mentors and the mentees.

As part of new teacher induction and mentoring programs, mentors and mentees are each given documents to help them throughout the program. These documents are created on the state and district levels and are used for the training of mentors and mentees, as evaluation rubrics and guidelines, and as a way to convey important information. For the mentor, these documents may include observation charts, pre- and post-observation discussion guides, teacher evaluation rubrics, licensing policies, and instructions/training on how to be a good mentor, to name a few. For the mentee, these documents may include such topics as district and school policies,

licensing policies, teacher evaluation rubrics, and guidelines for beginning work as a teacher.

These documents should reflect and acknowledge the complexity of these programs as systems.

Since these documents are created by personnel on the district and state levels, they should reflect the epistemological beliefs of the larger system that created the documents for use. If personnel in the larger educational system believe and understand that the new teacher induction and mentoring programs are complex and are part of larger complex systems, then the documents should contain language reflecting that. Such presence of language would be a positive indicator that the complexity of the system is recognized and is being utilized. If the documents do not contain language reflecting complexity of new teacher and mentoring program systems, then either those who created the document do not understand or acknowledge the complexity of the programs, or they do not know how to create the documents to reflect the complexity of the system. Either case could be dangerous. If the former is the case, then the complexity of the system is not acknowledged and it will be difficult to move to the next step of working effectively with complexity. If the latter is the case, then changes need to be made in the process of creating the documents so that the documents reflect the complexity that is inherent in the beliefs of those creating them. In either case, lack of complexity language could be indicative of lack of belief in these programs as complex systems or the importance of treating them as such. In turn, this will make it difficult for mentors and mentees alike to understand what these programs are really about, which could inhibit their ability to utilize the programs to the fullest potential.

Statement of the Purpose

The purpose of this study is to analyze new teacher induction and mentoring documents for language that reflects and acknowledges the complexity of these two systems. The findings

of this paper should help researchers, state and district mentor specialists, and policy makers as they seek to improve new teacher induction and mentoring programs.

Research Ouestion

In order to have some insight into the districts' views of the complex nature of new teacher induction and mentoring programs, the purpose of this study is to review documents for language that reflects and acknowledges the complexity of these two systems. The research question is as follows: To what extent do new teacher induction and mentoring program documents reflect and acknowledge the complexity of the systems of which they are a component?

Limitations

This study was conducted as a document analysis. As such, it reveals—through the language of the documents—the attitudes and beliefs of personnel who create new teacher induction and mentoring programs. The analysis led to findings about the extent to which the documents reflect and acknowledge the complexity of mentoring. However, these documents are only one component of the programs, and as complex systems there are many other components that must be considered for full generalizability. The findings of this study cannot yield generalizable conclusions for the entire program. In spite of this limitation, this study reveals which aspects of complex systems may be missing in new teacher induction and mentoring documents and thereby pinpoint areas for improvement.

Throughout the course of this study, new teacher induction and mentoring documents from five school districts were reviewed. The same types of documents created for districts other than these five districts may contain very different language reflecting complexity. The findings and discussion of this study cannot therefore be applied to all new teacher induction and

mentoring programs. However, when reviewing other programs it may be beneficial to consider these findings.

Documents for analysis were collected from five school districts from district websites and from district personnel. I sought out all documents related to new teacher induction and mentoring. Though I tried to clearly define the documents I was seeking, it is possible that the districts may have materials they do not consider as a new teacher induction or mentoring document so they withheld them from me. Therefore, there may be documents that would have been relevant for analysis but that were not given to me because of lack of understanding by district personnel.

Data analysis was conducted qualitatively through coding of documents. I was the key coder and analyzer of data, but in seeking to triangulate data analysis I trained another person to code a sample collection of documents to ensure coherency of data coding.

Definitions of Terms

Complex systems. To briefly sum up the ideas of a complex system as explained by Davis and Sumara (2006), a complex system is a collection of people with a common culture, purpose, geographical location, or occupation—among other important features—who function together in a synergistic relationship. Each complex system has smaller complex sub-systems and is part of a larger complex system.

Complexity theory. According to Davis and Sumara (2006), complexity science, complexity thinking, and complexity theory are all used to describe the line of research dealing with the notion of complex systems. In this paper the term "complexity theory" will be used most often.

District mentor specialists. The term "district mentor specialists" is used rarely if at all in the literature, though the ideas behind this term are implied (Bickmore & Bickmore, 2010; Bullough, 2012; Washburn-Moses, 2012). This paper uses the term "district mentor specialists" to refer to employees of a district responsible for running a district mentor program.

Mentees. The literature uses various terms to describe a new teacher who is under the mentorship of a mentor. New teachers are described as "novices" (Bickmore & Bickmore, 2012; Bullough, 2012; Waterman, 2011; Waterman & He, 2011), "protégés" (Jones & Brown, 2011; Kalin, et al., 2009) and "mentees" (Bickmore & Bickmore, 2012; Bullough, 2012; Kalin, et al., 2009). The write up of this study will use the term "mentee" to refer to a new teacher—generally within the first three years of teaching—who is given a mentor for the purposes of growth and development.

Mentoring documents. Most literature contains very little to no discussion of the documents used in new teacher induction and mentoring documents, though there are implications that documents are being used (Bickmore & Bickmore, 2012; Washburn-Moses, 2012). In this paper, "mentoring documents" refers to documents used by mentors or mentees in the new teacher induction or mentoring programs. These documents will include the following: documents used as evaluation tools of new and experienced teachers, informational packets given to mentors and mentees, information found on district and state websites online, and State Entry Years Enhancement (EYE) documents.

Mentoring programs. Mentoring programs are part of new teacher induction programs and are designed to help new teachers grow and develop by pairing novice teachers with experienced teacher mentors (Bickmore & Bickmore, 2010; Bullough, 2012; Washburn-Moses, 2012; Waterman & He, 2011). Mentoring programs are a "mutually beneficial process" (Jones

& Brown, 2011, p. 401) and are created for the mentor to "[impart] knowledge, information, or support and the protégé [to receive] it" (Jones & Brown, 2011, p. 405). In this paper, the term "mentoring programs" refers to new teacher developmental programs which are utilized as part of new teacher induction programs.

Mentor. The current literature describes a mentor as an experienced teacher that is paired up with one or more novice teachers to help the novice teacher develop during his/her first years of teaching (Bickmore & Bickmore, 2010; Bullough, 2012; Jones & Brown, 2011; Kalin, et al., 2009; Washburn-Moses, 2012; Waterman, 2011). The term "mentor" is likewise used in this paper.

New teacher induction programs. State and/or district programs that help new teachers within their first one to three years of teaching to develop into better teachers (Bickmore & Bickmore, 2010; Bullough, 2012; Washburn-Moses, 2012; Waterman, 2011).

Chapter 2

Review of Literature

In order to understand new teacher induction and mentoring programs and the complexity that should be reflected and acknowledged in the language of the corresponding documents, I first explain complexity. I then explain new teacher induction and mentoring programs and explain how complexity theory is an integral part of these systems. This chapter contains an explanation of these concepts as contained in the literature and as it pertains to this study and will guide understanding of why these documents should reflect and acknowledge the complexity of these programs as systems.

Complexity Theory from Linear Thinking

Traditionally, linear thinking was the leading thought on education and what it means to learn, what knowledge is and how it is constructed, and what a learner is and what learning is (Davis & Sumara, 2006). Linear thinkers approached educational issues as being cause-and-effect relationships that led to certain outcomes (Davis & Sumara, 2006), the relationships of which could be repeated with the same outcomes each time. These ideas were based on mathematical linear thinking in which an action would lead to a result of the same proportion (Bratianu, 2007; Richmond, 2005).

Using this linear train of thought, policy makers create mandates with the assumptions that educational intricacies will always follow certain rules with the same outcome each time. Such thinking led to No Child Left Behind mandates (Davis & Sumara, 2006). But such linear thinking does not allow for complex phenomenon to be understood (Bratianu, 2007; Davis & Sumara, 2006).

The movement from linear thinking to complexity theory has been taking place for more than 100 years. It can be said to have begun in the late 1800s and early 1900s with the development of the pragmatist movement during which truth and knowledge were not viewed as inert, but instead "understood to exist in an intricate web of collective meaning" (Davis & Sumara, 2006, p. 73). During the 1970s and 1990s, computer modeling assisted researchers in identifying and mimicking these intricate and dynamic structures. Next, the emphasis shifted to not only modeling these structures, but further "affecting the behaviors and characters of complex phenomena" (Davis & Sumara, 2006, p. 74). Various other studies during the mid-1900s concluded that diverse phenomena were found to have similar features as one another (Davis & Sumara, 2006). These features were eventually identified as indicators of complex systems. All of these changes in thought and research led to what is known today as complexity theory.

When describing complexity theory, Davis and Sumara (2006), define it as "an umbrella notion that draws on and elaborates the irrepressible human tendency to notice similarities among seemingly disparate phenomena" (p. 7). As mentioned above, the development of complexity theory was due to the tendencies to notice similarities and try to make meaning of and organize them. Complexity theory is beginning to be applied to the field of education, including research on mentoring (Davis & Sumara, 1997, 2001, 2006, 2012; Jones & Brown, 2011; Kalin, et al., 2009; Waterman & He, 2011; Waterman, 2011). However, education is not the only field to apply notions from complexity theory. In making sense of these similarities, other fields utilize complexity theory, though often by a different name, as follows: complex adaptive systems (physics), non-linear dynamical systems (mathematics), dissipative structures

(chemistry), autopoietic systems (biology), and organized complex systems (information science) (Davis & Sumara, 2006, p. 8).

Complex systems are at the core of complexity theory. In essence, a complex system is a collection of people with a common culture, purpose, geographical location, or occupation who function together in a synergistic relationship. In their book *Complexity and Education:*Inquiries into Learning, Teaching, and Research, Davis and Sumara (2006) describe in detail the characteristics of complex systems. They acknowledge that there are several indicators of complex systems but they list and describe only eight. It is unclear from their work if Davis and Sumara think it necessary for all eight indicators to be present for a complex system to exist or if a system is considered complex with the presence of only some of the indicators. It is also unclear whether or not some indicators are more or less important than others or if they are all of equal importance.

Indicators in Complex Systems

In this study, the indicators of complex systems as outlined by Davis and Sumara (2006) will be used as a guideline for analyzing new teacher induction and mentoring documents. A summary of each of the eight indicators of complex systems is given below as described by Davis and Sumara.

Self-organization. Complex systems are self-organized (Davis & Sumara, 2006). This means that organization of the system happens without the assistance of a central organizer and essentially "bootstraps itself into existence" (p.81). Each situation is different, though emergence of a system is usually for the purpose of sharing identification—such as a common belief or common enemy—even though individuals in the system may not have much in common. Decisions are made by the group and not a centralized leader. Individuals within the

system become interlinked and co-dependent, creating a synergistic relationship in which the group is able to come up with solutions that are greater than solutions the individuals could have come up with on their own.

Bottom-up emergence. Complex systems are bottom-up emergent (Davis & Sumara, 2006). These systems are decentralized, emerging without a leader, and therefore do not function under a hierarchy of leadership. Decisions about local problems are made by the local people, at the basic, bottom-most level. People are more engaged when they have more responsibility over their environments, so even though the individuals in the system may be acting out of self-interest or selfishness, the results of the group's decisions are more effective. Members of the group do not need to arrive at a consensus or compromise when making decisions because forcing consensus/compromise tapers enthusiasm. The group is led by proscriptive behavior—what one must not do—instead of prescriptive behavior—what one must do.

Short-range relationships. Complex systems have short-range relationships (Davis & Sumara, 2006). Information within the system is "exchanged among near neighbors, not distributed from a central hub" (p. 104). People in a complex system need to think "win-win" and "we" not "I" (p. 105). For this to take place in the classroom, teachers must "forego centralized control of information" (p. 105) in order to allow for exchange of information to take place among the individuals in the classroom, not from the teacher-acting-as-central-hub. Exchange of information is not accomplished only through vocal exchanges, but also by physical, contextual, and social exchanges. Exchanges should not be forced. For example, as teachers guide students in exchanging information they often force students into organized

round-table discussions or small-group meetings. However, it might be more effective to allow the students to straight talk with each other or organize their own groups.

Scale-free networks/nested structures. Complex systems have scale-free networks/nested structures (Davis & Sumara, 2006). Each complex system has sub-complex systems, while at the same time being part of a larger complex system. There is no limiting restriction on the creation, movement, or direction of this intricate web of systems. This structure of complex systems makes them strong because they exchange information efficiently while remaining robust: if one section of a complex system fails, the rest of the system will carry on and the system will remain intact.

Ambiguously bounded, but organizationally closed. Complex systems are ambiguously bounded (Davis & Sumara, 2006). The nested structure of complex systems means a complex system is a smaller part of a larger complex system, and complex systems thus become part of one another. These systems are constantly exchanging matter or information with their contexts and with each other. It is therefore difficult to discern the boundaries between complex systems. However, these complex systems are closed "in the sense that they are inherently stable—that is, their behavioral patterns or internal organizations endure, even while they exchange energy and matter with their dynamic contexts" (Davis & Sumara, 2006, p. 5-6). Even though there is transfer of matter and information, the systems maintain their identity.

Structure determined. Complex systems are structure determined (Davis & Sumara, 2006). This means that it is a complex system's structure that determines how it will act and react. Complex systems act as living organisms and not as machines, in the sense that the response to a perturbation will depend on the individual system. The response to a perturbation

will be different for two systems that are seemingly the same, or even for the same system at two different times. There are two reasons for this. First, complex systems learn, and second, systems that are essentially the same will yield different responses, because in reality no two systems really are the same. "This is what problematizes the idea of 'best practices' [in education], a notion that is anchored in the assumption that what works well in one context should work well in most contexts" (p. 100).

Far-from-equilibrium. Complex systems are far from equilibrium (Davis & Sumara, 2006). As each individual system acts as determined by its structure, the system is in a state of disequilibrium as it receives both positive and negative feedback. Positive feedback for a system is when actions of the system allow for excitement and magnification of certain ideas, which in turn allows for growth and learning of the system. Negative feedback for a system is when mechanisms of the system keep actions within certain bounds so that behavior is regulated according to the rules of the system. Both positive and negative feedback are needed for a complex system, but the constant feedback keeps it moving so that it never stays in a state of stable equilibrium. "The experienced teacher, of course, is intimately familiar with striking the balance between classroom and lesson structures that are too rigid to allow for innovative responses and structures that are too loose to enable coherent activity" (p. 103). Teachers must avoid "behavior management" and "rigid regimes" that prohibit growth and enthusiasm (p. 103).

These eight indicators of complex systems will be used in analyzing new teacher induction and mentoring documents. I now turn to the literature on new teacher induction and mentoring programs.

New Teacher Induction and Mentoring

New teacher induction programs include mentoring programs but are much more than that. A brief explanation of these programs is given below, followed by a section on the effectiveness of these programs, a section on building effective programs, and a section relating these programs to complexity theory.

New teacher induction programs. New teacher induction programs are designed as a type of professional development geared towards new teachers with the purpose of helping novice teachers in their first three years of service develop their attitudes and sense of professionalism and self in the field. (Ashdown, et al., 2006; Flores, 2006; Wood & Waarich-Fishman, 2006). As outlined by Flores, (2006), these programs have five general goals: (a) to improve teaching performance, (b) to increase the retention of promising beginning teachers during the induction years, (c) to promote the personal and professional well-being of beginning teachers by improving teachers' attitudes toward themselves and the profession, (d) to satisfy mandated requirements related to induction and certification, and (e) to transmit the culture of the system to beginning teachers (p. 39). In addition to mentoring, these induction programs include new teacher orientations, portfolio projects, and licensing/certification requirements.

Mentoring programs. Mentoring programs are part of new teacher induction programs and are a widely-used practice (Resta, 2006; Zeek & Walker, 2006). According to Huling (2006), studying the mentoring between experienced and novice teachers is the most important part of the induction program. Some states require that mentoring be included as part of the induction program, but often the amount of support given to districts and schools to accomplish that is minimal (Basile, 2006) and there is some evidence that those in the mentoring programs do not follow the program's policies (Washburn-Moses, 2010) but that effectiveness of the

program is increased when policies are implemented correctly (Bickmore & Bickmore, 2010). However, mentoring programs are part of the success of decreasing new teacher attrition rates and new teacher effectiveness as described above.

A brief overview of the history of mentoring is given here as outlined by Odell (2006). Mentoring of new teachers began in the 1980s with the humanistic perspective of supporting novice teachers with feelings of stress. During the mid-1980s to mid-1990s that direction moved beyond the humanistic approach to a goal of having novices learn about teaching from their mentors. During this time mentors helped novices learn about being reflective in their teaching and how to instruct and assess students. In the mid- to late-1990s, the approach to mentoring further shifted to one of guiding novice teachers to teach in ways consistent with educational reform and teaching standards. Though approaches to mentoring have changed during the last 30 years, there is still a need for the humanistic support that was the focus of the 1980s and the need for teachers to learn how to teach.

Effectiveness of new teacher induction and mentoring programs. It is apparent from the literature that one of the main reasons new teacher induction and/or mentoring programs exist at all is because of extremely high teacher attrition rates (Basile, 2006; Flores, 2006; Hayes, 2006; Resta, 2006; Zeek & Walker, 2006). Numerous studies have shown that 50% of new teachers leave the profession with the first five years of teaching (Basile, 2006; Hayes, 2006; Resta, 2006; Zeek & Walker, 2006), the majority of whom leave within the first three years (Resta, 2006; Zeek & Walker, 2006). A shocking 9.3% of new teachers do not even make it through their first year of teaching (Resta, 2006) even though many new teachers have genuine interests and care for their students (Hayes, 2006). According to Resta (2006), "Teacher turnover is 50% higher in high-poverty than in low-poverty schools" (p. 104). Hayes (2006)

makes the claim that even if teachers do make it through their first few years of teaching they may have had significant negative experiences that will prevent them from ever reaching their true potential as a teacher.

Teacher attrition rates are significant events, around which there are certain ramifications (Basile, 2006; Resta, 2006; Wood & Waarich-Fishman, 2006). It is evident that a problem with teacher attrition is the cost of inducting those teachers and the additional costs of inducting their replacements (Basile, 2006; Resta, 2006). On the other hand, providing comprehensive induction is cost effective (Wood & Waarich-Fishman, 2006) since teacher retention is increased. An additional ramification is the ineffectiveness of such turnovers and the less stable and less effective environments that the public school students are placed in (Basile, 2006; Resta, 2006).

