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A Critical Discourse Analysis of Teacher Preparation Standards within Inclusion-Intensive States

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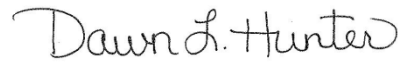
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Completing a dissertation is not something that a person does alone, and I am no exception. Many people have supported me along the way, and I am forever grateful for it. I would like to first thank my family. Although they may have not have ever understood why I kept going to school, they never discouraged me from doing so. Even though they could not help me with advice from having experienced attending college themselves, they always supported me by trying to make sure I could focus on school as much as possible, so to my mother, my grandmother, and my husband, I am blessed to be supported by such amazing people. I also want to thank all of the students that I have worked with over the years. Although I cannot say that every day in the classroom has been easy, I am always inspired by their tenacity, and it is because of them that I chose the topic for this study. Last, but definitely not least, I want to thank all of the amazing educators I have had the opportunity to work with. Starting with the teachers I had in school, and then the teachers I have had the privilege to work alongside with who are too many to name in this small space, I am grateful for all of you. You have taught me so much about what makes a great teacher, and I look forward to continuing in and contributing to this field. I also want to thank the educators in my original PhD cohort, as well as the cohorts that adopted me when I fell behind my classmates, your texts and kind words kept me going many times when I was ready to quit. Finally, to my committee, Dr. Gerri McNenny, Dr. Audri Sandoval Gomez, and especially to my co-chairs Dr. Don Cardinal and Dr. Dawn Hunter, I thank you for not giving up on me when I was ready to give up on myself many times. I was not always sure I would make it to this day, and will be forever grateful for all of the support you have given me over the past eight years.

ABSTRACT

A Critical Discourse Analysis of Teacher Preparation Standards within Inclusion-Intensive States

by Kay Lynn Ceja

Federal law calls for students with disabilities to be educated in the least restrictive environment possible. However, this still allows for students with disabilities to be placed in a range of educational settings, from the general education classroom to a separate school. The number of students with disabilities that are included to the maximum extent possible in the general education classroom varies by state. This study focused on the role of teacher training as defined by state driven teacher education standards. The purposeful outlier sample was selected by identifying the 12 states with the highest levels of inclusion of students with disabilities within a general education classroom across select disability categories. The level of inclusion was based on the percentages of students with disabilities in three educational settings: 80% or more of the day in general education, less than 40% of the day in general education, and separate school across all 50 states over a ten-year period. The teacher education standards for these states were obtained and Critical Discourse Analysis (CDA) was used to analyze the standards for evidence both of best practices in regards to implementing inclusion, as well as how disability was described by these states. Evidence of many of the best practices were found in these states' standards, and disability was often included in standards about teaching practices, learning environments, and diversity. However, it was also found that disability (and teaching practices) were often described in vague, non-specific terms, which may lead to the impression that disability is not included or important. These results are helpful in shaping the direction of the writing of standards in the future to better include and acknowledge disability in them.

TABLE OF CONTENTS

LIST OF TABLES

Chapter 1: Introduction

Brown v. Board of Education (1954) held that separate was not equal regarding disparities in educational opportunity in terms of race. Currently, the United States and the world are facing a time of deep reflection once again surrounding issues of equity and equality for minority populations. For example, discussions in education continue about ensuring access to high-quality education for all students. There is not consensus within the field on how to ensure students have access to a high-quality education, or even what this kind of education looks like (McKenzie, 2003). The Individuals with Disabilities Education Act (IDEA) provides some guidance as it calls for students with disabilities to receive a free and appropriate education (FAPE) in the least restrictive environment possible. Since the IDEA's establishment, litigation has continued to interpret this law in favor of increased inclusion for students with disabilities (SWD) into general education settings.

Background/Theoretical Underpinnings

Two distinct theoretical frameworks guided the design of this study: ambiguity-conflict model of policy implementation (Matland, 1997) and alternatives to the medical model of disability (Goodley, 2016). Both of these frameworks will be briefly described in the following sections.

Policy Implementation as a Theoretical Framework

The history of research on policy implementation has occurred in three distinctive stages (Odden, 1991). The first stage, beginning in the 1960s, focused on studying the specific content of a given policy. At that time, the process of policy implementation was viewed as a *top-down* process, with a policy being established by those in power (typically at the federal level) and then implemented by people with decreasing amounts of power at the state, district, and school levels (Matland, 1995; Sabatier, 1986; Sabatier & Mazmanian, 1980).

The second stage of policy implementation research began in the 1970s, with the focus shifting from the policy's implementation to examining its longitudinal effects (Odden, 1991). Different categories of policies were identified, such as *developmental policies*, which aim to help all students, and *redistributive policies*, which focus on providing support for specific groups of students. Developmental policies tended to have stronger support and more effective implementation, but regardless of type, some level of implementation eventually occurred for both types of policies (Odden, 1991).

During the 1980s, the third stage of policy implementation research began, with the focus shifting from whether or not a policy was being implemented, to its effectiveness, with an increased focus on implementation at the local level, rather than at the state or federal level, which is viewed as a *bottom-up* process (Honig, 2006).

The fourth stage of policy implementation research began in the late 1990s with a more critical focus (Taylor, 1997). According to Taylor (1997), prior research periods simply focused on what policies were being implemented and how - without using a critical lens to examine the value or effects of implementing a policy or the factors that went into creating a policy. Beginning in the late 1990s, studies began to examine policy implementation as a conflict between groups with differing goals and levels of power rather than a simple process of development and implementation. This new focus led to new areas of research. One was the processes of how policies are implemented, rather than just their effects, and examining the complexity between policies and the people who create and implement them, rather than focusing on simply evaluating policy in terms of effectiveness or making future policy recommendations (Honig, 2006).

Matland (1997) applied a critical lens to policy implementation to develop a model for analyzing policy by examining two key factors: conflict and ambiguity. Conflict is defined as the alignment (or lack of alignment) in goals between the creators and the implementers of a policy. When an agreement exists between the two groups, Matland defined this as a low level of conflict, but when there are large levels of disagreement of goals between the two groups, there is a high level of conflict. Top-down approaches tend to view policy implementation through the lens of low levels of conflict, while bottom-up approaches see high levels of conflict. The other factor examined by Matland utilized was *ambiguity*, which is defined in terms of clarity of both goals of a policy and the means for implementation of a policy, with a *top-down* approach favoring lower levels of ambiguity, while a bottom-up approach favors a higher level of ambiguity. The successful implementation of a policy comes from clear goals in a top-down approach, while a *bottom-up* approach, which allows for more flexibility at the implementation level, which is seen as the cause of successful implementation.

By using these two factors in his policy analysis model, Matland (1997) developed four paradigms for viewing policy implementation: administrative, political, symbolic, and experimental. In the *administrative* paradigm, there are low levels of conflict and low levels of ambiguity. This view of policy implementation can be viewed as an input-output system, with the policy as the input and the outcomes of the policy as the output. Any variation in terms of implementation is attributed to the available resources rather than any type of conflict between actors. In the *political* paradigm, there are high levels of conflict and low levels of ambiguity. Within the political paradigm, one group (the policy creators) exerts power over another (the policy implementers). Additionally, policies are implemented through the level of monitoring or coercive action exerted over the implementers, typically through monitoring outcomes with

3

reward and/or punitive action tied to those outcomes. The *symbolic* paradigm is characterized by high conflict and high ambiguity. Although there may be shared goals, there is conflict regarding defining the goals and meeting the goals in this model. This type of implementation can be commonly found when groups of professionals are involved, as multiple actors can exert their expertise in an attempt to define a policy, often leading to wide levels of variation in how a policy is ultimately applied. Finally, the *experimental* paradigm is characterized by low conflict and high ambiguity. In this view, policy implementation results from a specific context and is very dependent on factors at the micro-level. This approach tends to use a bottom-up view of policy implementation. See Table 1 for a summary of Matland's policy analysis model.

Table 1

Matland's Policy Analysis Model (1997)

	Low Level of Conflict	**High Level of Conflict**
Low Ambiguity	Administrative Paradigm	Political Paradigm
High Ambiguity	Experimental Paradigm	Symbolic Paradigm

For this study, I will utilize Matland's (1997) *symbolic* paradigm to examine the implementation of teacher education standards in terms of preparing teachers to work with students with disabilities in inclusive settings, through looking at the content of the standards, utilizing Critical Discourse Analysis (CDA) as the method of analysis. The implementation of teacher education standards by pre-service teachers or by teacher education programs would be considered a *top-down* approach, as it is up to individual schools of education and credentialing/licensure programs in each state to implement the standards as parts of their programs. Since ultimately, it is up to the teachers to implement and apply the skills and

knowledge in the classroom, there may be considerable ambiguity in policy implementation.

Consequently, the symbolic paradigm appears to be the best fit for analysis in this study.

Models of Disability as Theoretical Framework

Currently, there are two primary models of viewing disability in the literature, the social model of disability and the medical model of disability. The social model of disability makes a distinction between disability and impairment, with impairment defined as differences in the individual, and disability as the effects of the societal inability to accommodate a wider range of access needs, as well as the stigmatization of people that may have different impairments (Gabel, 2010; Goodley, 2016). Implicit in the social model is the rejection of the medical model of disability, which is the prevailing view of disability in special education (Massoumeh & Leila, 2012). The medical model views disability as the specific impairment that resides within an individual and helps to form the basis of determining eligibility for special education services in IDEA (Triano, 2000). In this model, a student must meet specific criteria for one of thirteen federally determined disability categories to qualify for services (EHA, 1975).

However, a related model of disability that frames this study is disability as a minority group status, also referred to in the literature as the socio-political model of disability (Hahn, 1985; Smart & Smart, 2006). As in the social model, disability is viewed as a social construct resulting from society not accommodating the individual. However, this model goes a step further to view disability as a form of difference, rather than something negative, and simply members of another minority group (Hahn, 1996; Wertlieb, 1985). These two models of disability form the basis and framework for this study.

This study looks at what skills and knowledge are necessary for teachers to work with students identified with disabilities and how disability is described. Although a concept like the

social model or minority model of disability likely will not be explicitly stated in any state's teacher education standards, using a methodology that allows for the examination of the intent behind the words and context will allow for a deeper examination of these issues. The use of critical discourse analysis (CDA) as the method of this study will examine the concepts and ideas being presented in each states' standards. This study will use a disability studies framework and CDA as the method, which will allow for going beyond the words as written, as many of the standards may be written more from a medical model perspective. For example, looking at which teacher education standards mentions of disability are located in may give insight as to how disability is being presented. If standards discussing disability are located under a diversity category rather than a disability category, it may give insight into how that state views disability. CDA as an analysis method allows for exploration of these issues, with its ability to look beyond the words as written and look at other textual factors that may be in use.

Definition of Terms

One of the terms key to this study is *inclusion*. Although true inclusion involves much more than a physical placement of a student, in terms of analyzing policy, it would be difficult to use a definition of inclusion that cannot be somehow measured. For this study, I am using the definition of inclusion developed by the National Center in Educational Restructuring and Inclusion, which states,

> providing to all students, including those with severe disabilities, equitable opportunities to receive effective educational services, with supplementary aids and support services as needed, in age-appropriate general education classes in their neighborhood schools, toward the outcome of preparing all students for productive lives as full members of the society. (NCERI, 1995, pp. 1-2)

Related to inclusion, in this study, is the term *full inclusion* that is defined as a student with a disability spending eighty percent or more of the school day in the general education classroom (U. S. Department of Education, 2021).

Another term that will be frequently used is *teacher education standards*. Although this may not be the name used in all states, I will use this term to refer to the standards identified by an individual state regarding the skills and knowledge that teachers should have to be licensed or certified in that state. Additionally, *students with disabilities (SWD)* in this study will refer to any student eligible for special education services under one of the 13 qualifying categories of IDEA. Although this study will be using a disability studies framework, the quantitative data used to create the sample uses the categories listed in IDEA, so it is necessary also to use these categories to define what qualifies as a student with a disability for this study.

Statement of the Problem

The legal right of students with disabilities to receive an education in the United States has not always been legally mandated. Codified into law as PL 94-142 in 1975 within the Education for All Handicapped Children Act (EHA), this law was the first nationwide decree allowing all students with disabilities to receive a free and appropriate public education (FAPE). EHA has been reauthorized and amended numerous times since its inception to update and clarify the legislation (e.g., in 1986 PL 99-457; in 1990 PL 110-476; in 1997 PL 105-17). As with any law, its interpretation and implementation have been determined by the courts and by each state. However, since the initial passage of EHA (1975), the law called for students with disabilities to be educated in the least restrictive environment (LRE), meaning students should be in the same classroom and school they would otherwise be attending if they were not disabled. The teachers in these classrooms and schools have to be prepared to work with all students for

this to happen, but in most states, the preparation of general and special education teachers occurs on two separate tracks, mirroring the separation of students with disabilities from their peers (Tropea, 1987; Yell et al., 1998). The teachers of these ungraded classes began to organize and create professional organizations. The rise of Normal schools and departments of teacher education at the university level also reflected this division, which helped create the perception of a separate yet equal system of teacher education (Labaree, 2008; Winzer, 2007).

There are federal laws that directly protect students with disabilities at the K-12 level through the reauthorized EHA, now called the Individuals with Disabilities Education Act (IDEA), and indirectly offers students protection at the post-secondary levels through section 504 of the Rehabilitation Act as well as the Americans with Disabilities Act (ADA). However, even with this federal oversight, states structure their teacher education systems. These differences in states' requirements can lead to wide variation in the level, and amount of training future teachers receive in any area, including working with students with disabilities. Data at the national level reveals that there may also be variation in the rates in which students with disabilities are being included in general education classrooms across states.

In previous research about the education of students with disabilities, multiple studies have focused on the evaluation of specific interventions or programs (e.g., a teacher educator writing about what they did in their class and how successful it was), with a large focus on the attitudes of pre-service and in-service teachers regarding working with students with disabilities. Research has also been done about best practices (or, more accurately, most commonly used practices) to include students with disabilities in the general education classroom (Nolet & McLaughlin, 2005; Reyes et al., 2017). Many factors affect the inclusion of students with disabilities being educated in the general education classroom; no study can effectively look at

them all simultaneously. By analyzing individual states' teacher credentialing/licensure standards, I hope to learn what effect (if any) the state's credentialing/licensing structure has on its rates of inclusion.

With the ongoing debates about education and calls for reform nearly constant, it is important to have empirically based data about how current practices translate into actual effects of including SWD in general education classrooms. Whether at the K-12 level or working with pre-service teachers, education occurs in individual classrooms, far from the macro-level of teacher education standards or credential structures; however, these structures form the framework for designing teacher education programs and highlight what is valued by a particular state. In looking at the actual teacher education standards in a state and seeing what similarities and differences exist across states that are inclusive intensive, the data gathered can help inform future directions of research and practice.

Purpose of the Study

Occurring at the state level, the licensure of teachers is highly regulated, with each state determining criteria and standards for teacher education and certification. Across states, pre-service teachers reported positive attitudes towards working with students with disabilities, while in-service teachers reported not receiving adequate training to work effectively with students with disabilities (Kent & Giles, 2016; Kurth & Foley, 2014; Praisner, 2003). The purpose of this study was to critically review state licensing or credential standards for teacher education across a purposive sample of states to determine if there is any connection between teacher education standards and how/if these standards may affect the placement of SWD in the general education classroom.

Research Questions

For this study, the questions I am addressing are:

1) What similarities and differences exist across states' teacher education standards who share high rates of inclusion of students in public school classrooms?

2) How do a state's teacher education standards describe the preparation for teachers to work with students with disabilities?

Ultimately, this is a study of standards. When looking at teacher education standards, it is important to look at the text of the standards, not just teachers' or administrators' opinions about how they feel about the standards. Although the standards can be coded quantitatively, an analysis of standards should not only look at what is said but also what is meant, what is emphasized, and even what is not said or included. If standards are seen as a codification and valorization of a teacher's ideal skill-set and knowledge base, that which is not included can be inferred to be unimportant, which can also be informative as to what is being valued and/or prioritized in the training of teachers in a particular state.

Significance of the Study

This study looked at states with either high percentages of students with disabilities that were fully included, or low percentages of students in highly exclusionary settings, termed in this study as "inclusive intensive," to identify if any themes or specific types of knowledge or content were common across these states. This study looks at what has been identified for teachers by their state as something to know and do in order to be licensed to teach in their state. It is my hope that the results of this study will help inform future directions of research in teacher education concerning students with disabilities.

Basic Assumptions and Limitation

This study assumes that the data are accurate and representative of actual numbers of students in the different educational settings as reported by individual schools and districts to the United States Department of Education and compiled at the national level is accurate. Another assumption is that each state's teacher education standards are incorporated into its teacher education programs. Although there can and will be variations, programs are accredited based on showing the inclusion of these standards in their program sequences, so this study assumes that teachers are receiving exposure to these standards as a part of their preparation. Another assumption is that teachers will implement the practices they learn about in their preparation programs once they begin teaching.

Given the design of this study, the results are not necessarily generalizable to other states that were not included in the sample. However, these results can help determine areas of future research regarding state standards and teacher preparation. Determinations on how to determine which states to include as a part of an inclusive-intensive sample were included as part of the study design and will be described in Chapter 3.

Summary

Looking at teacher education in terms of students with disabilities, one of the main findings seems to be that teachers do not feel prepared to work with students with disabilities in general education classrooms (Gehrke & Cocchiarella, 2013; Idol, 2006; Kent & Giles, 2016). The right for a student with disabilities to be included in the classroom has only been legally protected since 1975 with the enactment of PL 94-142, with continued interpretation through the courts since then. This study examined how teachers are prepared to work with students with disabilities, specifically what teachers are expected to know to be certified in states with the

highest rates of including students with disabilities. Before looking at the results of this study, Chapter 2 will explore the historical roots of the education of students with disabilities in the United States and practices that have been identified as being supportive of the inclusion of students with disabilities.

Chapter 2: Literature Review

When examining how teachers are trained to work with students who have disabilities in general education settings, it is helpful to look back at the history of teacher training in the United States. Additionally, reviewing the history of how students with disabilities came to be educated in the public school systems, teachers' attitudes towards working with students with disabilities, and what practices have been identified that help teachers work most effectively with this population of students are research areas that help explain the current state of education surrounding students with disabilities. This Chapter has four sections. The first section summarizes the history of special education, both the education of students with disabilities, as well as the history of teacher education for teachers of students with disabilities, including the role that parent and disability advocacy groups played in pushing forward both legislation and litigation to create increased inclusive educational opportunities for students with disabilities. The second section outlines identified best teaching practices for working with students with disabilities in the general education classroom. The third section discusses teacher attitudes towards disability, and the final section focuses on teacher attitudes towards working with students with disabilities, particularly when working with these students in inclusive settings.

History of Special Education and Teacher Education

The path to education for students with disabilities has varied widely across the United States over the past 200 years. This is due to the 10th amendment of the Constitution, which states, "the powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people" (U.S. Const. Amend. X). Since education is not a power delegated to the United States by the Constitution, it fell to each state to determine how to structure its school systems for all students, both with and without

disabilities. The following section will describe the earliest efforts to educate students with disabilities.

Efforts to Help: The Beginnings of Special Education

As Yousef (2001) described, one of the earliest recorded attempts to educate a child with disabilities was the case of Victor of Aveyron, by Jean Marc-Gaspard Itard, in the late 1700s in France. Although attempts to teach Victor language were unsuccessful by Itard's measure, his methods could be classified as one of the first systematic attempts to educate a child with a disability and the beginnings of special education. The concept of using specialized methods to educate students in segregated settings spread throughout Europe and eventually came to the United States.

Starting in the United States in the early 1800s, some states provided grants for the creation and running of asylums for children who were blind (Martin et al., 1996), which allowed for the establishment of segregated residential schools which specialized in educating children with disabilities. In the case of creating schools for children who were blind, American doctors, Samuel Gridley Howe and John Dix Fisher, observed schools in Paris, who then went on to found one of the first schools for children who were blind in the United States, the New England Asylum for the Blind in Boston, Massachusetts (Winzer, 2007). This school provided instruction to the students and the teachers who worked at this school. These teachers often went on to work with students at other schools as well. These types of schools utilized a model of *custodial care* for students with disabilities, often taking the place of the family in educating and caring for these children, which although was cautioned against by Howe and others, these types of schools often became permanent placements, rather than temporary educational settings (Pfeiffer, 1993).

According to Crouch and Greenwald (2007), another example of European methods being brought back to the United States comes from the creation of schools for children who are deaf. Some of the wealthier families in the United States with children who were deaf would send their children to schools such as Braidwood Academy in Scotland, which was a residential school for children who were deaf. One such family, the Bolling family, would found the first school for children who were deaf in the United States. Teachers would learn the specialized methods at these initial schools and then create other schools using the same teaching techniques. For example, Thomas Gallaudet, after spending time at Braidwood Academy, went on to found the American School for the Deaf in Hartford, CT. Gallaudet also helped spread sign language or manualism, versus the teaching of lip-reading and speaking, or oralism, which was favored at the time. His son, Edward Gallaudet, created a similar type of school in the District of Columbia. This school was eventually given the right to grant college degrees and is still in operation today (Marschark et al., 2002).

Efforts to Educate: Compulsory Education Laws and Common Schools

During the 1800s, as described by Yell et al. (1998), states began to pass compulsory education laws, which mandated that all children attend school. The first state to pass one of these laws was Rhode Island in 1840, followed by Massachusetts in 1852, and by 1918, all states had a compulsory education law, with the exceptions of Alaska and Hawaii, which did not become states until 1959. The ultimate result of these compulsory education laws was the creation of a large influx of students into schools from culturally and linguistically diverse backgrounds. Many of these laws contained exceptions that allowed the exclusion of children that were not seen as being able to benefit from school due to disability status, as well as due to

cultural and linguistic differences, which provided a way for schools to exclude these students from the classroom (Tropea, 1987).

In addition to the first compulsory school laws being passed in the 1840s, bringing larger numbers of students into classrooms, the Common School movement, in which schools were seen as a way of socializing children into becoming "good citizens" began gaining popularity in the United States (Osgood, 1997). As described by both Winzer (2007) and Fife (2016), Common Schools were founded with the idea of providing all students with a taxpayer-funded education; the difficulties in meeting this challenge became apparent quickly. This belief problematized the behavior of some children in the classroom, especially those who were from different countries and who faced language barriers, as well as for children with disabilities, whose behavior deviated from a perceived norm. Horace Mann, a leader of the Common School movement, described the Common Schools in the following way in his 12th Annual Report to the Massachusetts Board of Education in 1848, "…without money and without price, it [education] throws open its doors, and spreads the table of its bounty, for all the children of the state" (as cited in Osgood, 1997, pp. 375).

Increasing numbers of students from various cultural and linguistic backgrounds began entering schools, ungraded classrooms, where students could be placed using a pre-determined and often ill-defined referral process and not be held to the same academic standards as other students (Osgood, 1997). These classes increasingly became a way to remove students who were seen as disruptive from other classes, described as"...an unholy trinity of academic retardation, low intelligence, and undesirable behavior" (Spaulding & Pratt, 2015, p. 26). Ungraded classes were not very successful in educating students, and frequently, the students in these classes simply stopped attending school, with little effort on the part of the school to prevent this from

happening or to re-enroll the child again. Teachers or other school administrators determined which students would not benefit from school, and without a set process, it was very easy for a school to make this determination about a given student. Early advocates of psychology and child study during this time provided a supposedly scientifically based method of identifying them and espoused eugenic applications of these types of testing.

Efforts to Train Teachers: Differing Schools of Education

In addition to the rise of Common schools, compulsory school laws and ungraded classrooms in the mid to late 1800s discussed in the previous section, the formation of Normal schools began. As Labaree (2008) described, these schools were created specifically to train teachers and were a move towards the professionalization of the education of teachers. A divide also began to form between the Normal schools, which focused more on practical skills needed for teaching (many of which went on to expand and form the basis of the state university systems), and the departments of education at more elite universities such as Harvard, which focused on producing research about education. Neither system placed a large focus on the teachers of ungraded classes, which were responsible for the education of students with disabilities. This lack of focus on teachers of ungraded classes led to efforts by these teachers to form their professional organizations, which was the beginning of training teachers to work with students with disabilities (Winzer, 2007).

Continuing these efforts to train teachers of students with disabilities, in 1922, faculty and students in the Teachers College at Columbia University helped found the Council for Exceptional Children (CEC), led by Elizabeth Fallon, who had previously served as the Inspector of Ungraded Classes for the New York City schools (Wehmeyer & Smith, 2016). Fifty years later, this organization would go on to play a key role in constructing the Education for All

Handicapped Children Act (later reauthorized as the Individuals with Disabilities Education Act)

that would eventually guarantee a right to a Free and Appropriate Public Education (FAPE) to

students with disabilities (Itkonen, 2007).

Efforts to Advocate: Parents and Disability Advocates Respond

In addition to teachers of ungraded classes beginning to organize and form professional

organizations, parents began to organize in an attempt to find and/or create better educational

opportunities for their children with disabilities, with many local organizations forming in the

1920s and 1930s, as parents grew increasingly unhappy with their children's educational

placements (Yell et al., 1998). The parent groups often focused their advocacy efforts around

civil rights issues, more so than the professional organizations did (Itkonen, 2004). This was

especially true for parents of children who lived in institutions, where the conditions were often

far from ideal (Wehmeyer & Smith, 2016). At the time, the rise of child psychology provided a

perceived scientific basis for excluding these children from all but institutional placements

because they were deemed *uneducable* (Ferguson, 2014).

The post-World War II period saw the beginning of a move away from eugenics-based

policies to prevent any comparisons to the atrocities perpetrated in Germany towards Jewish

people (Pfeiffer, 1993). Additionally, parent and professional organization advocacy groups were

able to organize more formally. They began to increase their ability to influence policy at local

and state levels. By the 1950s, many of these groups had gained influence and lobbied Congress

to change laws and get funding for children with disabilities (Yell et al., 1998). Groups such as

ARC (formerly the Association for Retarded Citizens), the United Cerebral Palsy Foundation,

and the American Foundation for the Blind were all creating a stronger presence for themselves

and the advancement of rights for individuals with those disabilities at both the state and national

level (Pfeiffer, 1993; Yell et al., 1998).

The 1970s brought the independent living movement, which had the goal of moving

people with disabilities out of institutionalized settings and back into the community, with the

segregation of people with disabilities framed as a part of the broader civil rights movement

occurring across the country at the time (Pfeiffer, 1993). This extended to advocating for

students with disabilities to be enrolled in their local neighborhood schools, with advocacy

organizations playing an important role in pushing these issues forward both in the courts, and in

making changes to federal laws (Yell et al., 1998).

Efforts to Create Change: Case History of Students with Disabilities

As previously discussed, schools during the 1800s and early 1900s determined whether a

student benefited from school. They could exclude students if it were determined they would not

benefit. One of the earliest court cases concerning excluding children with disabilities was

Watson v. City of Cambridge, MA (Mass., 1893). This case found that a child deemed to be *weak*

of mind could be expelled from public schools, providing an exception to the compulsory

education law of that state. This was followed by *Beattie v. Board of Education* (Wis., 1919),

which made its way to the Wisconsin State Supreme Court. In this case, it was found that a

student who drooled could be excluded from the public school, and the student was referred to a

school for the deaf instead. Again, this case provided a precedent for excluding children with

disabilities from school by providing an exception to the compulsory education laws. Another

case, *Board of Education of Cleveland Heights v. Goldman* (1934), found that students with

disabilities could be excluded from compulsory education laws too and that school districts could

"...consider whether certain children were not capable of benefiting from instruction" (Osborne

& Russo, 2012, p. 33). Cases such as these formed the legal basis for excluding students with disabilities from schools and absolving schools of the responsibility for educating all students.

Winzer (2007) described increasing numbers of states began to pass laws specifically calling for educational services to be provided for students with disabilities, typically with more focus on practical skills and not academics. Sixteen states passed these types of laws by 1930, and by 1945, 175 special education programs existed across the country. Special education classes also provided a destination for the students in ungraded classes, which reinforced the concept of a segregated educational system for children with disabilities and created a precedent for schools' rights to refuse to educate a student with a disability. This belief had been previously reinforced by court decisions, such as the previously discussed *Watson v. MA (*1893), *Beattie v. Board of Education* (1919) and *Board of Education v. Goldman* (1934). Cases involving the exclusion of students with disabilities from schools would continue to be litigated in courts across the country; however, the outcomes of these cases would begin to shift away from segregation and towards inclusion.

Efforts to be Treated Equally: The Rise of the Civil Rights Movement

In 1954, the Supreme Court decided the landmark case *Brown v. Board of Education of Topeka, KS.* The doctrine of "separate yet equal" was deemed unconstitutional and was determined to violate the Equal Protection Clause of the 14th amendment of the Constitution. This case was preceded in 1947 by a lesser-known case, *Mendez v. Westminster School District*, which found that Mexican students could not be segregated into "Mexican schools," schools that most typically served a remedial function. At the time of *Mendez,* the governor of California, Earl Warren, had taken an active role in the Mendez case by asking the State Attorney's General Office to assist the plaintiffs in the case, which were the families, not the school district. Six

years after the final decision in *Mendez*, Warren would be appointed as Chief Justice of the Supreme Court. Chief Justice Warren was presiding over the court at the time of the decision in *Brown v. Board of Education*, and with similar types of language used in both cases, the influence and precedent of *Mendez* was implied as it was used in the decision made in *Brown* (Aguirre, 2005).