High teacher attrition rates calls forth the question of which teachers are leaving the field and why. The teachers leaving the field are not the ones who just are not cut out for the job or are in some way deficient in their ability to teach. On the contrary, researchers have found that it is often the "best and brightest" teachers (Basile, 2006, p. 6) and the "most academically talented" teachers (Wood & Waarich-Fishman, 2006, p. 71) that leave the profession in the greatest numbers. The challenges these new teachers face include teacher tasks separate from actual teaching, lack of student motivation, issues related to classroom management, time pressure, tiredness, isolation, loneliness, lack of support, and feelings of giving up, among others (Flores, 2006). Any new teacher is subject to these challenges and is in need of aid during the beginning of his or her career as an educator. This is where new teacher induction and mentoring programs come in. Wood and Waarich-Fishman (2006) found that a large percentage of teachers leaving the field are the teachers without new teacher induction programs.

One of the five goals of new teacher induction and mentoring programs, as defined by Flores (2006) and described earlier, is to reduce teacher attrition rates. Zeek and Walker (2006) report that national attrition rates of teachers within their first three years of teaching can be 11% higher for those not in induction programs. Additional studies have shown that teacher induction and mentoring programs can retain teachers better than otherwise (Hayes, 2006; Wood & Waarich-Fishman, 2006). It is apparent that these programs are effective in reducing teacher attrition rates. Formal induction and mentoring programs have greatly increased since the 1980s with the hope of decreasing teacher attrition (Resta 2006; Zeek & Walker, 2006) but also with the hope of creating a "bridge" for new teachers as they move from being a "student of teaching to a teacher of students" (Ingersoll & Kralik, 2004, p. 2).

Building effective new teacher induction and mentoring programs. The structural set up of a mentor program greatly affects the impact it has on teachers. There should be a mentor program specialist—often on the district level—who assists the mentors and who is ultimately responsible for the following: coordinating the program, ensuring that practices match program goals, arranging for professional development of mentors and novices, arranging incentives for mentors, selecting mentors, and matching mentors with novices (Odell, 2006). Often, principals assist in the selection of mentors in their schools but are given little support otherwise (Basile, 2006). Teachers acting as mentors for novices should be given paid time away from teaching to focus on mentoring tasks (Basile, 2006).

Mentors need training. Once mentors are selected, they should be given training before they begin their mentoring duties with professional training throughout the duration (Hayes, 2006; Odell, 2006). This training should consist of how to teach adults since adult mentees learn differently than children and adolescents (Hayes, 2006). Mentors also need to learn how to

balance challenge and support for their mentees (Bullough, 2012) so that mentees' needs are met both emotionally and in regards to teaching.

Complexity in new teacher induction and mentoring programs. As mentioned in the introductory chapter, researchers are calling for the need to analyze educational issues through the lens of complexity theory—including new teacher induction and mentoring programs (Davis & Sumara, 1997, 2001, 2006, 2012; Jones & Brown, 2011; Kalin, Barney, & Irwin, 2009; Waterman, 2011; Waterman & He, 2011). There are many components of these programs that make up their complexity. Such components include mentor-mentee relationships; the rules and mandates of the state, district, and school; mentor/mentee individual educational backgrounds; mentor/mentee purposes for teaching, personalities, and experiences; unique classroom dynamics; parents and the community; etc. In studying new teacher induction and mentoring programs, the complexity of the system must be acknowledged and should be reflected in the components of the systems.

Both mentors and mentees are usually given tools as part of the new teacher induction and mentoring programs. As part of mentors' training they are often given tools, in the form of documents, which assist them in mentoring. Such documents often include observation tools, teacher evaluation tools, and some training handouts. Mentees' documents often include teacher evaluation tools, pamphlets with expectations, and instructional sheets. As components of these complex systems, these documents were analyzed for how they reflect and acknowledge the complexity of these systems. Details of analysis are given in the following chapter on methodology.

Chapter 3

Methods

Design

This study is designed as a content analysis. According to Weber (1990), content analysis is "a research method that uses a set of procedures to make valid inferences from text" (p. 9). Themes, issues, concerns, ideas, and meanings are identified and analyzed by a series of procedures. Since the purpose of this study is to analyze new teacher induction and mentoring documents for language that reflects and acknowledges the complexity of these two systems, content analysis is the best methodology. I analyzed documents from five different school districts and the state office of education to infer how those documents reflect and acknowledge the complexity of new teacher induction and mentoring programs. Language of the documents was analyzed using complexity theory as a framework, utilizing the ideas behind the eight indicators of complex systems as outlined by Davis and Sumara (2006).

There is no right way to do content analysis, though it is important to follow certain procedures so that analysis findings are reliable and valid, avoiding methodological problems of analysis (Weber, 1990). In order to ensure reliability and validity, it is important to use the proper method of analysis.

Content analysis can be conducted as quantitative, qualitative, or both (Frandsen, 2006). Quantitative content analyses focus on making inferences based on numerical occurrences of coding units. While these quantitative studies illuminate the issues and concerns of texts, they ignore the theoretical underpinnings and epistemological beliefs of those issues and concerns. Qualitative content analyses, on the other hand, make inferences based on the theoretical and epistemological underpinnings surrounding the text (Frandsen, 2006). Since the purpose of this

study is to make inferences about how documents reflect and acknowledge the complexity of the new teacher induction and mentoring programs—the theoretical underpinnings and epistemological beliefs surrounding the programs—qualitative content analysis was the method used.

Context and Data Sources

This study reports on documents collected in July of 2012 from five public school districts that work in partnership with a major western university. This partnership between the five districts and university exists to "[bring] about positive change in teacher education as well as student learning—at both the university and public school levels....through initiatives in professional development, education support, and research and publications" (Black, n.d.). I chose to work with these five partnership districts because of their relationship with the university. Each district has a liaison who facilitates school district and university relationships, specifically working with pre-service teacher practicums and student teaching placements/supervision. Networking with the liaisons, I was granted greater access to mentoring documents that were used for analysis as well as greater networking of personnel who could give me the documents.

Each of the five partnership districts create and implement their own mentoring programs. However, the state department of education does have documents upon which several of the districts base their own documents, so some similarities exist between the district and state documents and between the district-to-district documents.

Data were collected from the five partnership districts and consist of documents available online and in print. The types of documents varied from district to district, and there were some types of documents that were available in some districts but unavailable in others. Documents

include the following: standards documents, analysis tools, rubrics, new teacher guides, pamphlets, and instructions sheets.

Each of the five districts varies greatly in teacher and student population demographics. A brief summary of each district is given below with information coming from the state office of education website (Utah State Office of Education, n.d.) To preserve anonymity, each district will henceforth be named by a letter of the alphabet—District A, B, C, D, and E. The student body ethnicities are from the Fall 2011 enrollment statistics as is the number of schools in each district. The student-teacher ratios are from the 2011 fiscal year. The special education and free and reduced lunch statistics are also from the 2011 school year.

District A. District A has a total student body population of 29,724 students. Of these students, 263 are identified as Asian, 267 are identified as African American/Black, 271 are identified as American Indian/Alaskan Native, 349 are identified as Pacific Islander, 2,993 are identified as Hispanic/Latino, and 28,921 are identified as White. This district consists of 26 elementary schools, six middle schools, and five high schools. The median student-teacher ratio is 22.55. There are 3,776 special education students, 2,912 of which are identified as Resource and 864 of which are identified as Self-Contained. There are 37% of students on free and reduced lunch.

District B. District B has a total student body population of 68,233 students. Of these students, 918 are identified as Asian, 650 are identified as African American/Black, 1,011 are identified as American Indian/Alaskan Native, 1,073 are identified as Pacific Islander, 5,909 are identified as Hispanic/Latino, and 65,204 are identified as White. This district consists of 53 elementary schools, 11 middle schools, and eight high schools. The median student-teacher ratio is 23.69. There are 6,585 special education students, 5,167 of which are identified as Resource

and 1,418 of which are identified as Self-Contained. There are 29% of students on free and reduced lunch.

District C. District C has a total student body population of 5,253 students. Of these students, 36 are identified as Asian, 23 are identified as African American/Black, 26 are identified as American Indian/Alaskan Native, eight are identified as Pacific Islander, 779 are identified as Hispanic/Latino, and 5,185 are identified as White. This district consists of five elementary schools, one middle school, and one high school. The median student-teacher ratio is 18.72. There are 653 special education students, 573 of which are identified as Resource and 80 of which are identified as Self-Contained. There are 36% of students on free and reduced lunch.

District D. District D has a total student body population of 13,779 students. Of these students, 406 are identified as Asian, 171 are identified as African American/Black, 217 are identified as American Indian/Alaskan Native, 425 are identified as Pacific Islander, 3,669 are identified as Hispanic/Latino, and 12,754 are identified as White. This district consists of 13 elementary schools, two middle schools, and two high schools. The median student-teacher ratio is 19.88. There are 1,738 special education students, 1,134 of which are identified as Resource and 604 of which are identified as Self-Contained. There are 47% of students on free and reduced lunch.

District E. District E has a total student body population of 50,582 students. Of these students, 1,465 are identified as Asian, 1,040 are identified as African American/Black, 3,248 are identified as American Indian/Alaskan Native, 1,210 are identified as Pacific Islander, 5,953 are identified as Hispanic/Latino, and 45,629 are identified as White. This district consists of 33 elementary schools, nine middle schools, and five high schools. The median student-teacher ratio is 24.11. There are 5,655 special education students, 4,140 of which are identified as

Resource and 1515 of which are identified as Self-Contained. There are 26% of students on free and reduced lunch.

Researcher Stance

As the researcher conducting this study I bring my beliefs, biases, and interpretations to the analysis of data and it is therefore important to understand my educational background and epistemological beliefs that I brought into my analysis of the documents. I undertook my undergraduate work at the major western university that is in partnership with the five public school districts, completing a program in Family and Consumer Sciences Education. Since my graduation from the university I have been employed as a full-time Family and Consumer Sciences teacher at a high school in one of the five partnership districts. As a new teacher in that district I went through the district mentor program for three and half years and recently completed all requirements for my Level II licensure in the state. Concurrent with my teaching at this school and going through the mentor program, I started a master's program in Teacher Education at the same university with a focus on teacher education and development.

Through my experiences in the district mentoring program and my studies in my master's coursework, I have come to believe that studying new teaching induction and mentoring programs through the lens of complexity theory will provide insight for improvement of these programs.

Procedures

Content analysis began with collection of the content documents. In order to obtain the necessary documents from each district I first searched for any information I could find on each district's web site. Then I contacted the school district-university liaisons, sharing with them the documents I had found on district web sites, and asked them for any additional materials or

references from the district. I was given additional networking resources of district mentor specialists and employees who have information about each district's mentoring programs and corresponding documents.

Documents collected were analyzed relative to complexity theory. Content analysis was conducted as described in detail below.

Data Analysis

New teacher induction and mentoring documents were qualitatively analyzed for content that reflects and acknowledges the complexity of these two programs/systems. Data Analysis was conducted in two phases. Phase I was an analysis of the language of each document and how that language reflected and acknowledged complexity or not. Phase II was analyzing how the findings from Phase I connected to the eight indicators of complexity as outlined by Davis and Sumara (2006). Details for each phase of analysis are given below.

Phase I. Analysis of document language was initially based on the eight indicators of complexity. A summary of each of the eight indicators of complex systems was given in the Literature Review chapter. Appendix A reviews aspects of these eight indicators that are particularly relevant to new teacher induction and mentoring programs and contains a series of questions for each indicator that were used to guide analysis of the documents based on the ideas of these indicators.

Data analysis of the documents was based on the ideas of these eight indicators. Once documents were collected from each of the five school districts, data analysis began. First, the documents were categorized into three groups by type of document: (a) documents for use by the mentor, (b) documents for use by the mentee, and (b) documents for use by the district. Next, I read through each document in detail, marking the documents and taking detailed notes. As I

read each document I took notes of words, phrases, and ideas that I saw repeatedly across all types of documents from each district. I began to notice certain words or phrases that showed up often and I recorded the page numbers of where these were used.

After reading through all of the documents in detail, I organized my notes under the seven indicators of complexity as outlined by Davis and Sumara (2006). I did this by first taking each indicator of complexity and labeling it as a heading. I then took my notes from Appendix A—the summary of the indicators of complexity—and identified the main words of each indicator. I then took questions designed to guide analysis and also put them under each indicator. Finally, I went through my notes from my first read through of the documents and categorized them under the indicator that they seemed to most exemplify. Since elements of the seven indicators of complexity overlap so much, there were several items from my notes that fit under multiple indicators. I therefore color-coded my notes when I placed them under the indicators so that I knew which notes were under multiple indicators and where those were located.

This degree of overlap made analysis of the complexity language of the documents impractical, suggesting the need for further simplification of the data. The decision was made to allow naturally occurring categories to emerge from the data, and then subsequently examine whether and how these categories related to the complexity indicators. I reviewed my notes from analysis of the documents allowing themes or categories to emerge. Using these notes I initially found six main emerging themes. However, I decided that in order to be more careful and precise my next several times reading through the documents, it would be best to split one of the categories—growth—into two. Therefore, there were seven final categories derived from my initial notes: (a) growth of the mentor, (b) growth of the mentee, (c) roles/purposes of the

mentor, (d) the state of being of the mentee, (e) expected teaching methods for evaluation, (f) one-size-fits-all approaches to teaching and mentoring, and (g) hoop jumping requirements and expectations.

I then took each document and re-read it one time for each of the seven categories, making in total seven additional times reading each document. For each time reading through, I used a different colored pen to make additional notes and mark what I saw as evidence for that category. After reading a document seven times, I compiled a second set of notes, specifically recognizing the presence or absence of evidence for each category. Re-reading the documents multiple times is important because a single read-through is not enough. As Miles and Huberman (1994) warn, "It's easy to fall into the trap of premature closure, a feeling of 'rightness' that is grounded falsely" (p. 85-86).

In order to make my analysis as reliable as possible, I checked reliability with an independent coder (IC). The IC is an experienced qualitative researcher who also has experience with teaching on the secondary level. The IC and I met once during the early phases of analysis, and then once again during the latter phases of analysis. Reliability was established as the IC and I analyzed the same documents and came to a consensus of the ideas that are found in the documents.

During the early stages of my analysis, I met with the IC to establish guidelines for the analysis. I first trained the IC with a summary of the eight indicators (see Appendix A) and explained the main ideas behind those indicators that I was looking for in the documents. The IC was given a clean copy of a sample of documents to analyze and I also had a clean copy of the same documents. We each conducted an initial read-through and mark-up of the documents, one by one, taking notes of the ideas and reflections, or contradictions, of complexity that we

noticed. The IC and I then discussed each the ideas and topics we found, establishing certain phrases, ideas, and words that are present in the language of the document that reflects and acknowledges, or that contradicts, the ideas of the complexity of these new teacher induction and mentoring programs. We then repeated the same process over and over again for several more documents, going through each document one at a time on our own and then discussing together.

After establishing initial reliability with the IC, the rest of the documents were marked and analyzed by myself using a recursive process. I read through all of the documents in detail, highlighting the text, making notes in the margins, and writing memos of inferred meanings (Miles & Huberman, 1994). When a new meaning, idea, or theme emerged in my readings, I created a new note for it and recorded where it occurred in other documents.

During the latter stages of data analysis, I met again with the IC to further establish reliability of my inferences. Since I had read and taken notes of all of the documents by that time, I had a firm understanding of the ideas that were present in the language of the documents. The new themes, ideas, etc. that emerged during my analysis were discussed with the IC. We again went through the process of analyzing a sample of documents—one by one and then together—but this time using the emergent themes. We discussed and compared our markings and inferences. This process was repeated until the IC and I were noticing the same ideas, reflections, acknowledgments, and contradictions regarding the complexity of new teacher induction and mentoring documents.

Phase I of analysis was completed when all of the documents had been read through eight times with organized notes describing the language of complexity that was or was not found within the documents. Appendix B describes in detail the language found in the documents that either reflected and acknowledged the complexity of new teacher induction and mentoring

programs or not. This appendix is included in order to enable repeatability of the study using the same techniques included in Phase I of data analysis. It also creates a thorough report of the language contained in the documents for use in deeper understanding of the language of the documents and the relationship between complexity and the new teacher induction and mentoring program documents. However, it is not included in the main body of this paper because of its great length and detail. Instead, the analysis included in Appendix B is explained in the Findings chapter and is referenced in the Discussion chapter.

Phase II. During Phase I of data analysis it became clear that the degree of overlap of the complexity indicators required a different approach for further analysis than simply identifying language in the documents and assigning it under one of the indicators of complexity. Therefore, Phase I of analysis outlined the language of the documents and Phase II outlined which indicators connect with which of the seven emergent categories. Analysis in Phase II was conducted to examine how the eight indicators of complexity are connected to the seven emergent categories and the language of the documents. I did this by analyzing which indicators were most strongly relevant to each category and then I discussed how each indicator was specifically related and then gave examples from the language of the documents to demonstrate the connection between the category and the indicator (see Appendix C). Similar to Appendix B, the contents of Appendix C are included in order to enable repeatability of the study and to provide the thorough connection between document language and the complexity indicators, but is not included in the body of this paper because of its great length and detail. Instead, the analysis included in Appendix C is explained in the Findings chapter and is referenced in the Discussion chapter.

Having a clear picture of the main themes that emerged from the language of the documents and how they related to complexity, I then state how each district reflects and acknowledges complexity or not. The Findings chapter is organized as a discussion of each district and how their documents reflect and acknowledge the complexity of the new teacher induction and mentoring programs or not. The Discussion chapter evaluates the districts' reflections and acknowledgements of complexity, relates the findings to the literature, and suggests further research.

Chapter 4

Findings

Data analysis revealed language in the documents that reflected and acknowledged complexity while at other times demonstrating a lack thereof (see Appendix B and Appendix C). This chapter is organized as a discussion of each district and how their documents reflect and acknowledge the complexity of the new teacher induction and mentoring programs or not.

District A and Complexity

Reflections and acknowledgments of complexity. District A documents strongly reflect and acknowledge the complexity of new teacher induction and mentoring programs. The language in these documents demonstrates an understanding of the need for balance between requirements for running the program with room for innovation and flexibility for growth to occur. Though requirements are necessary for running the programs, this district does not use one-size-fits-all or hoop jumping approaches to completing those requirements; tasks that are required can be met a variety of ways, or at least in a way that will focus on the needs of the individual. An example of this is shown in document A9, a document for mentors to use in creating a professional development day. This document focuses on the need to tailor mentoring activities to the individualized needs of the mentee in an emotionally safe environment: "SPA (Special Professional Activities) is a professional development day [the mentors] design to meet the special needs of [their] new teachers" (A9.1) and is to be based on the mentor's assessment of what the special needs of the new teachers are. Such language demonstrates a strong understanding of the need to balance requirements to run the program with the importance of meeting the needs of the individuals.

Most of the language in these documents is positive, suggesting that the personnel in charge of creating the documents have a positive view of the benefits of these programs and understand that new teachers need leaders who approach the programs with strong intent.

Examples of such positive language include words such as "goals" and "help" when discussing growth of the mentee, "giver of help" (A27) when discussing the role of the mentor, and "celebrate" (A6) when discussing the needs of the new teacher. Through the variety of documents in this district, it is evident that the mentor program has been well thought out to meet the needs of both mentor and mentee.

Overall, the language and types of these documents reveal that the new teacher induction and mentoring programs in this district are set up to allow for and enhance the complexity of the new teacher induction and mentoring programs. The following indicators of complexity are well-represented in this district: Indicator One (Self-organized), Indicator Two (Bottom-up emergent), Indicator Three (Short-range relationships), Indicator Four (Scale-free networks/nested structures), Indicator Seven (Structure-determined), and Indicator Eight (Far-from-equilibrium). The following statement is a good representation of District A personnel's epistemological beliefs supporting complexity in these programs:

Everyone needs a sounding board now and then, but new teachers also need practical advice and professional guidance. [District] mentors assist new teachers in all aspects of the [District] Standards of Effective Teaching....[District] mentors do more than help protégés survive in classrooms and learn the culture of the school setting. They help new teachers create a student-centered classroom and improve in their ability to engage students in learning. Mentors also guide protégés in effective teaching practices and a variety of strategies to meet the needs of diverse learners....[District] mentors help

protégés become more thoughtful about their work. The mentor offers a safe place to discuss successes and failures, openly examine instructional practices, solve problems, consider new ideas, actively share experiences, and seek feedback. (A16.1)

This quotation from the district's philosophical beliefs regarding the mentoring program demonstrates the awareness this district has for the many facets that are part of the program that must be carefully created to successfully achieve the desired growth in the mentor, the mentee, and the students' learning.

Lack of reflections and acknowledgments of complexity. District A is weak in Indicators Five and Six (Ambiguously bounded but organizationally closed). According to these indicators, new teacher induction and mentoring programs should support interactions of those persons within these programs with persons outside of these programs. Though District A focuses a great deal on the importance of development within the new teacher induction and mentor programs, there is little focus on interactions with the other sub-systems in the larger educational system. As shown by the language in the district's philosophy of the mentor program, the focuses of the program are directed internally as a program that "focuses on effective, active mentoring.... is organized around a vision of quality teaching.... encourages protégés to be reflective and practice self-assessment.... [and] uses technology as a tool to enhance communication, collaboration, supportive interaction, and professional development" (A16.1). Most districts were weak in this regard.

District B and Complexity

Reflections and acknowledgments of complexity. District B weakly reflects and acknowledges the complexity of the new teacher induction and mentoring programs. The documents in this district come mainly from the state documents for the two programs and have

not been developed much beyond that. The main focus of these documents is the procedures for completing the new teacher induction and mentoring programs. This being said, positive language regarding growth of the mentee is found in the documents, demonstrating that the intentions of these programs are at least geared in the right direction. An example of such language is found in document B1. This document addresses mentee growth and states that the purpose of the new teacher induction program is to "to help [new teachers] hone their teaching practice for more effective student learning. And effective learning creates opportunities for our students to be college and career-ready" (B1.1). This statement indicates not only that teachers can grow and strengthen the skills they already have, but the idea is made explicit that teacher growth affects student learning. However, these documents contain little focus on other aspects of the complexity of these programs. These documents do not strongly represent any of the indicators of complexity.

Lack of reflections and acknowledgments of complexity. The documents in this district contain little language about growth and development of members of the system. On the contrary, the mentor is portrayed as an evaluator instead of a non-evaluative teacher who will assist the mentee. This is shown in documents B2 and B3, which are evaluation tools that appear to be used by both mentors and administrators. The language in this district's documents is cold and prescriptive with a heavy focus on completing tasks because they need to be completed for re-licensure, creating a sense that the new teacher induction and mentor programs are just hoops to jump through. For example, the pages in document B4 are teacher evaluations to be filled out by students regarding their teacher. The implied focus of this document is that achieving a high score on the evaluations is what makes a good teacher. Additionally, document B5—the Educator Evaluation Bill—focuses on certain tasks that must be completed for re-licensure with

little language explaining the positive benefits of completing those requirements. This document uses continuums with the highest score being placed first, giving the impression that a score lower than the highest is unexpected, and indeed not acceptable. All of the eight indicators of complexity are found to be strongly lacking in this district.

District C and Complexity

Reflections and acknowledgments of complexity. District C documents have a moderate amount of reflection and acknowledgement of complexity. Overall, the documents in this district use positive language when describing growth of the mentee and expected teaching methods. Growth of the mentee is shown through document C5. This document addresses growth of the mentee in several ways. First, the document contains a continuum to indicate current performance of the teacher, also implying that growth is possible and expected over time. Second, this document contains language indicating that the purpose of these evaluation forms is to document teacher growth: "A cumulative record of each candidate's performance will be maintained to document the growth of the candidate over time in his/her field experiences" (C5.3). Third, this document uses positive language from Bloom's taxonomy to indicate that the new teacher can grow in teaching practices. Language in the document includes words such as "understand," "use," "create," and "provide." This language indicates that there are several different levels of teaching expertise a teacher may have, but that they can also increase from lower levels of performance in Bloom's taxonomy to higher levels. Also, language such as "shows progress," "meets," and "solid mastery" implies that growth is possible and expected.

Expectations for evaluations are clear but also created to be helpful to the mentee in improving his/her skills. There is a large focus on setting goals as a way to improve one's teaching and student learning. Such a positive focus on goal setting demonstrates the district's

epistemological beliefs that teacher growth is developmental and worth supporting and increasing. This district focuses on completing a new teacher portfolio as documentation of teacher growth. The language of the portfolio requirements is positive and explains the reasoning behind the requirements for the portfolio. An additional focus of District C is completing teacher evaluations. Again, the language in the documents is positive in explaining that the purpose of the evaluations is not as a hoop to jump through, but to "be an opportunity to help teachers improve their craft and impact student learning" (C1.12).

The following indicators of complexity are moderately-well-represented in this district: Indicator One (Self-organized), Indicator Two (Bottom-up emergent), Indicator Three (Short-range relationships), Indicator Four (Scale-free networks/nested structures), Indicators Five and Six (Ambiguously bounded but organizationally closed), and Indicator Seven (Structure-determined). Most of these indicators need to be developed into stronger components of the new teacher induction and mentoring programs.

Lack of reflections and acknowledgments of complexity. District C is a little weak in supporting and encouraging the freedom to develop innovative ideas—Indicator Eight. Though this district does not employ a one-size-fits-all approach, neither does it contain language to support the opposite. Though innovation is not stifled, it is not encouraged. Document C5 does contain some positive language encouraging innovation, but document C1 is mostly prescriptive. Additionally, language in this district's documents needs to be stronger and more encompassing for each of the other indicators of complexity.

District D and Complexity

Reflections and acknowledgments of complexity. District D documents are weak in reflecting and acknowledging the complexity of new teacher induction and mentoring programs.

These documents are designed mainly as helpful materials to help new teachers start their career and these materials make up the bulk of this district's documents. The following statement is a good summary of District D's philosophy about mentoring and why the bulk of the mentor binder contains helpful materials for the mentee: "Your first year will probably seem the hardest because you must create your lesson plans from scratch" (D1.10). Though these documents are weak, they are not negative. These documents do reflect and acknowledge complexity in several ways, but there is not much strength in the development of complexity concepts.

The following indicators of complexity are somewhat represented in this district:

Indicator One (Self-organized), Indicator Two (Bottom-up emergent), Indicator Three (Short-range relationships), Indicator Four (Scale-free networks/nested structures), Indicator Seven (Structure-determined), and Indicator Eight (Far-from-equilibrium). Once again, these indicators are present but are poorly developed.

Lack of reflections and acknowledgments of complexity. District D documents are weak in supporting and encouraging interactions with other systems—Indicators Five and Six. The language in these documents is directed internally, with the intention of helping the new teachers by giving them materials to use in the classroom. This focus on new teacher survival does not help the new teachers to interact with other teachers or other parts of the educational system at large. As mentioned previously, the philosophy of this district is to help new teachers their first years since the must "create [their] lesson plans from scratch" (D1.10).

District E and Complexity

Reflections and acknowledgments of complexity. Though District E has a well-developed teacher evaluation system as part of new teacher induction and mentoring programs, it does not strongly reflect and acknowledge complexity. This district has a central focus on

teacher evaluations for all teachers, new or experienced. As stated in the new teacher registration, "You are joining a district committed to high quality teaching and professional development. Our district offers an extensive inservice program to help you gain new skills and enhance those you have in your repertoire" (E6.1). As is described in the data analysis, there are 49 teaching techniques that teachers are evaluated on. These 49 teaching techniques are described in detail in a large, 148-page packet. With the focus of this district on teacher evaluations for all teachers, there is less focus on the growth and development of the mentee as a new teacher. Because a majority of this information is to be utilized by administrators, there is also not much focus on the role of the mentor. However, this district has the strongest focus of any district in utilizing mentors for more than just new teachers; struggling teachers can request a mentor to help them more satisfactorily pass their evaluations.

The following indicators of complexity are well-represented in this district: Indicator

Four (Scale-free networks/nested structures) and Indicators Five and Six (Ambiguously bounded but organizationally closed. These three indicators are present in the language of the documents.

Language in the district documents reveals that there is a strong focus on teacher development through interactions with other parts of the system, acknowledging that the new teacher induction and mentoring programs are only part of the larger teacher development system, which in turn is part of the larger education-for-students system.

Lack of reflections and acknowledgments of complexity. District E is weak in the following indicators: Indicator One (Self-organized), Indicator Two (Bottom-up emergent), Indicator Three (Short-range relationships), Indicator Seven (Structure-determined), and Indicator Eight (Far-from-equilibrium). Language in these documents reveals that there is a strict approach to teacher development issued forth from a central hub—contrary to Indicators

One, Two, and Three. This is most strongly seen in documents E13, E14, E15, and E16 in which the administrator plays a significant role in enforcing the program requirements as outlined by the district personnel. These documents show little to no flexibility, but instead mandate that teachers follow the requirements strictly. Teachers are to excel in certain teaching techniques, with little apparent room for individual solutions or freedom for innovative ideas—contrary to Indicators Seven and Eight. This is most strongly seen in documents E4 and E10—the professional development materials—in which teachers are instructed to follow certain teaching techniques in order to be considered good teachers. Though there is some flexibility within each of these techniques, there are so many techniques used for evaluation and so much prescription within what is expected of a teacher's behavior that there is little room for a teacher to focus on the techniques of teaching that he/she wishes to. This is contrary to freedom for innovative ideas.

Summary

To summarize, each district has documents with strengths and weaknesses in the degree to which they reflect and acknowledge complexity of the new teacher induction and mentoring programs. Most districts needed to improve focus on growth of the mentor. Additionally, most districts offer flexibility to some extent, some districts better than others.

Chapter 5

Discussion

This chapter relates the findings to the literature on new teacher induction and mentoring programs and evaluates the districts' reflections and acknowledgements of complexity.

Suggestions for further research are given.

Connections with Literature

Overall, the language in the documents illustrates that each of the five districts contain some elements of complexity while lacking others. Additionally, it is apparent that some linear thought is contained in the documents in addition to the reflections and acknowledgements of complexity.

Complexity thinking in the documents. Language in the documents reflects complexity of the new teacher induction and mentoring programs. The general language of the documents used in these five school districts recognizes that mentors and mentees are valuable components of the larger educational system—Indicator Four: Scale-free networks/nester structures. Several documents, especially those found in District A, demonstrate freedom for innovation to be used within boundaries of the system—Indicator Eight: Far-from-equilibrium. These non-linear approach to mentoring allows for complex phenomena to be understood and utilized (Bratianu, 2007; Davis & Sumara, 2006).

Language in the documents demonstrates a lack of reflection and acknowledgment of complexity in a few ways. First, most of the documents are distributed from a central hub—the district or state personnel over the programs. And many of these documents are prescriptive in nature. Some of the documents portray a good amount of flexibility and local decision making, while others portray less—Indicators One, Two, and Three. Additionally, though many

documents allow for individual-based solutions, many documents utilize a one-size-fits-all approach instead, contrary to complexity theory Indicator Seven.

Linear thinking in the documents. It is clear from the language of the documents that certain elements of linear thinking are employed in the creation of the documents. Linear thinkers approach educational issues as being cause-and-effect relationships that lead to certain outcomes, the relationships of which could be repeated with the same outcomes each time (Bratianu, 2007; Davis & Sumara, 2006; Richmond, 2005). But such linear thinking does not allow for complex phenomenon to be understood (Bratianu, 2007; Davis & Sumara, 2006). Linear thinking is shown most in the documents that are very prescriptive of teaching methods (A1/B8, A17, A23, A27, B2, B3, B5, B8, B10, B11, B12, C1, C5, E4/E10, E12). Though the language in these documents often portrays a sense of flexibility in the enactment of the prescribed teaching methods, the focus on prescribing certain teaching behaviors and methods demonstrates an epistemological belief that following certain teaching procedures will result in the desired outcome of student learning.

Other insights from the documents. Though the literature focuses on the purposes of new teacher induction and mentoring programs as preventative of teacher attrition rates (Basile, 2006; Flores, 2006; Hayes, 2006; Resta, 2006; Zeek & Walker, 2006), the language in the documents never alludes to this. The documents do not include language encouraging the teachers to stay in the profession or language implying actions teachers should take to stay active participants in the system.

It is clear from the language of the documents that the new teacher induction and mentoring programs are indeed organized to meet four of the five general goals as outlined by Flores (2006): (a) to improve teaching performance, (c) to promote the personal and professional

well-being of beginning teachers by improving teachers' attitudes toward themselves and the profession, (d) to satisfy mandated requirements related to induction and certification, and (e) to transmit the culture of the system to beginning teachers (p. 39). However, as mentioned above, goal (d)—to satisfy mandated requirements related to induction and certification—is not found in the language of the documents. It also clear from the language of the documents that the documents are created to help new teachers meet the tasks that new teachers face separate from actual teaching: lack of student motivation, issues related to classroom management, time pressure, tiredness, isolation, loneliness, lack of support, and feelings of giving up, among others (Flores, 2006).

Overall Evaluations

All school districts demonstrated strengths and weaknesses in their new teacher induction and mentoring programs. Most districts demonstrated a heavy focus on mentee growth and expected teaching methods for evaluation. Very few districts addressed mentor growth very much if any. Most districts need to increase focus on creating opportunities and freedoms for interactions between the different components of the new teacher induction and mentoring programs with other sub-systems in the larger educational system.

Only District A was strong in reflecting and acknowledging most indicators of complexity. Districts B, C, and D need to develop their programs more. District E focuses so much on teacher evaluations that the complexity of the new teacher induction and mentoring programs is lost.

Suggestions for Further Research

In order to better understand how complexity is reflected and acknowledged in these five school districts, further research is needed. First, more documents should be collected and

analyzed. Documents for analysis in this study were collected from five school districts and it is possible that the documents given were not truly representative of the documents used in the school districts' new teacher induction and mentoring programs. There may be many documents missing, or there may be documents which were analyzed but which are no longer used.

Second, in order establish a more complete picture of how these five districts reflect and acknowledge complexity, more methods need to be used in studying these programs. For example, conducting interviews with mentors, mentees, district mentor specialists, and possibly even school administrators in each district will give a more complete picture of these programs. It would also be insightful to conduct observations of mentor training meetings, mentor-mentee relationships, or individual mentor and mentee teaching practices influenced by the new teacher induction and mentoring programs. Conducting further research using these methodologies would allow for a more complete picture of how each district reflects and acknowledges the complexity of new teacher induction and mentoring programs in actual practice.

Third, more research needs to be done on growth of the mentor and how new teacher induction and mentoring programs reflect and acknowledge mentor growth as an integral part of these complex systems. If there truly is as little focus on mentor growth as part of the complexity of new teacher induction and mentoring programs as was revealed in this study, research needs to call forth changes in the structure and set up of these programs in order to include growth of the mentor as an important component of these complex systems.

References

- Ashdown, J., Hummel-Rossi, B., & Tobias, R. (2006). Linking teacher induction, teacher development, and student learning. In J. R. Dangel (Ed.), *Research on teacher induction:*Teacher education yearbook XIV (p. 19-35). Lanham, MD: Rowman & Littlefield Education.
- Basile, C. (2006). From mentoring to the Colorado new educator consortium. In J. R. Dangel (Ed.), *Research on teacher induction: Teacher education yearbook XIV* (p. 5-18). Lanham, MD: Rowman & Littlefield Education.
- Bickmore, D. L. & Bickmore, S. T. (2010). A multifaceted approach to teacher induction. *Teaching and Teacher Education*, 26, 1006-1014.
- Black, S. (n.d.). *BYU-Public school partnership*. Retrieved from http://education.byu.edu/deans/psp.html
- Bratianu, C. (2007). Thinking patterns and knowledge dynamics. In B. Martins, & D. Remenyi (Eds.), *ECKM 2007 8th European conference on knowledge management*, (p. 152-156). Dublin, Ireland: Trinity College. Retrieved from http://books.google.com/books
- Bullough, R. V. (2012). Mentoring and new teacher induction in the United States: A review and analysis of current practices. *Mentoring & Tutoring: Partnership in Learning, 20*(1), 57-74.
- Davis, B., & Sumara, D. (1997). Cognition, complexity, and teacher education. *Harvard Educational Review*, 67, 105-125.
- Davis, B., & Sumara, D. (2001). Learning communities: Understanding the workplace as a complex system. *New Directions for Adult and Community Education*, *92*, 85-95.

- Davis, B., & Sumara, D. (2006). *Complexity and education: Inquiries into learning, teaching, and research*. New York, NY: Routledge.
- Davis, B., & Sumara, D. (2012). Fitting teacher education in/to/for an increasingly complex world. *Complicity: An International Journal of Complexity and Education*, *9*(1), 30-40.
- Flores, M. A. (2006). Induction and mentoring. In J. R. Dangel (Ed.), *Research on teacher induction: Teacher education yearbook XIV* (p. 37-66). Lanham, MD: Rowman & Littlefield Education.
- Frandsen, K. (2006). Reading and writing in science: How do the reform documents attend to the fundamental sense of science literacy? (Master's thesis). Retrieved from http://hdl.lib.byu.edu/1877/etd1417
- Hayes, J. L. (2006). A longitudinal study of the effects of a mentoring program on teacher performance, efficacy and retention. In J. R. Dangel (Ed.), *Research on teacher induction: Teacher education yearbook XIV* (p. 213-241). Lanham, MD: Rowman & Littlefield Education.
- Huling, L. (2006). Overview and framework of division 1. In J. R. Dangel (Ed.), Research on teacher induction: Teacher education yearbook XIV (p. 3-4). Lanham, MD: Rowman & Littlefield Education.
- Ingersoll, R., & Kralik, J.M. (2004). *The impact of mentoring on teacher retention: What the research says*. ECS Research Review, Denver, CO: Educational Commission of the States. Retrieved from http://www.ecs.org/clearinghouse/50/36/5036.htm
- Jones, R., & Brown, D. (2011). The mentoring relationship as a complex adaptive system:

 Finding a model for our experience. *Mentoring & Tutoring: Partnership in Learning*, 19, 401-418.