Although both of these cases were regarding the segregation of students based on race, the precedent set by *Brown* formed the legal basis that a segregated education for a specific group of students was unconstitutional. However, states would continue to push back against the idea of including students with disabilities in public schools. Up until 1969, parents who tried to enroll students with disabilities into public schools who had already been deemed uneducable could be criminally charged, and many states during this time stated that they did not have the funding to provide educational services to students with disabilities (Yell et al., 1998).

Concurrent to these court cases, changes in federal law were also occurring, which also had implications for the education of students with disabilities. For example, the Elementary and Secondary Education Act (ESEA) was passed in 1965. The ESEA increased the amount of federal money available to help provide support to schools for specific categories of students, including students with disabilities under Title VI of this Act. ESEA also established the Bureau of Education for the Handicapped, which was formed to oversee educational services to students with disabilities (Martin et al., 1996; Yell et al., 1998). Although this law passed at the federal level, individual states still had flexibility in determining enrollment of children with disabilities. Court cases such as *Mendez v. Westminster* (1947) and *Brown v. Board of Education* (1954) found that separate was neither equal nor constitutional when it came to education. However, even with the legal precedent set by *Brown*, there continued to be an uneven application of this

law in regards to students with disabilities in various states. Rates of attendance in public schools for students with disabilities were still low, and by the early 1970s, no state claimed to educate more than 50% of children with disabilities, with some states educating less than 20% of children with disabilities in the public education system (Martin et al., 1996). The early 1970s would see a new group of court cases that changed the direction of the current legal precedent regarding the rights of students with disabilities to receive public education, a precedent that set the stage for the passage of a law guaranteeing these rights for students with disabilities across the country.

Pennsylvania Association for Retarded Citizens (PARC) v. Pennsylvania (1972), a class-action lawsuit, led to the guarantee of education for students with intellectual disabilities from ages 6-21. The programs were required to resemble general education classes as much as possible. Another class-action lawsuit, *Mills v. Board of Education of Washington, D.C.* (1972), led to schools requiring safeguards for students and their families to prevent excluding students with disabilities from school. Forty-eight similar cases in twenty-eight states across the country were heard, with a similar pattern of outcomes, finding that parents of students with disabilities had a right to enroll their children with disabilities in public schools (Yell et al., 1998). However, not all cases were found in favor of students' families with disabilities. In *Harrison v. Michigan* (1972), the provision of programs for students with disabilities in a segregated setting was found not to violate due process, and in *San Antonio v. Rodriguez* (1973), a right to public education was found not to have a constitutional basis (Itkonen, 2007). Therefore, the focus of many advocacy groups shifted towards creating a law at the federal level versus continued litigation in the courts (Melnick, 1995).

In 1973, the Rehabilitation Act passed. Section 504 of the Act prevented the discrimination against people with disabilities in any institution receiving federal money,

including schools. However, regulations were not issued about the implementation of Section 504, and it was not until a lawsuit was filed, *Cherry v. Matthews,* that implementation of section 504 began in 1977. In addition to the passage of the Rehabilitation Act, there was an attempt to amend the ESEA that same year. The Education Amendments to ESEA, initially introduced as PL 93-380, would guarantee the rights of children with disabilities to receive a public education. The goal of guaranteeing the rights of children with disabilities in public education was largely seen as being unenforceable; therefore, Congress did not take action on these amendments before the end of the session, meaning that they would not be voted on. For the amendments to be implemented, they would have to be reintroduced, and attempt to have it passed the following year (Yell et al. 1998).

A year later, in 1974, the amendments were reintroduced, now identified as PL 94-142, and renamed the Education for All Handicapped Children Act (EHA). This act codified many protections for students with disabilities in terms of education. It guaranteed students with disabilities the right to a *free and appropriate public education* (FAPE). It also included provisions for non-discriminatory testing of students to determine disability status. This process for determining placements of students mandated placing students in what was termed the *least restrictive environment* (LRE). It also created a due process procedure to ensure students and their families had a way of contesting decisions made by the school that they felt were not providing FAPE to their children (Pub. L. 94-142).

Education is not controlled at the federal level, so the federal government monitored the enforcement of the mandates of EHA by promising money to states that enacted EHA to help fund their special education programs. States were required to submit a State Plan for following EHA to receive this money, and forty-nine of the fifty states submitted such a plan. The one state

that did not, New Mexico, was eventually sued by a disability advocacy group for not providing the same special education benefits as other states (Yell, Rogers, & Rogers, 1988). *New Mexico Association of Retarded Citizens v. State of New Mexico* (1982) found that although the state was not ordered to follow EHA, they were ordered to follow Section 504 of the Rehabilitation Act.

The passage of EHA shifted the legal landscape in terms of increasing and protecting the rights of students with disabilities to receive a public education; however, the legal fights to enforce its mandates continued. In 1978, *Stuart v. Nappi,* the Danbury school district attempted to suspend a student with disabilities for an entire school year due to disruptive behavior after the student had been placed in a special education class. The ruling, in this case, found that suspending the student for the entire year would be a denial of FAPE; however, the ruling did allow a school to move a student with disabilities to a more segregated or restricted setting (D. Conn. 1978). *Doe v. Koger* (1979) further interpreted this issue. This case found that a determination hearing must take place before a change of placement to a more restrictive setting or suspension of a student with a disability occurs. *Doe* also found that a student with a disability could be expelled from a school, but only if the behavior leading to the expulsion was found not to be a result of the student's disability (ND Ind. 1979).

Efforts to Reform: The Era of Accountability

The 1980s were the beginnings of the Reform movement in education in the United States (Bullough, 2001; Mostert & Crockett, 2000; Winzer, 2007). With the publication of *A Nation at Risk*, calls increased for the professionalization of teacher education, the creation of standards for teacher education, and increased federal government oversight of education was solidified in 1984. The United States' Department of Education was formed as a separate department from the Department of Health and Human Services in 1979. The Bureau of

Education for the Handicapped was renamed the Office of Special Education Programs (Martin et al., 1996). The focus of where students with disabilities would receive their education began to transition to students being educated within their neighborhood schools, with a goal of *sameness of experience* instead of *sameness of treatment* (Winzer, 2007). However, cases would continue to be litigated in the courts that would continue to interpret the mandates set by EHA.

In 1982, in the case of the *Board of Education v. Rowley*, Amy Rowley, a child with a hearing impairment, was denied access to an interpreter, as it was stated that she was making progress with a hearing aid. This case eventually made its way to the United States Supreme Court. The court ultimately found that the standard for an educational program for a student with disabilities was that it provided *some educational benefit* and that the purpose of EHA was to provide access but not necessarily full educational benefits for a child with a disability (Board of Educ. v. Rowley, 458 U.S. 176, 1982).

In 1983, *Roncker v. Walter* found that special education services are portable, meaning that if a service can take place in a more integrated setting, then the special education services can follow the student to a more integrated setting. However, this case also found that a more segregated setting could still constitute FAPE if the services were not carried over to a more integrated setting. Another finding of this case was that placements should be made on an individual basis, meaning that a placement should be made based not solely on the type of disability but rather on the child's needs.

In 1986, the Part H amendments of the EHA were authorized. These amendments included the ability for parents to be reimbursed for attorney's fees for cases brought against school districts, lowering the initial age for eligibility of services to age three, and establishing an Infant/Toddler eligibility for children with developmental disabilities. These changes increased

the ability for parents to fight for placements and services for their children, and the court cases continued (Pub. L. 94-142).

The Regular Education Initiative (REI) was another reform effort introduced during the 1980s. REI called for the elimination of separate special education services and the full integration of students with disabilities into general education classrooms. One proponent of REI was the Assistant Secretary for the Office of Special Education and Rehabilitative Services, Madeleine C. Will. The Teacher Education Division for the Council for Exceptional Children also supported REI (Council for Exceptional Children, 1987). However, there was a lack of consensus between general and special education (Fuchs & Fuchs, 1994). This proposal had strong opinions on both sides, as it called into question many of the basic premises of special education, such as the need for students with disabilities to be educated separately or the concept that only specially trained teachers could, or should, teach students with disabilities. Some professionals in the field felt that the REI movement was harmful to students with disabilities, as it would cause fewer resources to be allocated specifically to students with disabilities (Harkins, 2012; Skrtic, 1991).

In 1989, *Daniel R. v. Texas Board of Education* found that FAPE was not defined as being a general education placement, but instead, FAPE is where the student will receive the most educational benefit. This case also created a two-part test for determining the placement of a student with disabilities: (1) Can general education placement plus services meet the IEP goals?, and (2) is the child being mainstreamed to the maximum extent possible? (5th Cir. 1989). Also, in 1989, *Timothy W. v. New Hampshire Board of Education* found that school districts must provide special education services to all eligible students, regardless of the type of disability. This meant that even students with the highest support needs must be provided

education. *Timothy W. v. New Hampshire Board of Education* also reinforced the zero-reject policy of the EHA, which is that all children with disabilities must be provided with FAPE. However, in this case, the finding did allow for a variety of settings and program types to be construed as special education (1st Cir. 1989).

Efforts to be Included: Legislation and Litigation for Inclusion

A major reauthorization of the EHA (Pub. L. 94-142) occurred in 1990. As a part of this reauthorization, the law was renamed the Individuals with Disabilities Education Act (IDEA), with a change in terminology from *handicapped* to *disabled* as well as requiring the use of person-first language (i.e., *the girl with autism* would be person-first language vs. *the autistic girl* would not). This reauthorization also added two new eligibility categories, autism and traumatic brain injury, and added a requirement for transition plans to be developed as a part of the IEP for any student aged 16 and above. In addition, in 1990, the Americans with Disabilities Act (ADA) was passed, a law that protects people with disabilities from discrimination in public places, including colleges and universities. Unlike IDEA, the ADA is not focused specifically on education.

During the 1990s, K-12 schools focused more on the inclusion of students with disabilities in the general education setting, versus students being in segregated classes on general education campuses (Mostert & Crockett, 2000). The legal battles continued as well. In 1990, *Sacramento Board of Education v. Rachel H.* ultimately created a four-part test to determine if a student with a disability should be included in a general education setting. The four-part test includes determining: (1) the educational benefits to the student in the general education classroom, (2) the impact of the student with a disability on the teacher and other students in the classroom, (3) the non-academic benefits of interaction with non-disabled peers

for the student with a disability, and (4) the cost of supplementary aids/devices that would be required for the student with a disability to be placed in a general education setting. Three years later, in 1993, Oberti *v. Clementon Board of Education* (New Jersey) found a district's attempt to move a student with a disability to a more segregated setting from a general education classroom to violate IDEA. Although students can be moved into more segregated settings, this was only if the general education placement was determined not to be working. The court concluded "...inclusion is a right, not a privilege for a select few" (Oberti v. Board of Education, 995 F.2d 1204, 83 Ed. Law Rep, 1009, 2 A.D.D. 64).

In 1997, another reauthorization of IDEA occurred. In this reauthorization, a requirement for specific goals and objectives that a student would be expected to meet over the next year to be included in the IEP was added, as well as the use of Positive Behavior Support Plans, to help assist students with behavioral challenges as an attempt to reduce suspensions and changes in placement. There was also the mediation process and a ten-day maximum suspension period for students with disabilities, with a maximum of forty-five days for an emergency placement.

Also, in 1997, *Hartmann v. Loudon County Board of Education* was decided, which found that students with disabilities should be mainstreamed if only they are receiving a benefit and that a *marginal* benefit does not prevent moving a student to a more segregated setting. Cases continue to make their way through the courts (1st Cir. 1989). In 2017, *Endrew F. v. Douglas County School District* (Colorado) changed the standard established by Rowley, from *some educational benefit*, which was found to be the required standard for the education of students with disabilities with the *Rowley* finding, increased to be *appropriately ambitious*. The court's interpretation of this new standard for students with disabilities remains to be seen, but this finding made clear that the currently held standard of *de minimis* was not acceptable

(Endrew F. v. Douglas County School District, 2017). The next section will look at the research base surrounding best practices for educating students with disabilities.

Best Practices for Inclusive Education for Students with Disabilities

The term inclusion does not appear in the federal law governing the delivery of special education services in the United States, the Individuals with Disabilities Education Act (IDEA). Instead of referring to the term inclusion, IDEA refers to a concept of the *least restrictive environment (LRE),* which states that students with disabilities should receive access to the general education curriculum. In the 2004 reauthorization of IDEA, the language surrounding this principle was strengthened, stating that students with disabilities should be educated, "...in the regular [general education] classroom to the maximum extent possible." (20 U.S.C. § 1400 (c) (5) (2004)). Inclusion is often measured by the amount of time a student with disabilities spends in the general education classroom, meaning the classroom and school they would attend if they did not have a disability (Gilhool, 1989). Often studies about inclusion define a student as being fully included if they are educated in the general education setting for 80% or more of the school day (Goodman et al., 2011; Mackey, 2012; Rojewski et al., 2015). The federal government does not keep records of a percentage range higher than 80% or greater in the Child Count function of IDEA, so this is the highest rate of students being included that can be obtained through federal data. In thinking about inclusion, rather than focusing on simply a physical placement of students, inclusion is also defined as a set of ideals, values, and beliefs that students with disabilities should be educated alongside their non-disabled peers, and valuing having a wide range of learners in the general education classroom setting (Gehrke & Cocchiarella, 2013). The next sections will describe methods found to be supportive of inclusive education.

Collaboration/Co-Teaching

As summarized by Osgood (1997), Mann described co-teaching relationships as a means of maintaining and improving classroom efficiency. Having instruction provided to students on a specific topic by a teacher who was seen as an expert in that subject was seen as a more efficient teaching model, rather than having a single teacher be responsible for teaching all subjects to a single class of students. This model of specialization of teachers remained at the secondary level. The 1850s also brought about the rise of ungraded classes and the beginnings of compulsory education laws, which required schools to enroll larger numbers of children than previously had been.

In the years following the passage of PL 94-142, individual states and schools began to experiment with co-teaching to provide instruction for students with disabilities, with an increase in popularity in the 1980s (Friend et al., 2010). Continued changes in federal education laws led to further adoption of co-teaching, specifically the No Child Left Behind Act (NCLB), which passed in 2002 (Pugach et al., 2011). Part of NCLB was the mandate for all students to be taught by a *highly qualified* teacher, which was codified to apply to students receiving special education services with the 2004 reauthorization of IDEA (IDEA 2004).

Solis et al. (2012) described co-teaching as having "...little variability in the definition...but broad variability in its implementation" (p. 499), while Friend (2008) defined co-teaching as:

> the partnering of a general education teacher and a special education teacher or another specialist to jointly deliver instruction to a diverse group of students, including those with disabilities or other special needs, in a way that flexibly and deliberately meets their learning needs. (p. 11)

Friend and Cook (2010) described six different models of co-teaching. One model is *one teach, one observes*, in which one of the teachers teaches the entire group of students, while the other teacher observes and either collects data (behavioral, academic, etc.) or may provide individual student support as needed throughout the lesson. A second model is *station teaching*, in which both teachers are teaching different topics, as well as there may be some activities designed for students to complete in groups or independently, but without direct teacher guidance or instruction. Students then rotate through the stations so that both teachers work with all students. A third model is *parallel teaching*, in which both teachers are simultaneously teaching the same content to part of the class, which allows for smaller group sizes and increased opportunities to differentiate instruction for individual students. A fourth model is *alternative teaching*, when one teacher works with the majority of the class, while the other teacher works with a smaller group of students, teaching different content, which can be for remediation, enrichment, assessment, or some other reason. A fifth model is *teaming*, where both teachers instruct the whole group, either alternating who is presenting at once, providing differing viewpoints or approaches, or some other configuration. The sixth model is *one teach, one assist*, where one teacher provides the primary instruction to the whole group, while the other teacher provides individual assistance to students as needed throughout the lesson.

Co-teaching is often operationalized in one of two ways: one, as a special education teacher utilizing a push-in model of service delivery, where the teacher/assistant comes into the general education classroom and works with either an individual or group of students; or the use of a consulting model, where the special education teacher consults with the general education teacher but is not providing direct instruction to students (Bauwens et al., 1989; Kilanowski-Press et al., 2010; Sileo, 2011). In most cases, the *one teach, one assist* model is utilized, with

the special education teacher acting as the assistant and the general education teacher teaching the class (Solis t.al., 2012). This is especially true at the secondary level, although both teachers preferred this arrangement (Mastropieri et al., 2005). This may be because at this level, the general education teacher is seen as a content expert, with a level of knowledge about the subject that the special education teacher may not have. This allows the special education teacher to focus on making accommodations and modifications. However, it has also been found that the special education teacher in this co-teaching arrangement is often used as an assistant to a student with behavioral challenges rather than assisting with the actual content of the lesson (Mastropieri et al., 2005).

One obstacle to implementing co-teaching in classrooms is that teachers feel they received inadequate training in their teacher preparation programs, often consisting of a single course, and not specifically focused on co-teaching (Friend et al., 2010; Hoppey, 2016). Even if teachers are open to co-teaching as an instructional method, they may not have the training or experience to implement it well. Receiving professional development or training in co-teaching has been found to have a positive effect on teachers' attitudes towards co-teaching, as well as working in inclusive settings in general, and many university faculty in teacher credentialing programs report feeling unprepared to teach pre-service teachers to work successfully in inclusive settings (Reyes, Hutchinson, & Little, 2017).

Another problem cited in the literature in implementing co-teaching is a lack of shared planning time (Mastropieri et al., 2005). This lack of planning time may be a part of one the *one teach, one assist model* is most widely used, as this model would typically require the least (or no) planning to implement. The general education teacher would prepare and teach the lesson, while the special education teacher could simply arrive and assist throughout. The research has

found improving attitudes towards co-teaching over time (Solis, Vaughn, et al., 2012). However, less support has been found at the secondary level than at the primary level for co-teaching (Avramidis & Norwich, 2002; Mastropieri et al., 2005; Scruggs & Mastropieri, 1996).

Instructional Assistants/Paraprofessionals

The use of instructional assistants, also known as paraprofessionals, started in the 1950s to help alleviate stresses caused by teacher shortages, increasing from about 10,000 paraprofessionals in 1965 to approximately 150,000 by 1993 (Jones & Bender, 1993). The role of instructional assistant gradually evolved, shifting from more clerical and administrative functions to taking on a larger share of teaching responsibility, occurring while increasing numbers of students with disabilities were entering public school systems (Jones & Bender, 1993). Although the concept of the LRE does not preclude placements in segregated special education settings, it does state that students with disabilities should be educated alongside students without disabilities to the maximum extent possible (IDEA, Sec. 300.114). Instructional assistants have played a large role in fulfilling this mandate, as they are often the ones facilitating the inclusion of a student with disabilities in the general education classroom. However, caution should be taken that instructional assistants remain in a support role rather than taking on primary teaching responsibilities for students with disabilities (Giangreco et al., 2001).

Instructional assistants currently play a large role in the inclusion of many students with disabilities in the United States. Often, an instructional assistant accompanies a student with disabilities into the general education classroom and facilitates their participation in that setting, rather than the special education teacher, due to large caseloads of special education teachers (Suter & Giangreco, 2009). The literature base has documented the high rates of instructional assistants used in this role, with instructional assistants often being used in inclusive contexts as

a one-to-one aide for a student with a disability, an arrangement that was preferred by a majority of general education teachers (Giangreco et al., 2002; Idol, 2006; Suter & Giangreco, 2009). This means that instructional assistants are providing the primary instruction to students with disabilities, which can be problematic, as instructional assistants do not often receive much, if any, pre-service or in-service training in working with students with disabilities, with many instructional assistants receiving their primary training from the classroom teacher (Giangreco, et al. 2002). Instructional assistants have been used more frequently with students with higher support needs, and instructional assistants were found to play the primary role in providing instruction to these students (Blalock, 1991; Giangreco et al., 1999).

The use of instructional assistants is higher at the elementary school level than at the high school level (Giangreco et al., 2002). However, this may be a reflection of higher rates of inclusion at the elementary school level versus high school level, or a lack of content-area knowledge on the part of the instructional assistants when it comes to more advanced subjects at the high school level (Idol, 2006). As discussed in the previous section, instructional assistants often also play a role in co-teaching. Rather than having a second teacher pushing into classrooms to work in any one of various co-teaching models described by Friend and Cook (2010), it may be an instructional assistant to push into the general education classroom to help support students with disabilities.   However, most teachers, in either special education or general education, are not trained on giving support or supervision to instructional assistants, which can often lead to difficulties in the classroom and a lack of clarity between teachers and instructional assistants as to the role of the assistant, which can lead to problems in the classroom (French, 1998).

Differentiated Instruction

Another topic discussed in the literature as a best practice for inclusion is differentiated instruction. Differentiated instruction can trace its roots to the work of Vygotsky (1978) and his concept of the *zone of proximal development*, which is the belief that children learn best when given tasks that are slightly above their current ability level. A child's progression from their current level of understanding to the slightly higher level comes from interactions with teachers and peers that have a slightly higher level of skill or ability for the task.

Differentiated instruction builds upon the work of Vygotsky by focusing on creating learning experiences and planning curricula that addresses the increasing diversity of the classroom that occurred with the implementation of IDEA (Subban, 2006). As previously mentioned, the implementation of IDEA, and its doctrine of LRE brought a wider variety of students into the general education classroom, so much so that even segregated classrooms increased the numbers of students being educated in the public school system and at their neighborhood schools (Tomlinson et al., 2003). Tomlinson (2001) described differentiated instruction as a response to the increased "academic diversity" of students and classrooms of increasingly mixed ability levels.

Based on a review of the literature on differentiated instruction, Tomlinson et al. (2003) identified six hallmarks of differentiated instruction. One hallmark of differentiated instruction is that it is *proactive, not reactive*. In truly differentiated instruction, tasks are planned with multiple entry points and engagement options before the lesson. Accommodations and modifications are not made to an existing lesson; instead, lessons are designed with various ability levels and interests in mind. Another hallmark is the use of *small, flexible teaching groups*. This is not to say that whole group lessons cannot occur in a classroom where

35

differentiated instruction frames the curriculum design and planning. However, small group instruction needs to be a frequently used practice to accommodate various learners. This allows targeted instruction to occur so that a teacher can better meet the needs of each student. The third hallmark of differentiated instruction is the use of *varied materials*. In truly differentiated instruction, there are a variety of ability levels and learning preferences represented by the tasks. By planning for tasks that are truly inclusive of a heterogeneous group of learners, the same materials would not be able to be used by all students.

An example of this would be using books on the same topic at different reading levels to either increase or decrease the literacy demands of a task. Varied materials can also help incorporate student choice into a task. If a class was studying fairy tales, students might have a variety of stories to choose from, rather than the entire class learning about the same story at the same time. The fourth hallmark of this model is *variable pacing*. Often in classrooms, teachers feel pressured to keep pace with a predetermined rate for "coverage" of material so that students will be ready for end-of-the-year state testing. This concept goes against the ideals of differentiated instruction, as not all students will reach the same benchmarks simultaneously. Having variable tasks and small groups can help facilitate different pacing for students. The fifth hallmark is curriculum and tasks that are *knowledge-centered*. Key concepts and ideas are identified before planning a lesson or unit of study. What learners should come away with is identified before the task, and then the learning activity (or activities) are designed with this in mind. Less emphasis is placed by the teacher on what tasks a student is completing to students completing the same tasks, but rather, they are completing tasks that move them towards the mastery of key concepts. The knowledge gained from a unit of study may be a skill versus specific information. An example of a key skill to be learned may be how to complete a research

project, with students given a variety of options for the topic of the project. The key knowledge

might be to write a persuasive essay, but students would choose what to write. The teacher may

need to provide more scaffolding for the writing process with a small group of students, while

others may simply need an overview. Some students may use assistive technology, such as

computer software that helps them organize their writing, or speech-to-text software that allows

them to dictate rather than type out their responses. Students may be given multiple output

options, such as creating an advertisement or writing a letter to a lawmaker rather than a standard

essay. The final hallmark identified *learner-centered curriculum* and tasks. Instructional tasks

are designed with the needs and interests of all learners in mind. This means incorporating

various materials, response options, instructional methods, and timing into all tasks.

Universal Design for Learning (UDL)

Originally scribed to Mace, Universal Design is a concept that originated in architecture,

described as the process of designing buildings and other physical spaces to be physically

accessible to a wide range of people as a part of the initial design process, rather than retrofitting

a non-accessible building to make it more accessible after it is already built (Bowe, 2000).

Building on this concept and applying it to education, Rose and Meyer (2002) developed three

principles of universal design for learning (UDL):

> 1. To support recognition learning, provide multiple means of representation—that is, offer
>
> flexible ways to present what we teach and learn.
>
> 2. To support strategic learning, provide multiple means of action and expression—that is,
>
> flexible options for learning and expressing what we know.
>
> 3. To support effective learning, provide multiple means of engagement— that is, flexible
>
> options for generating and sustaining motivation, the why of learning.

The use of UDL does not mean there will not be a need for further instructional differentiation to occur to meet individual student needs, but it is a concept described in the literature as being supporting of inclusive education. In addition to be supportive of inclusive education, an increased focus on providing individual supports in the form of accommodations, modifications and supports to students with disabilities as a part of their IEP was included in the 1997 IDEA re-authorization (Nolet & McLaughlin, 2005).

UDL serves as a solution to meet the requirements of IDEA as it is applying this same process to education - including a wide range of diverse learners by designing curriculum, adjusting teaching practices, and changing school organization, rather than designing accommodations or modifications to existing structures to accommodate the needs of a particular learner (Pisha & Coyne, 2001). The Assistive Technology Act defined UDL as "…a concept or philosophy for designing and delivering products and services that are usable by people with the widest possible range of functional capabilities," and was ultimately written into the 2004 re-authorization of IDEA (ATA, 29 USC 3002 Sec. 3, 19,1998; IDEA, 20 U.S.C. § 1400, 2004). UDL allows for a wider variety of learners to access a given learning environment, and rather than making adjustments and changes after a lesson has been designed, UDL calls for designing a lesson with a wide range of methods of participation and evaluation so that students with a variety of strengths and abilities can all participate (Jimenez, Rose, & Graf, 2007).

Rose and Meyer (2006) described three primary principles of UDL. The first principle is *multiple means of representation*. This calls for multiple ways of accessing and/or presenting content. Technology often can play a role in this process by providing screen reading, enlargement of text, or defining words. The second principle is *multiple means of expression*. This allows students to demonstrate their knowledge or mastery of a task in more than one way.

Rather than solely measuring mastery through a test, this principle calls for tasks to be designed with multiple response options in mind. The third principle is *multiple means of learner engagement*. This refers to giving options for choice or basing units of study on learner interests; rather than predetermining what will be taught exactly, tasks are designed with allowance for students to have some flexibility in what they are learning. Pisha and Coyne (2001) described the role of the teacher in UDL as more of a facilitator by creating experiences and tasks that will meet the needs and spark the interest of all learners.

UDL shares a great deal with the ideals of inclusion. It sees limitations as problems with the learning task or the environment, rather than with the individual students, and can provide a framework for implementing differentiated instruction (Meo, 2008). The goal of a universally designed lesson is to allow a wide range of learners to participate in the lesson, as the tasks are designed with a wider range of abilities and preferences in mind from the start, rather than having to make changes to existing lessons after their creation (Hitchcock, 2001). Like co-teaching, UDL is another concept that many teachers report not having much, if any, training to implement. The ability to adapt curriculum is critically important for inclusion to succeed (Hunt & Goetz, 1997; Scott, 2018). However, some studies have found that even with a brief introduction to UDL, teachers could create a universally designed lesson plan for students with cognitive disabilities (Spooner et al., 2007).

Assistive technology (AT) is a concept often associated with UDL, with some using the terms interchangeably or as different points on the same spectrum (Edyburn, 2005). Rose et al. (2005) differentiated the two by describing UDL as a way of increasing the accessibility of the curriculum, while AT increases the access of an individual to the curriculum. Assistive technology is defined by IDEA as "…any item, piece of equipment, or product system, whether

acquired commercially off the shelf, modified, or customized, that is used to increase, maintain,

or improve functional capabilities of a child with a disability" (20 U.S.C. 1401(1), Sec. 300.5).

AT can be low-tech, such as eyeglasses, a device to keep a book raised, or high-tech, such as a

speech output device or specialized computer software. It can also include things like electronic

textbooks, which help make the content accessible to a wider variety of learners, by providing

many different options in terms of accessibility, such as the ability to read text aloud, to change

the size or color of text or to highlight text (Rose et al., 2005). IDEA specifically calls for the

consideration of the use of AT with all students, having an awareness of it is important in terms

of inclusion, as there may be devices that can help increase a student's ability to access curricular

tasks or increase overall communication independently. AT may also lessen the reliance of a

student with a disability on an instructional assistant or special education teacher (Jimenez, Graf,

& Rose, 2007).

Accommodations, Modifications, and Adaptations

Related to differentiated instruction and UDL are accommodations and modifications.