- Kalin, N. M., Barney, D. T., & Irwin, R. L. (2009). Complexity thinking mentorship: An emergent pedagogy of graduate research development. *Mentoring & Tutoring:*Partnership in Learning, 17, 353-367.
- Miles, M. B., & Huberman, A. M. (1994). Early steps in analysis. In R. Holland (Ed.),

 *Qualitative data analysis: An expanded sourcebook (p. 50-88). Thousand Oaks, CA:

 Sage.
- Odell, S. (2006). Overview and framework of division 3. In J. R. Dangel (Ed.), *Research on teacher induction: Teacher education yearbook XIV* (p. 203-211). Lanham, MD: Rowman & Littlefield Education.
- Resta, V. (2006). Overview and framework of division 2. In J. R. Dangel (Ed.), *Research on teacher induction: Teacher education yearbook XIV* (p. 103-106). Lanham, MD: Rowman & Littlefield Education.
- Richmond, B. (2005). Systems thinking and the STELLA software: Thinking, communicating, learning and acting more effectively in the new millennium. In *An introduction to systems thinking* (p. 3-34). Retrieved from http://www.fi.muni.cz/~xpelanek/IV109/jaro07/IST.pdf
- Utah State Office of Education, (n.d.). *Data and statistics*. Utah state office of education.

 Retrieved from http://www.schools.utah.gov/main/
- Washburn-Moses, L. (2010). Rethinking mentoring: Comparing policy and practice in special and general education. *Education Policy Analysis Archives*, 18(32), 1-22.
- Waterman, S. (2011). Using a complexity-based perspective to better understand the relationships among mentoring, school conflicts, and novice retention (Doctoral dissertation). Retrieved from ERIC EBSCOhost.

- Waterman, S., & He, Y. (2011). Effects of mentoring programs on new teacher retention: A literature review. *Mentoring & Tutoring: Partnership in Learning, 19*(2), 139-156.
- Weber, R. P. (1990). Basic content analysis (2nd ed.). Iowa City, IA: Sage.
- Wood, A. L., & Waarich-Fishman, N. (2006). Two induction models in one urban district. In J.
 R. Dangel (Ed.), *Research on teacher induction: Teacher education yearbook XIV* (p. 67-87). Lanham, MD: Rowman & Littlefield Education.
- Zeek, C. K., & Walker, C. (2006). There's nothing easy about mentoring. In J. R. Dangel (Ed.), Research on teacher induction: Teacher education yearbook XIV (p. 279-293). Lanham, MD: Rowman & Littlefield Education.

Appendix A: Summary of Complexity Indicators with Guiding Questions

The questions were designed to help with identifying aspects of the documents that are reflective and acknowledging of the complexity of the system, but also to help with identifying aspects of the documents that are contrary to supporting the complexity of the system. When a question has two parts separated by an "or," the first half of the question is to guide identification of aspects of the documents that reflect and acknowledge complexity. The second half of the question is meant to guide identification of aspects of the documents that are contrary to supporting the complexity of the system. If a question does not contain both aspects—supporting the complexity of the system and aspects that are contrary to that support—then the question should be understood to contain ideas that support the complexity of the system.

Self-organized

Some central ideas of Indicator One that may be particularly relevant to new teacher induction and mentoring activities are the ideas that decisions are made by the group, individuals within the system become interlinked and interdependent, and the group is able to come up with solutions that are greater than solutions the individuals could have come up with on their own.

Ideas to look for in new teacher induction and mentoring documents include the following: Are there indications of a shared identification, or is there a sense of isolation? Do the documents acknowledge shared leadership, or do the documents constrain mentors and new teachers to follow the decisions of a centralized leader? Do the documents point to opportunities for new teachers to become interlinked and interdependent with other teachers?

Bottom-up Emergent

Central to Indicator Two is the idea that decisions about local problems are made by the local people. The main idea to look for in new teacher induction and mentoring documents is:

Do the documents reflect or acknowledge that new teachers are an integral part of the decision-making process?

Short-range Relationships

Indicator Three emphasizes that complex systems have short-range relationships.

Information within the system is "exchanged among near neighbors, not distributed from a central hub" (p. 104). People in a complex system need to think "win-win," and "we" not "I" (p. 105). Exchanges should not be forced.

Ideas to look for in new teacher induction and mentoring documents include the following: Do mentoring documents emphasize the importance of information being exchanged by near neighbors, or is information distributed form a central hub? Do the documents suggest exchanges that are chosen by immediate neighbors, or are exchanges forced?

Scale-free networks/nested Structures

A central idea of Indicator Four is that complex systems have scale-free networks/nested structures. Each complex system has sub-complex systems, while at the same time being part of a larger complex system. There is no limiting restriction on the creation, movement, or direction of this intricate web of systems

Ideas to look for in new teacher induction and mentoring documents include the following: Are new teachers and their classrooms viewed as part of a larger web of systems, or are they viewed as an isolated system? Do the documents recognize the need for a free-flow of creation, movement, and direction within and between systems, or is the flow of information represented as unidirectional, linear, and restricted?

Ambiguously Bounded, but Organizationally Closed

The central idea of Indicator Five is that complex systems are ambiguously bounded. Since a given complex system is a smaller part of a larger complex system, and complex systems are part of one another, these systems are constantly exchanging matter or information with their contexts and with each other. The boundaries in between these systems are therefore difficult to discern, and even more difficult to define. On the other hand, complex systems are closed in the sense that they maintain internal organization throughout exchanges with other systems. These indicators suggest that although there is movement within and between systems, these systems remain organizationally stable as identities within the larger system.

Ideas to look for in new teacher induction and mentoring documents include the following: Do mentoring documents reflect or acknowledge that mentoring activities are part of a larger, complex system, or are they represented as isolated events? Is the importance of interactions with other systems such as other teachers' classrooms or other schools in the district/state acknowledged? Is the stability and unique identity of classroom and teacher systems recognized within the larger system(s)?

Structure Determined

A central idea of Indicator Seven is that it is a complex system's structure that determines how it will act and react. The response to a perturbation will be different for two systems that are seemingly the same, or even for the same system at two different times.

Ideas to look for in new teacher induction and mentoring documents include the following: Do mentoring documents indicate that there is room for context- or subsystem-relevant solutions, or do they seem to suggest a one-size-fits-all approach?

Far-from-equilibrium

Complex systems are far from equilibrium. Positive feedback for a system is when actions of the system allow for excitement and magnification of certain ideas, which in turns allows for growth and learning of the system. Negative feedback for a system is when mechanisms of the system keep actions within certain bounds so that behavior is regulated according to the rules of the system. Both positive and negative feedback are needed for a complex system.

Ideas to look for in new teacher induction and mentoring documents include the following: Do mentoring documents reflect a new teacher's freedom to develop innovative ideas, or do they appear to require strict adherence to particular methods and content suggested by the curriculum? Do mentoring documents reflect a need to balance innovation with limitations of the system?

Appendix B: Phase I of Data Analysis—Report of Language Contained in the Documents

This section reports on the language of the documents and how the language demonstrates absence or presence of the seven emergent categories. It is therefore important to understand the seven emergent categories and the language demonstrative of each, so each is discussed here.

The first category is "growth of the mentor." Language in this category has anything to do with growth of the mentor as a mentor or as a teacher. The next category is "growth of the mentee." Just as the first category, language in this category has to do with the mentee's growth as a teacher. "Roles/purposes of the mentor" is the next category and has to do with the identity, tasks, or functions of the mentor. The fourth category is the "state of being of the mentee." Language in this category has to do with skills, capacities, or special needs of the new teacher. The fifth category is "expected teaching methods for evaluation," or in other words: what are the direct or implied notions about what makes a good teacher? This category looks for language that implies that if teachers perform some action then it makes them a good teacher. In many cases this is arguable, especially if the focus of the action is not on student learning. The sixth category is "one-size-fits-all approach." Language in this category demonstrates an approach taken by the district that is prescriptive or very demanding with little room for individuality, flexibility, or personal preferences. The final category is "hoop jumping," or the idea that certain requirements are completed for the purpose of signifying the task was done instead of for the purpose of increasing student learning or teacher growth. It should be noted that in all categories I was looking for language that was either directly stated or implied.

There are many documents described below. For the purpose of analyzing and describing these documents, each document has been given a name based on a single capital letter—A, B,

C, D, or E—followed by a letter—1, 2, 3, etc. The letter corresponds to the district from which the document originates from and the number distinguishes one document in a district from another. When direct quotes are used or specific page numbers are otherwise referenced, the document name is followed by a period and the page number. For example, a quote from document B3.1 would refer to a quote from the third document in District B on page one of that document. It should be noted that the documents in Appendix C may have been renumbered or combined with other documents.

Some state-level documents are used in multiple districts. However, because these districts may use the documents differently they are usually analyzed separately in each district to get the most accurate description for each individual district. Such documents are labeled with a forward slash to indicate that the documents are the same. For example, document A1/B8 means that the same document was used in District A and District B and was numbered in each district.

A list of all of the documents and how they are categorized according to district and type of document—mentor documents mentee document, or district document—is given in Appendix C along with a brief title description of the contents of the document. Any time a document is mentioned in the list in Appendix C but not mentioned in this section, it means that the document was originally collected for analysis but was not found to pertain to new teacher induction mentoring programs.

District A Documents

District A personnel gave access to 21 documents: five mentor documents, 11 mentee documents, and five district documents. These documents were obtained and printed from the online district mentor website.

District A mentor documents. There are five documents in this set. Document A7 contains the protocol information regarding a discussion group the mentor is supposed to lead with his/her mentee and other new teachers. The purpose of this discussion group is to analyze samples of student work the mentee has collected from his/her class; analysis of the student work samples should aid the new teacher in improving his/her teaching. Document A9 contains information for the mentor about organizing a professional development day for the mentee based on the mentee's individual needs as a new teacher. Document A18 is a calendar and timeline for mentors. The online version of this document contains links to other documents for use by the mentor and mentee and which have been analyzed separately in this study. This document outlines required as well as suggested procedures, roles, and activities for the mentor. Document A21 contains information for the mentor and mentee about what should be accomplished during their first mentor-mentee meeting together. This document is mainly informational. Document A27 is a set of classroom management terms and observational charts for the mentor to discuss with and use in observing the mentee.

Growth of mentor. Of the five documents, only two address growth of the mentor.

These documents focus on the process of becoming a mentor—application for being a mentor, mentor training, mentor meetings, and end-of-year reports and self-assessments—implying that mentors need and will experience growth throughout the program. However, there are no direct statements about growth of a mentor in these documents.

Growth of mentee. Four of the five documents address growth of the mentee. These documents imply that growth of the mentee is accomplished through collaboration and interaction with mentors and other new teachers. Reflecting on his/her own work as a teacher, as well as participating in analysis of students' work, will give the mentee increased perspective

and thereby increase student learning. Language in these documents that describe growth of the mentee also include the words "goals" and "help," implying that mentees will be growing throughout the program. Document A18 implies that growth of a mentee is a process and is achieved as new teachers go through the cycle of asking questions and then planning for and creating their classroom procedures, physical set up, and lesson plans.

Roles/purposes of mentor. Four of the five documents address the roles and purposes of the mentor. These documents portray the mentor as a "coach" (A18.1), teacher of classroom management (A27), "giver of help" (A27), judge of mentee actions (A27), and facilitator of new teacher analysis groups (A7). Mentors are to help their mentees with classroom management, procedures and policies, student engagement, teacher actions, and student behavior. Mentors are to accomplish this as they apply for the program, are trained, use available resources, and plan discussions and events based on the needs of the mentee.

State of being of mentee. All five of the documents address the state of being of the mentee. These documents focus on the need to tailor mentoring activities to the individualized needs of the mentee in an emotionally safe environment. This district has SPA day: "SPA (Special Professional Activities) is a professional development day [the mentors] design to meet the special needs of [their] new teachers" (A9.1) and is to be based on the mentor's assessment of what the special needs of the new teachers are. These documents purport that the special needs of the teachers include help with the following: lesson planning, curriculum development, curriculum mapping, room set up, disclosure documents, classroom management, self-reflection, and self-assessment.

Expected teaching methods for evaluation. All five of these documents address the topic of what good teaching looks like. Good teaching is portrayed to be following teacher

standards by the district and state, following the state core curriculum, using a variety of research-based methodologies and techniques, engaging students in learning, and analyzing student data. Specific techniques are outlined and specific goals for student engagement are set.

One-size-fits-all approach. Four of these five documents are very open and flexible. There is not a one-size-fits-all approach. Examples and suggestions are given for the mentors in how to help their mentees and what the mentees might need or do. However, these documents are not prescriptive in there being one right way to do things. There is one document that takes a slightly one-size-fits-all approach—document A21. This document does not take into account what the new teacher may be interested in, informs the new teachers that there are certain posters that have already been put up in their rooms, and seems to be saying in essence, "Here is what we are going to do first no matter what."

Hoop jumping. None of the five documents have hoops for the mentors or the mentees to jump through, except in the sense that there are certain requirements and activities that are to be done as part of the program. These documents are set up with certain goals—such as improving classroom management for the mentee—but the pathways to achieve those goals are flexible. Even though there are certain requirements that are part of the new teacher induction and mentoring programs, the documents are very flexible in how those requirements are to be met. For example, document A9 contains the protocol, ideas, and report for a professional development day the mentors in the school are supposed to organize for their mentees. However, this professional development day is not required and the entire protocol for this day is structured as a flexible means of meeting the various needs of the mentee as assessed by the mentor.

District A mentee documents. There are 11 documents in this set for use by the mentee. The majority of these documents are meant to be used by the mentee in preparing for his/her first year of teaching. Therefore, this set of documents contains several lesson-planning templates, checklists for tasks to complete in preparation for teaching, and information about best practices. Documents A2, A3, and A4 are lesson planning templates for use by the mentee. Document A5 is formatted as a letter to a new teacher about what the experienced teacher wished to have known during their first years of teaching. Document A8 is an informational packet about special education terminology and contains specific information for teaching students with special needs and conditions. Documents A10, A11, A14 contain checklists for the new teacher in preparing his/her room and getting ready for the school year. Document A13 is a worksheet for the mentee to fill out and then discuss with his/her mentor regarding classroom procedures. Document A23 is an informational packet about nine instructional practices that teachers should utilize in their teaching methodology. Document A24 is intended to guide new secondary teachers in creating disclosure documents for their class.

Growth of mentor. Only one of the 11 mentee documents in District A, document A5, addresses growth of the mentor. This document is formatted in the style of a letter to new teachers from an experienced teacher. This letter acknowledges what the new teacher may be going through, what the new teacher can expect, and is a reassuring, suggesting-giving letter. Through the language of this letter, it is implied that the writer of the letter—an experienced teacher who could perhaps be the mentor—has been in the shoes of the new teacher but has grown through experience over the years.

Growth of mentee. Four of the 11 documents address growth of the mentee. These documents suggest that mentee growth occurs through asking questions, being reflective, letting

other teachers help in a variety of ways, and working with a mentor. Document A3 is a weekly lesson planning template and suggests that mentees will improve their practice through learning how to create well-designed lessons. Document A3 instructs teachers to use a variety of teaching techniques so they can "enhance lesson design," implying that use of these techniques will increase growth over time through experience (A3.1).

Roles/purposes of mentor. Six of the 11 mentee documents in District A address the roles and purposes of the mentor. There are a variety of roles present in these six documents. First, these documents explain to the mentee that the mentor will be giving them helpful materials and curriculum examples such as examples of disclosure documents, examples of assignments, and examples of get-to-know-you activities for the first of the year (A11). In addition, the mentor will be a classroom management teacher to the mentee, teaching the mentee basic classroom procedure principles (A13).

Also, the mentor is to function as a supervisor, ensuring that the mentee has accomplished certain tasks such as room set up, rules and policies established, disclosure document completed, readiness for first day of teaching, curriculum planning, school tour completed, introductions to personnel, etc. (A10). Document A14 emphasizes the importance of the mentor helping the mentee to debrief after each day of school during the entire first week of the school year. Document A14 also emphasizes the role of the mentor as someone the mentee can get assistance from at any time, as shown through the statement, "Call or email your mentor with any questions...yes, even if it's over the weekend" (A14.3). It is apparent from these documents that the mentor functions in several roles and is to be a help, support, and resource for the new teachers.

State of being of mentee. All of the 11 mentee documents imply or address the state of being of the mentee. These documents portray the beginning teacher as someone who is capable, naturally reflective and asking questions, but self-centered instead of being student-centered (A5). These teachers have several needs such as creating lesson plans, implementing instructional methods and techniques, and implementing classroom procedures (A2, A4, A8, A10, A11, A13, A23). The structure and type of documents given to the mentees implies that the mentees are in need of checklists and informational packets to help them address the many aspects of teaching that are new and often overwhelming to them. Document A14 uses the phrase "You'll be surprised" more than three times, suggesting that new teachers are not able to anticipate all that is encompassed in the act of teaching.

Expected teaching methods for evaluation. All 11 mentee documents explicitly or implicitly address expected teaching methods of the new teachers. Three of the documents are lesson planning templates, implying that good teaching comes from having well-developed lesson plans (A2, A3, A4). Documents A10, A11, A13, and A14 imply that good teaching is accomplished through having classroom management techniques and procedures, classroom set up, and organization. Teachers need to follow best practices of teaching and ensure that the special needs of new teachers are met (A8, A23). Good teaching is also achieved when teachers collaborate, share ideas, and coordinate lessons (A5).

Document A24 describes the basics for creating disclosure documents. Through its language, this document emphasizes that good teaching is demonstrated when teachers "demonstrate a love for [their] subject and excitement about the coming year," "express the attitude and belief that [they] want all students to succeed," "appear approachable and friendly

without being unprofessionally committed to 'working cheap,'" and "appear caring and fair" (A24.1).

One-size-fits-all approach. Seven of the 11 mentee documents in District A utilize a flexible approach to teaching instead of a one-size-fits-all approach (A5, A8, A10, A11, A13, A14, A24). These documents give the mentee suggestions and ideas without being prescriptive. Language in these documents demonstrates the opportunity for mentees to take the documents and use them in a way that works for them. For example, document A11 instructs mentees to "Look over the examples I've included," and to "Draft your own disclosure so we can go over it together and solidify your final. There may be changes, but having it already in working form will make your life easier come August" (A11.1-2). This document clearly gives the mentee the freedom to plan and create according to what they think is best.