However, unlike UDL, which is very much in line with the concepts of differentiated instruction,

accommodations and modifications are changes that occur after a task has been designed to

create access for a student who would otherwise not be able to engage with the task. IDEA does

not specifically define the terms accommodations or modifications. However, there is some

consensus on the definitions of these terms, with accommodations defined as changes made to

the learning task or environment but do not fundamentally change the construction of the task

(McDonnell et al., 1997). For example, if a task was to complete a multiple-choice test,

accommodation may provide extra time for a student to complete the test. Another

accommodation might be providing materials in an alternative and more accessible format, such

as providing an electronic copy of a textbook to a student versus a paper copy. On the other hand, modifications are changes made to the nature of the task itself, fundamentally changing what the student is expected to do or learn (McDonnell et al., 1997). For example, changing the reading level of a test would be a modification, as it is changing the task's difficulty level, therefore fundamentally changing its construction (Hollenbeck et al., 1997; Tindal & Fuchs, 2000).

Accommodations and modifications at the K-12 level took a larger role in the dialogue surrounding students with disabilities with the implementation of the 1997 Amendments of IDEA, which called for students with disabilities to be included in statewide testing programs, with the provision of appropriate accommodations and modifications (Linn et al., 2002). NCLB also called for increased accountability through annual yearly progress (AYP), to be measured through statewide testing programs, with results separated by sub-groups, which is any group of students with 100 or more students, including students with disabilities [Section 1111 (b)(F)]. IDEA (Section 300.160) also calls for the participation of students with disabilities in federal and state assessment programs, with appropriate accommodations and modifications to be provided. Although any teacher can provide either accommodations or modifications at any time to a student, they typically are the result of a student at the K-12 level having them listed as part of an individual education plan (IEP), while at the post-secondary level, they are typically a result of having registered with a disability office (Thurlow et al., 2006).

Thurlow et al. (2005) found that at the time of their study, forty-nine out of fifty states explicitly allowed for an IEP to have the unrestricted ability to determine accommodations and modifications for a student with disabilities (one state did not specifically state this in their policies, but did not preclude it either). They found five primary categories of accommodations

listed as *acceptable* for students to use in testing (and therefore likely to be used in the classroom). The first is *presentation accommodations*. This refers to changing how information is presented, such as providing large print or braille text and typically reading a text aloud. There is some discussion about whether reading aloud should be an allowable accommodation due to a perceived unfair advantage provided or whether it is a modification and not an accommodation (Meloy et al., 2002; Tindal & Fuchs, 2000). A second category is *equipment accommodations*. This is the provision of additional tools, such as a magnifier or a calculator. As with reading aloud, there is some disagreement over whether using a calculator is an accommodation or modification (Meloy et al., 2002; Tindal & Fuchs, 2000). A third category is *scheduling/timing accommodations*. This includes providing extended time to complete a task and allowing a test to be completed at a time that is more beneficial to the student. For example, if a student takes medication, a test could be scheduled at a time that would minimize any negative effects, or in the case of medications often prescribed for Attention Deficit Disorder (ADD), at a time that would maximize the positive benefit of that medication. A fourth category is *response accommodations*. This includes using a scribe, allowing something to be typed that would otherwise be hand-written, or even allowing a student to write directly into a test booklet rather than marking answers on a separate sheet. The fifth category is *setting accommodations*. This includes allowing students to take a test or complete tasks in a private room or be tested in a small group or individually instead of a large group.

Looking at what makes teachers more or less likely to provide accommodations or modifications to students with disabilities, Zhang et al. (2010) identified four key factors. *Having knowledge of legal responsibilities* was identified as a key factor, and most instructors rated themselves highly on this aspect. Teachers were aware that they should be providing

accommodations or modifications to students who needed them. A second key factor was *perceived institutional support*. Although not as high as legal knowledge, most teachers felt that they did have institutional support to implement accommodations and modifications. A third key factor was *personal attitudes* towards working with students with disabilities. This factor varied widely across teachers and was largely influenced by previous experiences working with students with disabilities. The fourth key factor was *comfort level* in working with students with disabilities. Most teachers rated themselves the lowest on this factor, which was influenced heavily by previous experience (or lack of previous experience) in working with students with disabilities. Although one study should not be generalized to an entire population, these findings align with other studies of teacher attitudes towards inclusion or working with students with disabilities, which will be discussed in the next section.

Teacher Attitudes towards Disability

In a review of the literature regarding teacher attitudes towards inclusion, many studies have found that teachers have positive attitudes towards inclusion, but that they feel unprepared by their training programs either to work with students with disabilities or to work in inclusive settings (Gehrke & Cocchiarella, 2013). Multiple studies had found that attitudes of general and special education teachers towards inclusion as a practice improved when they had either more training and/or more exposure to students with disabilities, but less positive attitudes towards implementing it in their classrooms, which was attributed to concerns of lack of knowledge and/or resources (Idol, 2006; Kent & Giles, 2016). However, if teachers had students with disabilities in their classes with what they felt was inadequate support and/or training, more negative attitudes towards having students with disabilities in their classes were reported (Gehrke & Cocchiarella, 2013). A strategy identified in the research that could be used to improve

teachers' feeling of being inadequately prepared are courses including a fieldwork component working with students with disabilities as they have been shown to positively affected pre-service teachers' attitudes towards working with students with disabilities (Campbell et al., 2003; Kent & Giles, 2016). It was also found that teachers with more background in special education had increased positive attitudes towards inclusion (Lee et al., 2015).

Differences have also been found between primary and secondary levels, with wider levels of support for inclusion found at the primary level (Mackey, 2012). The majority of research has also focused on including students with disabilities requiring lower levels of support, such as learning disabilities or ADHD, versus students with higher support needs (Mastropieri & Scruggs, 2001). Mastropieri and Scruggs (2001) felt this might be due to an increased emphasis on testing and more complex content being taught, making teachers feel unable to differentiate the pace or content of tasks. They also found that secondary teachers were less likely to implement inclusive teaching practices even once they had learned them, reporting an inability to maintain the appropriate pace to cover content if any changes were made.

In addition to teachers' attitudes, the attitudes of administrators play an important role in the success of inclusion at a school as well. Praisner (2003) found much higher levels of support for the inclusion of students with learning disabilities or physical disabilities and much lower support for the inclusion of students with autism or emotional disturbance. However, administrators and teachers who had more experience with inclusion, either in practice or through coursework, had more positive attitudes towards inclusion than those with less experience (Praisner, 2003; Vaughn et al., 1998).

Reported Lack of Training

Teacher training is vital to successful inclusion. However, numerous studies have found that most teachers do not feel they have been adequately trained in different practices important to the successful implementation of inclusion, whether in general education, special education, or dual certification programs (Kent & Giles, 2016). The training of special and general education teachers has historically occurred on two separate tracks, with general education and special education teachers both reporting they do not receive enough training regarding inclusion or different approaches and/or strategies that are often discussed in the inclusion literature (Kurth & Foley, 2014). This study looked at what types of skills and knowledge are included in the teacher education standards of states with high rates of inclusion for SWD and how disability is described in these states' standards.

This Chapter has summarized the historical roots of educating students with disabilities in the United States, including educational methods, legal challenges, and advocacy efforts that shaped the current state of students with disabilities having the right to FAPE. In addition, teaching practices that are supportive of inclusion were also described. In the next Chapter, the methods used to create the sample and the methodology for this study will be described in more detail.

Chapter 3: Methodology

In direct response to the research questions posed in this study, I used a mixed-methods approach. The mixed-method is originally attributed to Campbell and Fiske (1959). It requires careful thought into the study's design, especially when both parts will be completed by a single researcher rather than by a team. In any study, but especially in mixed-methods studies, having a clear idea of the research question is important in determining which methods will be best to find the appropriate data source and analyze these data in a meaningful way and help answer the research questions.

For this study, the questions I addressed were:

1) What similarities and differences exist across states' teacher education standards who share high rates of inclusion of students in public school classrooms?

2) How do a state's teacher education standards describe the preparation for teachers to work with students with disabilities?

This study consisted of two separate, distinct phases. The initial phase included a collection of quantitative data from the USDOE website. These data were used to calculate percentages of students in five different disability categories and the total number of students receiving special education services in all fifty states over ten years. This process was used to select the ultimate sample of states whose standards were analyzed in this study. The second phase used a qualitative analysis of the standards, using Critical Discourse Analysis as the method, with results from each phase presented separately, with no data mixing.

All state teacher education programs are working within a framework provided to them by the teacher education standards of that state. As much as teacher education faculty or teachers in the K-12 classroom feel they can "close the door" to be impervious to outside policy

and political influences when they are teaching, there is no way to avoid the impact of policy and politics in education, because programs and courses are approved in terms of how well they align with given policies. In education, standards are increasingly being used to operationalize what students and teachers should know skills and knowledge. Therefore, looking at these standards is an important part of the ultimate picture of examining teacher education.

Definition of Key Terms

One of the terms key to this study is *inclusion*. For this study, I defined inclusion as the primary placement of a student with a disability in a general education setting. Although inclusion involves much more than a physical placement of a student, in terms of analyzing policy, it would be difficult to use a definition of inclusion that cannot be measured objectively. Related to inclusion, in this study, *full inclusion* is defined as a student with a disability who spends eighty percent or more of the school day in the general education classroom. Another term that will be frequently used is *teacher education standards*. Although this was not the name used in all states, I used this term to refer to the standards identified by an individual state regarding the skills and knowledge that teachers should have to be licensed or certified in that state.

Methods and Methodology

Sample Selection

In a study that uses mixed methods, the study design plays an important role in determining how the sample will be selected (Onwuegbuzie & Collins, 2007). In this study, I analyzed how disability is described and what types of skills were expected for all teachers to have and whether there was any connection between this information and the rates of inclusion within a state. Because I am using qualitative methods, looking at the standards of all fifty states

was beyond the scope of this current project. Since this is a mixed-methods study, the sample selection process may use a variety of sampling strategies since both quantitative and qualitative methods are being used.

Since analyzing all fifty states was beyond the scope of this study, I thought about whether having a random or purposive sample to select the states would better address the topic. A purposive sample can help to maximize limited resources (Patton, 2002), as well as provide information rich cases, and can be a helpful sampling method in implementation research (Onwuegbuzie & Collins, 2007, Palinkas et al., 2015). I decided to use outlier cases as the sample, focusing on states that had high rates of inclusion to serve as the information rich cases. In addition to looking at the total number of students with disabilities in a state, I also looked at four additional disability categories, to see if a state had a high percentage of students included based solely on categories that were already less likely to be excluded, such as specific learning disability or speech and language impairment. This is a framework that has been used previously with quantitative data sets utilizing a disability studies framework (Cosier, 2012). High incidence eligibility categories (Gage et al. 2012; Gresham et al., 2001; Murray & Pinanta, 2007) were selected to be included in the sample to help mitigate low numbers of students in some of the other disability categories, while still including categories with both higher and lower percentages of students that were included fully in the general education classroom. The categories selected for the sample were the following: all students with disabilities (ALL), specific learning disability (SLD), speech and language impairment (SLI), autism (AUT), and intellectual disability, which was previously called mental retardation (ID).

Once the sample selection method was determined, school inclusion data were retrieved from the United States Department of Education website (USDOE) on educational placements

for students with disabilities for all fifty states over the past ten available years at the start of this study (2008-2017). The USDOE collected these data under Title 1, Part A, Subsection 618 of IDEA as a part of the Child Count, where data are collected from all fifty states on the number of unduplicated children ages three through five, as well as ages six through twenty-one that has been found eligible for special education services under one of the disability categories of IDEA, as well as their current educational placement.

Once collected, these data were analyzed by educational setting. I looked at three different educational settings: placement in a general education setting for 80% or more of the school day, placement in a general education setting for less than 40% of the school day, and placement in a separate school. By including these three educational settings, the selected data represented settings at the two ends of the LRE spectrum, with 80% or more of the day representing full inclusion, with less than 40% of the day representing and separate schools representing the opposite end of the spectrum, with these data are presented in Appendix K. Next, percentages of students with disabilities within each of the selected high-incidence disability categories for each educational setting were calculated for each of the ten years of data collected (2008-2017) to determine the outlier cases for each setting and disability type.

The state that appeared most frequently in each category was then selected for inclusion in the sample the initial sample consisted of nine states, all of which were smaller states with a population size of ten million or fewer people. Although this was not a stratified sample, since all states in the first sampling process were small population states, this created a high level of homogeneity in the sample; the decision was made to include large population states in the sample to increase a higher likelihood of capturing a complete response to the research questions.

The selection process for the second round of analysis was done using the same school data set that was used for the initial sample selection process (calculated percentages of students in high incidence categories of SLD, SLI, ID, AUT and ALL disabilities, across the settings of 80% or more of the day in general education classroom, less than 40% of the day in general education classroom and separate school). However, the ten largest states by population size from the last available census data were identified, and then highlighted within the previously identified categories. The highest-ranked large state in each category across the ten-year sample was identified and those states that ranked highest in each category were included in the final sample, which consisted of thirteen states. Of the final sample of thirteen states, nine were from the initial sample, with an additional four large states added in the second round of analysis. Ultimately, the category of SLI was removed from the sample as well, due to inconsistent data in this category. The final sample consisted of twelves states, presented in Table 2.

Table 2

States in the Sample

State	Basis for Inclusion	Inclusion Phase
Alabama	80% All 80% SLD	Initial Round
Florida	80% All 80% SLD	Initial Round
Georgia	Separate School - AUT	Second Round
Iowa	80% ID 80% AUT <40% ID <40% ID	Initial Round
Louisiana	Separate School -SLD	Initial Round

State	Basis for Inclusion	Inclusion Phase
New Mexico	Separate School – AUT	Initial Round
North Carolina	Separate School – ALL Separate School - SLD	Second Round
North Dakota	<40% - ALL	Initial Round
Ohio	80% ID <40% ID <40% SLD Separate ID	Second Round
Pennsylvania	80% AUT <40% All <40% AUT	Second Round
South Dakota	<40% SLD	Initial Round
West Virginia	Separate School – All Separate School – ID	Initial Round

Mixed Methods as Methodological Framework

In thinking through any research study, the methods need to help answer the question, rather than simply trying to fit a project into a particular methodology. In looking at the evaluation of educational policy, the outcomes of the policy should be considered. Policy analysis can use both quantitative and qualitative methods, to bridge the divide between quantitative and qualitative methodologies (Onwuegbuzie & Leech, 2005). Mixed-methods research is also a helpful method for studies looking at implementation (Aarons et al., 2011; Landsverk et al., 2012; Palinkas et al., 2011). Although this study will be using Critical Discourse Analysis (CDA) as the primary method of analysis, the use of quantitative data collection and analysis was completed as a part of the sample selection process, and Creswell's (1996) *sequential exploratory* study design helped provide the framework for this study.

Creswell (1996) described four factors that need to be considered when selecting the most appropriate mixed methods design for a given study: (a) *timing*, specifically in what order will the different types of data being collected and analyzed, (b) *weighting* of the different types of data, with either more importance placed on one data set or both sets being treated equally, (c) *mixing* of data, with either connected, embedded or integrated data sets, and (d) *theoretical perspective*, which may or may not be present depending on the ultimate study design. In addition to these four factors, the use of a visual model helps identify the different phases and emphases of the different types of methods within the study. The design ultimately chosen to frame this study was *sequential explanatory* because it is well suited for exploring an unknown phenomenon, with distinct phases for quantitative and qualitative data collection and analysis, and the use of a theoretical framework.

Ethical Framework and Researcher Subjectivity

Students with disabilities are considered a vulnerable population for research. However, this study solely utilized publicly available, pre-existing data. All of the data about inclusion rates were obtained from the US Department of Education website. The standards for the states that were ultimately included in the sample were obtained from those states' Department of Education websites. Although the data were not de-identified, individual students, schools, or districts could not be identified from these data since all quantitative analysis were done at the statewide level. Given these parameters, the Chapman University Institutional Research Board (IRB) granted this study exempt status.

This study used a qualitative method of analysis, Critical Discourse Analysis (CDA) as the primary method of study. Therefore, researcher subjectivity is a factor that must be taken into consideration. While this method focuses on analyzing the language used in the documents,

which were the different sets of teacher education standards in this study, decisions were constantly made throughout the coding and analysis process as to what to include under a given code. My professional background is entirely in the field of education. I have worked with students at the K-12 and post-secondary levels. I have held teaching positions in self-contained special education classrooms, resource specialist programs, and coach and administrator. I have held positions that focused primarily on students with disabilities and students experiencing academic difficulty but did not have an official disability diagnosis. I do not identify as an individual with a disability but have worked with a wide range of learners in terms of age, setting, and disability status. These professional experiences have given me a knowledge base and familiarity with many of the terms utilized in these standards, thus informing my current research subjectivity.

Qualitative Methodology: Critical Discourse Analysis

Fairclough (in Wodak & Meyer, 2016) described discourse as an element of making meaning in the social process, using the types of language associated with a specific field, constructing of aspects of the world using a given perspective. Standards are written with a certain level of technical language, often using more formalized language and education-specific terminology; however, as the sampling of studies demonstrated, this does not make it impossible to analyze them in a qualitative method. In analyzing teacher education standards, I selected states with higher inclusion rates and identified how they organized their standards, specifically in terms of disability.

Anderson (2001) described standards in education as "...normative statements that are negotiated within relations of power," as well as "...disciplinary practice as well as ideology" (pp. 201-202). Re-conceptualizing disability from the prevalent medical model of disability and

in response to the current model of segregated special education services are both means of advocacy and a critical response to the current service provision system. Using a methodology that incorporates some aspect of critical analysis is considered key in helping to identify not only what is listed in teacher education standards but also in identifying what is valued and what is left unsaid. Since this study will be looking at what skills and knowledge are described in the teacher education standards, as well as how disability is described, I selected a methodology that would allow for a focus on the text, and what messages were being conveyed by it.

Fairclough (1992) described a critical form of discourse analysis (CDA) as an interdisciplinary approach to the study of discourse. Originating in the 1970s as critical linguistics, this methodology aimed to draw attention to the role of language in defining and perpetuating social issues, especially social inequality and power imbalance. Drawing upon the work of theorists such as Marx and Foucault, CDA draws on not only theories of linguistics but also social theory. In this view, discourse is seen as a way of either furthering or fighting against issues of inequality or unequal distributions of power. The purpose of CDA is to examine these relationships at multiple levels: the level of the text, the level of distribution or creation of text, and the level of context of the creation of the text. Like other critical theories, the role of a study utilizing this type of methodology would help to highlight issues of social inequality by looking at how things are being said rather than simply what is being said.

In Fairclough's (1992) model, there are three levels of analysis. The first and most micro-level of analysis is *textual analysis*. This focuses on the specific words and language used and can include looking at the particular vocabulary or grammatical patterns and structures. The second level, *discursive practices*, involves looking at how the text was produced. The third and most macro-level of analysis is a *social practice*, which involves looking at the factors that

influence the creation of the discourse, which in this study are the teacher education standards. It can also include looking at the wider discussion about disability or special education.

I have chosen CDA as the methodology for this study for several reasons. The language used in standards (as in many types of policy documents) can be very repetitive and overly formalized. Using a method that looks at the words being used may overlook some of the meaning embedded in a text, meaning that can only be ascertained by looking at what is being said and how it is being said. One example of this may be looking at what words a state's standards use to describe disability. Is it described more in the context of diversity, or is it a separate section dedicated specifically to disability? Another important concept that may help determine what is truly being valued or identified is through the concept of erasure, meaning what is not being said.

Although standards may have very repetitive sentence structures or text structures, in terms of analyzing these documents for descriptions of inclusive practices, or even disability in general, looking at the types of terms used can give insight into what is being emphasized or valued within the document. One method that can assist with this process is coding the text of the standards. The coding process provides a systematic method of analyzing a text at the micro-level. Especially when looking at issues surrounding disability, the words used (or not used) can help give insight into evidence of inclusion, social models of disability, disability as a minority group status, etc.

There are many different methods of coding, each with different strengths and purposes. Saldaña (2016) outlined several coding methods, emphasizing the importance of choosing an appropriate strategy for the topic of study. For this study, two different coding methods were selected. The first was *concept coding*, which Saldaña described as "…assign[ing] meso or

macro levels of meaning to data" (p. 119), as well as being well suited for working with data from any source. The concept codes were selected by looking at the Council for Exceptional Children (CEC) High Leverage Practices for Inclusion (2015), best practices for inclusion identified by the National Association for Special Education Teachers (NASET) for Inclusion (2022), teaching practices identified in IDEA, as well as looking at systematic reviews evaluating best practices for inclusion. From this review, six best practices were identified that were used as the basis of the concept coding in the analysis: assistive technology, accommodations/modifications/adaptations, collaboration, differentiated instruction, inclusion, universal design for learning (UDL). Codes about behavioral skills and assessment were not included, because these may have been less frequently in standards of general education teachers, but would still be picked up as part of the in-vivo coding if present. Given the formulaic nature of standards, concept coding was selected as the first round to help overcome the repetitive nature of the text to identify evidence of more abstract concepts that may exist. The second type of coding selected was in-vivo coding, in which codes are developed from the words used in the text.

Sample Selection Process

Using the standards obtained for the twelve states identified in the sample, I individually analyzed each state's standards using two methods of coding: concept coding and in-vivo coding. Concept coding uses pre-determined concepts or terms to code a data set. I generated a list of possible codes collected from the literature described as associated with inclusive education before analyzing any state's standards. I also completed the second round of coding using in-vivo coding, where words from the text generate a list of codes—using both coding methods allowed for the identification of any established concepts related to inclusion and allowed for the

emergence of any previously un-identified concepts. Both sets of codes are listed in Table 3

below.

Table 3

List of Codes (Pre-Identified and Generated)

Concept Codes (Pre-Identified)	Additional Codes Generated from In-Vivo Coding	
Accommodations/Modifications/Adaptations	Accessibility	Achievement
Assistive Technology	Advocacy	Assessment
Collaboration/Co-Teaching	Classroom Environment	Communication
Differentiated Instruction	Creation of Knowledge	Culture and Diversity
Inclusion	Data Use	English Language Learners
Universal Design for Learning	Families	Human/Child Development
	Instructional Materials	Instructional Planning
	Instructional Strategies	Intervention
	Knowledge of learning process	Knowledge about pedagogy
	Knowledge about research	Knowledge about standards
	Leadership	Motivation
	Policy	Professional Development
	Professional Learning Communities	Professionalism
	Reflective Practice	Response to Intervention (RTI)
	School Improvement	School Structure
	Special Education Policy	Teacher Dispositions
	Technology Use	Transition
	Words besides disability	Working with SWD

I used NVivo software to assist in the data coding process. This allowed for the coding of

information and collecting additional data points, such as how frequently a word appeared or

which words appeared near others. This software, produced by QSR International, assists in the

coding and analysis process for data analysis in qualitative research. It can be used with both structured texts and transcripts and electronic sources, including (but not limited to) interviews, surveys, social media and blog posts, journal articles, or in this study, teacher education standards. This information assisted in looking at research sub-question one: How do states prepare teachers to work with students with disabilities? Each set of standards was coded two times, first with the concept coding and then in-vivo coding. After both rounds of coding were completed, and combined with an examination of best practices of professional organizations and systematic reviews of best practices associated with inclusion, ultimately six practices were used as a basis of analysis for the creation of the state profiles. Using these data, a profile was created for each of the included states (with all of the states that used the InTASC standards combined due to them using the same standards.)

Using the previously identified codes as a framework, the standards were re-examined to determine what textual elements were present, using the CDA framework as the analysis tool. Gee (2010) described specific tools of CDA that may be particularly useful for more academic or technical language that was utilized in this analysis. Specifically, the "Doing and Not Just Saying" (pp. 50-53) and the "Why This Way and Not That Way" (pp. 62-63) tools were utilized for this analysis. The "Doing and Not Just Saying" tool focuses on using speech as a form of action. This tool was selected as the majority of the teacher education standards were written in a format that described what a teacher should do or a type of knowledge they should possess. The other selected tool, "Why This Way and Not That Way," is described by Gee as very closely related to the "Doing and Not Just Saying" tool, but with a specific focus on word and sentence structure choices that create specific meaning. This tool was specifically selected to examine the narrative treatments of disability in the standards.

The quantitative data used in the sample selection process and the results of the

qualitative data analysis utilizing CDA were completed for each state's standards individually.

These results will be presented in the next Chapter state-by-state, with the states using the

InTASC standards presented together. This will be followed by a compilation of themes

identified through the qualitative data analysis portion of the study. The results of these analyses

are presented in the next Chapter.

Chapter 4: Results

The purpose of this study was to look at how disability was described in the teacher education standards of inclusive-intensive states, as well as look for similarities and differences across a purposively selected sample of states. First, data were collected from the USDOE about the inclusion rates over ten years across all fifty states from 2008-2017, the ten most recent years available at the start of this study. Then, a twelve-state sample was selected, based on their high percentages of inclusion or low percentages of exclusion of students with disabilities across four different disability categories (all disabilities, SLD, AUT, and ID) and three types of educational settings (placement in a general education setting for 80% or more of the day, placement in the general education classroom for less than 40% of the day, or at a separate school, which are three separate categories in the federally reported data.) The teacher education standards were then obtained and analyzed for each state in the final sample, consisting of twelve states. The final sample states were (in alphabetical order): Alabama, Florida, Georgia, Iowa, Louisiana, New Mexico, North Carolina, North Dakota, Ohio, Pennsylvania, South Dakota, and West Virginia. Three of these states used the InTASC standards as their state teacher education standards (Georgia, North Dakota, and South Dakota), resulting in a final sample of nine different sets of standards analyzed.

Once the sample was set, two rounds of coding were completed, and Critical Discourse Analysis (CDA) was used to analyze the standards. This Chapter will summarize the results for all twelve states, followed by the individual results for each state, with qualitative and quantitative data for each state and its standards. The three states that used the InTASC standards (North Dakota, South Dakota, and Georgia) will be presented together, as summarized in Table 4 below. For each state, descriptive statistics will be provided, followed by a discussion of

disability in the state's standards, and finally, a discussion of the presence of best practices in the

state's standards.

Table 4

Summary of States in the Sample

State	Basis of Inclusion in Sample	Total Stan-dards	Total Discussing Disability	Total References to Disability	Number of Best Practices Present	Best Practices Present
AL	All-80% SLD-80%	5	3	29	5	Accommodation/Modification Differentiated Instruction Assistive Technology Collaboration Inclusion
FL	All-80% SLD-80%	4	3	29	5	Accommodation/Modification Assistive Technology Differentiated Instruction Collaboration Inclusion
IA	Aut-80% Aut-40% ID-80%	8	1	8	4	Accommodation/Modifications Assistive Technology Differentiated Instruction Collaboration
LA	SLD-Sep	8	4	3	4	Accommodation/Modifications Assistive Technology Collaboration Inclusion
NC	SLD-Sep All-Sep Aut-Sep	5	1	0	5	Accommodation/Modifications Assistive Technology Differentiated Instruction Collaboration Inclusion
NM	Aut-Sep	10	8	12	5	Accommodation/Modifications Assistive Technology Differentiated Instruction Collaboration Inclusion
OH	ID-80% ID-40% ID-Sep.	7	2	0	1	Accommodation/Modifications
PA	All-40%	4	2	2	4	Accommodation/Modification Differentiated Instruction Collaboration Inclusion

State	Basis of Inclusion in Sample	Total Standards	Total Standards Discussing Disability	Total References to Disability	Number of Best Practices Present	Best Practices Present
WV	ID-Sep	5	0	0	4	Differentiated Instruction Assistive Technology Collaboration Inclusion
In TASC States	ND: All-40 SD: SLD-40 GA: Aut-Sep	10	2	18	5	Accommodation/Modification Assistive Technology Differentiated Instruction Collaboration Inclusion

Alabama

Descriptive Statistics

Alabama was included in the initial sample based on its percentage of students in the category of All Disabilities. In this category, Alabama had the highest percentage across all states of students in the setting of 80% or more the day in the general education classroom over the sample period. The total percentage in this category increased slightly over the ten years, from 80.9% in 2008 to 83.6% in 2017. Alabama also had the highest percentage across all states for the category of Specific Learning Disability (SLD), in the setting of 80% or more of the day in the general education classroom and held that rank for the entire sample period. The percentage of students in this category also increased slightly over time, from 88.9% in 2008 to 95.5% in 2017. The full quantitative data are available in Appendix K.

Discussion of Disability in the Alabama Standards

Alabama had five main teacher education standards: (a) Content Knowledge, (b) Teaching and Learning, (c) Literacy, (d) Diversity, and (e) Professionalism, with the full text of the Alabama standards available in Appendix A. Disability was discussed in three of these

standards: *Content Knowledge*, *Teaching and Learning,* and *Diversity*. In both the *Content Knowledge* and *Teaching and Learning* standards, disability was discussed in the context of making adaptations to curriculum and learning environments. In the *Diversity* standard, disability was discussed in reference to teachers having specific knowledge of traits and characteristics of different disability categories.

There were twenty-nine uses of "disability" or alternate terms in the Alabama Standards. In addition to looking at how working with students with disabilities was described, words used in place of the word disability were also examined. There were seven different terms used throughout the standards; the word disability was only used when clarifying an alternate term. See Table 5 for a discussion of where the term disability was used in the standards and the context in which it was used. Some of the most commonly used alternatives to disability were *special needs* and *exceptionalities*. Other terms used referenced diversity, but the context of the standard indicated reference to a disability or was specifically mentioned, such as "students with diverse needs, including students with disabilities" (AL 2E) and "different backgrounds and abilities" (AL 2C). *Differences* and *difficulties* were also alternate terms used for disability (AL 4B).