Three of the mentee documents are lesson planning templates (A2, A3, A4). These documents give somewhat of a one-size-fits-all approach by implying that certain elements must be certain for every lesson plan. However, the fact that there are three different templates suggests that though there are certain items to include in lesson plans, the way the plan is created can be flexible as seen fit by the mentee.

One document was very prescriptive and had a definite one-size-fits-all approach (A23). This document is a very technical description of nine best practices of instruction that are to be utilized for every lesson. This document states that, "Evidence of all elements must be present during instruction in order to be considered standards-based instruction" (A23.1). It is apparent from this document that these teaching techniques are to be employed by all teachers regardless of individual differences in teaching style, classroom dynamics, or subject taught.

Hoop jumping. Seven of the 11 documents are clearly created to be informational, helpful, and a resource (A2, A4, A5, A8, A10, A11, A13). Though requirements are given, these documents present the requirements as methods for achieving the desired goals of the new teacher induction and mentoring programs.

Three documents imply that there are hoops to jump through (A3, A14, A24). Document A14 gives details for creating disclosure documents and states that if they do not have a textbook to use for the class, they should "make up one if necessary for this assignment" (A14.1). Since it is impossible to determine exactly how this document is used, it cannot be completely determined if this is a hoop to jump through or not. However, it appears that this document is only a suggestion and is not an assignment that mentees are required to do, in which case this document is not creating a hoop to jump through.

Document A3 states that mentees are to check off their lesson plans with their mentor every week. This could quickly become a hoop to jump through if approached as such by the mentor and/or mentee. However, since it is not clear for how many weeks this should be done, it could also be used as a tool for development and then abandoned once the new teacher has a sound experience base in creating lesson plans. It would therefore not be a hoop to jump through but a tool for development.

One document (A23) has the potential for being a hoop jumping document. This document gives technical detail about nine best practices for teachers to implement. As stated in the category above, this document states that evidence of these best practices must be present in order to be considered good teaching. Because of the cold, technical language used in this document with little flexibility in its contents, it has the potential to be seen as something teachers have to do just to make sure they are getting high marks on their evaluations.

District A district documents. There are five documents in this set. Document A1 contains the state standards for mentors. As far as is known, District A is one of only two districts that utilizes this documents from the state. The document will be analyzed here as well as in District B where it is also used. Document A15 is a set of documents—originally labeled A15, A22, A26 and now compiled into A15—containing the applications for a teacher to become a mentor as well as the principal's recommendation for the applying teacher. Document A16 is the mentor program philosophy for District A and contains the epistemological beliefs supporting the mentor program in this district. Document A17 contains the information about District A's professional teacher standards. This document is similar to the state professional teacher standards but is altered to meet the desires of District A. Document A19 is a report form for mentors to fill out at the end of the year concerning how the mentoring program went that year.

Growth of mentor. Four of the five mentor documents used on the district level address mentor growth (A1, A16, A17, A19). Document A17 contains the district standards of professional teachers that are to be used for all teachers throughout the district. This document contains a continuum for indicating current levels of teacher performance according to certain criteria and indicates room for growth. It is implied that because mentors are teachers in this district, they should grow in their own development of these professional teacher standards.

Document A1 is similar to A17, but instead of being a continuum of growth for all teachers, it is a continuum specifically designed for mentors. This document states that the purpose of these mentor standards is to "provide a common language and vision of the scope and complexity of mentoring by which all EYE mentors can define and develop their practice" (A1.1). The continuum is used in order to provide "a framework for growth toward mastery"

(A1.4). The language of this document shows that much thought has been put into mentor growth:

The five standards are designed to be used by mentors to: focus on their own professional learning and development; set professional goals to improve mentoring relationships; prompt reflection on mentoring, teaching, and learning practices; plan ongoing professional learning opportunities for mentors; and guide mentor growth. (A1.1) It is apparent that mentor growth is an integral part of the new teacher induction and mentoring programs.

It is implied that mentor growth also comes from reflecting on his/her experiences as a mentor and that mentor growth comes through professional dialogue among mentors (A16, A19). Mentor growth ultimately affects teaching practices and student learning (A1, A19).

Growth of mentee. Two of the five documents address growth of the mentee (A16, A17). The district professional teaching standards for all teachers imply that because they are one of all practicing teachers, new teachers will grow throughout their experiences and improve their teaching practice (A17). The explanation regarding the continuum used in this document states that,

A teacher may be at the basic or emerging levels in some places on the Continuum and at the master level in others, regardless of the number of years he/she has been in the profession. Because a teacher's growth is developmental, he/she may return to an earlier classification temporarily if there are changes in the teacher's career, such as new course content, grade level, school, or student demographics. (A17.3)

Creating individual goals is also an aspect of this document that implies growth for the mentor.

Growth of the mentee is implied to come from being a reflective teacher (A17) and through engaging in the following: the process of solving problems and considering solutions with a mentor, participating in Professional Learning Communities, strengthening curriculum and classroom management, and through learning the "the culture and skills of teaching" (A16). Mentee growth is in the following areas: classroom environment, curriculum planning, student engagement and learning for a variety of students, teacher professionalism, and creating student-centered classrooms (A16, A17).

Roles/purposes of mentor. Four of the five district documents address the roles and purposes of the mentor (A1, A15, A16, A19). The only document that does not address these roles is the document that is geared towards the professional development of all teachers and is used as an evaluative tool by administrators (A17). Document A1 implies that mentors should be reflective, defining and developing their own practice as teachers, and that mentors are to:

[develop] positive relationships and networks which support the beginning teacher in the learning community; [articulate] and [model] best practices in content and pedagogy; [respond] to the unique and diverse needs of the beginning teacher; [consult], collaborate, and [coach] to promote reflective practice; and to [guide] development of the beginning teacher's professionalism and ethical standards. (A1.3)

These mentors are expected to give of their time to help the mentees, attend trainings and meetings, and conduct observations of the mentee (A15, A16, A19).

This district recognizes that the role of a mentor is important and has great depth. The following is a good summary of the philosophy of this district regarding the role of mentors:

Mentors are more than sympathetic friends. Everyone needs a sounding board now and then, but new teachers also need practical advice and professional guidance. [District]

mentors assist new teachers in all aspects of the [District] Standards of Effective

Teaching....[District] mentors do more than help protégés survive in classrooms and
learn the culture of the school setting. They help new teachers create a student-centered
classroom and improve in their ability to engage students in learning. Mentors also guide
protégés in effective teaching practices and a variety of strategies to meet the needs of
diverse learners....[District] mentors help protégés become more thoughtful about their
work. The mentor offers a safe place to discuss successes and failures, openly examine
instructional practices, solve problems, consider new ideas, actively share experiences,
and seek feedback.

Research shows that mentoring is a pro-active responsibility that requires extra time, effort, and commitment. Literature about effective mentoring programs often includes lists of mentor responsibilities, and these lists usually begin with active verbs: help, assist, facilitate, guide, demonstrate, observe, develop, support, explain, etc. As such, the [District] Mentor Program is designed to establish an active and pro-active role for mentors. (A16.1-2)

The role of the mentor in this district is extensive. Mentors fill many roles as they seek to help new teachers grow and develop.

State of being of mentee. Three of the five district documents address the state of being of the mentee (A1, A16, A17). These documents portray mentees as having a basic knowledge of teaching, good technology skills, and a readiness to begin teaching (A17, A16). These teachers are already professionals and reflective to some degree (A17). Though ready to begin teaching, these teachers have needs such as advice, support, and knowledge about the many aspects of teaching (A1, A16, A17).

Expected teaching methods for evaluation. Four of the five district documents address techniques that define good teaching (A1, A15, A16, A17). The foundation for good teaching is the district professional teaching standards, document A17. It is implied that good teaching is moving from being a basic level teacher to a master teacher, constantly improving one's teaching practice (A1, A17). Good teaching is being a reflective teacher, engaging students, creating student-centered classrooms, and developing curriculum according to research-based practices (A15, A16).

One-size-fits-all approach. None of the five documents promote a one-size-fits-all approach. On the contrary, these documents portray the concepts that all teachers are at different levels in their individual development and that all can improve their teaching regardless of where they currently are positioned on the continuum of development. The professional teacher standards are meant to be a framework for helping growth and good teaching to happen.

Hoop jumping. Three of the five documents present any new teacher induction and mentor program requirements as methods for achieving goals, not for jumping through hoops (A1, A16, A17). These documents are guides and frameworks for the program to guide the mentors and the mentees. However, all of these documents present ideas that could be treated as hoops if the purpose becomes to simply complete a task instead of promote growth and learning.

Document A19 feels like a hoop to jump through since it is a required document but has little depth of meaning. This document is a mentor end-of-year report and asks the mentors to reflect on their growth. However, because the report is very shallow, it feels like a task to accomplish just so someone at the district can record that it was done.

District B Documents

District B personnel gave access to 10 documents: two mentor documents, one mentee document, and seven district documents. These documents were obtained and printed from the online district website.

District B mentor documents. There are only two documents in this set. One of them is an evaluation form and the other is an observation form. It is apparent that these forms are for use by the principal in conducting evaluation, but it is unclear if the forms are also used by the mentor. However, it seems plausible that the mentors probably use these forms in helping their mentee prepare for the evaluation by the principal.

Growth of mentor. Neither of the two District B mentor documents contains information about growth of the mentor.

Growth of mentee. Both of these documents address growth of the mentee. Document B2 is an evaluation form, probably used by the principal in addition to being used by the mentor, and uses a continuum similar to a Likert scale and also similar to the continuum used by District A. In this district, teachers are evaluated on 14 teaching techniques and are ranked on a scale of one to five, five being the highest score. However, this document is formatted with the five placed on the left and the one placed on the right. This makes the document feel slightly stifling because it gives the impression that any score less than a five on any of the indicators is unacceptable. So although this document does contain a continuum to indicate growth of the mentee, it is presented in such a way that pressure is put on teachers to be at the highest level.

Document B3 is an observation form and is not very self-explanatory, but it appears to be for observing any teacher, new or experienced. It also appears that the observer is supposed to check off with a yes or no whether or not they observed each of the 14 techniques described

above. This implies that teachers either have the technique present or they do not. There is no indication that teachers might be at different developmental levels in the employment of certain techniques. Therefore this document is a negative example of demonstrating growth of the mentee

Roles/purposes of mentor. Both documents address the roles and purposes of the mentee. Both of these documents appear to be used by the principal for evaluation and it is unclear if these tools are also used by the mentor, though it seems plausible they are. If these documents are indeed used by the mentor, then they both place the mentor in the role of evaluator. This is a negative example of the role of a mentor. Both of these documents also feel cold and formal instead of encouraging mentee growth.

State of being of mentee. Neither of the two documents directly addresses the state of being of the mentee. However, as mentioned above, both forms imply that the highest level of development is expected from the teacher and the document therefore feels unforgiving of imperfection which is the state of being of any mentee.

Expected teaching methods for evaluation. Both of these documents address the expected teaching methods of new teachers. Since both B2 and B3 are evaluation and observation forms of teaching techniques, it is explicitly stated that these techniques are needed for good teaching. It is implied that good teaching is doing all 14 of these techniques at the highest level. However, it is not explained in the documents what these 14 techniques are, how they should be done, or what they should look like in the classroom. But any teacher receiving a low score of one or two will be recommended for termination if those scores aren't corrected by the next evaluation. So there are high stakes attached to the evaluation, but with vague, non-descript expectations.

It should be noted that document B5 is the Educator Evaluation Senate Bill 159 and contains information about these 14 teaching techniques and gives a continuum for evaluating them. However, documents B2 and B3 do not appear to use the same continuum.

One-size-fits-all approach. Both of these documents contain a very high degree of the one-size-fits-all approach. The language in the documents is very prescriptive with high stakes, while at the same time being very vague. There is little to no room for individual differences in the teacher's developmental levels.

Hoop jumping. Both of these documents contain language and formatting that have the appearance of jumping through hoops. As mentioned previously, there is strong focus on passing with high scores, but little evidence that the teacher can be at different developmental levels. This gives the feeling that the purpose of the evaluation is simply to pass the evaluation instead of the focus being on teacher development or student learning. Document B3 is designed with each of the 14 teaching techniques in a separate box with space for comments. In the corner of the box there is a circle with the apparent purpose of checking off if the technique is present or not. Not only is this an implied hoop to jump through, it is also a physical hoop to check off. Indicating that the technique is present or not leaves no room for different levels of development, and therefore gives the implication that it is a hoop to jump through.

District B mentee documents. There is only one document in this set, document B1. It is an informative piece for mentees about the new teacher induction program and is very brief.

Because it is such a short document and is the only document specifically for the mentee it is not possible to draw very much data.

Growth of mentor. This document does not address mentor growth.

Growth of mentee. This document does address mentee growth. It states that the purpose of the new teacher induction program is to "to help [new teachers] hone their teaching practice for more effective student learning. And effective learning creates opportunities for our students to be college and career-ready" (B1.1). This statement indicates not only that teachers can grow and strengthen the skills they already have, but the idea is made explicit that teacher growth affects student learning.

Roles/purposes of mentor. This document does not address the roles and purposes of the mentor

State of being of mentee. This document addresses the state of being of the mentor by directly stating that "Supporting teachers in their first years in the profession is important in [the District B] school district" (B1.1), implying that the state of new teachers is that they are in need of support. As explained above, the phrase "help [new teachers] hone their teaching practice for more effective student learning" (B1.1) suggests mentee growth. The use of the word "hone" in this phrase also suggests that new teachers come with certain skills that need to be made stronger and will be through this program.

Expected teaching methods for evaluation. This document states that this district's new teacher induction and mentoring program is based on the state Professional Teacher Standards. Making this statement on such a short document shows that these standards are what make a good teacher.

One-size-fits-all approach. This document does not use a one-size-fits-all approach.

Hoop jumping. This document does not present information or duties that appear to be prescriptive or for the purpose of checking of a completed task.

District B district documents. There are seven documents in this set (B4, B5, B7, B8, B10, B11, B12). Document B4 is a set of evaluation forms used by students to evaluate their teacher. There are four forms to be used by different grade levels of students. These forms ask a variety of questions with slightly different questions for each form depending on the grade levels of the students completing the evaluations. All of the forms, except the form for the youngest grades, contain a four-part Likert scale for each evaluation question. The youngest grades form contains a three-part Likert scale in the form of different types of smiley faces. Document B5 is the Educator Evaluation Senate Bill 159 with the legal definitions and requirements for educator evaluations. Document B7 is a form for district personnel to complete verifying that a given teacher has completed the requirements to upgrade from a Level I license to a Level II license. Document B8 is the same state EYE Mentor standards document used by District A and will be discussed as it relates to District B. Document B10 is the Entry Years Enhancement (EYE) packet used by the state for the new teacher induction program. Document B11 is the one-page handout of the state Professional Teacher Standards and outlines the five different categories of teacher behavior desired. Document B12 is the state Professional Teacher Standards and Continuum of Teacher Development. This document goes into great detail of the five professional teacher standards and how to use the continuum. This document is similar to the simplified version used by District A.

Growth of mentor. Three of the seven District B district documents address growth of the mentor (B8, B11, B12). As discussed in District A, document A1/B8 is the state EYE Mentor Standards. This document is a continuum for assessing mentor performance according to the five standards for mentor performance and contains language specifically geared towards mentor growth and development. The continuum is used in order to provide the mentor "a

framework for growth toward mastery" (B8.4) as they increase their own professional development, set goals, reflect, and engage in mentoring activities with their mentee. This document further purports that mentor growth affects teaching practices and student learning (B8).

Document B11 is the state Professional Teacher Standards and alludes to the idea of mentor growth only in the sense that mentors are included in the realm of all teachers, whom this document is designed to evaluate and help grow. The continuum is not present in this document, so growth is less implied than otherwise. Document B12 implies that teachers improve their own effectiveness as they seek to reach out and help other teachers. Since reaching out to other teachers is the main focus of mentor behavior, mentor growth is implied.

Growth of mentee. Five of the seven documents address growth of the mentee (B5, B7, B10, B11, B12). These documents address mentee growth inasmuch as mentees are teachers for whom the professional teacher standards apply (B10, B11, B12). Document B5, the educator evaluation bill, states that teacher growth should be promoted through the process of teacher evaluations: "Teacher evaluation should promote the professional growth of the teacher by identifying and reinforcing strengths and establishing goals for improvement. Teacher evaluation will provide assistance for those whose performance is marginal or ineffective" (B5.5). It is implied that teachers will grow through participating in the new teacher induction and mentoring programs and through creating a portfolio of their work and reflections in those programs (B7, B10).

Roles/purposes of mentor. Three of the seven District B district documents address the roles and purposes of the mentor (B7, B8, B10). These documents contain the expectation that mentors be trained (B7, B10) and that mentors should work with mentees for three years (B7).

Mentors should be reflective and continually seeking to increase their development in their own practice as a teacher (B8). Mentors should use the mentor professional standards to guide and develop their work as a mentor (B8).

State of being of mentee. Six of the seven district documents address the state of being of the mentee (B4, B7, B8, B10, B11, B12). These documents portray the mentee as someone who is on a basic, yet individual, level of teacher development (B10, B11, B12) but also in need of support (B8). These beginning teachers should be able to complete basic coursework and paperwork for licensure upgrades (B7) and should be teachers who are friendly, knowledgeable, courteous, polite, fair, patient, observant of student performance, like students, like to teach, want the best for students, have student expectations, have respect of the students, are encouraging of students, are prepared for class, and are able to move students to higher learning (B4).

Expected teaching methods for evaluation. All seven of these documents address expected teaching methods. Five of these documents focus on teacher professional standards, either from the state, from the senate bill, or from the standards for mentor growth (B5, B8, B10, B11, B12). It is therefore implied that teaching according to these standards is what makes one a good teacher. Document B7 is a verification form that the mentee is ready to upgrade to a Level II license and is therefore suggesting that being a good teacher is meeting the coursework and paperwork requirements. Document B4, the teacher evaluation forms, implies that good teaching is seen when teachers are knowledgeable and prepared, have expectations for student performance, have positive inter-personal skills, treat students fairly and politely, and when student learning takes place. This document also suggests that an element of being a good teacher is if the student wants their sibling to have the same teacher.

One-size-fits-all approach. Two of the seven documents have a slight one-size-fits-all approach (B4, B7). Document B4, the teacher evaluation forms, implies that the teaching qualities and characteristics present in the forms are what will work for all teachers and what should be employed for student learning to take place. However, the language in this document does allow for flexibility in how those teaching techniques are carried out; it is not prescriptive in its approach of teaching techniques, only in the sense that the technique should be present.

Document B7, the verification for licensure upgrade, implies that the new teacher induction program is the right pathway to becoming a qualified teacher and that by checking off the requirements of the program one is declared a suitable teacher. There is some flexibility for teachers who are taking an alternate route to licensure, but most of the elements for upgrade remain the same.