Table 5

Discussion of Disability in Alabama Standards

Standards with Disability Mentions	Context of Mention
Content Knowledge (AL 1)	Adapting general education curriculum to learners with special needs
Teaching and Learning (AL 2)	Adapting learning environment and assessments
Diversity (AL 4)	Knowledge of special needs

Presence of Best Practices in the Alabama Standards

Of the six identified best practices related to inclusion, five of them were present in the Alabama standards. There were three references to *accommodations and modifications*. Two of them were about making accommodations to the general education curriculum and learning experiences, with the third referring to making accommodations for assessments. There were two references to *collaboration*, one was the previously mentioned standard regarding accommodations for assessments, and the other reference occurred in the standard on knowing the role of paraprofessionals. For *differentiated instruction*, there were six total references in the standards. Standards discussing *differentiated instruction* included skills such as the ability to "…recognize needs that exceed the typical range and provide appropriate learning experiences," as well as "…use of flexible groupings and instructional strategies" (AL 2A). Differentiation as a practice was also discussed in terms of making adaptations for multiple types of diverse populations (AL 1B) and knowing about multiple curricular materials and technologies (AL 2B, 4D). There were three references to *assistive technology*: discussing the ability to select technologies (AL 2B), the use of technology to foster communication (AL 3D), and the ability to support "…cognitive development of diverse learners" (AL 4D). There was no mention by name or description of practice to *Universal Design for Learning* in the Alabama standards. See Table 6 on the next page for a summary of best practices present in Alabama standards.

Table 6

Presence of Best Practices in Alabama Standards

Best Practice	Number of references	Mentions in the Standards
Accommodations/ Modifications/ Adaptations	3 references	"Ability to provide adaptations, accommodations and modifications to general curriculum to meet needs of individual learners." "Ability to recognize individual variations in learning and development that exceed the typical range and use this information to provide appropriate learning experiences…" "Ability to collaborate with others to incorporate accommodations into all assessments."
Collaboration	1 reference	"…knowledge of the role of para-professionals."
Differentiated Instruction	6 references	"Recognize needs that exceed the typical range and provide appropriate learning experiences." "Ability to organize, use, and monitor a variety of flexible student groupings and instructional strategies to support differentiated instruction." "Ability to adjust instruction in response to information gathered from ongoing monitoring of performance via formative assessment." "Ability to provide a variety of ways for students with diverse needs, including students with disabilities, to demonstrate their learning." "Differentiate instruction in ways that exhibit a deep understanding of how cultural, ethnic, and social background; second language learning; special needs; exceptionalities; and learning styles affect student motivation, cognitive processing, and academic performance." "Knowledge of a range of curricular materials and technologies to support the cognitive development of diverse learners." "Knowledge of research relating collective responsibility for student learning to increased achievement for all students."
Universal Design for Learning	0 references	Not present
Assistive Technology	3 references	"Ability to select and support the use of instructional and assistive technologies." "Ability to foster effective verbal and nonverbal communications during ongoing instruction using assistive technologies as appropriate."

Best Practice	Number of total references	Mentions in the Standards
		"Knowledge of a range of curricular materials and technologies to support the cognitive development of diverse learners."
Inclusion	2 references	"Ability to address learning differences and disabilities that are prevalent in an inclusive classroom."
		"Ability to collaborate in the planning of instruction for an expanded curriculum in general education to include Individual Education Plans and other plans such as Section 504 goals for students with disabilities."

Florida

Descriptive Statistics

Florida was added to the sample in the second round of analysis as one of the large states. Its inclusion in the sample is based on the same two categories as Alabama: general education classroom for 80% or more of the day for the categories of All Disabilities and Specific Learning Disabilities (SLD). Of the ten large states identified, Florida had the highest percentage of students in these two categories for the five most recent years and ranked no lower than fourth for the first five years of the sample in both categories. Two other large states with higher percentages of students in these categories compared to Florida in the first five years were North Carolina and Pennsylvania. They were also included in the sample but were included based on different categories, which will be discussed in those states' respective sections. For the category of SLD, Florida's percentage of students included in the general education classroom for 80% or more of the school day in the category of SLD increased from 68.2% up to 86.6% over the years of the sample. For the category of All Disabilities, the percentage of students included 80% or more of the school day in the general education classroom increased from 63.0% to 74.1%. The full quantitative data are available in Appendix K.

Discussion of Disability in the Florida Standards

Florida had four main teacher education standards: (a) *Instructional Design and Lesson Planning*, (b) *The Learning Environment*, (c) *Instructional Delivery and Facilitation*, and (d) *Assessment*, with the full text of the Florida standards available in Appendix B. Of these four standards, disability was discussed in the latter three, with these mentions summarized in Table 7. Under the *Learning Environment* standard, the need for an inclusive environment (FL 2), "adapting [the] learning environment to accommodate differing needs of students," and the use of assistive technology (FL 2) were mentioned. In the *Instructional Delivery and Facilitation* standard, disability is discussed in the context of differentiated instruction (FL 3). In the *Assessment* standard, disability was mentioned in terms of making modifications to assessments (FL 4). There were no specific standards for either Disability or Diversity in the Florida standards. All standards focused on instructional areas and topics related to or had mentions of disability embedded within them. The word disability was not used in the Florida standards, but instead, reference was made to "students with differing needs" or "diversity of students" (FL 1). Florida had the fewest total standards of all of the states included in the sample, which may account for why some standards are not present in Florida's standards that were present in some of the other states.

Table 7

Discussion of Disability in Florida Standards

Standards with Disability Mentions	Context of Mention
Instructional Design and Lesson Planning (FL 1)	Adapt learning environment to accommodate differing needs and diversity of students
The Learning Environment (FL 2)	Learning environment that is inclusive, adapts learning environment to accommodate differing needs of students, utilizes current and assistive technologies

Standards with Disability Mentions	Context of Mention
Instructional Delivery and Facilitation (FL 3)	Differentiate instruction based on students' needs
Assessment (FL 4)	Modifies assessments

Presence of Best Practices in the Florida Standards

Of the previously identified best practices, five were present in the Florida standards: (a) accommodations, modifications, and adaptations, (b) collaboration, (c) differentiated instruction, (d) assistive technology, and (e) inclusion, summarized in Table 8 below. There were three references to *accommodations, modifications, and adaptations* in the Florida standards. One reference included the ability to "…adapt the learning environment to accommodate the differing needs and diversity of students" (FL 2h), while the other two references discussed modifying instruction (FL 3) and the use of accommodations and modifications during assessments, as well as testing conditions (FL 4). There was one reference to *collaboration* with home, school, and community to support student learning (FL 3), but no specific mention of collaboration in working with students with disabilities. There were two references to *differentiated instruction*, discussing student feedback to monitor needs and adjust instruction (FL 3) and the ability to monitor learning (FL 1). There were three references to *assistive technology*, referencing the use of assistive technology to support communication (FL 2), using assistive technology to "…provide comprehensible instruction, and to teach for student understanding" (FL 3), and the widespread use of assistive technology to integrate communication technologies into the classroom. These mentions of assistive technology did not specifically reference students with disabilities. There was no mention of Universal Design for Learning (UDL), either by name or by description in the Florida standards, even though there were multiple mentions of assistive technology, which is often a closely associated practice with UDL.

Table 8

Presence of Best Practices in Florida Standards

Best Practice	Number of References	Mentions in the Standards
Accommodations/ Modifications/ Adaptations	3 references	"Adapts the learning environment to accommodate the differing needs and diversity of students."
		"Modify instruction to respond to preconceptions or misconceptions."
		"Modifies assessments and testing conditions to accommodate learning styles and varying levels of knowledge."
Collaboration	1 reference	"Collaborates with the home, school, and larger communities to foster communication and to support student learning and continuous improvement."
Differentiated Instruction	1 reference	"Utilize student feedback to monitor instructional needs and to adjust instruction."
Universal Design for Learning	0 references	Not present
Assistive Technology	3 references	"Utilizes current and emerging assistive technologies that enable students to participate in high-quality communication interactions and achieve their educational goals."
		"Integrates current information and communication technologies."
		"Apply varied instructional strategies and resources, including appropriate technology, to provide comprehensible instruction, and to teach for student understanding."
Inclusion	1 reference	"To maintain a student-centered learning environment that is safe, organized, equitable, flexible, inclusive, and collaborative, the effective educator consistently."

Iowa

Descriptive Statistics

Iowa was included in the initial sample based on two eligibility categories: autism and intellectual disability (ID). In the category of autism, Iowa had the highest percentage of students in the general education classroom setting for 80% or more of the day for nine out of the ten years of the sample (data were not available for Iowa for one of the years of the sample). The

percentage of students in this category increased from 62.1% to 69.9% over the ten years. For the setting of students being in the general education classroom less than 40% of the day (more restrictive setting), Iowa had the lowest percentage of students in this category across all states for nine of the ten years of the sample. The percentage of students in this category remained stable across the sample, starting at 0.079% and increasing very slightly to 0.08% across the years of the sample. In the eligibility category of ID, Iowa had the highest percentage of students included in the general education classroom for 80% or more of the day in eight of the ten years of the sample, including the most recent six years. It increased from 61.7% to 69.4% over the sample period. The full quantitative data are available in Appendix K.

Discussion of Disability in the Iowa Standards

Iowa had eight main teacher education standards; disability was discussed in Standard Four: *Meet Multiple Learning Needs of Students*, with the full text of the Iowa standards available in Appendix C. This standard referenced the need to "…address the full range of cognitive levels and varied experiences that meet diverse needs" (Iowa Standard 4). However, these standards also frequently used the term "every learner" or "all students" in ways that could be taken to be inclusive of students with disabilities, and summarized in Table 9 below.

Table 9

Discussion of Disability in Iowa Standards

Standards with Disability Mentions	Context of Mention
Meet Multiple Learning Needs of Students (IA 4)	Address full range of cognitive levels, varied experiences that meet diverse needs

Presence of Best Practices in the Iowa Standards

Of the identified best practices, the Iowa standards had four present, and they were

identified either by name or through the description of practiced, and summarized in Table 10

below. There was one reference to *accommodations, modifications, and adaptations*, describing

the general need to provide them (IA 1A). There were two references to *collaboration* in the

Iowa standards, referring to the need to work collaboratively to improve practice (IA 7) and

collaborate with students, colleagues, and the community to improve student learning (IA 8).

Neither of these references specifically refer to students with disabilities, which was common

throughout Iowa's standards. Although not specifically mentioned by name, there were also two

references to *differentiated instruction*, referring to "…varied experiences that meet diverse

needs," and "…use [of] strategies to deliver instruction that meets multiple learning needs (IA 4).

There were two references to *assistive technology*, both referring to the use of technology in the

development and delivery of instruction.

Table 10

Presence of Best Practices in Iowa Standards

Best Practice	Number of References	Mentions in the Standards
Accommodations/ Modifications/ Adaptations	1 references	"Demonstrates flexibility and responsiveness in adjusting instruction to meet student needs."
Collaboration	2 references	"Works collaboratively to improve professional practice and student learning."
		"Collaborates with students, families, colleagues, and communities to enhance student learning."
Differentiated Instruction	3 references	"Demonstrates flexibility and responsiveness in adjusting instruction to meet student needs; Engages students in varied experiences that meet diverse needs and promote social, emotional, and academic growth."
		"Uses strategies to deliver instruction that meets the multiple learning needs."

Best Practice	Number of References	Mentions in the Standards
		"Engages students in varied experiences that meet diverse needs and promote social, emotional, and academic growth."
Universal Design for Learning	0 references	Not present
Assistive Technology	2 references	"Uses available resources, including technologies, in the development and sequencing of instruction."
		"Uses available resources, including technologies, in the delivery of instruction."
Inclusion	0 references	Not present

Louisiana

Descriptive Statistics

Louisiana was included in the sample based on its ranking in the educational setting of a separate school for the eligibility category of *specific learning disability* (SLD). For the overall period of the sample, Louisiana had the lowest percentage of students with the eligibility of SLD placed in a separate school for this setting for five of the ten years of the sample. This was the largest number of years for any state. The percentage of students in the category of SLD that were in separate schools decreased slightly, from .00194% to .000478%. These percentages were well below the mean average across all fifty states for this category, which decreased from .05% and decreased to .03% over the ten years. The full quantitative data are available in Appendix K.

Discussion of Disability in the Louisiana Standards

Louisiana had eight teacher education standards, and four of them mentioned disability, with the full text of the Louisiana standards available in Appendix D. Louisiana did not have a standard specifically focused on either diversity or disability but did have multiple standards referencing legal requirements and instructional practices for working with students with disabilities, with these mentions summarized in Table 11 below. Like some other states in the

sample, the term disability was not used, rather the term "student with exceptionalities" was used in its place. The majority of the discussion within these standards was about legal requirements in terms of working with students with disabilities, such as having knowledge of the laws (LA E) and the development and implementation of Individual Educational Plans (IEP) (LA G). There was also discussion about instructional practices (LA F), as well as making accommodations and modifications in assessments (LA H).

Table 11

Discussion of Disability in Louisiana Standards

Standards with Disability Mentions	Context of Mention
Knowledge of State and Federal Laws (LA E)	"...applies knowledge of state and federal laws related to students' rights and teacher responsibilities for appropriate education for students with and without exceptionalities."
Differentiated Instruction, Behavior Management (LA F)	"…differentiates instruction, behavior management techniques, and the learning environment in response to individual student differences in cognitive, socio-emotional, language and physical development."
Develop and Apply Individualized Educational Plans (IEP) (LA G)	"…develops and applies instructional supports and plans for an individualized education plan (IEP) or individualized accommodation plan (IAP) to allow a student with exceptionalities developmentally appropriate access to age- or grade-level instruction, individually and in collaboration with colleagues."
Assessment (LA H)	"…applies knowledge of various types of assessments and their purposes, strengths, and limitations to select, adapt and modify assessments to accommodate the abilities and needs of students with exceptionalities."

Presence of Best Practices in the Louisiana Standards

Of the six previously identified best practices, four were identified in the Louisiana standards, and summarized below in Table 12. There was one reference to *accommodations, modifications, and adaptations;* however, this was specifically in assessments (LA H). There was also one reference to *collaboration.* Although this standard did not specifically mention

students with disabilities, it did refer to the use of collaboration and communication in supporting student's learning and development (LA B). There were four references to *differentiated instruction*, although similarly to collaboration, it did not specifically mention students with disabilities. Instead, there were references to meeting individual differences in development and student needs. There were also references to differentiating practice and the overall learning environment (LA D), behavior (LA F), and the overall learning environment (LA B). There was one reference to the practice of *inclusion*. However, the term was not specifically used, with reference being made to students "in need of intervention" in the regular classroom setting (LA B).

Table 12

Presence of Best Practices in Louisiana Standards

Best Practice	Number of References	Mentions in the Standards
Accommodations/ Modifications/ Adaptations	1 reference	"The teacher candidate applies knowledge of various types of assessments and their purposes, strengths, and limitations to select, adapt, and modify assessments to accommodate the abilities and needs of students with exceptionalities."
Collaboration	1 reference	"Communicate and collaborate with students, colleagues, families, and community members to support students' learning and development."
Differentiated Instruction	4 references	"Adapts practice to meet the needs of each student."
		"Adapt instructional practices and other professional behaviors to better meet students' needs."
		"The teacher candidate elicits and uses information about students and their experiences from families and communities to support student development and learning and adjust instruction and the learning environment."
		"The teacher candidate differentiates instruction, behavior management techniques, and the learning environment in response to individual student differences in cognitive, socio-emotional, language, and physical development."

Best Practice	Number of References	Mentions in the Standards
Universal Design for Learning	0 references	Not present
Assistive Technology	0 references	Not present
Inclusion	1 reference	"Students in need of academic and non-academic intervention in a regular education setting."

New Mexico

Descriptive Statistics

New Mexico was included in the initial sample based on its rank in the eligibility category of *Autism* in the educational setting of separate school. In this category (i.e., special schools), New Mexico had the lowest percentage of students with autism in special school placements for four years of the sample, which was the best of any state across all fifty states, and it had the second-lowest percentage for an additional three years during the sample period. Although the percentage of students in this category increased slightly over the sample, from 0% to .13%, it is still well below the mean average for students with autism in a special school placement for all fifty states during this period, which started at 6.2% and decreased to 5.3%. The full quantitative data is available in Appendix K.

Discussion of Disability in the New Mexico Standards

New Mexico had a higher number of teacher education standards than many of the states in the sample, with a total of ten, with the full text of the New Mexico standards available in Appendix E. There were mentions of disability in six of the ten standards. In addition to mentions in the *Professionalism, Instructional Planning and Implementation, Classroom Management, Technology,* and *Diversity* standards, there was a standard specifically titled *Inclusion*, and summarized in Table 12. As with several other states in the sample, rather than the term *disability*, the term *exceptionalities* was most frequently used to refer to students with

disabilities. There was also use of the term *students with special needs.* In addition to mentions of instructional practices, there were references to students with disabilities not just being included in general education classrooms, but "…assist[ing] students with exceptionalities in having positive experiences in the regular classroom" (New Mexico H11), as well as, "…provid[ing] a safe classroom environment where individual differences are respected" (New Mexico C4). This was one of the few mentions about the quality of experience that a student with disabilities should have in the classroom for any of the standards in the sample.

Table 13

Discussion of Disability in New Mexico Standards

Standards with Disability Mentions	Context of Mention
Professionalism (NM A)	"…critically reviews, selects and adapts materials, resources and technologies and analyzes them for (d) exceptionalities."
Instructional Planning and Implementation (NM B)	"…plans lessons that provide for the success of students with exceptionalities, including learning disabilities, visual and perceptual difficulties, and physical or mental challenges."
Classroom Management (NM C)	"…provides a safe classroom environment where individual differences are respected."
Technology (NM E)	"…demonstrates awareness of resources for adaptive assistive devices and software for students with special needs."
Diversity (NM F)	"…is aware of and can apply current research findings regarding individual differences such as linguistic backgrounds, developmental levels, exceptionalities and gender."
Inclusion (NM H)	"…adjusts lessons and strategies for students with exceptionalities with regard to academic levels, physical environment and emotional needs."
	"…understands the social, emotional, physical and academic needs of students with exceptionalities."
	"…assists students with exceptionalities to have positive experiences in the regular classroom."

Presence of Best Practices in the New Mexico Standards

Five of the six previously identified best practices were included in the New Mexico standards, summarized in Table 14. There were four references to *accommodations, modifications, and adaptations*. Two of these mentions directly referred to Individual Educational Plans (IEP). In contrast, the other two referred to the need to make changes based on students' needs and specifically referenced students with exceptionalities in both of these mentions (NM H). There were five references to *collaboration,* with two of them making specific mention of students with disabilities. Of these two mentions, both were about collaborating with special education teachers to implement IEPs (NM H), and the others were about working with "…specialists, support personnel, parents and administrators in an interdisciplinary manner for the success of the individual student" (NM C).

There were eight references to *differentiated instruction.* Mentions included creating different learning opportunities for "diverse" learners, both for individuals and flexible groupings of students (NM F), using assessment and other data sources to create groupings and lessons for groups of students (NM E), and designing lessons and instructional materials based on student needs (NM I).

There were four references to *assistive technology.* Two of the four references had specific mentions of students with disabilities and specifically referred to *adaptive devices*, with a third referencing culturally and linguistically diverse students, while the fourth referred to "…integrat[ing] a variety of technologies into planned activities" (NM E). Finally, there were three references to *inclusion*. Two of the references were about students with disabilities having "positive experiences" in the general education classroom, with the third discussing students understanding the social responsibilities of inclusion (NM H).

Table 14

Presence of Best Practices in New Mexico Standards

Best Practice	Number of References	Mentions in the Standards
Accommodations/ Modifications/ Adaptations	4	"The teacher adjusts lessons and strategies for students with exceptionalities with regard to academic levels, physical environment, and emotional needs."
		"The teacher understands the responsibilities in implementing objectives set in an IEP, an individualized transition plan/504 plan and utilizes modifications."
		"The teacher develops lessons according to IEPs, an individualized transition plan/504 plan and utilizes modifications."
		"The teacher adjusts lessons and strategies as specified by the modifications for students with exceptionalities with regard to academic levels, physical environment, emotional, and transition needs."
Collaboration	5	"The teacher collaborates with specialists, support personnel, parents, and administrators in an interdisciplinary manner for the success of the individual student."
		"The teacher will use technology in communicating, collaborating, conducting research, and solving problems."
		"The teacher collaborates with special education teachers for individualized program implementation."
		"The teacher collaborates with specialists, support personnel, parents, and administrators in an interdisciplinary manner for the success of the individual student."
		"The teacher partners with special education teachers and others as necessary for implementation of the IEP."
Differentiated Instruction	8	"The teacher understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to diverse learners."
		"The teacher organizes and manages varied learning groups as appropriate in each of the disciplines as appropriate to the needs and/or interests of students and the goals of the lesson."
		"Methods of instruction: the teacher differentiates methods of instruction based on needs of students and designs instruction based on the reading and language arts components."
		"Lessons developed must reflect effective grouping and assessment strategies for diverse populations."
		"The teacher understands how students differ in their approaches to learning and creates instructional approaches that are adaptive to diverse learners."

Best Practice	Number of References	Mentions in the Standards
Differentiated Instruction continued		"The teacher understands how students differ in their approaches to learning and creates instructional approaches that are adaptive to diverse learners." "The teacher organizes and manages varied group learning strategies, as appropriate, to diverse strengths, needs, and/or interests of students and to the goals of the lesson." "The teacher develops curriculum and implements instructional strategies appropriate to the developmental level of each student, leading to effective management of transitional time." "The teacher creates learning experiences in his/her discipline that demonstrates knowledge of student learning styles, diversity, and cognitive development."
Universal Design for Learning	0	Not present
Assistive Technology	4	"The teacher integrates a variety of technologies into planned activities including software, applications, and other learning tools." "…demonstrates awareness of resources for adaptive assistive devices and software for students with special needs." "…demonstrates awareness of resources for culturally and linguistically diverse students." "Demonstrates awareness of resources for adaptive assistive devices and software for students with special needs."
Inclusion	3	"The teacher assists students to understand social responsibilities." "The teacher assists students with exceptionalities to have positive experiences in the regular classroom." "The teacher assists students with exceptionalities to have positive experiences in the regular classroom."

North Carolina

Descriptive Statistics

North Carolina was added to the sample during the second round of analysis and after

adding the larger states. Its inclusion is based on having the lowest percentage of students in the

educational setting of separate schools for three of the special education eligibility categories

79

included in this sample: all disabilities, autism, and specific learning disability (SLD). The percentage of students with disabilities in North Carolina in the category of *All Disabilities* in the educational setting of separate schools decreased slightly over the sample period, starting at 1.2% and decreasing to .9%. This was lower than the mean average for all fifty states, although that percentage also decreased slightly over the sample period, from 2.3% to 2.2%. For the eligibility category of autism, North Carolina had the lowest percentage of students in separate schools for nine out of the ten years of the sample, after the exclusion of Texas from the sample due to a cap on special education placements that was later determined to be illegal by the USDOE (DeMatthews & Knight, 2019). The percentage of students with the eligibility of autism in this placement decreased slightly over the period of the sample, dropping from 2.6% to 2.4%. This was well below the mean average for all fifty states, which decreased from 6.2% to 5.3%. For the category of specific learning disability (SLD), North Carolina had the lowest percentage of students in this placement for an additional five of the years once Texas was excluded. North Carolina was ultimately the state from the large states with the lowest percentage of students with SLD eligibility in a separate school placement for seven out of the ten years of the sample in this category. The percentage of students with the eligibility category of autism in a separate school placement decreased over the period from .12% to .06%, which was well below the mean average for all fifty states, which started at .52% and decreased to .30%. The full quantitative data are available in Appendix K.

Discussion of Disability in the North Carolina Standards

North Carolina had five teacher education standards, with disability discussed in one of them: *Establish Respectful Environment for Diverse Population of Students*. The term disability was not used, but instead the phrase "students with special needs" was used. All references to

disability in the North Carolina standards are summarized in Table 15 on the next page, and were primarily related to instructional practices, including inclusion as an instructional model (NC Standard 2d). The full text of the North Carolina standards is available in Appendix F.

Table 15

Discussion of Disability in the North Carolina Standards

Standards with Disability Mentions	Context of Mention
Establish Respectful Environment for Diverse Population of Students (NC 2)	"Teachers adapt their teaching for the benefit of students with special needs."
	"…engage students and ensure they meet the needs of their students through inclusion and other models of practice."

Presence of Best Practices in the North Carolina Standards

Of the previously identified best practices, five were present in the North Carolina standards, and summarized in Table 16. There was one reference to *accommodations, modifications, and adaptations*, which referenced modifying plans "…to enhance student learning" (NC 4). There were six references to *collaboration* in the North Carolina standards, including collaborating with other teachers, parents, and community members. In addition to these mentions, there was a reference to collaboration as a way to "…mentor and support teachers to improve effectiveness" (NC 5). Although no specific mention of students with disabilities was made, one of the references did talk about collaborating with specialists, which could be seen as a reference to working with students with disabilities, as many specialists in the school setting do work with students who receive special education services, such as resource specialists, speech-language pathologists, occupational therapists, adapted physical education teachers, etc.

There were four references to *differentiated instruction* in the North Carolina standards. A range of contexts was described, including the need to address students' strengths and

weaknesses, responding to student needs, and responding to cultural diversity (NC 4). There was specific mention of the importance of adapting teaching "…for the benefit of students with special needs" (NC 2), as well as using a wide range of techniques and materials as a part of differentiated instruction (NC 4).

There were three references to *assistive technology* in the North Carolina Standards. Like many of the other practices in this state's standards, there was no specific mention of students with disabilities, but there was mention of using technology to communicate and learn content (NC 4), which could apply to students with disabilities. Finally, there was one mention about *inclusion.* North Carolina was one of the few states to use the term inclusion in its standards in the following passage: "Engage students and ensure they meet the needs of their students through inclusion and other models of effective practice" (NC 2).

Table 16

Presence of Best Practices in North Carolina Standards

Best Practice	Number of References	Mentions in the Standards
Accommodations/ Modifications/ Adaptations	1 reference	"Monitor and modify plans to enhance student learning."
Collaboration	6 references	"Collaborate with colleagues to mentor and support teachers to improve effectiveness."
		"Collaborate with specialists."
		"Improve communication and collaboration between the school and the home and community."
		"Promote trust and understanding and build partnership with school community."
		"Seek solutions to overcome obstacles that prevent parental/community involvement."
		"Collaborate with other teachers…"

Best Practice	Number of References	Mentions in the Standards
Differentiated Instruction	4 references	"Teachers adapt their teaching for the benefit of students with special needs."
		"Adapt resources to address the strengths and weaknesses of students."
		"Respond to cultural diversity and learning needs of students."
		"Employ a wide range of techniques using information and communication technology, learning styles, and differentiated instruction."
Universal Design for Learning	0 references	Not present
Assistive Technology	3 references	"Teachers integrate and utilize technology in their instruction."
		"Know appropriate use of technology…"
		"Assist students in use of technology to learn content, think critically, solve problems, discern reliability, use information, communicate, innovate, and collaborate."
Inclusion	1 references	"Engage students and ensure they meet the needs of their students through inclusion and other models of effective practice."

Ohio

Descriptive Statistics

Ohio was added to the initial sample once the larger states were added during the second round of analysis. The inclusion of Ohio was based on its percentages for all three educational settings included in this sample for the eligibility of *Intellectual Disability (ID):* 80% or more of the day in the general education classroom, less than 40% of the day in the general education classroom, and separate school. Of the large states, Ohio had the highest percentage of students with the eligibility of ID in the general education classroom for 80% or more of the day, and the lowest percentage of students with this same eligibility in the settings of less than 40% of the day in the general education classroom or separate school placement. In looking at the eligibility category of ID, for the setting of 80% or more of the day in general education, Ohio was ranked

first among the large states for nine of the ten years of the sample, including the seven most recent years. The percentage of students in this category increased over the sample timeframe, from 25% to 33%. This was well above the mean average across all fifty states for this period, which stayed very static at 16%. For the setting of less than 40% of the day in the general education classroom for students in the category of ID, Ohio was ranked first among the large states for eight of the ten years of the sample period, including the most recent five. The percentage of students in this eligibility category for this setting decreased from 4% to 2% over the time period, lower than the mean average across all fifty states, which decreased from 7% to 3%. For the setting of separate school, Ohio had the lowest percentage of students in this category among the large states for eight out of the ten years of the sample, including the most recent four. The percentage of students in the category of ID in this setting increased slightly, from .9% to 1.2%. However, this percentage was well below the average for this setting and eligibility category across all fifty states, which started at 4.9% and decreased to 4.7%.

Ohio was also included because of its percentage of students with the placement of less than 40% of the day in the general education classroom for the eligibility of *Specific Learning Disability (SLD).* For this category and setting, once Texas was removed from the sample, Ohio had the lowest percentage of students in this eligibility category and placement among the large states for five out of the ten years of the sample, including four of the six most recent. The percentage of students in the category of SLD decreased from 4% to 2% over the time period, which was also below the mean average across all fifty states in this category, which decreased from 7% to 3%. The full quantitative data is available in Appendix K.

Discussion of Disability in the Ohio Standards

Ohio had seven teacher education standards, with disability discussed in two of them: *Students* and *Instruction*, and presented in Table 17. In the *Students* standard, reference was made to "…recognize characteristics of gifted students, students with disabilities and at-risk students" (OH 1.5). In the *Instruction* standard, providing instructional support to students with disabilities was included (OH 4.5). The term *disabilities* was used in Ohio's standards, and students with disabilities were grouped with other specific populations such as at-risk students, gifted students, and "all students." Ohio was a state that frequently used the term "all students" in ways that could be seen as possibly including or referring to students with disabilities. However, these uses were not counted towards references to disability as far as being coded as an alternate term to "disability," as there were somewhere the intent was not clear, so the decision was made to only include those references that explicitly mentioned students with disabilities, or an alternate term that was referencing students with disabilities, (i.e., students with exceptional needs). The full text of the Ohio standards is available in Appendix G.

Table 17

Discussion of Disability in Ohio Standards

Standards with Disability Mentions	Context of Mention
Students (Diversity) (OH 1)	"…recognize characteristics of gifted students, students with disabilities and at-risk students in order to assist with appropriate identification, instruction and intervention."
Instruction (OH 4)	"…differentiate instruction to support the learning needs of all students, including students identified as gifted, students with disabilities and at-risk students."

Presence of Best Practices in the Ohio Standards

Of the best practices identified, only one was present in the Ohio standards, *accommodations, modifications, and adaptations*, summarized in Table 18 on the next page.

There was one reference to this standard, which was about using data to change instruction (OH 3).

Table 18

Presence of Best Practices in Ohio Standards

Best Practice	Number of References	Mentions in the Standards
Accommodations/ Modifications/ Adaptations	1 reference	"Teachers analyze data to monitor student progress and learning and to plan, differentiate and modify instruction."
Collaboration	0 references	Not present
Differentiated Instruction	0 references	Not present
Universal Design for Learning	0 references	Not present
Assistive Technology	0 references	Not present
Inclusion	0 references	Not present

Pennsylvania

Descriptive Statistics

Pennsylvania was included in the sample when the addition of large states was made. Pennsylvania had the lowest percentage of students in the category of All Disabilities among the large states in the setting of less than 40% of the day in the general education classroom for nine out of the ten years of the sample, including the most recent seven. The percentage of students in this category decreased slightly over the sample period, starting at 10% and decreasing to 9%. This percentage was lower than the average for all fifty states during the sample period, which started at 13% and decreased to 11%. Although it did not have the highest percentage of students in the eligibility category of Autism for the setting of 80% or more of the school day, it is being included based on this category due to the exclusion of Texas and Michigan from the sample of

large states. With those two states removed, Pennsylvania had the highest percentage for this category among the large states for seven of the ten years of the sample, including the six most recent. The full quantitative data is available in Appendix K.

Discussion of Disability in the Pennsylvania Standards

Pennsylvania has four teacher education standards, with the full text of the standards available in Appendix H. Disability was referenced in two of these standards, *Subject Matter Content and Pedagogy* and *Assessment*, and summarized in Table 19. One reference regarded instructional practices; the other referred to being aware of cultural issues that impact identification, specifically, "Demonstrate an understanding of overrepresentation of minorities in special education so as not to misinterpret behaviors that represent cultural or linguistic differences as indicative of learning problems" (PN III-11). Pennsylvania is another state that did not specifically use the word "disability" in its standards. Still, their standards did use the term *broad spectrum of learning abilities,* as well as used the term "all children" in ways that could be inferring students with disabilities. The full text of the Pennsylvania standards is available in Appendix H.

Table 19

Discussion of Disability in Pennsylvania Standards

Standards with Disability Mentions	Context of Mention
Subject Matter Content and Pedagogy (PN 2)	"Differentiate instruction, assessment and management styles to represent a broad spectrum of learning abilities, learning styles, multiple intelligences and interests."
Assessment (PN 3)	"Demonstrate an understanding of overrepresentation of minorities in special education so as not to misinterpret behaviors that represent cultural or linguistic differences as indicative of learning problems."
	"…differentiate instruction to support the learning needs of all students, including students identified as gifted, students with disabilities and at-risk students."

Presence of Best Practices in the Pennsylvania Standards

Of the identified best practices, four were present in Pennsylvania's standards, summarized in Table 20. There were three references to *collaboration*. One of the references specifically mentioned working with student support programs to meet the needs of students, while the other two more generally referenced working with other school professionals to support the curriculum and help serve the children (PN D). None of these standards specifically mentioned students with disabilities. There were also three references to *differentiated instruction*. References included being able to implement "multiple approaches" (PN D), the ability to "Differentiate instruction, assessment, and management strategies to represent a broad spectrum of learning abilities, learning styles, multiple intelligences, and interests," as well as an ability to plan these types of lessons (PN B). There was one indirect mention of disability in these standards, referring to "…a broad spectrum of learning abilities, learning styles, multiple intelligences and interests" (PN B).

There were four references to *assistive technology*, two making indirect references to disability. One discussed using technology to capitalize on "the developmental characteristics of all children" (PN IIB). At the same time, the other referred to the use of technology to aid in students' ability to communicate (PN IIB). The other two references more generally discussed the use of technology in the classroom: use for assessment purposes and to prepare students for further education or for entering the workforce (PN IIID). There were two references to inclusion, and both references specifically used the term. One of the references regarded knowing the history of education, including inclusion. At the same time, the other specifically discussed the need to "Develop inclusionary practices that respect differences and encourage students to work together to maximize their own and one another's learning" (PN IIB).

Table 20

Presence of Best Practices in Pennsylvania Standards

Best Practice	Number of references	Mentions in the Standards
Accommodations/ Modifications/ Adaptations	0 references	Not present
Collaboration	3 references	"Use student assistance and student support programs that attend to the intellectual, social, and emotional needs of children." "Interact with various professionals that serve children (e.g., school counselors, social service workers, home school coordinators)." "Serve on an advisory program, co-curricular activities, and other programs supporting the curriculum."
Differentiated Instruction	3 references	"Implement multiple approaches to learning." "Differentiate instruction, assessment, and management strategies to represent a broad spectrum of learning abilities, learning styles, multiple intelligences, and interests." "Demonstrate an understanding of and ability to plan for type, identification, prevalence, effective, evidenced-based instructional practices and adaptations."
Universal Design for Learning	0 references	Not present
Assistive Technology	4 references	"Employ teaching and learning strategies, including the use of technology, that consider and capitalize upon the developmental characteristics of all children." "Integrate technology and other resources appropriately in order to prepare students for further education, higher education, full citizenship, and the workforce." "Design educational experiences that help students communicate using various tools and means, including technology." "Implement technology in student assessment and measures."
Inclusion	2 references	"Current issues with historical and philosophical background, including inclusionary practices." "Develop inclusionary practices that respect differences and encourage students to work together to maximize their own and one another's learning."

Descriptive Statistics

West Virginia was part of the initial sample, based on its rank in the category of intellectual disability (ID), in the setting of separate school. West Virginia ranked first across all fifty states in this category for this setting for four of the ten years of the sample, which was the most of any state. It was ranked second or third for an additional four years of the sample period. The percentage of students in this category stayed virtually at zero throughout the sample, with .08% in the final year of the sample. This was well below the average for all fifty states, which started at 4.9% and decreased to 4.7% over the sample period. The full quantitative data is available in Appendix K.

Discussion of Disability in the West Virginia Standards

West Virginia had five teacher education standards. There was no mention of disability in any of them, nor any alternate terms. These standards did contain multiple references to "all students," which could refer to students with disabilities, but this was not counted as a specific reference to disability.

Presence of Best Practices in the West Virginia Standards

West Virginia had five teacher education standards, summarized in Table 21, with the full text available in Appendix I. Three of the previously identified best practices were present in the West Virginia standards. There were six references to *collaboration*. None of the references specifically mentioned working with students with disabilities, but there were references to working with colleagues, administrators, the community, parents, guardians, and the students themselves. There were three references to *differentiated instruction.* References were made to knowing the "unique characteristics" of students (WV 2A), as well as meeting students' needs

and responding to teachable moments (WV 3). There were two references to *assistive technology* referring to the need for appropriate use of technology (WV 3) and the use of technology in multiple different lesson designs (WV 1).

Table 21

Presence of Best Practices in West Virginia Standards

Best Practice	Number of References	Mentions in the Standards
Accommodations/ Modifications/ Adaptations	0	Not present
Collaboration	6	"Students are encouraged to collaborate and to assume responsibility for their positive interaction in the learning environment."
		"A teacher's professional responsibilities also include working collaboratively with colleagues, parents, guardians and adults significant to students on activities that connect school, families and the larger community."
		"The teacher works collaboratively with the principal and colleagues to develop and support the school mission."
		"The teacher works collaboratively with the principal and colleagues to develop and sustain student support systems that enable learning."
		"The teacher works collaboratively with the principal, colleagues and students to develop and sustain management systems that support and extend learning."
		"The teacher works collaboratively with the principal, colleagues, parents, students and the community to develop and sustain school activities that make meaningful connections among the school, families and the community."
Differentiated Instruction	3	"The teacher's understanding of the unique characteristics of the learner is evidenced in the design of learning activities which are developmentally appropriate and differentiated to engage all students in the learning process."
		"Excitement about learning is not only demonstrated in the instruction, but also by the engagement of the students in learning activities that are relevant and based on individual needs and learning characteristics."
		"The teacher adjusts instruction based on the needs of the students and in response to *teachable moments.*"

Best Practice	Number of References	Mentions in the Standards
Universal Design for Learning	0	Not present
Assistive Technology	2	"Information media and technology tools are frequently incorporated into lesson design and teaching strategies are supported by a variety of technologies." "…appropriate use of technology."
Inclusion	0	Not present

The InTASC States (North Dakota, South Dakota, Georgia)

The InTASC States

In the compilation of the initial sample, three of the identified states all had elected to use the InTASC standards as their state's teacher education standards. To present the results of these states, the descriptive statistics for each of these three states will be presented individually, followed by an analysis of the InTASC standards.

Descriptive Statistics – North Dakota

North Dakota was included as part of the initial sample, based on its rank in the eligibility category of All Disabilities for the setting of less than 40% of the day in the general education classroom. In this category, North Dakota was ranked first for six out of the ten years of the sample and second for one year, and third for two years. The percentage of students in this category for North Dakota increased slightly over the sample period, increasing from 4.8% to 5.9%. This was still below the mean average across all fifty states, which started at 13.3% and decreased to 11.5% over the sample time.

Descriptive Statistics – South Dakota

South Dakota was included as a part of the initial sample, based on its ranking in the eligibility category of specific learning disability (SLD) in the setting of less than 40% of the day in the general education classroom. South Dakota ranked first in this category for six of the ten years of the sample period, including the most recent four. It also ranked second for an additional three years. The percentage of students in this category decreased, starting at .7% and ending at .28%. This was well below the average across all fifty states for this category, which also decreased over the period, but started at 7% and decreased to 3%.

Descriptive Statistics - Georgia

Georgia was not part of the initial sample but was included when the larger states were added to the sample. Georgia was included in the sample based on its ranking in the eligibility category of autism in a separate school setting. Georgia was ranked first for one year and, after the exclusion of Texas, was the highest-ranked large state in this category for an additional four years. The percentage of students in this category increased slightly from 2.6% to 2.7%. This was below the mean average for this category across all fifty states, which decreased from 6.2% to 5.3% over the sample period. The full quantitative data for North Dakota, South Dakota and Georgia are available in Appendix K.

Discussion of Disability in the InTASC Standards

Ten total teacher education standards comprised the InTASC standards, with disability discussed in three: *Learning Differences*, *Assessment* and *Professional Learning, and Ethical Practice*. In the Learning Differences standard, references were made to being able to access resources (InTASC 2f) and knowledge of instructional strategies to use with students with disabilities (InTASC 2h), summarized in Table 22 on the next page. The assessment standard

focused on making appropriate accommodations for students with disabilities during assessments (InTASC 6p). In the *Professional Learning and Ethical Practice* standard, there were mentions about having knowledge of legal protections for students with disabilities (InTASC 9j), as well as "…reflect[ing] on his/her personal biases and access[ing] resources to deepen his/her understanding of cultural, ethnic, gender and learning differences to build stronger relationships and create more relevant learning experiences" (InTASC 9e).

The term disability was used in the InTASC standards but phrased in a way that grouped disability with gifted students, using the phrase "students with exceptional needs, including those associated with disabilities and giftedness." In addition to using this phrase, another alternate term used was Learner Differences. The InTASC standards also used the phrase "all learners" in ways that could be taken to be referring to disability, but for this analysis, that phrase was not included as an alternate term. The full text of the InTASC standards are available in Appendix J.

Table 22

Discussion of Disability in InTASC Standards

Standards with Disability Mentions	Context of Mention
Learning Differences	"The teacher accesses resources, supports and specialized assistance and services to meet particular learning differences or needs."
Learning Differences continued	"The teacher understands students with exceptional needs, including those associated with disabilities and giftedness, and knows how to use strategies and resources to address these needs."
Assessment	"The teacher understands how to prepare learners for assessments and how to make accommodations in assessments and testing conditions, especially for learners with disabilities and language learning needs."
Professional Learning and Ethical Practice	"The teacher understands laws related to learners' rights and teacher responsibilities (e.g., for educational equity, appropriate education for learners with disabilities, confidentiality, privacy, appropriate treatment of learners, reporting in situations related to possible child abuse)."

Presence of Best Practices in the InTASC Standards

Of the previously identified best practices, five were present in the InTASC standards, and summarized in Table 23. There were ten references to *accommodations, modifications,* and *adaptations*. The need for teachers to be able to adjust instructional resources and materials (InTASC 4) and assessments (InTASC 6) were discussed. In addition to the need for knowledge of strategies for making accommodations, modifications, and adaptations, having an open mindset and placing value on being flexible were also referenced (InTASC 9). There were twelve references to *collaboration* in the InTASC standards. The standards refer to collaborating with learners, families, colleagues, other school professionals, those with "specialized expertise," and the wider community (InTASC 10). There was also reference to the quality of interactions, "The teacher knows how to work with other adults and has developed skills in collaborative interaction" (InTASC 10).

There were ten references to *differentiated instruction* in the InTASC standards. Most of the references mentioned differentiating instruction to meet student needs (InTASC 7), the need to use data in the process, and respect different learners' needs (InTASC 9). Although these standards talked about differing needs, there was no specific mention of disability regarding this practice. There were 11 references to assistive technology. Standards included ensuring that learners were able to use technology effectively (InTASC 1) and using technology in ways that support learning (InTASC 9), as well as to improve accessibility (InTASC 8). Although accessibility is often associated with disability, there was no specific mention of disability in these standards. Finally, there was one reference to *inclusion* in the InTASC standards: "The teacher uses understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments" (InTASC 4).

Table 23

Presence of Best Practices in the InTASC Standards

Best Practice	Number of References	Mentions in the Standards
Accommodations/ Modifications/ Adaptations	10 references	"The teacher makes appropriate and timely provisions (e.g., pacing for individual rates of growth, task demands, communication, assessment, and response modes) for individual students with particular learning differences or needs."
		"The teacher evaluates and modifies instructional resources and curriculum materials."
		"The teacher prepares all learners for the demands of particular assessment formats and makes appropriate accommodations in assessments or testing conditions."
		"The teacher understands how to prepare learners for assessments and how to make accommodations in assessments and testing conditions, especially for learners with disabilities and language learning needs."
		"The teacher is committed to making accommodations in assessments and testing conditions, especially for learners with disabilities."
		"The teacher plans how to achieve each student's learning goals, choosing appropriate strategies and accommodations, resources, and materials to differentiate instruction for individuals and groups of learners."
		"The teacher knows when and how to adjust plans."
		"The teacher believes that plans must always be open to adjustment and revision."
		"The teacher uses appropriate strategies and resources to adapt instruction."
		"The teacher values flexibility and reciprocity in the teaching process as necessary for adapting instruction to learner responses."
Collaboration	12 references	"The teacher collaborates with learners, families, and colleagues."
		"The teacher plans collaboratively with professionals who have specialized expertise."
		"The teacher knows when and how to access resources and collaborate with others to support student learning."

Best Practice	Number of References	Mentions in the Standards
Collaboration continued		"The teacher values planning as a collegial activity that takes into consideration the input of learners colleagues, families, and the larger community."
		"The teacher collaborates with learners to design and implement relevant learning experiences, identify their strengths, and access family and community resources to develop their areas of interest."
		"The teacher works with other school professionals to plan and jointly facilitate learning."
		"The teacher engages collaboratively in the school wide effort to build a shared vision and supportive culture."
		"Working with school colleagues, the teacher builds ongoing connections with community resources to enhance student learning and well-being."
		"The teacher uses technological tools and a variety of communication strategies to build local and global learning communities."
		"The teacher understands schools as organizations within a historical, cultural, political, and social context and knows how to work with others across the system to support learners."
		"The teacher knows how to work with other adults and has developed skills in collaborative interaction."
		"The teacher actively shares responsibility for shaping and supporting the mission of his/her school as one of advocacy for learners and accountability for their success."
Universal Design for Learning	0 references	Not present
Assistive Technology	11 references	"The teacher promotes responsible learner use of interactive technologies."
		"The teacher intentionally builds learner capacity to collaborate in face-to-face and virtual environments."
		"The teacher knows how to use technologies and how to guide learners to apply them."
		"The teacher uses supplementary resources and technologies effectively to ensure accessibility."
		"The teacher understands how to use digital and interactive technologies."

Best Practice	Number of References	Mentions in the Standards
Assistive Technology continued		"The teacher continually seeks appropriate ways to employ technology to support assessment practice."
		"The teacher engages learners in using a range of learning skills and technology tools."
		"The teacher knows how to use a wide variety of resources, including human and technological."
		"The teacher understands how content and skill development can be supported by media and technology."
		"The teacher is committed to exploring how the use of new and emerging technologies can support and promote student learning."
		"The teacher uses technological tools and a variety of communication strategies to build local and global learning communities."
Inclusion	1 reference	"The teacher uses understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments."

Summary of Results

Discussion of Disability in the Standards

Of the states included in the sample, only West Virginia did not have any mentions of disability in their standards. One finding resulting from the in-vivo coding was using alternate terms for disability in several of the states' standards. Disability was also frequently not located in a disability-specific standard, but instead in standards about teaching and learning, educational environment, or diversity. These results, as well as the locations of where mentions of disability occurred in each states' standards are summarized in Table 24 below and discussed in further detail in the next section.

Table 24

Summary of Discussions of Disability in the Standards – All States

State	Alternate Terms Used	Standards with Mentions
AL	Learners with special needs	Content Knowledge Teaching and Learning Diversity
FL	Differing needs, diversity of students	Instructional Design and Lesson Planning The Learning Environment, Instructional Delivery and Facilitation Assessment
IA	Full range of cognitive levels, diverse needs	Meet Multiple Learning Needs of Students
LA	Students with and without exceptionalities, individual student differences in cognitive…development	Knowledge of State and Federal Laws Differentiated Instruction/Behavior Management Develop and Apply Individual Educational Plans (IEP), Assessment
NC	Students with special needs	Establish Respectful Environment for Diverse Population of Students
NM	Students with exceptionalities (including learning disabilities, visual and perceptual difficulties, and physical or mental challenges), exceptionalities, students with special needs,	Professionalism, Instructional Planning and Implementation, Classroom Management, Technology, Diversity, Inclusion
OH	"…gifted students, students with disabilities and at risk students"	Students (Diversity), Instruction
PN	Broad spectrum of learning abilities, "students identified as gifted, students with disabilities and at-risk students'	Subject Matter Content and Pedagogy, Assessment,
WV	none	
InTASC (ND,SD, GA)	Particular learning needs or differences, students with exceptional needs (including those with disabilities and giftedness)	Learning Differences

Terms besides Disability

In looking at the standards in this sample, the term "disability" was rarely used, although this does not mean that disability was not discussed. Alternative terms often were used, such as *special needs* or *exceptional needs*. This was true regardless of the location of the standard, whether it was part of a standard specifically referring to disability or not. For example, in the InTASC standards, both *exceptional needs* and *disabilities* are used. For example, "The teacher understands students with *exceptional needs*, including those associated with disabilities and giftedness, and knows how to use strategies and resources to address these needs" (InTASC 2). Alabama and New Mexico both used *exceptionalities* as an alternate term to disability and used *students with special needs*. In the New Mexico Standard F, Diversity, the term *exceptionalities* were used: "The teacher is aware of and can apply current research findings regarding individual differences such as linguistic backgrounds, developmental levels, *exceptionalities*, and gender" (NM 4).

The word disability was included in discussions of multiple forms of diversity, although disability was still often singled out as a distinctive form of disability. For example, in Alabama Standard Two – Teaching and Learning, one of the sub-standards is, "Ability to provide a variety of ways for *students with diverse needs, including students with disabilities*, to demonstrate their learning" (AL 2).

In addition to the alternate terms used for disability, another theme that emerged from these standards was a lack of specific mention of disability. Florida used phrases such as "individual differences in students." Still, it did not use the term disability or widely used alternate terms such as special needs or exceptionalities found in other states' standards. Iowa used the phrase "full range of cognitive abilities," which would seem to imply a reference to

disability, but again, without using the word or any of its alternatives. North Carolina frequently used the term "all students." Still, North Carolina did not use the term disability or any of its alternates outside of the specific sub-standard under the diversity standard referring to "special needs." Ohio was another state that frequently used the term "all students" or references to "each individual student" rather than using the actual term "disability" or its alternatives.

Location of Disability in the Standards

The states in this sample had varying numbers of standards, ranging from four to ten. These overarching standards often had multiple sub-standards or indicators below them. The location of where disability was discussed within a state's set of standards had three possible locations: a *disability* standard, diversity standard, or a *teaching environment* standard, as summarized in the previous Table 24.

Disability in a Disability Standard

This was the least common location of discussion of disability, and the majority of states in the sample did not have disability as one of their standards. However, the InTASC standards did have it as a standard, and these standards were used by three states in the sample. The InTASC standards also had one of the largest number of standards in the sample, with ten, while other states had as few as five standards. The disability standard in the InTASC standards was listed second out of ten, titled *Learner Differences*.

Disability in a Teaching/Learning Environment Standard

The second most frequent location of the discussion of disability was in a teaching/learning standard. Florida is one state that discussed disability under this type of standard. The second of six quality indicators, *The Learning Environment*, stated the ability "To maintain a student-centered learning environment that is safe, organized, equitable, flexible,

inclusive, and collaborative, the effective educator consistently…," followed by several sub-standards, including, "Adapts the learning environment to accommodate the differing needs and diversity of students" (Florida 2H).

West Virginia is another state that discussed disability under a teaching/learning environment standard. Standard Two, *The Learner, and Learner Environment* contained the *Understanding Intellectual/Cognitive, Social, and Emotional Development* sub-standard: "The teacher's understanding of the unique characteristics of the learner is evidenced in the design of learning activities which are developmentally appropriate and differentiated to engage all students in the learning process" (WV 2A).

Disability in a Diversity Standard

The most common location for discussions of disability was under a diversity standard or in descriptions of "diverse learners" within other standards. However, there were usually specific mentions of working with students with disabilities in one of the sub-standards or indicators, but still listed separately from other forms of diverse learners, such as English Language Learners. Alabama's Diversity standard stipulates that "To improve the learning of all students, teachers differentiate instruction in ways that exhibit a deep understanding of how cultural, ethnic, and social background; second language learning; *special needs; exceptionalities*; and learning styles affect student motivation, cognitive processing, and academic performance" (AL 4).

This sample was purposely composed of states with either high rates of inclusion and/or low exclusion rates. One of the questions posed by this study was how disability is discussed in these states' standards. Most of the states did not have a different standard for disability but instead included discussions of disability under other standards, specifically under a teaching/learning standard or a diversity standard.

Preparing Teachers for Inclusion – Best Practices

The process for selecting the best practices involved using checklists compiled from various professional organizations and a literature search for articles discussing best practices for inclusion. The identified best practices will be discussed in the subsequent sections and summarized in Table 25 below.

Table 25

Summary of Best Practices in the Standards – All States

	AL	FL	IA	LA	NC	NM	OH	PA	WV	InTASC
Accommodations/ Modifications/ Adaptations	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Assistive Technology	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes
Collaboration	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Differentiated Instruction	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes
Inclusion	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Universal Design for Learning	No	No	No	No	No	No	No	No	No	No

Accommodations, Modifications, and Adaptations

One of the identified best practices was the ability to accommodate, modify, and adapt the curriculum. IDEA refers to the need for students with disabilities to participate in statewide assessment programs and receive accommodations and modifications as needed. Many of the states in the sample referred to teachers' ability to accommodate, modify, or adapt the curriculum to meet the various needs of students. Often these references were separate from references to

disability. In Alabama's standards, there were mentions of making accommodations, modifications, and adaptations in both standards about curriculum (1B) and human development (2A), describing, "…meeting the needs of each individual learner," and "recogniz[ing] individual variations in learning and development that exceed the typical range…to provide appropriate learning experiences." Florida is another state that references a teacher's ability to make accommodations, modifications, and adaptations to meet "differing student needs" under an Instructional Design and Lesson Planning standard (1H). Iowa and New Mexico referred to making accommodations, modifications, and adaptations. The InTASC standards refer to modifying curricular materials and choosing "appropriate strategies and accommodations" to differentiate for individual learners (InTASC 4f, 7b).

Collaboration

There are many groups of stakeholders that teachers collaborate with to ensure students' success. Working with students with disabilities may include other instructional personnel, such as special education teachers, other specialists, and family and community members. References were made to collaborating with many of these different groups. Collaboration was mentioned both in the context of students with disabilities and in professional development. Multiple states ' standards also mentioned collaboration with specialists to work more effectively with students with disabilities. In the InTASC standards, collaboration is referred to in the *Planning for Instruction* standard: "The teacher plans collaboratively with professionals who have specialized expertise (e.g., special educators, related service providers, language learning specialists, librarians, media specialists) to design and jointly deliver as appropriate learning experiences to meet unique learning needs" (InTASC 7e). North Carolina and New Mexico mention working with support specialists or special education teachers in their Special Education standards. New

Mexico's standards also refer to working with a variety of other stakeholders in its Classroom Management standard: "The teacher collaborates with specialists, support personnel, parents, and administrators in an interdisciplinary manner for the success of the individual student" (NM C8). New Mexico was not the only state to refer to collaboration in the context of working with families. Both the InTASC and Florida standards referred to collaborating with families to support learning for all students. InTASC discussed collaboration with family and colleagues to "…build a safe, positive learning climate of openness, mutual respect, support, and inquiry" (InTASC 3A), while Florida's standard highlighted, "…foster[ing] communication and to support student learning and continuous improvement" (Florida 1D).

Collaboration was also mentioned in professional development for teachers in multiple sets of standards. InTASC referenced working with colleagues "…to plan and jointly facilitate learning on how to meet diverse needs of learners" (InTASC 10b). Iowa's standard eight, Professional Improvement, emphasized the role of collaboration to "enhance student learning." In contrast, North Carolina's standards discussed short- and long-term instructional planning collaboration. West Virginia's focus was on collaboration to create ties between the students and the larger community outside of the school (WV 5).

Differentiated Instruction

Another best practice identified through the literature review was differentiated instruction. Nearly every state in the sample included either specific mention of differentiated instruction in their standards by name or referenced it in instructional planning and delivery. Although Iowa's standards did not use the term, multiple mentions of practices in the standards could be defined as differentiated instruction. Iowa's standard four, Multiple Learning Needs of Students, stated that teachers should be able to "…demonstrate flexibility and responsiveness in

adjusting instruction to meet student needs," as well as in "…engag[ing] students in varied experiences that meet diverse needs and promote social, emotional, and academic growth," (IA 4). Similarly, New Mexico referenced differentiated instruction for students with disabilities without using the term differentiated instruction. Instead, it referred to the teacher "…adjust[ing] lessons and strategies for students with exceptionalities about academic levels, physical environment, and emotional needs" (NM H8).

Many other states in the sample used the term *differentiated instruction* in their standards, both within standards specific to disability and in standards about teaching and learning and instructional planning. Alabama's standard two, *Teaching and Learning,* refers to "[The] ability to organize, use, and monitor a variety of flexible student groupings and instructional strategies to support differentiated instruction" (AL 2B). Florida also referred to differentiating instruction explicitly in Standard Three, *Instructional Facilitation and Delivery*: "Differentiate instruction based on an assessment of student learning needs and recognition of individual differences in students" (FL 3H). Louisiana's *Meeting Student Needs* standard stated, "The teacher candidate differentiates instruction, behavior management techniques, and the learning environment in response to individual student differences in cognitive, socio-emotional, language, and physical development" (LA 3F). North Carolina, New Mexico, West Virginia, and the InTASC standards also all explicitly used the term *differentiated instruction* in their standards for Instructional Planning or Learning Environments.

Universal Design for Learning (UDL)

Universal Design for Learning was another best practice for inclusion identified in the literature. Although none of the states in the sample mentioned UDL, they all mentioned differentiated instruction, and many of the states discussed the use of assistive technology.

Assistive Technology

Technology was mentioned in several of the standards. Technology use was often discussed more generally, such as teachers using technology as a part of their professional practice, but not specifically about technology use to increase accessibility for students with disabilities. Similar to the term *differentiated instruction*, the term *assistive technology* was not always used, even if the state had descriptions in their standards that fit the definition of assistive technology. Alabama is a state that explicitly uses the term across multiple standards. In Standard Five, *Teaching and Learning*, the term is explicitly used as, "Ability to select and support instructional and assistive technologies and to integrate these into a coherent instructional design" (AL 5D). The term is also used in the *Literacy* standard, "Ability to foster effective verbal and nonverbal communications during ongoing instruction using assistive technologies as appropriate" (AL 3A).