Hoop jumping. Three of the documents do not contain hoop jumping elements and four of the documents do. Documents B4, B8, and B11 contain language indicating that these documents are meant to be used as guides and frameworks for teacher development and increasing teacher performance of the professional teacher standards. There is the possibility of any of these documents to become construed as a hoop if handled improperly by district personnel or mentors. Because document B4, the evaluation forms, are completed by the students, it is even less likely to be treated as a hoop to jump through; the results of these forms will come from what the students really think and feel about their teacher and the education they are receiving. It is possible that teachers could hand out the forms to the students with a hoop jumping attitude, but even then, it is likely that the students will approach the form sincerely.

Four documents contain hoop jumping language and implications. Document B5, the evaluation senate bill, requires that teacher evaluations be completed and it is prescriptive in how

that should happen. This document also presents the information backing up the need for teacher evaluations and uses positive language to prescribe how it should be done. The districts' approaches to implementing this bill will determine how much of a hoop it is compared to how it is used as a tool for documenting teacher growth and development. Document B7, the verification for upgrading from a Level II to a Level II license, feels like a hoop since it implies that the requirements on the form are what indicate good teaching without actually being tied to teacher development or student learning. Such an approach with the wrong focus makes it feel like a hoop. Document B10, the state Entry Years Enhancement program packet, definitely feels like a hoop because the document is entirely prescriptive with little to no information about why the program will help teachers or students. All we get from the document is that teachers have to do this program. Document B12, the state professional standards with continuum, feels a little like a hoop to jump through because it is more technical, long, and has a large number of rubric pages. Such dense writing and formatting makes the document feel cold, impersonal, and like a task that has to be accomplished because that is what someone else is requiring.

District C Documents

District C personnel gave access to two large documents: one mentor document, no mentee documents, and one large district document. These documents were obtained and printed from the online district website.

District C mentor documents. There is one set of documents for this district for mentors to use. Document C5 is a set of evaluation papers used by the major western university to evaluate student teachers. It appears that District C uses this document for their mentors to evaluate their interns. It is unknown how or if this document is used with mentees, but it is assumed that it is.

Growth of mentor. This document does not address growth of the mentor.

Growth of mentee. This document does address growth of the mentee in several ways. First, the document contains a continuum to indicate current performance of the teacher, also implying that growth is possible and expected over time. Second, this document contains language indicating that the purpose of these evaluation forms is to document teacher growth: "A cumulative record of each candidate's performance will be maintained to document the growth of the candidate over time in his/her field experiences" (C5.3). Third, this document uses positive language from Bloom's taxonomy to indicate that the new teacher can grow in teaching practices. Language in the document includes words such as "understand," "use," "create," and "provide." This language indicates that there are several different levels of teaching expertise a teacher may have, but that they can also increase from lower levels of performance in Bloom's taxonomy to higher levels. Also, language such as "shows progress," "meets," and "solid mastery" implies that growth is possible and expected.

This document also uses a continuum from one to five, five being the highest score. Like document B2, document C5 places the five on the left and the one on the right of the scale. However, unlike the continuum used by document B2, this document does not feel stifling of teacher growth because the formatting of the document is more positive—the focus of the evaluation is the observed performance of the teacher instead of the score on the continuum. Additionally, the language of this document is overall very supportive of teacher growth, so it does not feel stifling of teacher development.

Roles/purposes of mentor. This document implicitly addresses the role of the mentor. Since this is a university evaluation tool, it appears that using it in the public school district new teacher induction and mentoring program places the mentor in the role of evaluator. The

document does state that "Evaluators have been trained on the INTASC Standards and have reached a consensus of expectation for candidates on each standard to increase consistency in the evaluations" (C5.3). However, it is uncertain and quite plausible that the same training and consensus does not happen for the district mentors.

State of being of mentee. This document implies that the new teacher is at a basic level of understanding and can perform certain tasks accordingly, especially regarding performance according to Bloom's taxonomy. The language of the document does imply that new teachers are capable of performing quite high on Bloom's taxonomy, as indicated by language such as "create." This document is the same form that is used for the university student teachers and interns, implying that new teachers can be evaluated the same way a student teacher is evaluated. Such assumptions could have very interesting implications.

Expected teaching methods for evaluation. This document is designed to evaluate new teachers based on the national INTASC standards and therefore contains lots of language and implications about good teaching methods. The document is not strict and prescriptive, however, in its focus on good teaching methods. On the contrary, the language in this document is positive and is meant to be used as a guideline for teacher development. Words such as "appropriate," "addresses," "differentiates," "connects," "models," "supports," and "accepts and uses feedback," suggest that there are a variety of ways to satisfactorily meet the standards.

One-size-fits-all approach. This document does not use a one-size-fits-all approach. As mentioned above, the language of the document is supportive of multiple pathways to achieving the same goal and is a flexible guideline for teacher practice and development.

Hoop jumping. This document does not contain language representative of hoop jumping. The evaluations are required, but give so much flexibility and support to new teachers

that the approach is to use these evaluations as a tool for improvement of teacher practice instead of as a hoop to jump through. Of course, there is a possibility that it could be treated as a hoop to jump through if mentors approach it as such instead of approaching it as a tool for mentee development and growth.

District C mentee documents. District C does not contain any documents designed specifically for the mentee. Document C1 is a packet that the new teacher is to read, but this document is discussed in the district document section below since it applies to all teachers.

District C district documents. Document C1 is the only district document for District C. It is a 66-page document that goes into detail about all of the requirements for a teacher development portfolio, presumably used during the new teacher induction program.

Growth of mentor. This document does not contain language explicitly or implicitly addressing mentor growth.

Growth of mentee. This document does address growth of the mentee. Teacher are to "set goals for improving student achievement based on appropriate performance measures...set goals for improving the quality of their teaching" (C1.3) and set goals with their department.

Such a strong emphasis on goal setting with the objectives of increasing student learning and teacher quality is a positive indicator for mentee growth. Achievement of goals and subsequent growth should be shown through documentation. For achievement of student learning goals samples of student work and assessments should be included in the portfolio. For achievement of teacher development goals documentation could include a professional development log, examples of curriculum development, proof of Utah State Office of Education (USOE) credits obtained, etc.

Evaluations are also part of the portfolio requirements in this district and are based on the 14 legislative professional teacher standards. This district created a continuum using the letters in TEACH, with T being the highest. This continuum is presented positively in format and language to indicate that teachers can and should grow in these 14 standards and that they can be at different levels for the different techniques.

Roles/purposes of mentor. The only way this document addresses the role of the mentor is by stating in the state EYE section of the document that mentees must go through the three-year new teacher induction and mentoring programs.

State of being of mentee. This entire document does not address the state of being of the new teacher. The focus of the document does include growth of teachers, but focuses mainly on the requirements for developing that growth and documenting it.

Expected teaching methods for evaluation. The only indications this document gives for what good teaching looks like is the use of the 14 state professional teacher standards and the language used to describe these. The language is positive and is formatted with suggestions of what indicators to look for in the observation/evaluation that demonstrate the specific technique.

One-size-fits-all approach. This document is structured as a one-size-fits-all approach in the sense that it is a requirement to go through the new teacher induction and mentoring programs and complete the portfolio goals and evaluations. But there is a sense of flexibility in how these requirements can be completed, so in that sense it is not a one-size-fits-all approach.

Hoop jumping. The intent of this document is for it to be used for teacher growth and not a hoop to jump through. The document states,

Required teacher evaluations sometimes appear to be removed from learning, and can be intimidating. However, done correctly, evaluations can be an opportunity to help

teachers improve their craft and impact student learning. Effective evaluations inform administrators and the teacher of what he or she is doing well, and where that teacher can improve. (C1.12)

This is an excellent example of language that emphasizes the importance of using these tools to focus on improving teacher practice and student learning instead of approaching them as hoops to jump through. How this document is actually utilized will depend on whether or not it is treated as a hoop.

District D Documents

District D personnel gave access to four documents: two mentor documents, no mentee documents, and two district documents. These documents were obtained and copied from a district mentor binder.

District D mentor documents. This district has two mentor documents (D1, D4).

Document D1 is a compilation of documents from the binder given to mentors in this district. It contains several checklists of items the mentor should discuss with the mentee as well as a great deal of material intended to help new teachers get started. Because these documents are given to the mentor to use with the mentee, they are included in this section. Note that there are no other specific mentee documents used by this district. Document D4 is a short formative assessment tool. It appears that this tool is to be used by the mentor to record collaborative meetings between the mentor and mentee.

Growth of mentor. Document D1 addresses growth of the mentor but document D4 does not. Document D1 states that the attributes of an effective mentor are teachers who "stretch themselves professionally and encourage others to do the same" (D1.39) and who "encourage and participate in reflection" (D1.39). As discussed in this district's section on the state of being

of the mentee, mentor reflection is encouraged and it is implied that by using reflection the mentor will better be able to address the needs of the mentee and thereby increase his/her own growth and performance as a mentor.

Growth of mentee. Document D1 addresses mentee growth but document D4 does not.

Document D1 states that "Your first year will probably seem the hardest because you must create your lesson plans from scratch" (D1.10), implying that growth comes with experience. New teachers are encouraged to develop "confidentiality" and "professionalism" (D1.38), implying growth in these areas. This document also contains a basic continuum using three categories—consistently, sometimes, seldom—implying that new teacher growth occurs through using the results of self-assessments and formal evaluations to identify current performance and move towards a higher performance level.

Roles/purposes of mentor. Both of the mentor documents in District D address the roles and purposes of the mentor. Document D4 implies that the role of the mentor is to engage in collaborative discussions with the mentee to focus on what is working well and what the new teacher needs to improve. Since a majority of the content in document D1 are materials for helping new teachers get started and checklists for items to discuss with the mentee, it is implied that the roles and purposes of the mentor are to inform the mentee and give material helps.

State of being of mentee. Document D4 does not address the state of being of the mentee, but document D1 contains a lot of language addressing this topic. As alluded to in the section on mentor growth, this document emphasizes the importance of reflecting on the mentor's own experiences as a teacher as a way to help the mentor identify the needs of the new teacher. This is shown by the statement, "One of the most important thing [sic] that mentor teachers can do is reflect back of their first years of teaching" (D1.40). When mentor teachers

reflect on their own first years of teaching, they should be able to identify what their needs were as a new teacher and thereby address the needs of their current mentee. This document alludes to, but does not directly cite, a study conducted in Texas in which the following were identified as the most prevalent needs of new teachers: feelings of being overwhelmed, classroom management, learning the culture of the school and district, and lesson planning (D1.40).

Document D1 also either directly states or implies the following as the state of being of the new teacher: in survival mode and at the same level of development as a student teacher. This document either directly states or implies the following as the needs of the new teacher: help with curriculum, policies, procedures, classroom rules and organization, using time efficiently, understanding students, reflecting, teaching methods, and how to praise students. Mentees are also in need of having their own successes celebrated and need to be given additional tips for success.

Expected teaching methods for evaluation. Document D4 addresses expected teaching methods by including on the discussion form the list of professional teacher standards. This implies that when working with the mentor, the mentor and mentee should focus on these standards.

Document D1 addresses expected teaching methods by directly or implicitly identifying the following teaching techniques: following policies, procedures, and routines; classroom setup; organization; social expectations; age/grade-appropriate lessons; use of instructional activities; developing a sense of community; reinforcing students' social skills; conduct democratic-style class meetings; teaching anger management and negotiation skills; and self-reflection. Lesson planning templates are included as are the INTASC standards (D1.33, D1.41-44).

One-size-fits-all approach. Neither of these documents uses a one-size-fits-all approach. On the contrary, both documents allow for individuality and flexibility and contain language and materials that are meant to be used as needed by the mentee.

Hoop jumping. Neither of these documents approaches the standards or materials as hoops to jump through. On the contrary, even when checklists are included, they are formatted with extra boxes for the mentor/mentee to build their own items for discussion and base the discussion topics on their own needs.

District D mentee documents. District D does not contain any documents designed specifically for the mentee. Document D1 is a compilation of materials the mentor can share with the mentee, but since it is included in the mentor document it was discussed in that section.

District D district documents. District D contains two documents for the district (D2, D3). Document D3 is the state EYE packet and was discussed in detail with the District B documents as document B10. It will be discussed with this district's documents as it pertains to this document. Document D2 is an outline for a mentor training meeting and contains a handout. This is a two-page document.

Growth of mentor. Neither of these documents addresses growth of the mentor.

Growth of mentee. Both of these documents address growth of the mentee. Document D2 outlines that the stages of teacher development will be discussed during the mentor training meeting, implying that mentees will be going through different stages of development and the mentors need to be aware of these in order to help the mentee through them. Document D3 contains very little language about mentee growth but does state that, "The EYE portfolio is a record of the Level I educator's growth, represented through artifacts and reflections" (D3.4).

Roles/purposes of mentor. Both of these documents address the roles and purposes of the mentor. Document D2 outlines that the mentor will be responsible for reporting logs online and for teaching best practices and the Big 8—instructional techniques—to the mentee.

Document D3 identifies the mentor as a trained resource for the mentee.

State of being of mentee. Both documents address the state of being of the mentee.

Document D2 outlines that mentors will be trained in what new teachers want to know when they start teaching and that each new teacher will be in and go through different stages of development. Document D3 only addresses the state of the mentee by stating that new teachers are Level I educators, thereby implying that they have a lot of needs and growth ahead of them.

Expected teaching methods for evaluation. Both of these documents address expected teaching practices. Document D2 outlines that mentors will be trained on the Big 8, implying that the mentor should ensure the mentee is learning and employing these techniques as well. Document D3 uses the state professional teacher standards as the expected teaching practices to be utilized in this district.

One-size-fits-all approach. Document D2 is an outline for a mentor training meeting and does not use a one-size-fits-all approach. Document D3 uses this approach in that the whole document is about teaching, re-licensure, and portfolio requirements with little information about why this program is actually supposed to be good for teachers and students.

Hoop jumping. Document D2 is not a hoop to jump through unless the training is approached as such. Document D3 does feel like a hoop because the document is entirely prescriptive with little to no information about why the program will help teachers or students.

District E Documents

District E personnel gave access to 13 documents: three mentor documents, four mentee documents, and six district documents. These documents were obtained and printed from the online district teacher evaluation and mentoring website.

District E mentor documents. There are three documents in this set. One of the documents, document E1, is a brochure for the mentor to use throughout the year in discussions with the mentee. The majority of the brochure consists of a large list of topics to discuss with the mentee. Document E2 is a PowerPoint presentation for mentors, and possible administrators, to use with the mentee regarding ethics and professionalism as a teacher. Document E3 is also a PowerPoint presentation for mentors, and possibly administrators, to use with mentees regarding classroom management strategies.

Growth of mentor. None of the three documents address growth of the mentor.

Growth of mentee. None of the three documents address growth of the mentee.

Roles/purposes of mentor. All three documents address the roles and purposes of the mentor. Document E1 states that the mentor should "Use these topics to initiate conversations and clarify information to help a new teacher make a strong start" (E1.1). So a role of a mentor is to converse with the mentee regarding certain topics that are designed to help the mentee grow. Document E2 implies that mentors themselves are to be ethical and professional. Mentors should not assume that new teachers know the ethical and professional responsibilities of being a teacher; therefore, the mentor has a responsibility to teach the mentee about this topic.

Document E3 implies that the role of the mentor is to reinforce to the mentee the concepts of classroom rules, routines, and procedures.

State of being of mentee. All three of the District E mentor documents address the state of being of the new teacher. The brochure indicates that new teachers cannot anticipate all entities that are within the scope of their employment: "This brochure contains a variety of topics a provisional teacher may not think to ask his/her mentor" (E1.1). Similarly, documents E2 and E3 address the needs of new teachers to know school and district policies and to enforce rules through routines and procedures.

Expected teaching methods for evaluation. Two of the three mentor documents address the expected teaching methods of new teachers (E2, E3). Teachers are to use rules, routines, and procedures (E3) as well as communicate with parents according to policy. Moral policies of an educator should be strictly enforced (E2).

One-size-fits-all approach. Document E3 uses this approach when describing classroom management strategies. Because this document focuses so much on rules, classroom management, routines, and procedures, the document gives the allusion that any teacher can follow these procedures and have success with classroom management.

Hoop jumping. None of these documents give the essence of jumping through hoops. All three documents are open and flexible and are to be utilized as a resource and informational packet for the mentor and the mentee during the processes of mentoring activities.

District E mentee documents. There are four documents in this set. Document E5 is the district evaluation report for teachers with unacceptable performance on the evaluation.

Document E6 is the registration information for the new teacher induction meetings. Document E7 is the information regarding the evaluation system. Document E8 contains information about being a Level I teacher and the process of moving to become a Level II teacher.

Growth of mentor. None of the four documents address growth of the mentor.

Growth of mentee. Three of the four documents address growth of the mentee (E5, E6, E7). This district focuses on the development of teacher skills and techniques through detailed assistance and feedback (E6, E7), implying that new teachers not only need help but that there is a focus on giving that help. This is shown in document E6 by the statement, "You are joining a district committed to high quality teaching and professional development. Our district offers an extensive inservice program to help you gain new skills and enhance those you have in your repertoire" (E6.1). Teachers who do not satisfactorily pass evaluations are given help to improve; teachers who fail to improve will have their job terminated (E5).

Roles/purposes of mentor. Two of the four District E mentor documents address the roles and purposes of the mentor (E6, E7). It is not stated, so it the data here is a little unclear, but it is implied that mentors will help with the new teacher induction program, especially for teachers who do not pass their evaluation with a satisfactory grade (E6). It also appears that mentors are to help monitor teacher performance, develop teacher skills, assist teachers, and provide feedback for mentees, though the administration appears to have a hand in these roles as well (E7).

State of being of mentee. Three of the four documents address the state of being of the mentee (E 5, E6, E7). The mentee is portrayed as needing to "enhance those [skills] you have in your repertoire" (E6.1), implying that the mentee already has a basic set of skills that need to be enhanced. New teachers are ready to start teaching and to grow, and they therefore need feedback on the basic skill set they have so they can do so (E6, E7). Again, teachers who fail to pass evaluations satisfactorily will have their job terminated (E5). These teachers are in a state of being frequently evaluated with their job on the line.

Expected teaching methods for evaluation. Only one of the four documents specifically addresses the expected teaching methods of new teachers going through this extensive assistance program (E7). This document outlines the evaluation system used by the district and explains that there are 49 indicators of good teaching that teachers will be evaluated on. This evaluation system will be described in the District E district documents section. The other three documents are more informative and pragmatic in nature and therefore discuss more about what the teacher needs to do in the program and not what good teaching looks like.