Alabama also referred to assistive technology in the Diversity standard, "Knowledge of a range of curricular materials and technologies to support the cognitive development of diverse learners (AL 4D). New Mexico also specifically mentioned assistive technology in the context of students with disabilities and mentioned a type of assistive technology. The teacher "…demonstrates awareness of adaptive assistive devices and software resources for students with special needs" (NM I). Florida also explicitly used the term *assistive technology* by stating that a capable teacher "Utilizes current and emerging assistive technologies that enable students to participate in high-quality communication interactions and achieve their educational goals" (FL 2I). Florida implied the use of assistive technology without using the term in their standards by stating that the teacher should be able to "Apply varied instructional strategies and resources, including appropriate technology, to provide comprehensible instruction, and to teach for student

understanding" (FL 3G). The InTASC standards did not use the term assistive technology. Still, they did refer to accessibility by indicating, "The teacher uses supplementary resources and technologies effectively to ensure accessibility and relevance for all learners" (InTASC 4g).

Working with Students with Disabilities

Another research question posed in this study was: *How do teacher education standards describe the preparation for teachers to work with students with disabilities?* In reviewing the standards, specifically looking for mentions of disability within the standards discussing disability, there were two types of preparation discussed and the specific practices discussed in the prior section. One type of knowledge was specific technical knowledge, such as knowledge of specific characteristics of disability or special education policy, and the second type was knowledge about support for inclusion. The results are summarized in Table 26 and will be further discussed in the next section.

Table 26

Types of Knowledge Discussed in the Standards – All States

	AL	FL	IA	LA	NC	NM	OH	PA	WV	InTASC
Knowledge about Policy and Disability Categories	Yes	Yes	Y?	Yes	Y?	Yes	Yes	Yes	No	Yes
Knowledge about Supports for Inclusion	Yes	Yes	Yes	Yes	Yes	Yes	Y?	Yes	Yes	Yes
Knowledge about Working in Inclusive Settings	Yes	Yes	No	Yes	Yes	Yes	No	Y?	No	Yes

Key: Yes: Present in standards, Y?: Implied in standards, No: Not present in standards

Knowledge about Policy and Disability Categories

Key indicators in Alabama's *Diversity* standard focused on technical knowledge about disability policy and the ability to recognize disability in students rather than instructional strategies. Indicators included: (a) knowledge of the major areas of exceptionality in learning, including the range of physical and mental disabilities, social and emotional disorders, giftedness, dyslexia, and attention deficit disorder; (b) knowledge of the indicators of the need for special education services; (c) ability to identify and refer students for diagnosis for special services; and (d) ability to address learning differences and disabilities that are prevalent in an inclusive classroom. New Mexico also mentioned specific disability categories in its standard two, Instructional Planning and Implementation, stating, "The teacher plans lessons that provide for the success of students with exceptionalities, including learning disabilities, visual and perceptual difficulties, and physical or mental challenges" (NM 2).

There was also discussion about knowledge of legislation applicable to students receiving special education services such as IDEA, Section 504, and ADA (AL 5F). Louisiana also makes specific mention of knowledge of legislation by stating, "The teacher candidate applies knowledge of state and federal laws related to students' rights and teacher responsibilities for appropriate education for students with and without exceptionalities, parents, teachers, and other professionals in making instructional decisions and communicating with colleagues and families" (LA E). Specific references to aspects of IDEA were also included indicating "The teacher candidate develops and applies instructional supports and plans for an individualized education plan (IEP) or individualized accommodation plan (IAP) to allow a student with exceptionalities developmentally appropriate access to age- or grade-level instruction, individually and in collaboration with colleagues" (LA G).

Knowledge about Supports for Inclusion

In addition to specific instructional practices associated with inclusion, the need to support students with disabilities in the general education setting was also discussed. For example, Louisiana's standards described the need to "…design and deliver effective instruction to all students, including students with exceptionalities and students in need of academic and non-academic intervention in a regular education setting" (LA B2). New Mexico described the need to utilize research-based practices by stating, "The teacher is aware of and can apply current research findings regarding individual differences such as linguistic backgrounds, developmental levels, exceptionalities, and gender" (NM F3). The InTASC standards talk about supports: "The teacher accesses resources, supports, and specialized assistance and services to meet particular learning differences or needs" (InTASC 2f).

Knowledge about Working in Inclusive Settings

In addition to specific knowledge of legislation, knowledge about working in inclusive settings was mentioned. For example, Alabama's implied references discussed the need to plan for students with disabilities in the general education setting. Alabama's standards mentioned the "Ability to collaborate in the planning of instruction for an expanded curriculum in general education to include Individual Education Plans and other plans such as Section 504 goals for students with disabilities" (AL 5E), as well inclusive classrooms (AL 4C). The InTASC standards also explicitly mention inclusive environments, "The teacher uses understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards" (InTASC 2). North Carolina also specified that teachers should "Engage students and ensure they meet the needs of their students through inclusion and other models of effective practice" (NC 2).

New Mexico has a standard titled *Inclusion*, which states, "The teacher adjusts lessons and strategies for students with exceptionalities about academic levels, physical environment, and emotional needs" (Standard H). A substandard within this standard referenced both instructional strategies focused on more social and emotional aspects of learning and the facilitation of inclusion of students with disabilities in the general education classroom. This included the following: "The teacher understands the social, emotional, physical, and academic needs of students with exceptionalities. The teacher assists students to understand social responsibilities," and "The teacher assists students with exceptionalities to have positive experiences in the regular classroom" (NM H). The following chapter will discuss the results of this study, the limitations of this study, and possible directions for future research in this area.

Chapter 5: Discussion

After selecting a sample of inclusive intensive states, best practices for working with students in inclusive settings were identified through a literature search and review of best practices identified by professional organizations for teacher training. This was followed by a critical discourse analysis of each of the sets of teacher education standards in the sample. Results were presented about what and how the previously identified best practices as well as how disability was discussed in the standards for each state in the sample.

Primary Findings

Nine of the ten sets of standards included four or five of the six previously identified best practices in their standards. The state that did not was Ohio, which only contained one of the best practices. Another finding included the location of discussions of disability was in a state's standards. The most frequent type of standard that included discussions of disability in the sets of standards in this sample were Teaching/Learning Environment standards, with six of the ten sets of standards having a mention of disability in this type of standard. The second most frequent location was a Diversity standard, with four sets of standards having mentions in this location. Another finding was that the actual term "disability" was very infrequently used. These findings, as well as implications will be discussed in the following sections.

Discussion of Results – Best Practices

This was an exploratory study, utilizing CDA to analyze teacher education standards in inclusion-intensive states. Looking at the ways in which teaching practices were described in the standards, many of the best practices tied to inclusion were present in the standards of the states included in the sample. All states included at least one of the standards, and nine of the ten sets of standards included at least four of the six practices.

Included Practices

The most frequently included practice across state standards was *accommodations, modifications, and adaptations*, present in nine of the ten sets of standards. While important in providing access to students with disabilities to the curriculum, this practice also places the responsibility of success primarily on the learner rather than the teacher or the school and does not require major changes in thinking about the inclusion of all learners in a task. It is also a legal requirement of IDEA that students with disabilities are included in large-scale assessment programs, and this practice was often mentioned in the context of assessments in the standards. Teachers reported feeling more comfortable with implementing this practice than some of the other identified, however, it usually was limited to those accommodations, modifications and adaptations that were implemented for testing as well (Mastropieri, et. al, 2005; Nolet & McLaughlin, 2005). Also, with accommodations and modifications, it allows for learning tasks and environments to remain largely unchanged, and does not necessarily lead to the creation of ultimately more accessibility for or inclusivity of students with disabilities in the general education environment.

Differentiated instruction, like the previously discussed practice*,* was present in nine of the ten sets of standards. Some changes may require less structural change to a task, such as teaching a lesson in groups to allow for variable pacing. An example of a change that may require more change is re-designing a task to allow for multiple response formats. Both pre-service and in-service teachers reported not receiving specific training in best practices related to inclusion, or even just working with students with disabilities (Kent & Giles, 2016; Kurth & Foley, 2014; Praisner, 2003). Differentiated instruction was also not always specifically named using that term in the standards. This lack of naming may lead not only to the perception that

113

teachers have not received training in this practice; it may also lead to it not being taught in teacher education programs. Although there will often be differences between a policy's wording and its implementation, this lack of specificity in naming of practices allows for enough ambiguity that it may lead to the practice not being taught to or implemented by teachers.

Collaboration was also included in nine out of ten of the sets of standards. This practice, like differentiated instruction, was not always titled by this term. There was also variation among the groups of potential collaborators, such as families, community members, and more vague terms such as "other professionals." Co-teaching, widely described when discussing collaboration in the literature, was only included in one out of the ten sets of standards. In addition, the most frequent group of professionals mentioned in the literature in terms of collaboration with other professionals in inclusion was para-professionals, which were also infrequently discussed in the standards in the sample. These findings align with the literature that pre-service training for teachers did not prepare them well to work with other professionals (Mastropieri, 2005). This has been identified as important for successfully supporting students with disabilities in the general education classroom, and providing this type of training to pre-service teachers is critical. Teachers also report schools are not set up with structures in place that would support collaboration between professionals, such as shared planning time (Idol, 2006; Suter & Giangreco, 2009). Not naming co-teaching or working with para-professionals specifically in the standards, but instead referring more broadly to collaboration, allows space for these practices to not be taught or implemented.

Inclusion and *assistive technology* both were included in eight of the ten sets of standards. Although the concept of inclusion is implied in IDEA, the term is not present there either, with the term *least restrictive environment* used. The use of this term may indicate a

specific focus on inclusion, which must be a part of the mindset of both special education

teachers and general education teachers as well to be successful. Since the use of the term

inclusion is not legally required, the use of it may indicate of a different mindset toward students

with disabilities.

In standards where *inclusion* was listed as a practice, the focus was typically on teacher

and/or student mindsets. Pennsylvania's standards referred to teachers knowing, "…current

issues with historical background, including inclusionary practices." North Carolina's standards

state, "Through inclusion and other models of effective practice, teachers engage students to

ensure that their needs are met." Similarly, New Mexico's standards include teachers helping

students understand their social responsibility to include all students. This may also be part of the

reason why this standard was not frequently included, as this is a more difficult practice to

operationalize into observable behaviors, given the format that many of the standards were

written in used sentence structures such as, "Teachers will be able to…" A shift in mindset is

necessary for inclusion to be successful. Changes in mindset are difficult to put into an

observation rubric, or ascertain from a test score; therefore, it is something that may be less

likely to show up in a state's standards.

With *assistive technology*, most of the references were about technology use, rather than

specifically mentioning using technology for increasing accessibility for students with

disabilities. However, there were mentions of technology use in the classroom to increase the

accessibility as well as to increase communication opportunities. While these types of standards

did not always specifically mention students with disabilities, these uses of technology are

beneficial for students with disabilities. Many commonly used devices such as laptops, tablets or

even smart phones have features or software that can be added to help increase accessibility

without the need for the purchase of separate hardware or devices, and may be much more cost-effective and readily available ways of using technology to help increase accessibility in the classroom setting. Assistive technology is also often associated with universal design for learning in the literature. However, unlike assistive technology, which was included in most of the standards, universal design was not included in any of the standards in the sample.

UDL: The Only Non-Included Practice

Of the previously identified best practices, the only one not present in any of the standards used in this study was *Universal Design for Learning (UDL)*. Unlike some of the previously mentioned practices, UDL requires more of a change in mindset versus simply a behavior change. It is also more difficult to observe this practice in action. There may be indications within a lesson of this occurring, such as having multiple presentation and/or response methods, but in the current climate of teacher and student evaluation through measurable data, this is another practice that while critically important for the inclusion of students with disabilities, may not as easily implemented. Also, teacher education faculty reported feeling less confident in teaching practices that they had not utilized themselves in the classroom (Scott, 2018; Spooner, et. al, 2007), which may also make it more difficult for UDL to become more widely included in teacher education standards without structural changes made at the state and teacher preparation program level.

Special Education/Disability Policy Knowledge

In addition to looking at specific teaching practices in the standards, seven of the sets of standards discussed special education policy knowledge. All ten sets of standards included knowledge of supports for inclusion, while seven described knowledge of working in inclusive settings. The inclusion of these types of knowledge in general education teacher standards can be

116

seen as supportive of the inclusion of students with disabilities in the general education classroom, as discussions of disability in the standards focused on teaching practices, learning environments, and respect for all forms of diversity, including disability.

Construction of Disability in the Teacher Education Standards

Through the analysis of the standards, a theme that emerged was a lack of specificity surround disability, in both teaching practices, as well as a lack of using the word "disability" or "disabled." Looking at the term disability through a medical model lens, it is seen as a deficit that resides within an individual, and is up to the individual to fix or resolve any issues that arise from it. The drawback to this approach in the school setting is that any difficulties that arise become the responsibility of the individual to mitigate. In looking at this concept through a social model lens, disability results from society's inability to accommodate a wide range of abilities, rather than a deficit within the individual. A view of disability related to the social model is disability as a minority group status, which views disability as one among many minority statuses. Looking at how and where disability was discussed in teacher education standards can give insight into what model of view of disability is present in these states' standards and will be discussed in the following sections. This study also looked at the types of language used, and how language was utilized to describe disability in the teacher education standards. Overall, disability was described in ambiguous ways in the standards, with the actual identifying term very rarely being used. However, upon analysis, this omission can ultimately be interpreted as supportive of a social model/disability as minority group status view on disability.

Location of Disability in the Standards

As previously discussed, only three sets of standards in the sample included a specific Disability standard, with discussions of disability most often within a Teaching and Learning

117

standard, with six of the ten sets of standards including disability in this location. Incorporating of disability into these types of standards, rather than being placed in isolation in a standard specifically about disability supports a more social model or disability as minority status view of disability. Placement of disability discussion as a part of standards about teaching behaviors and learning environments shows that students with disabilities are an expected part of the general education learning environment, and a population of students that both special and general education teachers should expect to work with. Mentions of this population of students within standards about teaching practices and the learning environment help embed the concept of disability, and more importantly, working with students with disabilities into these standards.

Mentions of disability were also included in Diversity standards in four of the ten sets of standards. Even though the discussions of disability were often made specifically, and they were mentioned separately from other forms of diversity. However, having disability located with a diversity standard is still supportive of a social model of disability, rather than the medical model. Given that there are specific legal requirements for identifying and providing services to students with disabilities, there may also be practical reasons for specifically calling out disability, even within a diversity standard. Further support for evidence of the social versus medical model was the lack of a separate disability standard. By incorporating discussions of disability into other standards about teaching behaviors, learning environments, or diversity, the concept of students with disabilities being part of a general education classroom was codified into the standards, and done so in a way that embeds more fully into Diversity or Teaching and Learning Environment standards.

Assessment standards were the next most frequent location for disability with four out of ten sets of standards having it in this location, and always referring to the need for

accommodations and modifications. Including students with disabilities in large-scale assessment programs is a legal requirement of IDEA. Although this location of disability discussion does not necessarily support of a social model/disability as minority group status view of disability, states with mentions of disability in assessment standards often also included discussions of disability in Teaching and Learning or Diversity standards as well.

Usage of Alternate Terminology

Language plays a large role in the construction of disability. Grue (2015) discussed the idea that multiple concepts of disability that can be referenced by the use of the word. For some, disability may evoke an image of a wheelchair user. For others, it may be a person who is blind. In the educational setting, many general education teachers reported having limited experiences with students with disabilities in their classrooms, as discussed in Chapter Two. The accommodations general education teachers most frequently reported using were those often associated with learning disabilities, such as receiving extra time on assignments and tests. This lack of specificity is mirrored in the language used in the standards across multiple states. Although disability was often included under diversity, it was also still specifically referenced as a separate category using inconsistent language across states.

IDEA calls for "person-first" language, where the person is named separately from the disability (i.e., the girl with autism). However, more recently, disability rights activists have countered the use of person-first language, calling instead for the use of disability first language (i.e., the autistic girl). Person-first language was most frequently used in the standards, which mirrors what is called for in IDEA. There was also a general lack of specificity or uniformity in terms of the use of the word *disability*. The actual term was infrequently used. One code that

emerged during the in-vivo round of coding was "Words besides Disability," in which alternate terms were used in place of the word "disability" in the standards.

What does using these alternate terms mean in regards to how the concept of disability is presented in a state's standards? Disability is already a term that carries multiple meanings, depending on the viewpoint of whoever is defining the term. In the social model of disability, this term refers to the environment's inability to accommodate for a wide range of individuals. In looking at the term through the medical model lens, disability refers to a physical or mental limitation. However, this can still lend itself to a wide range of meanings. A person who is blind would have different needs than someone who is autistic. When thinking about of the classroom setting, if a general education teacher pictures a student with a disability in their classroom, what image would come to mind? Given the lack of specificity in almost all of the standards included in this sample, it is open to much interpretation. IDEA identifies thirteen categories of eligibility for special education services. When a standard refers to an inclusive environment, it may not be with the specific thought of a student in one of the IDEA eligibility categories, and what their needs may be. The lack of specificity in the naming of disability in the standards can be viewed as being supportive of a truly inclusive mindset. Not specifically defining who or what is meant by a student with disabilities (or exceptional needs, or special needs, or any of the other alternate terms), it allows space for any and every student to be included.

This lack of specificity can also become problematic when describing knowledge, skills, and practices that a teacher should possess. Many in-service teachers have reported not having the specific skills, knowledge and training needed to work with students with disabilities. However, through analysis of the standards, most of these practices were present, although these specific terms were not actually used in many cases, as described in the previous Chapter.

In a recently published work, Haugen (2021) discussed the concept of emissions and omissions in framing a discourse around diversity, looking at what was said and what was left out as a spectrum, rather than included or excluded from a given discourse. This same concept can be applied to the narrative treatments of disability in the standards. What was omitted was the specific use of the word disability. Multiple different terms were used across states, and sometimes even different terms were used within one set of standards. The use of a widely known alternate term, such as *students with exceptional needs*, while technically an omission of specifically using the term disability, is still a reference. Typically, omissions may be seen as attempts to hide or exclude, and these omissions do help to reinforce the differences between general education and special education. By removing the requirement of this knowledge from the general education teachers, it maintains a system that requires someone else who has "expert knowledge" to become involved with the process.

These omissions of the word disability are not necessarily unsupportive of the full inclusion of students with disabilities in the general education classroom setting. Multiple states included standards about collaboration. By incorporating this practice into a state's standards, the implication is that teachers are expected to work not in isolation but with others, including other school professionals. Therefore, even if the perception is that someone else holds knowledge, the idea is in place that one person is not expected to make successful inclusion of students with disabilities happen alone. These omissions, combined with the integration of disability into standards not specifically focused on disability can indicate of a more social model of disability. The omission of the term disability, and the lack of a specific, separate location for discussions of disability in the standards support of the idea of including students with disabilities in the

121

general education classroom. This lack of specificity continues when discussing disability itself as well.

Implications

The results of this study found that there were similarities across the sets of standards in terms of teaching practices that were included, as well as how disability was described, with evidence of a social model/disability as minority group status model. The role of language in the standards is important to consider when thinking about teacher education, both in describing disability and teaching practices. There is clearly evidence of practices associated with inclusion in the standards of this sample. However, there is also a disconnect between what teachers are reporting receiving in their pre-service training that may go beyond simply a difference in implementation from policy, which has important implications for the field.

Disability as a Part of Diversity

One of the theoretical perspectives framing this study was alternate models of disability, specifically the social model and disability as a minority group status. There was evidence of these models of disability in the standards. Disability was usually talked about in terms of including students with disabilities in the classroom environment and providing different types of supports. It was usually included within standards about teaching practice, learning environments and diversity. These placements are more in line with a social model of disability, or disability as a minority group status. In both models, disability is seen as a part of the human condition. The focus is on increasing access and inclusivity of environments rather than placing the responsibility on the individual. Evidence supporting this view of disability is present in the teacher education standards of the states within this sample.

Diversity, equity and inclusion is a topic receiving much attention in education. The alternate models of disability previously discussed can play a large role in helping to incorporate disability into these wider discussions. However, this is not necessarily something that will happen automatically. Specific efforts can and should be made to include disability as a category within diversity, and to include accessibility as a part of discussions of providing equity in education. In K-12 education, and for students up to twenty-two years old, districts are required to provide a free and appropriate public education to students with disabilities. Beyond this legal mandate is a moral imperative to provide all students with educational opportunities. Although Oberti v. Clementon (1993) interpreted the current law to refer to inclusion as the presumptive setting for students with disabilities, the results of this study show that there continue to be large percentages of students in more restrictive settings.

Inclusion through Omission

Using alternate models of disability as a framing perspective, the use of CDA allowed for an analysis of how disability was discussed in the standards. Focusing on textual practices used in the standards, the omissions and lack of specificity surrounding disability in the standards on the surface may initially appear to be an attempt to hide disability, or the fact that the authors of the standards did not think of mentioning it. However, by looking at these omissions in the context of a social model/disability as minority group status model, the omission of the term can be seen as supportive of including students with disabilities. Not isolating these students through textual practice reinforces the concept of students with disabilities as a part of the overall student population. In addition to the range of omissions regarding disability in the standards, there were also large variations in which practices were and were not included across the standards of the states in the sample.

There are both positive and negative implications of these omissions. Having discussions of disability located in standards included in standards about teaching practices is helpful in ensuring these practices are seen as things that all teachers should know and be able to do, not just special education teachers. This can help to dispel the notion that general education teachers have not received specific training in regards to working with students with disabilities. Also by including disability as part of pre-service training for all teachers, this can help general education teachers become more aware of working with students with disabilities, and helps to set the expectation that these students will be a part of their future classrooms. Teachers report having positive attitudes towards inclusion during their training (Gehrke & Cocchiarella, 2013; Idol, 2006; Kent & Giles, 2016), by providing (and making clear) training in practices associated with inclusion, this can hopefully help teachers to have the tools to implement, which can lead to improved outcomes for all students, not just students with disabilities. Ultimately, the goal of full inclusion for students with disabilities cannot and will not be successful without the support of both special education teachers and general education teachers.

An important step in ensuring that these changes do occur at the teacher preparation level includes faculty within teacher education programs. These faculty may not have utilized many of the practices associated with inclusion themselves, and reported feeling uncomfortable teaching it to pre-service teachers (Reyes, Hutchinson & Little, 2017). Ensuring these structural changes occur will likely require supports at the level of teacher preparation programs. Even with the current standards that were specifically named in the states that were included in the sample, if faculty do not feel comfortable with teaching these practices to pre-service teachers, then the gap from policy to practice already begins to form. Providing professional development or additional training may be necessary, as well as hiring faculty that have experience in working in more

inclusive settings. Pre-service exposures to disability were also found to influence pre-service teachers' confidence in implementing practices associated with inclusion (Campbell, et. al, 2003; Kent & Giles, 2016). Ideally, inclusive settings would comprise at least some of the early field-work experiences of pre-service teachers, but even practices such as watching teachers on video in inclusive settings could be helpful.

Structural versus Surface Level Changes

Of the identified best practices, almost all six were in at least one of the states' standards. Accommodations and modifications, differentiated instruction and collaboration, require the least amount of change to the classroom setting, a teacher's instructional practices, or mindset. In addition, there are legal requirements for incorporating accommodations and modifications, which may also be part of why it is a more frequently included practice. The way collaboration was described in the standards would also not require huge changes to the classroom environment. However, these descriptions differ from how collaboration is described in the literature. Conversely, Universal Design for Learning (UDL), the practice that arguably requires the most change to settings, practices and mindsets, was not included in any of the standards.

The theory of double loop learning (Argyris & Schön, 1977) can help explain why certain practices were more frequently included. Behaviors or practices requiring minor adjustments that are more easily and frequently implemented are termed as Model I or single loop. Behaviors or practices that also require changes in mindset are termed Model II or double loop. Argyris (1991) utilized the example of a thermostat to illustrate the difference between these two models. A single loop change would be adjusting a thermostat as needed to reach the desired temperature, while a double loop change would be figuring out why the room is too hot or cold and determining whether there is a way to change that so that a person would not need to continue to

adjust the thermostat. Applying these models to the best practices, those that required minor changes were most frequently included, while those requiring a difference in the thinking process were less frequently included.

Implications for Policy

Looking at the research on teachers' perceptions of their pre-service training, many felt they had not received adequate training in working with students with disabilities (Kent & Giles, 2016; Kurth & Foley, 2014; Praisner, 2003). Although there are always differences in how policies are written, compared to how policies are implemented, there was evidence of many of the practices identified as being best practices for supporting the inclusion of students with disabilities into the general education classroom. However, the lack of specificity in the standards, and inconsistencies across states may have helped create the perception that teachers who were not specifically trained in special education somehow were not receiving the needed knowledge to work with students with disabilities.

The results of this study found that many of the practices associated with inclusion were a part of the teacher education standards of the inclusive intensive sample states. However, practices were not always named directly, and some practices associated with inclusion were not included at all. The previous section discussed ways in which teacher preparation programs can help increase the implementation of these practices, and the possible need for additional support at this level. One way to ensure the re-evaluation of programs is to re-evaluate the standards. Since standards provide the frameworks that teacher education programs follow in order to be accredited by a state, a change at the level of the standards would ultimately lead to programs at least looking at what is being required of programs. Research has been done on many practices

that are tied to successful inclusion, large scale changes are needed in order to shift the mindsets and practices at the program level.

Limitations

One of the major limitations of this study is the inability to generalize beyond these states. The sample utilized for this study was a purposive, outlier sample. The difference between a state ranked first and a state ranked second may not have been very large, but given the inclusion criteria for states to be included in this sample, that state would not have been included in this study. Although some initial themes emerged from the data, looking at additional states would be necessary to see if these themes were present in other inclusive-intensive. It is also unknown based on these results if these themes are similar across all states' standards, or it is connected with having high rates of inclusion. Another limitation is the sample size. Although the number of states selected for this sample was within the standards for qualitative studies, including more states might have borne out different results. Another limitation was that this study did not look at all disability categories.

Directions for Future Research

This was an exploratory study, and there are numerous directions for continued research surrounding these research questions. One clear future direction is the replication of this study but with different states. This study used purposive outlier sampling to identify twelve states that had either high percentages of students with disabilities included in general education classrooms, or low percentages of students in settings that were most exclusionary (less than 40% of the day in a general education classroom, or a separate school). This could easily be expanded to more states with high rates of inclusion/low rates of exclusion for students with the eligibility categories utilized in this study, or even expanded to look across all eligibility

categories to find additional states, to see if these or other themes were present. Another area for further exploration is state size. This study included adding additional larger states to the original sample to increase heterogeneity of the sample; however, looking at a sample of only large states could be another avenue of exploration. In addition to looking at other states with high percentages of inclusion/low percentages of exclusion, another area for future study would be states with low percentages of inclusion/high percentages of exclusion, to see if any themes exist across those states as well, or if there were similarities or differences in themes. Overall, this study found that larger states had lower percentages of students that were fully included; however, there was consistency across the larger states that had the highest rates of inclusion, and some of these states were ultimately included in the sample for this study.

Another area for future study is to take one of the themes found in this study, and look specifically at that practice across a larger sample of states. Although this sample was purposively selected, and generalizability is not necessarily a goal of a qualitative study, looking at how to determine ways of consistently measuring what could be considered "inclusion intensive" would be another direction for future study. This study chose three educational settings and ultimately three eligibility categories, as well as looking at the overall number of students with disabilities in a state to determine this. The settings were chosen to be the far ends of the LRE continuum of placements, while the disability categories were selected to be high-incidence, with both more likely and less likely to be included disabilities. Further examination of this methodology would be helpful in shaping the sampling for further studies that attempt to use more qualitative methods, where looking at all fifty states would likely not be feasible.

Conclusion

The inclusion of students with disabilities is an ongoing discussion in education. Even though educating students with disabilities in the least restrictive setting is legally mandated, there is not broad agreement about what that looks like, or how best to make that happen. As a field of education, we must embrace that individuals with disabilities belong to all of education, not only to a program called special education. Support services should be seen as simply that, support. We must move away from the idea that not all students belong in the classroom. Going beyond simply giving extra time on a test, or segregating students into settings based on pre-determined ideas of what they are or are not capable of achieving. The Supreme Court has already found that separate is inherently unequal, yet the educational system continues to allow for some of the most vulnerable learners to be separated from their peers for the entirety of their educational careers.

We must demystify terms like disability, LRE, inclusion, and so on. Part of this process comes from being clear in who and what we are talking about with students with disabilities and the teaching practices that will best support not only this population of students, but all students. We must also ensure that all teachers are trained in these practices. By continuing the idea that there are specific skills needed to work with students with disabilities, and that general education teachers do not receive this training, it is only perpetuating the concept of a separate system of education for students with disabilities. Being specific with naming this intent, and making sure it is truly integrated into teacher training coursework is critical to begin to shift not only mindsets, but practice. We must embrace the notion that education includes ALL children and youth, and their education is the responsibility of the entire education system and certainly not only to a sub-group of professionals. Teacher education standards could support this movement

by including specific language for all children to be educated by all teachers. This next step would benefit not just those students with IEPs, it would enrich the experience of all students and benefit society overall by creating better opportunities for all individuals to educate, work and live together, not as a feel-good venture, but to create a society that learns from early on that any society is stronger when its citizens work together. Ultimately, the education of all students is the responsibility of all teachers, regardless of disability status.

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Appendices

Appendix A: Alabama Teacher Education Standards

ALABAMA QUALITY TEACHING STANDARDS

Pursuant to the mission of improving the academic achievement of all students in the public schools of Alabama, teachers will align their practice and professional learning with the following standards:

> **Standard 1—Content Knowledge:** To improve the learning of all students, teachers master the disciplines related to their teaching fields including the central concepts, important facts and skills, and tools of inquiry; they anchor content in learning experiences that make the subject matter meaningful for all students.

Rationale. Researchers identify a strong relationship between teachers' content knowledge and the achievement of their students. Three dimensions of content knowledge contribute to effective teaching: (1) deep knowledge of the academic disciplines related to the subjects of instruction, (2) an understanding of pedagogical content knowledge that is required to make the subject understandable and meaningful for all learners, and (3) knowledge of the state standards and district curriculum for subjects taught at particular instructional levels.

Key Indicators

A. Academic Discipline(s)

1. Knowledge of the structure of the academic disciplines related to the subject-matter content areas of instruction and of the important facts and central concepts, principles, theories, and tools of inquiry associated with these disciplines.
2. Knowledge of ways to organize and present content so that it is meaningful and engaging to all learners whom they teach (pedagogical content knowledge).
3. Ability to use students' prior knowledge and experiences to introduce new subject-area related content.
4. Ability to identify student assumptions and preconceptions about the content of a subject area and to adjust instruction in consideration of these prior understandings.
5. Ability to help students make connections across the curriculum in order to promote retention and transfer of knowledge to real-life settings.

B. Curriculum

1. Knowledge of the content standards and of the scope and sequence of the subject areas of one's teaching fields as defined in the Alabama courses of study for those teaching fields.
2. Ability to provide accommodations, modifications, and/or adaptations to the general curriculum to meet the needs of each individual learner.
3. Ability to select content and appropriately design and develop instructional activities to address the scope and sequence of the curriculum.

Standard 2—Teaching and Learning: To increase the achievement of every student, teachers draw upon a thorough understanding of learning and development; recognize the role of families in supporting learning; design a student centered learning environment; and use research-based instructional and assessment strategies that motivate, engage, and maximize the learning of all students.

Rationale. Instruction and assessment are the vehicles by which teachers design and deliver rigorous and relevant learning experiences for all learners. Research provides compelling evidence relating student achievement to teachers' use of appropriate instructional strategies selected from a rich repertoire based in research and best practice. Researchers have also found a strong classroom learning culture that is strategically organized and managed to be essential to effective use of these strategies.

Key Indicators

A. **Human Development**

1. Knowledge of the physical, emotional, and social development of young people and of the relationship of these to learning readiness and to cognitive development.
2. Knowledge of the role of language in learning.
3. Knowledge of the general characteristics of disabilities and of their impact on cognitive development and learning.
4. Knowledge of developmentally appropriate instructional and management strategies.
5. Ability to teach explicit cognitive, metacognitive, and other learning strategies to support students in becoming more successful learners.
6. Ability to use knowledge about human learning and development in the design of a learning environment and learning experiences that will optimize each student's achievement.
7. Ability to recognize individual variations in learning and development that exceed the typical range and use this information to provide appropriate learning experiences.

B. **Organization and Management**

1. Knowledge of the importance of developing learning objectives based on the Alabama courses of study and the needs, interests, and abilities of students.
2. Knowledge of the principles underpinning a sound age-appropriate classroom organization and management plan and of supportive behavior management strategies.
3. Knowledge of the components and characteristics of collaboratively designed and implemented individual behavioral support plans.
4. Knowledge of conflict resolution strategies, school emergency response procedures, and juvenile law.
5. Ability to plan and implement equitable and effective student access to available technology and other resources to enhance student learning.
6. Ability to plan teaching and learning experiences that are congruent with the Alabama courses of study and appropriate for diverse learners.
7. Ability to collect and use data to plan, monitor, and improve instruction.

8. Ability to organize, allocate, and manage the resources of time, space, and activities to support the learning of every student.
9. Ability to organize, use, and monitor a variety of flexible student groupings and instructional strategies to support differentiated instruction.

C. Learning Environment

1. Knowledge of norms and structures that contribute to a safe and stimulating learning environment.
2. Knowledge of factors and situations that promote or diminish intrinsic motivation.
3. Ability to develop a positive relationship with every student and to take action to promote positive social relationships among students, including students from different backgrounds and abilities.
4. Ability to communicate with parents and/or families to support students' understanding of appropriate behavior.
5. Ability to create learning environments that increase intrinsic motivation and optimize student engagement and learning.
6. Ability to use individual behavioral support plans to proactively respond to the needs of all students.
7. Ability to create a print-/language-rich environment that develops/extends students' desire and ability to read, write, speak, and listen.
8. Ability to encourage students to assume increasing responsibility for themselves and to support one another's learning.

D. Instructional Strategies

1. Knowledge of research and theory underpinning effective teaching and learning.
2. Knowledge of a wide range of research-based instructional strategies and the advantages and disadvantages associated with each.
3. Knowledge of strategies that promote retention as well as transfer of learning and the relationship between these two learning outcomes.
4. Knowledge of the importance of parents and/or families as active partners in planning and supporting student learning.
5. Ability to select and support the use of instructional and assistive technologies and to integrate these into a coherent instructional design.
6. Ability to make developmentally appropriate choices in selecting teaching strategies to assist diverse learners in meeting instructional objectives.
7. Ability to evaluate, select, and integrate a variety of strategies such as cooperative learning, discussion, discovery, problem-based learning, and direct instruction into a coherent lesson design.
8. Ability to adjust instruction in response to information gathered from ongoing monitoring of performance via formative assessment.
9. Ability to use questions and questioning to assist all students in developing skills and strategies in critical and high order thinking and problem solving.
10. Ability to use strategies that promote the independence, self-control, personal responsibility, and self-advocacy of all students.

E. Assessment

1. Knowledge of the purposes, strengths, and limitations of formative and summative assessment and of formal and informal assessment strategies.

152

2. Knowledge of the relationship between assessment and learning and of how to integrate appropriate assessments into all stages of the learning process.
3. Knowledge of measurement-related issues such as validity, reliability, norms, bias, scoring concerns, and ethical uses of tests and test results.
4. Knowledge of current Alabama assessment requirements and procedures.
5. Ability to design and use a variety of approaches to formal and informal assessment to plan instruction, monitor student understanding and progress toward learning, modify teaching and learning strategies, and measure and report student progress related to learning objectives.
6. Ability to collaborate with others to design and score common assessments and to use results to share and compare instructional practice and plan new instruction.
7. Ability to collaborate with others to incorporate accommodations into all assessments as appropriate.
8. Ability to provide a variety of ways for students with diverse needs, including students with disabilities, to demonstrate their learning.
9. Ability to develop rubrics and to teach students how to use them to assess their own performances.
10. Ability to develop and select appropriate performance assessments.
11. Ability to engage all students in assessing and understanding their own learning and behavior.
12. Ability to interpret and use reports from state assessments and results of other assessments to design both group and individual learning experiences.

Standard 3—Literacy: To improve student learning and achievement, teachers use knowledge of effective oral and written communications, reading, mathematics, and technology to facilitate and support direct instruction, active inquiry, collaboration, and positive interaction.

Rationale. Research clearly indicates that one of the strongest correlates to effective teaching is a high level of literacy. Not only do effective teachers demonstrate effective use of the spoken and written language, reading, mathematics, and technology, they also model and actively teach their students the fundamentals of reading, writing, and oral communications across all content areas. Additionally, in this culture where technology is ubiquitous, teachers demonstrate mastery of appropriate instructional technology and integrate technology into instruction of their subject areas.

A.   Oral and Written Communications

1. Knowledge of standard oral and written communications.
2. Knowledge of the impact of native language and linguistic background on language acquisition.
3. Knowledge of media communication technologies that enrich learning opportunities.
4. Ability to model appropriate oral and written communications.
5. Ability to demonstrate appropriate communication strategies that include questioning and active and reflective listening.
6. Ability to foster effective verbal and nonverbal communications during ongoing instruction using assistive technologies as appropriate.
7. Ability to integrate skill development in oral and written communications into all content areas that one teaches.
8. Ability to use effective nonverbal communication and respond appropriately to nonverbal cues from students.

B. Reading

1. Knowledge of strategies associated with accelerated, highly specialized, explicit instruction in phonemic awareness, phonics, fluency, vocabulary, and comprehension that significantly expands and increases students' pace of learning and competence in reading, writing, speaking, and listening.
2. Knowledge of assessment tools to monitor the acquisition of reading strategies, to improve reading instruction, and to identify students who require additional instruction.
3. Ability to integrate reading instruction into all content areas that one teaches.
4. Ability to stimulate interest in and foster appreciation for the written word, promote reading growth, and increase the motivation of students to read widely and independently for information and pleasure.

C. Mathematics

1. Knowledge of the role that mathematics plays in everyday life.
2. Knowledge of the concepts and relationships in number systems.
3. Knowledge of the appropriate use of various types of reasoning, including inductive, deductive, spatial and proportional, and understanding of valid and invalid forms of reasoning.
4. Knowledge of both metric and customary measurement and fundamental geometric concepts, including shapes and their properties and relationships.
5. Ability to solve problems using different strategies, to verify and interpret results, and to draw conclusions.
6. Ability to communicate with others about mathematical concepts, processes, and symbols.

D. Technology

1. Knowledge of available and emerging technologies that support the learning of all students.
2. Knowledge of the wide range of technologies that support and enhance instruction, including classroom and school resources as well as distance learning and online learning opportunities.
3. Ability to integrate technology into the teaching of all content areas.
4. Ability to facilitate students' individual and collaborative use of technology, including classroom resources as well as distance and online learning opportunities when available and appropriate.
5. Ability to use technology to assess student progress and manage records.
6. Ability to evaluate students' technology proficiency and students' technology-based products within content areas.

Standard 4—Diversity: To improve the learning of all students, teachers differentiate instruction in ways that exhibit a deep understanding of how cultural, ethnic, and social background; second language learning; special needs; exceptionalities; and learning styles affect student motivation, cognitive processing, and academic performance.

Rationale. Teachers who respect and build upon diversity create a learning environment in which all students feel valued and supported in their learning. Respect for diversity grows out of knowledge of differences, including differences in students' cultural, ethnic, language, social, and experiential backgrounds; differences in their physical, emotional, and social development; differences in their readiness for a particular curricular goal; and differences in their learning styles and strengths. Teachers have a rich understanding of these and other important areas of diversity as well as knowledge of curricular and instructional modifications that improve the learning of the wide range of individual learners in their classrooms.

Key Indicators

A. Cultural, Ethnic and Social Diversity

1. Knowledge of the ways in which student learning is influenced by individual experiences and out-of-school learning, including language and family/community values and conditions.
2. Knowledge of cultural, ethnic, gender, linguistic, and socio-economic differences and of how these may affect individual learner needs, preferences, and styles.
3. Knowledge of the characteristics of one's own culture and use of language and of how they differ from other cultures.
4. Ability to develop culturally responsive curriculum and instruction, i.e., model, teach, and integrate multicultural awareness, acceptance, and appreciation into ongoing instruction.
5. Ability to communicate in ways that demonstrate sensitivity to diversity such as appropriate use of eye contact, interpretation of body language and verbal statements, and acknowledgement of and responsiveness to different modes of communication and participation.

B. Language Diversity

1. Knowledge of the process of second language acquisition and strategies to support the learning of students whose first language is not English.
2. Ability to differentiate between learner difficulties that are related to cognitive or skill development and those that relate to language learning.
3. Ability to collaborate with teachers of English language learners and to assist those students with full integration into the regular classroom.

C. Special Needs

1. Knowledge of the major areas of exceptionality in learning, including the range of physical and mental disabilities, social and emotional disorders, giftedness, dyslexia, and attention deficit disorder.
2. Knowledge of the indicators of the need for special education services.
3. Ability to identify and refer students for diagnosis for special services.
4. Ability to address learning differences and disabilities that are prevalent in an inclusive classroom.

D. Learning Styles

1. Knowledge of research and theory related to learning styles and multiple intelligences.
2. Knowledge of a range of curricular materials and technologies to support the cognitive development of diverse learners.

3. Ability to help students assess their own learning styles and to build upon identified strengths.
4. Ability to design learning experiences that engage all learning styles.

E. General

1. Knowledge of how personal/cultural biases can affect teaching and learning.
2. Ability to involve families, community agencies and organizations, and colleagues in helping support academic achievement of diverse learners.
3. Ability to create a learning community in which individual differences are respected.
4. Ability to assess and diagnose individual student's contexts, strengths, and learning needs and to tailor curriculum and teaching to address these personal characteristics.

Standard 5—Professionalism: To increase the achievement of all students, teachers engage in continuous learning and self improvement; collaborate with colleagues to create and adopt research-based best practices to achieve ongoing classroom and school improvement; and adhere to the Alabama Educator Code of Ethics and federal, state, and local laws and policies.

Rationale. Current research relates teacher collaboration, shared responsibility for student learning, and job-embedded learning in professional community to higher levels of student achievement. This research challenges the independence and isolation that has historically characterized the teaching profession and calls for deprivatization of practice. An underlying premise of professional learning communities is the power of ongoing, continuous learning that takes place in a culture where risk and experimentation are rewarded. In schools where there is a strong professional community, teachers actively participate in creating and sustaining such a learning environment and in maintaining its focus upon improved student learning. Beyond collaboration, teachers exhibit professionalism by demonstrating a personal commitment to continuous learning and improvement; by adhering to high ethical standards; and by maintaining currency with regard to federal, state, and local laws and policies. Teachers assume increased leadership for schoolwide improvement initiatives and for mentoring of colleagues as they move along their professional pathways.

A. Collaboration

1. Knowledge of the purposes, processes, structures, and potential benefits associated with collaboration and teaming.
2. Knowledge of the roles and responsibilities of members of different types of teams including, but not limited to, Building Based Student Support Teams.
3. Knowledge of roles and responsibilities of para-educators and other paraprofessionals.
4. Ability to involve parents and/or families as active partners in planning and supporting student learning.
5. Ability to share instructional responsibility for students with diverse needs, including students with disabilities, and to develop collaborative teaching relationships and instructional strategies.
6. Ability to share responsibility for all students' learning across the school and collaborate with colleagues to support every student's growth.

7. Ability to participate as reflective members of different types of teams including, but not limited to, Building Based Student Support Teams.
8. Ability to collaborate in the planning of instruction for an expanded curriculum in general education to include Individual Education Plans and other plans such as Section 504 goals for students with disabilities.
9. Ability to communicate and collaborate effectively with colleagues, students, parents, guardians, and significant agency personnel who are included and valued equally as partners.
10. Ability to exhibit the professional dispositions delineated in professional, state, and institutional standards while working with students, colleagues, families, and communities.

B. Continuous, Lifelong Professional Learning

1. Knowledge of a range of professional literature, particularly resources that relate to one's own teaching field(s).
2. Knowledge of a range of professional learning opportunities, including job-embedded learning, district- and state-sponsored workshops, university offerings, and online and distance learning.
3. Knowledge of the processes and skills associated with peer coaching and mentoring.
4. Ability to articulate and reflect on a personal philosophy and its relationship to teaching practice and professional learning choices and commitments.
5. Ability to use best practices, professional literature, and collegial assistance to improve as a teacher and a learner.
6. Ability and willingness to inquire into one's own practice by designing action research to determine the effectiveness of identified instructional strategies.
7. Ability to participate in the creation and nurturance of a learning environment that supports standards-based inquiry, reflective practice, and collaborative learning for teachers at all stages of their careers.

C. Alabama-Specific Improvement Initiatives

1. Knowledge of current and emerging state initiatives and programs including, but not limited to, the Alabama Reading Initiative (ARI); the Alabama Math, Science, and Technology Initiative (AMSTI); Alabama Learning Exchange (ALEX); and Alabama Connecting Classrooms, Educators and Students Statewide (ACCESS) and their relationship to student achievement.
2. Knowledge of Alabama's state assessment requirements and processes.
3. Ability to integrate statewide programs and initiatives into the curriculum and instructional processes.
4. Ability to communicate with students, parents, and the public about Alabama's assessment system and major state educational improvement initiatives.

D. School Improvement

1. Knowledge of research relating collective responsibility for student learning to increased achievement for all students.
2. Knowledge of the principles of individual and organizational change and a commitment to assume personal responsibility for leading and supporting others in results-oriented changes.
3. Ability to participate in school improvement planning by working collaboratively with teams focused on specific improvement initiatives.

4. Ability to assume increased leadership responsibility in school, district, and state improvement initiatives over the course of one's professional career.

E. **Ethics**

1. Knowledge of appropriate professional behavior and dispositions expected of professionals as outlined in the Alabama Educator Code of Ethics.
2. Knowledge of safe, responsible, legal, and ethical uses of technologies including fair-use and copyright guidelines and Internet-user protection policies.
3. Ability to use and maintain confidential student information in an ethical and professional manner.
4. Ability to practice safe, responsible, legal, and ethical use of technology and comply with school and district acceptable-use policies including fair-use and copyright guidelines and Internet-user protection policies.

F. **Local, State, Federal Laws and Policies**

1. Knowledge of laws related to students' and teachers' rights and responsibilities and the importance of complying with those laws, including major principles of federal disabilities legislation (IDEA, Section 504 and ADA), as well as Alabama statutes on child abuse and neglect, and the importance of complying with those laws.
2. Ability to access school, community, state, and other resources and referral services.
3. Ability to access resources to gain information about federal, state, district, and school policies and procedures.
4. Ability to keep accurate records including IEPs, especially records related to federal, state and district policies, and other records with legal implications.

Appendix B: Florida Teacher Education Standards

6A-5.065 The Educator Accomplished Practices.

(1) Purpose and Foundational Principles.

(a) Purpose. The Educator Accomplished Practices are set forth in rule as Florida's core standards for effective educators. The Accomplished Practices form the foundation for the state's teacher preparation programs, educator certification requirements and school district instructional personnel appraisal systems.

(b) Foundational Principles. The Accomplished Practices are based upon and further describe three (3) essential principles:

1. The effective educator creates a culture of high expectations for all students by promoting the importance of education and each student's capacity for academic achievement.

2. The effective educator demonstrates deep and comprehensive knowledge of the subject taught.

3. The effective educator exemplifies the standards of the profession.

(2) The Educator Accomplished Practices. Each effective educator applies the foundational principles through six (6) Educator Accomplished Practices. Each of the practices is clearly defined to promote a common language and statewide understanding of the expectations for the quality of instruction and professional responsibility.

(a) Quality of Instruction.

1. Instructional Design and Lesson Planning. Applying concepts from human development and learning theories, the effective educator consistently:

    a. Aligns instruction with state-adopted standards at the appropriate level of rigor;

    b. Sequences lessons and concepts to ensure coherence and required prior knowledge;

    c. Designs instruction for students to achieve mastery;

    d. Selects appropriate formative assessments to monitor learning;

    e. Uses diagnostic student data to plan lessons; and,

    f. Develops learning experiences that require students to demonstrate a variety of applicable skills and competencies.

2. The Learning Environment. To maintain a student-centered learning environment that is safe, organized, equitable, flexible, inclusive, and collaborative, the effective educator consistently:

    a. Organizes, allocates, and manages the resources of time, space, and attention;

    b. Manages individual and class behaviors through a well-planned management system;

    c. Conveys high expectations to all students;

    d. Respects students' cultural linguistic and family background;

    e. Models clear, acceptable oral and written communication skills;

    f. Maintains a climate of openness, inquiry, fairness and support;

    g. Integrates current information and communication technologies;

    h. Adapts the learning environment to accommodate the differing needs and diversity of students; and,

    i. Utilizes current and emerging assistive technologies that enable students to participate in high-quality communication interactions and achieve their educational goals.

3. Instructional Delivery and Facilitation. The effective educator consistently utilizes a deep and comprehensive knowledge of the subject taught to:

    a. Deliver engaging and challenging lessons;

    b. Deepen and enrich students' understanding through content area literacy strategies, verbalization of thought, and application of the subject matter;

    c. Identify gaps in students' subject matter knowledge;

    d. Modify instruction to respond to preconceptions or misconceptions;

    e. Relate and integrate the subject matter with other disciplines and life experiences;

    f. Employ higher-order questioning techniques;

    g. Apply varied instructional strategies and resources, including appropriate technology, to provide comprehensible instruction, and to teach for student understanding;

    h. Differentiate instruction based on an assessment of student learning needs and recognition of individual differences in students;

    i. Support, encourage, and provide immediate and specific feedback to students to promote student achievement; and,

    j. Utilize student feedback to monitor instructional needs and to adjust instruction.

4. Assessment. The effective educator consistently:

a. Analyzes and applies data from multiple assessments and measures to diagnose students' learning needs, informs instruction based on those needs, and drives the learning process;

b. Designs and aligns formative and summative assessments that match learning objectives and lead to mastery;

c. Uses a variety of assessment tools to monitor student progress, achievement and learning gains;

d. Modifies assessments and testing conditions to accommodate learning styles and varying levels of knowledge;

e. Shares the importance and outcomes of student assessment data with the student and the student's parent/caregiver(s); and,

f. Applies technology to organize and integrate assessment information.

(b) Continuous Improvement, Responsibility and Ethics.

1. Continuous Professional Improvement. The effective educator consistently:

a. Designs purposeful professional goals to strengthen the effectiveness of instruction based on students' needs;

b. Examines and uses data-informed research to improve instruction and student achievement;

c. Uses a variety of data, independently, and in collaboration with colleagues, to evaluate learning outcomes, adjust planning and continuously improve the effectiveness of the lessons;

d. Collaborates with the home, school and larger communities to foster communication and to support student learning and continuous improvement;

e. Engages in targeted professional growth opportunities and reflective practices; and,

f. Implements knowledge and skills learned in professional development in the teaching and learning process.

2. Professional Responsibility and Ethical Conduct. Understanding that educators are held to a high moral standard in a community, the effective educator adheres to the Code of Ethics and the Principles of Professional Conduct of the Education Profession of Florida, pursuant to Rules 6A-10.080 and 6A-10.081, F.A.C., and fulfills the expected obligations to students, the public and the education profession.

Rulemaking Authority 1004.04, 1004.85, 1012.34, 1012.56 FS. Law Implemented 1004.04, 1004.85, 1012.34, 1012.56 FS. History–New 7-2-98, Amended 2-13-11.

Appendix C: Iowa Teacher Education Standards

Iowa Teaching Standards and Criteria

The Iowa Teaching Standards appear in Iowa Code section 284.3. The Model Criteria were developed by the Iowa Department of Education with input from stakeholders and adopted by the State Board of Education on 5/10/02. Changes to the criteria were adopted by the State Board of Education on 5/13/10. The amendments strengthen Iowa's commitment to using student performance data to evaluate educators. They specifically address 281--Iowa Administrative Code 83, Teacher and Administrator Quality Programs.

Standard 1
Demonstrates ability to enhance academic performance and support for implementation of the school district's student achievement goals.

Criteria
The teacher:
- Provides multiple forms of evidence of student learning and growth to students, families, and staff.
- Implements strategies supporting student, building, and district goals.
- Uses student performance data as a guide for decision making.
- Accepts and demonstrates responsibility for creating a classroom culture that supports the learning of every student.
- Creates an environment of mutual respect, rapport, and fairness.
- Participates in and contributes to a school culture that focuses on improved student learning.
- Communicates with students, families, colleagues, and communities effectively and accurately.

Standard 2
Demonstrates competence in content knowledge appropriate to the teaching position.

Criteria
The teacher:
- Understands and uses key concepts, underlying themes, relationships, and different perspectives related to the content area.
- Uses knowledge of student development to make learning experiences in the content area meaningful and accessible for every student.
- Relates ideas and information within and across content areas.
- Understands and uses instructional strategies that are appropriate to the content area.

Standard 3
Demonstrates competence in planning and preparing for instruction.

Criteria
The teacher:
- Uses student achievement data, local standards, and the district curriculum in planning for instruction.
- Sets and communicates high expectations for social, behavioral, and academic success of all students.
- Uses student's developmental needs, backgrounds, and interests in planning for instruction.

- Selects strategies to engage all students in learning.
- Uses available resources, including technologies, in the development and sequencing of instruction.

<u>Standard 4</u>
Uses strategies to deliver instruction that meets the multiple learning needs of students.

<u>Criteria</u>
The teacher:
- Aligns classroom instruction with local standards and district curriculum.
- Uses research-based instructional strategies that address the full range of cognitive levels.
- Demonstrates flexibility and responsiveness in adjusting instruction to meet student needs.
- Engages students in varied experiences that meet diverse needs and promote social, emotional, and academic growth.
- Connects students' prior knowledge, life experiences, and interests in the instructional process.
- Uses available resources, including technologies, in the delivery of instruction.

<u>Standard 5</u>
Uses a variety of methods to monitor student learning.

<u>Criteria</u>
The teacher:
- Aligns classroom assessment with instruction.
- Communicates assessment criteria and standards to all students and parents.
- Understands and uses the results of multiple assessments to guide planning and instruction.
- Guides students in goal setting and assessing their own learning.
- Provides substantive, timely, and constructive feedback to students and parents.
- Works with other staff and building and district leadership in analysis of student progress.

<u>Standard 6</u>
Demonstrates competence in classroom management.

<u>Criteria</u>
The teacher:
- Creates a learning community that encourages positive social interaction, active engagement, and self-regulation for every student.
- Establishes, communicates, models, and maintains standards of responsible student behavior.
- Develops and implements classroom procedures and routines that support high expectations for student learning.
- Uses instructional time effectively to maximize student achievement.
- Creates a safe and purposeful learning environment.

<u>Standard 7</u>

Engages in professional growth.

<u>Criteria</u>
The teacher:

- Demonstrates habits and skills of continuous inquiry and learning.
- Works collaboratively to improve professional practice and student learning.
- Applies research, knowledge, and skills from professional development opportunities to improve practice.
- Establishes and implements professional development plans based upon the teacher's needs aligned to the Iowa teaching standards and district/building student achievement goals.
- Provides an analysis of student learning and growth based on teacher created tests and authentic measures as well as any standardized and district-wide tests.

<u>Standard 8</u>
Fulfills professional responsibilities established by the school district.

<u>Criteria</u>
The teacher:

- Adheres to board policies, district procedures, and contractual obligations.
- Demonstrates professional and ethical conduct as defined by state law and district policy.
- Contributes to efforts to achieve district and building goals.
- Demonstrates an understanding of and respect for all learners and staff.
- Collaborates with students, families, colleagues, and communities to enhance student learning.

Appendix D: Louisiana Teacher Education Standards

Subchapter C. General Teacher Competencies

§205. Introduction

A. The following teacher preparation competencies apply to all content areas and grade levels for which a teacher candidate may be certified to teach.

B. The competencies identify essential knowledge and skills that align with current expectations for practicing teachers, including but not limited to what a teacher candidate must know and be able to do in order to:

1. communicate and collaborate with students, colleagues, families, and community members to support students' learning and development; and

2. design and deliver effective instruction to all students, including students with exceptionalities and students in need of academic and non-academic intervention in a regular education setting.

AUTHORITY NOTE: Promulgated in accordance with R.S. 17:6(A)(10), (11), and (15), R.S. 17:7(6), R.S. 17:10, R.S. 17:22(6), R.S. 17:391.1-391.10, and R.S. 17:411.

HISTORICAL NOTE: Promulgated by the Board of Elementary and Secondary Education, LR 43:1296 (July 2017).

§207. General Competencies

A. The teacher candidate demonstrates, at an effective level, the Louisiana components of effective teaching as defined in Bulletin 130 and the compass teacher rubric.

B. The teacher candidate demonstrates mastery of the content knowledge and skills and content pedagogy needed to teach the current academic standards as defined in BESE policy.

C. The teacher candidate uses evidence to continually evaluate his/her practice, particularly the effects of his/her choices and actions on students and adapts practice to meet the needs of each student.

1. The teacher candidate observes and reflects on students' responses to instruction to identify areas of need and make adjustments to practice.

2 The teacher candidate gathers, synthesizes, and analyzes a variety of data from a variety of sources to adapt instructional practices and other professional behaviors to better meet students' needs.

3. The teacher candidate uses structured input and feedback from a variety of sources (e.g., colleagues, mentor teachers, school leaders, preparation faculty) to make changes to instructional practice and professional behaviors to better meet students' needs.

D. The teacher candidate elicits and uses information about students and their experiences from families and communities to support student development and learning and adjust instruction and the learning environment.

E. The teacher candidate applies knowledge of state and federal laws related to students' rights and teacher responsibilities for appropriate education for students with and without exceptionalities, parents, teachers, and other professionals in making instructional decisions and communicating with colleagues and families (e.g., laws and policies governing student privacy, special education, and limited English proficient education, including but not limited to Bulletin 1508, Bulletin 1530, Bulletin 1706, and Bulletin 1903).

F. The teacher candidate differentiates instruction, behavior management techniques, and the learning environment in response to individual student differences in cognitive, socio-emotional, language, and physical development.

G. The teacher candidate develops and applies instructional supports and plans for an individualized education plan (IEP) or individualized accommodation plan (IAP) to allow a student with exceptionalities developmentally appropriate access to age- or grade-level instruction, individually and in collaboration with colleagues.