One-size-fits-all approach. Most of these documents do not use a one-size-fits-all approach (E5, E6, E8). Each document does describe what the requirements are for the district in completing these evaluations as new or continuing teachers. However, these requirements are not presented in a prescriptive manner. The use of the 49 teaching techniques does create a feeling of prescriptiveness and one-size-fits-all even though they approach it as a tool for teacher development (E7).

Hoop jumping. Three of the documents do not use a hoop jumping approach (E5, E6, E8). However, as mentioned above, document E7 does present 49 teaching techniques that teachers are evaluated on. This large number of techniques for evaluation creates a feeling of micro-managing teachers' practices. This in turn creates a feeling that hoops have to be jumped through in order to pass the evaluation successfully since all 49 techniques will be evaluated.

District E district documents. There are a variety of documents for District E district documents. It should first be noted that there were originally seven documents in this set. However one document (E16) was not relevant to new teacher induction and mentoring programs and another document (E11) was simply a list of online documents, many of which were already being used in this study. Documents E14 and E15 were almost identical and

therefore combined for analysis. Documents E4 and E10 were moved to this section and are occasionally combined in the sections below. These documents were moved to the district documents section instead of being analyzed with the mentee documents because they are for all teachers in the district. So the documents in this set are documents E13, E12, E14/15, E9, E4/10.

Document E13 is a PowerPoint for principals to use at the beginning of the year to introduce the teachers, especially the new teachers, to the district evaluation system. Document E12 is a chart demonstrating how the 49 teaching techniques this district evaluates align with the state teaching standards. Documents E14/15 are the principal guidelines for evaluations for Level I and Level II teachers. Document E9 is information about the program designed to help teachers who have unsatisfactory evaluation results; it is unclear if this is the same or different from the mentoring program. Document E4 is a 148-page document explaining each of the 49 teaching techniques in detail.

Growth of mentor. None of these documents directly address growth of the mentor. This is somewhat surprising considering the focus this district puts on new teacher induction and mentoring programs. The only document that alludes to mentor growth is document E4, which implies that the mentor teacher is just like any other teacher and therefore should be growing through the programs and use of the 49 teaching techniques.

Growth of mentee. These documents imply that growth of the mentee will occur as the mentee engages in the new teacher induction program and works with a mentor (E4/10, E9, E13, E14/15). Document E4, the 148-page document explaining the 49 teaching techniques in detail, states that the purpose of the district evaluation system "provides much more than an evaluation procedure. It offers support to teacher in their commitment to refine and enhance their teaching skills through the creation of a series of Professional Development Materials" (E4.2). This

implies that great growth is expected to come from participation in the evaluation system. However, the evaluation rubric contains a box for the evaluator to indicate that the teaching technique was present or not (E13). There is no continuum, suggesting that the teacher has the technique developed and employed or not. This is a negative approach to the 49 teaching techniques and puts greater weight on the evaluation. It also stifles teacher growth by implying that teacher practice is either acceptable or not; there is no room for improvement unless perfection is achieved.

Roles/purposes of mentor. There is very little language in this set of documents addressing the roles and purposes of the mentor (E9, E13, E14/15). Document E13 indicates that mentors will be available upon request or if a teacher does not successfully pass an evaluation. The mentors are referred to as "consulting educators" and are to "assists the provisional [Level I] educator in becoming informed about the teaching profession and the school system, but shall not serve as an evaluator" (E15.1). Instead, these consulting educators are to "provide additional support, training or coaching to help improve teaching skills and effectiveness.... [and] provide confidential individualized peer support for improvement of teaching skills and instructional quality." (E9.1) Again, it appears that these mentors are to help not only new teachers, but any teacher who desires or needs additional help with improving his/her teaching.

State of being of mentee. Three of the six documents address the state of being of the new teacher. As discussed in the growth of the mentee section for this district, teachers are evaluated as either having each of the 49 teaching techniques present in their teaching or not (E13). This implies that all teachers, including the new teachers, either have the technique to an acceptable level or not; there is no room for partial development in a technique. However, other

documents imply that new teachers are ready with the basics, and just like any other teacher, they can build on their basic repertoire by employing the 49 teaching techniques (E10, E12).

Expected teaching methods for evaluation. Five of the six documents address expected teaching techniques. As is quite manifest already, District E focuses a great deal on the 49 teaching techniques for teacher evaluations. All five of these documents allude to the expectation that teachers will excel in the 49 teaching techniques and will successfully pass their evaluations (E4, E10, E12, E13, E14/15). In this district, employing these techniques is what good teaching looks like.

One-size-fits-all approach. The language in these documents is very indicative of a one-size-fits-all approach to teaching and mentoring programs. The practice of noting the presence or absence of the teaching techniques without a continuum suggests that all teachers are supposed to demonstrate excellent skill in each technique regardless of personal skills, experiences, or classroom dynamics (E4, E10, E12, E13, E14/15). Teachers who do not successfully pass their evaluation will be assigned a consulting educator/mentor (E9). This implies that there is one simple solution for not passing an evaluation: get extra help from a teacher that may be randomly assigned. District E appears to have little room for flexibility and different levels of development for teachers.

Hoop jumping. As has already been discussed, there is a great deal of emphasis placed on teachers performing according to the 49 teaching techniques. Because this is such a large number of techniques, even though they are broken down into five categories, these documents create a feeling of jumping through a hoop on fire. Not only are there a large number of techniques for a teacher to demonstrate, but there are also high stakes attached to failing to demonstrate the techniques adequately.

Appendix C: Phase II of Data Analysis—Connections with Indicators

In this section, the indicators of complexity are connected to the seven emergent categories and the language of the documents. During data analysis it became clear that the degree of overlap of the complexity indicators required a different approach for further analysis than simply identifying language in the documents and assigning it under one of the indicators of complexity. Therefore, in this section I will explain the overlap of the complexity indicators by describing which indicators connect with which of the seven emergent categories and how. I will give examples of the language in the documents that demonstrate the connection between the category and the indicator. It should be noted that the focus of this section is to exhibit the positive examples within the documents which demonstrate the particular categories and indicators of complexity—some documents contain language to the contrary, but such language is not exposed here since that is not the purpose of this section. It should also be noted that not all indicators are discussed under each category—only the most relevant indicators for each category are discussed, especially as they pertain to the language in the documents.

Growth of Mentor

Growth of the mentor has elements from six indicators of complexity. As demonstrated below, language from the documents represents the connection between growth of the mentor and each of the complexity indicators.

It should be noted that overall, there is very little explicit or implicit language addressing growth of the mentor. When growth of the mentor is addressed, it is usually referring to growth of the mentor in the sense that the mentor will grow as any other practicing teacher will grow through developing certain teaching practices.

Self-organized. Indicator One is relevant to growth of the mentor because present within the ideas of this indicator are the ideas that individuals within a system become interlinked and interdependent and should share leadership and decision-making. The mentor should not be working in isolation, either as a teacher or as a mentor. As a practicing teacher, the mentor should continue to develop individual teaching skills through mentor trainings and interactions with the mentee and district mentor specialists. In the role of mentor, the mentor should be developing connections with other mentors, district mentor specialists, Level II practicing teachers, and the mentee. All of these interlinked relationships should contribute to the growth of the mentor and should contribute to a shared identification among teachers in the system. A focus on mentor growth should encompass the development of leadership skills in mentors and how to share that leadership both with the district personnel responsible for training the mentor as well as with the mentee with whom the mentor will be working. As mentors develop shared leadership skills, they should also develop the skills of sharing decision-making with their peers, including mentees.

An example of language from the documents that demonstrates self-organization as being an integral part of growth of the mentor is shown in document A1:

The **Standards** provide a common language and vision of the scope and complexity of mentoring by which all EYE mentors can define and develop their practice. The five standards are designed to be used by mentors to: Focus on their own professional learning and development; Set professional goals to improve mentoring relationships; Prompt reflection on mentoring, teaching, and learning practices; Plan ongoing professional learning opportunities for mentors; Guide mentor growth. (A1.1)

As is evident from this language, there is a focus on the mentor's development in inter-related relationships and developing leadership skills as a mentor. Document A16 suggests that mentors need a support network and ongoing professional dialogue for their growth, directly connecting to the idea of Indicator One that mentors need opportunities to become interlinked and interdependent with others. Several documents (A1/B8, A17, B5, B11, E4) imply a shared identification of the mentor with other teachers and the mentee by including the mentor as a teacher who also needs to continually improve his/her teaching practice through the professional teacher standards

Bottom-up emergent. Indicator Two is relevant to growth of the mentor. The main idea of Indicator Two is similar to the idea in Indicator One that decisions should be made by the group in the system. Indicator Two further specifies that decisions should be made by the local people. As discussed above, mentors should be part of the decision-making processes of the new teacher induction and mentoring programs and should work to include the mentees in such decisions as well. When the mentor and the mentee—the local people regarding these decisions—are included in decisions regarding these programs, complexity is being reflected and acknowledged.

Document A9 is an excellent example of language in which the mentor and the mentee are the integral features in decision-making regarding professional development. Based on the language of this document, the mentor is to create a professional development day to meet the needs of the mentee. However, such a day does not need to be planned if it will not be in the best interest of the mentee at that stage of his/her development. Allowing the mentor and mentee to make that decision together supports complexity.

Short-range relationships in scale-free networks. Growth of the mentor is connected to Indicators Three and Four. The central ideas of Indicator Three related to growth of the mentor are that information should be exchanged among near neighbors and not distributed from a central hub and that such exchanges between near neighbors should not be forced. The central idea behind Indicator Four is that information should be allowed to flow freely instead of being linear or restricted. In the new teacher induction and mentoring programs, mentors should be provided opportunities to grow with their near neighbors through mentor-mentee relationships, participation in mentor training meetings, and through exchanges with other teachers that are of their own choosing. Such interactions should not be restricted and will therefore increase mentor growth because the mentor is given multi-directional room for growth instead of a prescriptive, linear direction for growth.

It should be noted that almost all of the documents in the data set are created by district personnel and distributed to mentors for either required or suggested use. It appears that some of the documents from District A came from practicing mentors for other mentors to use, but it is difficult to discern to which documents this applies. It therefore becomes important to analyze how the documents are utilized. If the mentors are given license to use the documents in the way that works best for them, then even though the documents are issued from a central hub the requirements surrounding it are not as prescribed from the central hub. On the contrary, if the mentors are to use the documents in prescribed ways, then the information coming from the central hub could inhibit growth of the mentor.

With this in mind, language in the documents that supports the connection between the growth of the mentor and Indicators Three and Four is shown through language that allows the mentors to make decisions regarding how to use the documents based on their own needs. For

examples, see the previous paragraphs analyzing the connections between growth of the mentor and complexity indicators one and two.

Ambiguously bounded but organizationally closed. Growth of the mentor is connected to Indicators Five and Six. The main idea behind these indicators as related to growth of the mentor is that it is important for members of the system to have interactions with other parts of the system. Mentor growth is increased when mentors have interactions with other teachers in the school and district. These interactions should take place naturally within the scope of the new teacher induction and mentoring programs, but also outside of the programs too.

Language in the documents does very little to mention mentor interactions with others outside of the mentoring program. However, it appears that District E does use mentor teachers as part of the teacher evaluation program for any teacher who would like additional help. For mentors to interact with other teachers in this way should help them develop their own skills as a teacher and their own teaching practice.

Growth of Mentee

From the language of the documents it is clear that growth of the mentee is addressed in a large portion of all documents. Mentee growth is often gauged by use of a continuum, demonstrating that new teachers are at different stages of development for different skills. As demonstrated below, language from the documents represents the connection between growth of the mentee and six complexity indicators.

Self-organized. Indicator One is relevant to growth of the mentee because present within the ideas of this indicator are the concepts that mentees need to create a shared identification with their mentor as well as other teachers in the school and district. Mentees should be invited

to be active in shared leadership and decision making within the school and mentor-mentee relationship and should be given opportunities to become interlinked and interdependent with other teachers as well as their mentor. These ideas are very similar to the growth of the mentor, which is supportive of complexity theory because both the mentor and the mentee should be working together to create shared identification, leadership, and decision making with each other and with other teachers and personnel in the school and district.

The language of the documents demonstrates self-organization as being an integral part of growth of the mentee. Multiple documents (A5, A7, A9, A13, A16, C1, E15) suggest that new teacher growth occurs when mentees interact with their mentors, other mentees, and other teachers through professional learning communities, analysis work groups, departmental teacher groups, and discussions/interactions within the mentoring relationship. Such interactions help new teachers establish shared identifications with other teachers and participate in shared leadership and decision-making opportunities. Other documents (A17, B2, B3, B5, B7, B10/D3, B11, B12, C1, C5, E2, E4, E5, E6, E7, E8, E9, E13, E12, E15) imply that mentees will grow just as any other teacher as they seek to develop the professional teacher standards and qualify for relicensure and thereby create a shared identification with experienced teachers. Very integral to Indicator One, District E documents create an overall implication that by working with district and school personnel on improving teaching practices, new teachers will become part of a synergistic solutions group.

Bottom-up emergent. Indicator Two is relevant to growth of the mentee. See the analysis of Indicator Two under the Growth of the Mentor category for an explanation and example of the language contained in these documents which supports the growth of the mentee.

Short-range relationships in scale-free networks. Growth of the mentee is connected to Indicators Three and Four in a similar way that growth of the mentor is connected to these indicators. The central ideas of Indicator Three related to growth of the mentee are that information should be exchanged among near neighbors and not distributed from a central hub, such exchanges between near neighbors should not be forced, and members of the system should think win-win and "we" not "I." The central idea behind Indicator Four is that information should be allowed to flow freely instead of being linear or restricted. Like the mentor, a mentee should be given opportunities to grow through interactions with near neighbors, especially his/her mentor. Mentors should not force these interactions, nor should they approach mentormentee interactions solely to meet the needs of the mentor or check off a task. As explained in the category on mentor growth, these interactions should be allowed to grow in any direction and should not be restricted by linear thought. Mentee needs should be a central focus of the relationship but because new teachers tend to be teacher-centered instead of student-centered, mentors should help the new teachers to become an active component of the complex system by helping mentees to have a "we" not "I" mentality.

It should be noted that many of the documents contain information that is to be given to the mentee by the mentor or an administrator. This document sharing arrangement supports the idea of information being exchanged among near neighbors and not just from a central hub. Even if the documents originally come from the district personnel initially, allowing mentors to be the intermediaries between district personnel and mentees increases the complexity of the system. There is little explicit language in the documents to support growth of the mentee in connection with Indicator Three. However, it is implied that mentors and mentees should work together closely for mentee growth to occur.

Ambiguously bounded but organizationally closed. Growth of the mentee is connected to Indicators Five and Six. The main idea behind these indicators as related to growth of the mentee is that it is important for members of the system to have interactions with other parts of the system. As similarly explained in the growth of the mentor category, it is important for mentees to have interactions with other members of the complex system. New teachers tend to be teacher-focused instead of student-focused and therefore may need extra help in extending beyond their sphere of comfort to interact with other teachers in the school and district. And just like interactions for the mentor, these interactions for the mentee should take place both within and outside of the realm of the new teacher induction and mentoring programs. Such interactions can promote mentee growth.

An excellent example of language specifying that mentee growth is enhanced through interactions with other teachers comes from District A, document A7. This document outlines the protocols for the mentor teacher to lead a group of mentees through an analysis of student work. The analysis discussion group is set up with the purpose of having the new teacher learn how to improve his/her teaching and increase student learning by discussing with the other teachers what was done well in a lesson and what could be done better. The new teacher is to accept suggestions as will best fit him/her. Such an example demonstrates the importance of learning from others in the system in order for oneself to grow.

Roles/purposes of Mentor

There are a wide variety of roles and purposes for mentor teachers to assume and fulfill.

The language in the documents demonstrates that longs lists can be created to identify these roles and purposes of the mentor. The roles and purposes of the mentor can be directly connected to seven indicators of complexity.

Self-organized. Indicator One is relevant to the roles and purposes of the mentor because present within the ideas of this indicator are the ideas of what interactions should be taking place, and such interactions are directly tied to the roles of mentors. Indicator One focuses on relationships of shared responsibility and decision making, groups that come up with synergistic solutions, opportunities for teachers to become interlinked and interdependent, and a sense of shared leadership. Each of those aspects should be considered when creating the roles and purposes of a mentor.

Language within the district documents shows that among the mentor's many roles, one of the roles is to assist the mentee by helping them to interact with other mentees and other teachers in general and that through these interactions synergistic solutions for better teaching can take place (A7, A9,). The mentor is also to create a shared identification with the mentee as each of them work towards developing professional teacher standards just like all other teachers (A1/B8). Mentors are also to be a trained resource for the mentee, implying that shared leadership should take place in the relationship (A18, B10/D3). Additionally, the mentor should "[offer] a safe place to discuss successes and failures, openly examine instructional practices, solve problems, consider new ideas, actively share experiences, and seek feedback" (A16.1). Such roles of the mentor are directly related to creating a shared sense of identification with the mentee and working together to create synergistic solutions.

Bottom-up emergent. Indicator Two is relevant to the roles and purposes of the mentor. As to the connection between this indicator and category, see the explanation and example for this indicator under the category Growth of the Mentor.

Short-range relationships in scale-free networks. The roles and purposes of the mentor are connected to Indicators Three and Four because central to Indicator Three are the

ideas that information should be exchanged among near neighbors and not distributed from a central hub, such exchanges between near neighbors should not be forced, and members of the system should think win-win and "we" not "I." The central idea behind Indicator Four is that information should be allowed to flow freely instead of being linear or restricted. In combining these two indicators, it is therefore implied that the role of a mentor is to be an intermediary between the central hub—usually district personnel—and the mentee. Additionally, the mentor is to help the mentee move away from a teacher-centered focus to a community- and student-centered focus. Mentors should promote and seek out exchanges with their mentor, other teachers in the school and district, and district personnel. However, these exchanges should not be forced and should be allowed to develop in any direction. Flow of information should not be restricted.

An example of language in the documents to support this connection is found in document A14: "Call or email your mentor with any questions...yes, even if it's over the weekend" (A14.3). This language explicitly states that the role of the mentor is to assist the mentee as a near neighbor. So close of a neighbor in fact, that the mentee can contact the mentor at home outside of school hours.

Ambiguously bounded but organizationally closed. The roles and purposes of the mentor are connected to Indicators Five and Six. The main idea behind these indicators as related to the roles of a mentor is that parts of a system should be viewed as part of the larger system and not as isolated events. It is therefore important for the mentor to view and facilitate mentoring duties as they pertain to the larger complex system. As such, mentor responsibilities should include facilitating interactions with other sub-systems within the larger complex system

of teaching. Mentors should do this by helping new teachers interact with other teachers, but also with other school and district personnel, parents, and community members.

There is little language in the documents pointing towards the mentor helping the mentee to establish connections with other sub-systems within the larger educational system. However, document E2 does encourage mentees to communicate with parents by following proper ethical standards, implying that communication with parents is important. This example is not a strong example of creating connections with other sub-systems but does demonstrate that the idea is at least of small focus in this district.

Seven. The main ideas of Indicator Seven that relate to new teacher induction and mentoring programs are that the elements of the system should be utilized and considered when creating solutions to problems. In other words, solutions should be based on the individual system's needs, not on a one-size-fits-all approach. Mentors should be careful to not use a one-size-fits-all approach. It is especially important for the mentor to allow the mentee to find solutions that work for him/her instead of the mentor imposing ideas or techniques on the mentee.

An example of language in the documents that demonstrates the roles and purposes of the mentor in connection with finding context-specific/individualized solutions is found in document A7. As discussed elsewhere, this document is the protocol for the mentor to facilitate a discussion group in which the mentee analyzes samples of his/her students' work with other teachers with the purpose of helping the new teacher to improve his/her teaching and thereby increase student learning. This document is geared toward meeting the individual developmental needs of the teacher and is open and flexible to solutions that will work for that teacher. Indeed, the new teacher who is receiving suggestions from the other teachers is to "respond to the

comments and ideas that s/he [sic] feels are most pertinent and insightful" (A7.2). Allowing the new teacher to respond in such a way allows for individual solutions to be met and complexity acknowledged.

State of Being of Mentee

The language of the documents indicates that the state of being of the mentee is one in which the mentee has a basic but broad skill set. New teachers are usually portrayed as being capable and often as being in different places in their development regarding certain skills. These teachers are also portrayed as having many specific needs. The state of being of the mentee is connected to four indicators of complexity.

Self-organized. Indicator One is relevant to the state of being of the mentee because present within the ideas of this indicator are the ideas that individuals within a system become interlinked and interdependent and should share leadership and decision-making. This is directly tied to the state of being of the mentee because the mentee usually has a basic skill set and may feel out of place creating a relationship of shared leadership and decision making. However, the mentor should encourage and assist the mentee in these aspects of the relationship and create opportunities for the mentee to become interlinked and interdependent with other teachers, including the mentor.

Language within almost every document demonstrates explicitly or implicitly that the mentee is in need of creating synergistic solutions through the assistance of the mentor to increase in capability within the different aspects of teaching (A1/B8, A2, A3, A4, A7, A9, A13, A14, A16, A18, A21, A23, A24, A27, B1, D1, E1, E4, E6, E7, E10, E12). Such a focus on creating synergistic solutions is at the backbone of mentoring programs. Mentees should also share in leadership and decision making, but there is little evidence of this in the documents, as

seen by document A7 which explains that mentees are to work with and learn from and take leadership with other new teachers regarding their own teaching practices and analyses of student work. As new teachers are seeking to establish their identity as a teacher, these teachers also need to create a sense of shared identification with their mentors and with other teachers. Though there is little language in the documents implying the need of new teachers to establish their own identity, there is even less—if any—language in the documents demonstrating that such development of identity is or should be shared with the mentor or other teachers in the system.

Bottom-up emergent. Indicator Two is relevant to the state of being of the mentee. The main idea of Indicator Two is similar to the idea in Indicator One that decisions should be made by the group in the system. Indicator Two further specifies that decisions should be made by the local people. Such a concept is related to the state of being of the mentee because it is implied that mentees are in a position to be actively involved in decision-making processes instead of passive agents required to follow the decisions of others. When mentees are actively involved in decision-making processes, especially regarding decisions that have to do with them as individual, new teachers, complexity is being reflected and acknowledged.

Unfortunately, there is little if any language in the documents reflecting the importance of including mentees in the decision-making process except as explained in the A9 document regarding the professional development day geared towards the unique needs of the mentee.

Most of the documents focus on giving resources and help to the mentee because such needs are also an integral part of the state of being of the mentee.

Short-range relationships in scale-free networks. The state of being of the mentee is connected to Indicators Three and Four since a central idea of Indicator Three is that information

should be exchanged among near neighbors and not distributed from a central hub, and the central idea behind Indicator Four is that information should be allowed to flow freely instead of being linear or restricted. As we know from the documents, new teachers are seen as having a basic set of teaching skills while still requiring help in a large number of areas. Therefore, the individual needs of the mentee should be analyzed and met through near neighbors, especially mentors. In seeking to meet the mentee's needs, mentors should not restrict information, but allow the information shared between the two of them to grow multi-directionally. Language to support this idea is found in document A9. In this document, mentors are instructed to assess the individual needs of their mentee and plan a professional development day to meet those needs. There are very few restrictions about how this professional development—flow of information—should take place.

Expected Teaching Methods for Evaluation

Language in the documents makes it clear that there is a vast and varied list of expected teacher behavior and skills that make a good teacher by improving student learning. These expectations include skills in classroom management, teaching methods, and classroom organization. Expected teaching methods are related to six indicators of complexity.

Self-organized. Indicator One is slightly relevant to the expected teaching methods of teachers because present within the ideas of this indicator are the ideas that individuals within a system become interlinked and interdependent and should share leadership and decision-making. It is clear that the expected teaching methods are for each teacher to develop individually. But it is also implied that such development takes place within interactive relationships with other teachers, especially in the relationship of mentor and mentee.

There is little language within the documents demonstrating shared leadership or opportunities for new teachers to become interlinked and interdependent with other teachers. Some documents imply that such opportunities are present through collaborating with other teachers on curriculum (A5) and through interacting with other teachers during lunch time in the faculty room (A14).

It should be noted that creation of expected teaching methods should include the input of new and practicing teachers. Most of the documents give little detail about who created the document and such focus of discussion is outside the scope of this study. However, document A17—the district professional teacher standards document—states that it was developed as "the product of a collaborative effort among many stakeholder groups" (A17.3). Such acknowledgements in the other documents would strengthen the reflections and acknowledgements of complexity for a district.

Bottom-up emergent. Indicator Two is relevant to the expected teaching methods used for evaluation. As stated previously, the main idea of Indicator Two is similar to the idea in Indicator One that decisions should be made by the group in the system and Indicator Two further specifies that decisions should be made by the local people. This is very important when decisions are being made regarding specifications for teaching methods and teacher evaluations. When teachers are included in the creation of these teaching methods and evaluations, complexity is being reflected and acknowledged.

As mentioned previously, documents A17 is an excellent example of including teachers and other stakeholders in creating the professional teacher standards. However, it is unfortunate that most of the documents do not explicitly or implicitly address who is creating the documents.

Ambiguously bounded but organizationally closed. The category of expected teaching methods for evaluation is connected to Indicators Five and Six. The main idea behind these indicators as related to expected teaching methods is the idea that part of being a good teacher is being someone who reaches outside of one's own classroom to interact with other teachers and the community.

A simple example of language in the documents that supports this is found in document A5 where new teachers are advised not to stay in their own classroom during lunch, but instead to join the other teachers in the faculty room. Though a simple example, this language demonstrates the epistemological belief that teachers need each other.

Structure determined. Expected teaching methods are connected to Indicator Seven. The main ideas of Indicator Seven that relate to expected teaching methods are that solutions for the system should be based on the systems structure. In other words, solutions should meet the needs of those in the system. And though there are a variety of research-based teaching techniques to improve student learning and increase teacher development, a one-size-fits-all approach should not be used. This is against the complexity idea that solutions should be found for a system on a system-relevant basis and should not be determined by a larger complex system. In new teacher induction and mentoring programs, expected teaching methods should be set up to allow teachers to choose methods that will meet their needs and the needs of their students.

In order to reflect and acknowledge complexity, language in the documents should not employ a one-size-fits-all approach, but instead should focus on allowing the teacher to utilize teaching methods that will work for him/her. Many of the documents give the new teachers help in the way of a framework, guideline, or template for creating lesson plans, setting up the

classroom, writing disclosure documents, etc. (A2, A3, A4, A10, A11, A14, A24, D1). These documents give outlines for expected teacher methods but set them up as suggestions and not one-size-fits-all.

Far-from equilibrium. Indicator Eight is relevant to the ideas of expected teaching methods. Central ideas of this indicator that related to new teacher induction and mentoring programs are the ideas that teachers need to be free to develop their own innovative ideas. As mentioned just prior, language in the documents reflect complexity when a one-size-fits-all approach is not used. See example above.

One-size-fits-all Approach

Language in the documents shows that some of the documents use a one-size-fits-all approach in the treatment of the new teacher induction and mentoring programs. It is also evident that most of the documents are designed to avoid such an approach but that the documents can be turned into such an approach is misused by the mentor, mentee, or even district personnel. The one-size-fits-all approach is evident in four indicators of complexity.

In order to reflect and acknowledge the complexity inherent within the new teacher induction and mentoring programs, language in the documents should reveal a lack of the one-size-fits-all approach. As stated earlier, the focus of this appendix section is to demonstrate the positive examples of how each category and indicator of complexity are connected to each other, and therefore any negative examples of this one-size-fits-all approach—meaning that the approach is used—will not be given here. Language in the documents exemplify that most documents do not use a one-size-fits-all approach.

Self-organized. Indicator One is relevant to the one-size-fits-all approach in the sense that such an approach is not conducive with the complexity ideas of this indicator, namely that

decisions should be made by the group, allowing for synergistic solutions. A one-size-fits-all approach usually flows from a central hub—contrary to Indicator Three: Short-range Relationships—and therefore allows for little input or flexibility by the teachers in the system.

Document A7, the protocol for group analysis of student work, is a good example of giving mentor and mentee teachers a framework for procedures without being too prescriptive in carrying out the details. This freedom allows the system to be self-organized as teachers work together to make decisions that will be best for their individual needs, creating synergistic solutions. Most documents exemplify this type of framework while allowing for freedom in the execution of it.

Bottom-up emergent. Indicator Two is relevant to the one-size-fits-all approach: decisions should be made by the locals in the system. If documents contain one-size-fits-all language, then it is most likely that the locals have little input regarding decisions that come from a central hub, yet they are expected to follow the decision with little to no flexibility for adapting to individual needs and circumstances.

Documents that are supportive of complexity regarding this indicator—and not following a one-size-fits-all approach—are shown through language that allows teachers to make decisions based on what will work best for them. This is seen in documents that give templates, suggestions/ideas, and frameworks for teachers to utilize according to individual needs (A1/B8, A2, A3, A4, A10, A11, A14, A24, B12, D1) and through documents that allow flexibility in the carrying out of tasks or teaching methods (A7, A9, A13, A27, C1, C5, E5).

Ambiguously bounded but organizationally closed. The one-size-fits-all approach is connected to Indicators Five and Six. The main idea behind these indicators as related to the one-size-fits-all approach is that the stability and unique identity of the individual classroom and

teacher should be recognized within the larger complex system. Teachers should stay within appropriate boundaries for an educational setting, but they should also be given freedom to grow and develop themselves, their practice, and their classroom in ways that will still allow for a unique identity to develop. In new teacher induction and mentoring programs, it is therefore important for both the mentor and the mentee to be given freedom to act in these programs as they need.

Most of the documents in this category are not employing the one-size-fits-all approach. Even though this is the case, most of the documents do not directly focus on new teachers establishing a unique identity for themselves and their classroom. So although there isn't a one-size-fits-all approach used, there is the implied idea that most teachers should still fit within a certain realm of expectations. Many of the districts use continuums to chart the progress or state of being of the new teachers. Establishing these continuums as the focus for all teachers implies that all teachers should fit somewhere on the continuum of teaching methods and that other teaching methods do not fit within the system. So teachers must fit somewhere in that continuum even though they have flexibility in what that fit looks like.

Hoop Jumping

Language in the documents overall demonstrates that these documents are designed to be helpful tools for increasing student learning and teacher development and should be approached with an avoidance of hoop jumping. Hoop jumping is contrary to complexity theory. However, how the documents are actually employed by the mentor, mentee, principal, and other district personnel influences whether or not the documents are used as hoops to jump through.

As explained above under the category of one-size-fits-all approach, in order to reflect and acknowledge the complexity inherent within the new teach induction and mentoring

programs, language in the documents should similarly reveal a lack of using a hoop jumping approach. Again, the focus of this appendix section is to demonstrate the positive examples of how each category and indicator of complexity are connected to each other, and therefore any negative examples of this hoop jumping approach—meaning that the approach is used—will not be given here. Language in the documents exemplify that most documents do not use a hoop jumping approach. Hoop jumping is related to five indicators of complexity.

Self-organized. Indicator One is relevant to the hoop jumping approach in the sense that such an approach is contrary to complexity theory. The ideas of Indicator One that are relevant to hoop jumping are the ideas that teachers should be able to participate in making decisions about which tasks are required, why they are to be completed, by whom, how often, etc. These decisions should be based on the input of the teachers.

Many of the documents contain language indicating that they are to be used as templates, guidelines, and resources, not as strict tasks to be accomplished just because they are required. Document A9, information regarding a professional development day, provides an example of such language by indicating that the professional development day is to be designed to meet the needs of the mentee and the mentee is not required to attend. Such freedom in action sets up the professional development day as a tool and not as a hoop.

Bottom-up emergent. Indicator Two is relevant to the hoop jumping approach since the main idea of Indicator Two is that decisions should be made by the local people. When decisions are made by the local people, the people are invested in making sure that the decisions are in their best interests and therefore decisions-making processes usually avoid hoop jumping techniques. As mentioned earlier, complexity is reflected and acknowledged when the documents contain an absence of hoop jumping language and ideas. However, there is little to

no language demonstrating that decisions are made by the local people to avoid tasks that are hoop jumping.

Short-range relationships in scale-free networks. Hoop jumping is connected to Indicator Three because of the main idea of Indicator Three that information exchanges should not be forced. Hoop jumping is connected to Indicator Four in that information should be allowed to flow freely instead of being linear or restricted. When mentors and mentees are required to have a certain number of observations or mandated interactions with each other, the complexity of the system is ignored. Such mandated interactions tend to lead away from free flow of information because the focus of the interaction is to accomplish a specific task instead of letting information develop according to individual needs.

Most of the documents do not contain language in which interactions between mentor and mentee are prescribed, but some do. For example, several of the documents (A3, A16, A18, B10/D3, E8, E13) explicitly state or imply that a mentor and mentee should have a certain number of formal meetings, observations, etc. On the other hand, many of the documents (A7, A9, A10, A11, A14, A21, C5) imply that though certain tasks need to be accomplished as part of the mentor program, these tasks can be done in ways that best meet the needs of the mentor and mentee through the interactions that work best for them.

Structure determined. Hoop jumping is connected to Indicator Seven. The main ideas of Indicator Seven that relate to hoop jumping are that solutions for the system should be based on the system's structure and the needs of those in the system. If a solution is based on a one-size-fits-all approach and does not actually address the needs of the individual mentor and mentee in the programs, then it is probably a hoop to jump through. As mentioned before, the absence of hoop jumping reflects the complexity of the system.

Language in the documents connecting hoop jumping to Indicator Seven should reflect the intention to create tasks for mentors and mentees that lead to individualized solutions. An example is found in document C1:

Required teacher evaluations sometimes appear to be removed from learning, and can be intimidating. However, done correctly, evaluations can be an opportunity to help teachers improve their craft and impact student learning. Effective evaluations inform administrators and the teacher of what he or she is doing well, and where that teacher can improve. (C1.12)

Such language demonstrates an understanding that teachers can benefit from solutions that are based on their individual needs.

Appendix D: List of Documents by District and Type of Document

District A

For Mentors

- Mentor Calendar Time Line **A18**
- Mentor: Questions and Info for First Meeting with Mentee A21
- Mentor Observation Tool: Classroom Management (terms with observation form) A27 (includes former documents A6, A12, A25, A20)
- SPA Day Information (new teacher in-service observation day) A9
- Student Work Analysis Protocol (for New Teacher Portfolio) A7

For Mentees

- Things I Wish I Had Known A5
- Unit Reflection and Planning Template A4
- Weekly Planning Template A3
- Utah Core Lesson Planning Template A2
- Disclosure Document Basics A24
- Best Practices of Instruction **A23**
- New Teacher Procedures **A13**
- Special Education Helps **A8**
- Checklist for New Teachers A14
- Secondary New Teacher Check List A10
- Room Ready Check List **A11**

District Documents

District Professional Teacher Standards A17

- Utah EYE Mentor Standards (are these current with USOE?) A1/B8
- District Mentor Program Philosophy A16
- Mentor Application for New Mentors A15 (includes former documents A22, A26)
- Mentor End-of-year Report A19

District B

For Mentors

- Educator Evaluation Form, Teaching Profile **B2**
- SET Teacher Observation and Interview Form **B3**

For Mentees

• New Teacher Academy Information **B1**

District Documents

- Utah Professional Teacher Standards and Continuum of Teacher Development (from USOE) B12
- Utah Professional Teacher Standards (from USOE) **B11**
- Utah EYE (from USOE) **B10**,
- Utah EYE Mentor Standards and Continuum of Mentor Development (from USOE) A1/B8
- Verification of EYE Upgrade from Level 1 to Level 2 License (from USOE)
 B7
- Educator Evaluation Senate Bill **B5**
- Student Evaluations of Teacher (K-12) **B4**

District C

For Mentors

• Clinical Practice Final Evaluation (from BYU CPAS) C5 (includes former documents C2, C3, C4)

For Mentees

none

District Documents

- Teacher Professional Development Portfolio C1
 - (This is one long, huge document that contains ALL information...apparently for mentors and mentees and district policies)

District D

For Mentors

- Mentor Handbook D1
 - o this contains information mostly for the mentor, but there are some handouts for the mentee
 - o is old... they are re-doing it this year
- Utah Collaborative Assessment Log **D4**

For Mentees

none

District Documents

- Outline for Mentor Training Meeting **D2**
- EYE, Modified *slightly* with notes for this school district **D3**

District E

For Mentors

- ABC's of Mentor Conversations E1
- Classroom Management Strategies (for mentors and mentees) E3
- Utah Educator Ethics/Professionalism PowerPoint (for mentors and mentees)

E2

For Mentees

- Provisional Teacher information **E8**
- JPAS In-service Registration E6
- JPAS Feedback Report Addendum (for unacceptable performance) E5
- Performance Appraisal System information E7

District Documents

- JPAS Orientation Instructions (for Principals) with PowerPoint E13
- Utah Effective Teaching Standards: Alignment with JPAS E12
- list of Administrator and Teacher Resources on district JPAS website E11
- Principal Guidelines for JPAS Educator Evaluation: Provisional Educator E15
- Principal Guidelines for JPAS Educator Evaluation: Career Educator E14
- Consulting Educator Program information E9
- Annual Work Plan (setting goals for objectives, with an evaluation) E16
- JPAS PDM (Performance Appraisal System: Professional Development Materials; JPAS PDM Cheat Sheet (outline) E4/E10