H. The teacher candidate applies knowledge of various types of assessments and their purposes, strengths, and limitations to select, adapt, and modify assessments to accommodate the abilities and needs of students with exceptionalities.

AUTHORITY NOTE: Promulgated in accordance with R.S. 17:6(A)(10), (11), and (15), R.S. 17:7(6), R.S. 17:10, R.S. 17:22(6), R.S. 17:391.1-391.10, and R.S. 17:411.

HISTORICAL NOTE: Promulgated by the Board of Elementary and Secondary Education, LR 43:1296 (July 2017).

Appendix E: New Mexico Teacher Education Standards

5.61.2.10   REFERENCED MATERIAL: Competencies for entry level elementary teachers
    A.   Professionalism
        (1)   The teacher reflects on, analyzes, and evaluates the effect of his or her choices and actions on others, including students, parents, and other professionals in the learning community, and will be able to use this knowledge to improve the learning process.
        (2)   The teacher is aware of the need to actively seek out opportunities to grow professionally, including participation in professional organizations and professional development such as conferences, workshops, classes and research, and use this information to improve professional practices and to become a life-long learner.
        (3)   The teacher participates in an on-going process of researching current educational issues and practices, applying them in the classroom, and monitoring their effects.
        (4)   The teacher understands their role in the educational decision-making process as an advocate for children, school, district, community, and self.
        (5)   The teacher is aware of and adheres to the educator code of ethics and professional standards.
        (6)   The teacher demonstrates an awareness of relevant legal requirements of teachers and schools.
        (7)   The teacher demonstrates an awareness of the structure of local, state, and federal agencies and educational systems.
        (8)   The teacher critically reviews, selects, and adapts materials, resources, and technologies and analyzes them for:
            (a)   age appropriateness;
            (b)   developmental level;
            (c)   cultural and linguistic background;
            (d)   exceptionalities;
            (e)   biases and stereotypes;
            (f)   content appropriateness in regard to curriculum;
            (g)   reading level;
            (h)   relevance to students.
    B.   Instructional planning and implementation:
        (1)   The teacher understands learning theory, subject matter, and curriculum development and uses this knowledge in planning instruction to meet curriculum goals.
        (2)   The teacher takes into account the physical, social, emotional, cognitive, and linguistic development of students when planning instruction.
        (3)   The teacher plans learning opportunities, recognizing the various learning styles of individuals/groups, according to the nature of the content being taught.
        (4)   The teacher creates short- and long-term plans that are linked to student needs, performance, and learning styles.
        (5)   The teacher becomes familiar with students' families, cultures and communities, and plans related learning activities.
        (6)   The teacher plans lessons that provide for the success of students with exceptionalities, including learning disabilities, visual and perceptual difficulties, and physical or mental challenges.
        (7)   The teacher integrates a variety of technologies into planned activities including software, applications, and other learning tools.
        (8)   The teacher plans activities to promote higher order thinking skills, creativity, and independent thinking.
        (9)   The teacher plans and uses assessment strategies and instruments appropriate to the learning outcomes being evaluated.
        (10)   The teacher evaluates lesson plans by observing classroom interactions, questioning, and analyzing student work.
        (11)   The teacher develops sequential lessons that include knowledge of the discipline, student diversity, the local community, and the district/state curriculum goals.
    C.   Classroom management:
        (1)   The teacher knows effective models of classroom management and has the opportunity to observe these in classroom situations.
        (2)   The teacher develops and implements a classroom management plan.
        (3)   The teacher responds to children as individuals.

  (4) The teacher provides a safe classroom environment where individual differences are respected.

  (5) The teacher arranges the classroom environment for optimal learning and students' success.

  (6) The teacher seeks student understanding and input for classroom procedures, rules, and consequences.

  (7) The teacher models and encourages positive social interaction.

  (8) The teacher collaborates with specialists, support personnel, parents, and administrators in an interdisciplinary manner for the success of the individual student.

  (9) The teacher uses data collection techniques to document classroom management.

  (10) The teacher manages time and materials effectively to minimize distractions and disruptions.

  (11) The teacher develops activities and transitions that guide students to be focused.

 D. Assessment:

  (1) The teacher understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social, physical, and aesthetic development of the learner.

  (2) The teacher develops valid evaluation tools to measure student outcomes.

  (3) The teacher selects materials and means for measuring progress.

  (4) The teacher assesses students' current knowledge in order to plan instruction.

  (5) The teacher uses assessment of student learning to improve their own teaching and to revise curriculum.

  (6) The teacher interprets and uses results of standardized instruments, including and understanding of percentiles, means, stanines, grade equivalence, and item analysis.

  (7) The teacher uses observation skills for informal assessment.

  (8) The teacher is able to use effective questioning techniques to better assess the student's knowledge.

  (9) The teacher recognizes developmental levels of student knowledge and skills including typical and atypical patterns.

  (10) The teacher recognizes unethical, illegal, and otherwise inappropriate assessment methods and uses of assessment information.

  (11) The teacher demonstrates familiarity with a variety of assessment tools, including but not limited to portfolios, performance-based assessment, and student writing.

  (12) The teacher uses student responses, explanations, and demonstrations, to analyze misunderstandings that led to errors (error analysis).

  (13) The teacher is aware that there may be a variety of methods, strategies, or procedures that will give a correct answer.

  (14) The teacher is skilled in communicating assessment results to students, parents, lay audiences, and other educators.

 E. Technology:

  (1) Basic computer and technology operations and concepts - the teacher uses computer systems to: run software, access, generate, and manipulate data; and publish results. The teacher evaluates performance of hardware and software components of computer systems and applies basic troubleshooting strategies as needed.

   (a) operates a multimedia computer system with related peripheral devises to successfully install and use a variety of software packages;

   (b) uses terminology related to technology appropriate to the teaching field in written and oral communication;

   (c) describes and implement basic troubleshooting techniques for multimedia computer systems with related peripheral devices;

   (d) uses imaging devices;

   (e) demonstrates knowledge of uses of computers and technology in business, industry, and society;

   (f) operates a variety of audio-visual devices.

  (2) Personal and professional use of technology - the teacher will apply tools for enhancing their own professional growth and productivity. The teacher will use technology in communicating, collaborating, conducting research, and solving problems. In addition, the teacher will plan and participate in activities that encourage lifelong learning and will promote equitable, ethical, and legal use of computer and technology resources.

(a) uses productivity tools for word processing, database management, and spreadsheet applications when developmentally appropriate;

(b) applies productivity tools for creating a multimedia presentation;

(c) uses computer-based technologies including telecommunications to access information and enhance personal and professional productivity;

(d) uses computers to support problem solving, data collection, information management, communications, presentations, and decision making;

(e) demonstrates awareness of resources for adaptive assistive devices and software for students with special needs;

(f) demonstrates awareness of resources for culturally and linguistically diverse students;

(g) demonstrates knowledge of equity, ethics, legal, and human issues concerning use of computers and technology;

(h) demonstrates awareness of computer and related technology resources for facilitating lifelong learning and emerging roles of the learner and the educator;

(i) demonstrates awareness of broadcast instruction, audio/video conferencing, and other distant learning applications.

(3) Application of technology to support teaching and learning - the teacher applies computers and related technologies to support teaching and learning in the grade level and subject areas. The teacher will integrate a variety of software, applications, and learning tools in the teaching and learning process. Lessons developed must reflect effective grouping and assessment strategies for diverse populations.

(a) explores, evaluates, and uses technology resources including applications, tools, educational software, and assorted documentation;

(b) describes best practice and appropriate assessment as related to the use of technology resources in the curriculum;

(c) designs, implements, and assesses learning activities that integrate technology for a variety of grouping strategies for diverse populations;

(d) designs learning activities that foster equitable, ethical, and legal use of technology by students;

(e) practices responsible, ethical, and legal use of technology, information, and software resources.

F. Diversity:

(1) The teacher understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to diverse learners.

(2) The teacher organizes and manages varied learning groups as appropriate in each of the disciplines as appropriate to the needs and/or interests of students and the goals of the lesson.

(3) The teacher is aware of and can apply current research findings regarding individual differences such as linguistic backgrounds, developmental levels, exceptionalities, and gender.

(4) The teacher identifies stereotypes in curriculum materials and adapts instruction appropriately.

(5) The teacher helps students develop critical perspectives on biased materials.

(6) The teacher identifies and develops appropriate responses to differences among language learners.

(7) The teacher demonstrates sensitivity to New Mexico's unique linguistic and cultural diversity.

G. Family and community:

(1) The teacher is aware of the culture, history, and values of the community in which he or she teaches.

(2) The teacher understands, respects, and values the central role that community and family play in the learning process of a child and will be able to utilize these experiences to enhance learning.

(3) The teacher understands that there must be a reciprocal relationship between the school and the community.

(4) The teacher values and utilizes the knowledge that all community members have something to contribute to the classroom to assist in the educational process.

(5) The teacher recognizes that families and community can be used as teaching resources to enhance learning and children's self value.

(6) The teacher communicates to parents and community members student progress, important events, and school activities.

(7)　The teacher understands the importance of inviting parents and community members to participate in classroom and school curriculum development and the decision making process.

(8)　The teacher conveys and demonstrates to students the importance of being an active part of the community.

H.　Inclusion:

(1)　The teacher understands special education rules.

(2)　The teacher understands the differing levels of disabilities.

(3)　The teacher understands the development and use of individualized education plans (IEPs).

(4)　The teacher understands their responsibilities in implementing objectives set in an IEP.

(5)　The teacher develops lessons according to IEPs.

(6)　The teacher monitors achievement and growth as set by an IEP and recommends changes when necessary.

(7)　The teacher collaborates with special education teachers for individualized program implementation.

(8)　The teacher adjusts lessons and strategies for students with exceptionalities with regard to academic levels, physical environment, and emotional needs.

(9)　The teacher understands the social, emotional, physical, and academic needs of students with exceptionalities.

(10)　The teacher assists students to understand social responsibilities.

(11)　The teacher assists students with exceptionalities to have positive experiences in the regular classroom.

I.　Development of student:

(1)　The teacher understands various theories of cognitive, social, aesthetic, emotional and physical development.

(2)　The teacher understands how children learn and develop, and provides learning opportunities that support their cognitive, social, aesthetic, emotional, and physical development.

(3)　The teacher develops curriculum and implements instructional strategies appropriate to the developmental level of each child, leading to continuous progress.

J.　Knowledge of content:

(1)　Mathematics

(a)　The teacher understands mathematical concepts including but not limited to:

(i)　the arithmetic of real numbers and their subsets of rational numbers, integers, and whole numbers;

(ii)　three dimensional geometry based on the concept of distance, and two dimensional geometry as a method of drawing plans and representing three dimensional objects;

(iii)　elements of algebra including elementary functions;

(iv)　measurement of length, angles, time, weights, and temperature; and

(v)　handling money problems such as cost and unit price.

(b)　The teacher demonstrates skill including but not limited to:

(i)　mental computations and proper use of four operation and non-programmable scientific calculators in the context of problem solving;

(ii)　constructions of solids, measurements of their volumes and surface areas, drawing their projections, and making plans for their construction;

(iii)　defining relevant variables and writing formulas describing their relationships in problem-solving activities; and

(iv)　using measurement tools and appropriate techniques for recording data and displaying results.

(c)　The teacher demonstrates adequate communication skills to be able to discuss mathematical ideas verbally and in writing.

(d)　The teacher knows a variety of teaching techniques and chooses ones appropriate to the topic of study and the level and needs of students.

(e)　The teacher constructs situations in which students learn to use a variety of mathematical skills and concepts, including problem solving, reasoning, and logic.

(f)　The teacher provides opportunities for students to learn how to use tools, technology, and manipulatives in problem solving.

(g)　The teacher uses measurements and other data gathered by students as a basis for classroom activities.

(h)　The teacher provides a classroom environment in which students develop skills in communicating, discussing, and displaying mathematical ideas.

(i)　The teacher provides enough open-ended problems and activities to allow students to expand creatively on the material learned in classrooms.

(2)　Reading and language arts:

(a)　Foundations: the teacher understands the foundations of reading and language arts development, including but not limited to:

(i)　research on reading;

(ii)　how children learn to speak, read, write, and listen;

(iii)　cultural, linguistic, environmental, and physiological factors in reading and language arts development;

(iv)　children's developmental processes;

(v)　characteristics of proficient and non-proficient readers;

(vi)　relationship between oral and written language;

(vii)　language structure including graphophonics, semantics, syntax, and pragmatics systems.

(b)　Assessment:

(i)　The teacher understands the use of classroom reading assessment to diagnose students' instructional needs and modify instruction appropriately.

(ii)　The teacher links assessment and instruction to New Mexico language arts content standards, benchmarks and performance standards.

(c)　Methods of instruction: the teacher differentiates methods of instruction based on needs of students and designs instruction based on the following reading and language arts components:

(i)　oral language development;

(ii)　phonemic awareness and phoneme manipulations, such as blending, segmentation, and substitution;

(iii)　phonics instruction, including a variety of strategies such as systematic, explicit instruction and the use of phonics in reading and writing;

(iv)　vocabulary development, including both explicit instruction and indirect vocabulary development through authentic literature and students' experiences;

(v)　comprehension strategies, including: instruction on predicting, re-reading, questioning, sequencing, summarizing, retelling, reading for pleasure and analytical and critical reading; activities to develop fluency, the ability to read text accurately and rapidly; and study strategies, for example, planning, accessing and organizing information from a variety of texts and sources;

(vi)　writing instruction, including: different types of writing for different audiences and purposes; spelling generalizations; grammar instruction within authentic contexts; and writing processes, including drafting, revising, and editing;

(d)　Teacher designs comprehensive reading and writing instruction that results in students becoming proficient in the language arts content standards, benchmarks, and performance standards, including:

(i)　the use of culturally relevant pedagogy that promotes an understanding of the importance of resources students bring to the classroom;

(ii)　evaluation of text for quality, cultural, and linguistic appropriateness;

(iii)　connecting identified needs of students based on data with appropriate research-based resources and materials;

(iv)　creation of opportunities for students to consider, respond to and discuss spoken and written materials;

(v)　the use of a variety of reading materials, including children's literature, non-fiction, technological media, stories, poems, biographies, texts from various subject areas;

(3)　Science:

(a)	The teacher knows, understands, and uses the fundamental concepts in the subject matter of science including physical, life, and earth and space sciences as well as concepts in science and technology, science in personal and social perspectives, the history and nature of science, the unifying concepts of science, and the inquiry process scientists use in discovery of new knowledge to build a base for scientific inquiry.

(b)	The teacher is familiar with the scientific method and uses it to develop students' abilities to identify and communicate a problem, and to design, implement, and evaluate a solution.

(c)	The teacher integrates a variety of technologies into planned science activities.

(d)	The teacher helps children build understanding about science and technology.

(e)	The teacher recognizes and responds to student diversity and encourages all students to participate fully in science learning.

(4)	Social studies:

(a)	The teacher understands the principles of teaching and learning processes that underlie social studies concepts and can translate these into meaningful learning activities focusing on inquiry, authenticity, and collaboration.

(b)	The teacher understands that the social studies encompass history, geography, anthropology, archeology, economics, political science, psychology, sociology, and the interdisciplinary relationship of all facets of the social studies.

(c)	The teacher understands that the definition of social studies requires that students are socially aware of and are active participants in local, state, national, and global issues.

(d)	The teacher helps students understand the relationship between social studies and other disciplines.

(e)	The teacher helps students to recognize and respect diverse local and global perspectives concerning cultures other than their own.

(f)	The teacher implements a variety of strategies for helping students use multiple resources including primary (e.g., documents, artifacts/regalia, direct observation, human resources, personal background) and secondary (e.g. books, newspapers, internet) as part of the inquiry/research process.

(g)	The teacher constructs experiences that provide opportunities for students to appreciate the historical development of democratic values, institutions, nations, and cultures.

(h)	The teacher engages students in activities that require them to formulate, analyze, synthesize, and critique issues by using well-reasoned, clearly supported arguments, policies, and positions.

(i)	The teacher constructs activities that encourage students to present social studies knowledge using a variety of sign systems including writing, charts, graphs, maps, art, music, drama, dance, and technology.

(5)	Arts:

(a)	The teacher understands and implements arts activities such as history, art making, appreciation, and criticism through dance, music, theater, and the visual arts, appropriate to students developmental levels.

(b)	The teacher uses the arts as interdisciplinary units and themes.

(c)	The teacher understands distinctions and connections between arts disciplines and arts experiences, and encourages study and active participation that leads to skill development and appreciation.

(d)	The teacher enables students to communicate at a basic level in the four art disciplines of dance, music, theater, and visual arts, including knowledge and skills in the use of basic vocabularies, materials, tools, techniques, and thinking processes of each discipline.

(e)	The teacher enables students to develop and present basic analyses of works of art from structural, historical, and cultural perspectives.

(f)	The teacher exposes students to exemplary works of art from a variety of cultures and historical periods and provides opportunities for students to discuss and respond to them.

(g)	The teacher relates basic types of arts knowledge and skills within and across the arts disciplines and makes connections with other disciplines.

K.	Communication:

(1)	The teacher uses knowledge of effective verbal, nonverbal, technological, and media communication techniques to foster active inquiry, collaboration, problem solving, and supportive interaction in the learning community.

(2)	The teacher effectively communicates orally and in writing using appropriate standard written and spoken English with a variety of audiences (e.g., peers, school, community) and encourage this in students.

(3) The teacher understands communications theories, language development, and the role of language in student learning.

(4) The teacher understands how to use a variety of strategies to facilitate language acquisition and development.

(5) The teacher recognizes that the conventions and skills of language need to be taught in meaningful and authentic contexts rather than in isolation.

(6) The teacher recognizes that writing is critical to other areas of language acquisition, cognitive growth, and expression.

(7) The teacher recognizes that the focus of reading is communication of meaning through interaction between the reader and the text.

(8) The teacher recognizes that humans communicate through a variety of verbal and non-verbal sign systems and can provide exposure to and experiences in multiple expressive modes across the curriculum.

(9) The teacher recognizes that social interaction enhances thinking and learning.

(10) The teacher understands how cultural, dialectic, and gender differences affect communication and encourage expression that is context appropriate.

(11) The teacher encourages culturally sensitive communication by and among all students.

(12) The teacher is a thoughtful and responsive listener and encourages this quality in students.

(13) The teacher understands the role of multiple questioning strategies and student inquiry as communication tools.

(14) The teacher recognizes the importance of technology as a tool for learning and communication.
[11-14-98; 6.61.2.10 NMAC - Rn, 6 NMAC 4.2.3.2.10 & A, 10-31-00; A, 05-28-04; A, 10-31-07]

Appendix F: North Carolina Teacher Education Standards

NORTH CAROLINA STATE BOARD OF EDUCATION

Policy Manual

Item	Description
Policy Title	Evaluation Standards and Criteria: Teachers
Policy Category	Evaluations & Qualifications (EVAL)
Policy ID	EVAL-006
Policy Date	2016-04-07
Previous Policy Dates	05/08/1998, 01/13/1999, 11/02/2006, 12/07/2006, 06/07/2007, 09/06/2007, 12/04/2008, 06/30/2010, 06/02/2011, 08/04/2011, 03/01/2012, 04/05/2012, 10/04/2012, 04/04/2013, 10/03/2013, 12/03/2015
Statutory Reference	

Formerly TCP-C-006

Standards for Teacher Evaluation

NORTH CAROLINA PROFESSIONAL TEACHING STANDARDS

STANDARD 1: TEACHERS DEMONSTRATE LEADERSHIP

Teachers lead in their classrooms.

Teachers demonstrate leadership by taking responsibility for the progress of all students to ensure that they graduate from high school, are globally competitive for work and postsecondary education, and are prepared for life in the 21st Century. Teachers communicate this vision to their students. Using a variety of data

sources, they organize, plan, and set goals that meet the needs of the individual student and the class. Teachers use various types of assessment data during the school year to evaluate student progress and to make adjustments to the teaching and learning process.   They establish a safe, orderly environment, and create a culture that empowers students to collaborate and become lifelong learners.

- Take responsibility for all students
- Communicate vision to students
- Use data to organize, plan, and set goals
- Use a variety of assessment data throughout the year to evaluate progress
- Establish a safe and orderly environment
- Empower students

Teachers demonstrate leadership in the school.

Teachers work collaboratively with school personnel to create a professional learning community. They analyze and use local, state, and national data to develop goals and strategies in the school improvement plan that enhances student learning and teacher working conditions. Teachers provide input in determining the school budget and in the selection of professional development that meets the needs of students and their own professional growth. They participate in the hiring process and collaborate with their colleagues to mentor and support teachers to improve the effectiveness of their departments or grade levels.

- Work collaboratively with all staff to create a professional learning community
- Analyze data
- Develop goals and strategies through the school improvement plan
- Assist in determining school budget and professional development
- Participate in hiring process
- Collaborate with colleagues to mentor and support teachers to improve effectiveness

Teachers lead the teaching profession.

Teachers strive to improve the teaching profession. They contribute to the establishment of positive working conditions in their school, district, and across the state. They actively participate in and advocate for decision-making structures in education and government that take advantage of the expertise of teachers. Teachers promote professional growth for all educators and collaborate with their colleagues to improve the profession.

- Strive to improve the profession
- Contribute to the establishment of good working conditions
- Participate in decision-making structures
- Promote professional growth

Teachers advocate for schools and students.

Teachers advocate for positive change in policies and practices affecting student learning. They participate in the implementation of initiatives to improve the education of students.

- Advocate for positive change in policies and practices affecting student learning
- Participate in the implementation of initiatives to improve education

Teachers demonstrate high ethical standards.

Teachers demonstrate ethical principles including honesty, integrity, fair treatment, and respect for others. Teachers uphold the Code of Ethics for North Carolina Educators (effective June 1, 1997) and the Standards for Professional Conduct adopted April 1, 1998.

- Demonstrate ethical principles
- Uphold the Code of Ethics and Standards for the Professional Conduct

STANDARD 2: TEACHERS ESTABLISH A RESPECTFUL ENVIRONMENT FOR A DIVERSE POPULATION OF STUDENTS.

Teachers provide an environment in which each child has a positive, nurturing relationship with caring adults.

Teachers encourage an environment that is inviting, respectful, supportive, inclusive, and flexible.

- Encourage an environment that is inviting, respectful, supportive, inclusive, and flexible

Teachers embrace diversity in the school community and in the world.

Teachers demonstrate their knowledge of the history of diverse cultures and their role in shaping global issues. They actively select materials and develop lessons that counteract stereotypes and incorporate histories and contributions of all cultures.

Teachers recognize the influence of race, ethnicity, gender, religion, and other aspects of culture on a child's development and personality.

Teachers strive to understand how a student's culture and background may influence his or her school performance. Teachers consider and incorporate different points of view in their instruction.

- Demonstrate knowledge of diverse cultures
- Select materials and develop lessons that counteract stereotypes and incorporate contributions.
- Recognize the influences on a child's development, personality, and performance
- Consider and incorporate different points of view

Teachers treat students as individuals.

Teachers maintain high expectations, including graduation from high school, for children of all backgrounds. Teachers appreciate the differences and value the contributions of each student in the learning environment by building positive, appropriate relationships.

- Maintain high expectations for all students
- Appreciate differences and value contributions by building positive, appropriate relationships

Teachers adapt their teaching for the benefit of students with special needs.

Teachers collaborate with the range of support specialists to help meet the special needs of all students. Through inclusion and other models of effective practice, teachers engage students to ensure that their needs are met.

- Collaborate with specialists
- Engage students and ensure they meet the needs of their students through inclusion and other models of effective practice

Teachers work collaboratively with the families and significant adults in the lives of their students.

Teachers recognize that educating children is a shared responsibility involving the school, parents/guardians, and the community. Teachers improve communication and collaboration between the school and the home and community in order to promote trust and understanding and build partnerships with all segments of the school community. Teachers seek solutions to overcome cultural and economic obstacles that may stand in the way of effective family and community involvement in the education of their children.

- Improve communication and collaboration between the school and the home and community.
- Promote trust and understanding and build partnership with school community.
- Seek solutions to overcome obstacles that prevent parental/community involvement.

STANDARD 3: TEACHERS KNOW THE CONTENT THEY TEACH.

Teachers align their instruction with the North Carolina Standard Course of Study.

In order to enhance the NC Standard Course of Study, teachers investigate the content standards developed by professional organizations in their specialty area. They develop and apply strategies to make the curriculum rigorous and relevant for all students and provide a balanced curriculum which enhances literacy skills.

Elementary teachers have explicit and thorough preparation in literacy instruction. Middle and high school teachers incorporate literacy instruction within the content area/discipline.

- Teach the NC Standard Course of Study
- Develop and apply strategies to make the curriculum rigorous and relevant
- Develop literacy skills appropriate to specialty area

Teachers know the content appropriate to their teaching specialty.

Teachers bring a richness and depth of understanding to their classrooms by knowing their subjects beyond the content they are expected to teach and by directing students' natural curiosity into an interest in learning. Elementary teachers have a broad knowledge across disciplines. Middle school and high school teachers have depth in one or more specific content areas/disciplines.

- Know subject beyond the content they teach
- Direct students' curiosity in subject

Teachers recognize the interconnectedness of content areas/disciplines.

Teachers know the links and vertical alignment of the grade or subject they teach and the North Carolina Standard Course of Study. Teachers understand how the content they teach relates to other disciplines in order to deepen understanding and connect learning for students. Teachers promote global awareness and its relevance to the subjects they teach.

- Know links between grade/subject and the Standard Course of Study
- Relate content to other disciplines
- Promote global awareness and its relevance

Teachers make instruction relevant to students.

Teachers incorporate 21st Century life skills into their teaching deliberately, strategically, and broadly. These skills include leadership, ethics, accountability, adaptability, personal productivity, personal responsibility, people skills, self direction, and social responsibility. Teachers help their students understand the relationship between the North Carolina Standard Course of Study and 21st Century content which includes global awareness, financial, economic, business and entrepreneurial literacy, civic literacy, and health awareness.

- Incorporate life skills which include leadership, ethics, accountability, adaptability, personal productivity, personal responsibility, people skills, self direction, and social responsibility.
- Demonstrate the interconnectedness between the core content and 21st Century content that includes global awareness, financial, economic, business and entrepreneurial literacy, civic literacy, and health and wellness awareness.

STANDARD 4: TEACHERS FACILITATE LEARNING FOR THEIR STUDENTS

Teachers know the ways in which learning takes place, and they know the appropriate levels of intellectual, physical, social, and emotional development of their students.

Teachers know how students think and learn. Teachers understand the influences that affect individual student learning (development, culture, language proficiency, etc.) and differentiate their instruction. Teachers keep abreast of evolving research about student learning. They adapt resources to address the strengths and weaknesses of their students.

- Know how students think and learn
- Keep abreast of evolving research and understand the influences on student learning
- Adapt resources to address the strengths and weaknesses of students

Teachers plan instruction appropriate for their students.

Teachers collaborate with their colleagues and use a variety of data sources for short and long range planning based on the North Carolina Standard Course of Study. These plans reflect an understanding of how students learn. They engage students in the learning process. Teachers understand that instructional plans must be constantly monitored and modified to enhance learning. Teachers make the curriculum responsive to cultural diversity and to individual learning needs.

- Collaborate with other teachers
- Use data for short and long range planning
- Engage students in the learning process
- Monitor and modify plans to enhance student learning
- Respond to cultural diversity and learning needs of students

Teachers use a variety of instructional methods.

Teachers choose the methods and techniques that are most effective in meeting the needs of their students as they strive to eliminate achievement gaps. Teachers employ a wide range of techniques including information and communication technology, learning styles, and differentiated instruction.

- Choose methods and materials as they strive to eliminate achievement gaps
- Employ a wide range of techniques using information and communication technology, learning styles, and differentiated instruction

Teachers integrate and utilize technology in their instruction.

Teachers know when and how to use technology to maximize student learning. Teachers help students use technology to learn content, think critically, solve problems, discern reliability, use information, communicate, innovate, and collaborate.

- Know appropriate use
- Assist students in use of technology to learn content, think critically, solve problems, discern reliability, use information, communicate, innovate, and collaborate

Teachers help students develop critical thinking and problem solving skills.

Teachers encourage students to use inquiry-based investigations, think creatively, develop and test innovative ideas, synthesize knowledge and draw conclusions. They help students exercise and communicate sound reasoning, understand connections, make complex choices, and frame, analyze and solve problems.

- Encourage students to ask questions, think creatively, innovate and test ideas, synthesize knowledge and draw conclusions
- Help students exercise and communicate sound reasoning, understand connections, make complex choices, and frame, analyze and solve problems

Teachers help students work in teams and develop leadership qualities.

Teachers teach the importance of cooperation and collaboration. They organize learning teams in order to help students define roles, strengthen social ties, improve communication and collaborative skills, interact with people from different cultures and backgrounds, and develop leadership qualities.

- Teach the importance of cooperation and collaboration
- Organize learning teams in classroom in order to help students define roles, strengthen social ties, improve communication and collaborative skills, interact with people from different cultures and backgrounds, and develop leadership qualities

Teachers communicate effectively.

Teachers communicate in ways that are clearly understood by their students. They are perceptive listeners and are able to communicate with students in a variety of ways even when language is a barrier. Teachers help students articulate thoughts and ideas clearly and effectively.

- Communicate clearly with students in a variety of ways
- Assist students in articulating thoughts and ideas clearly and effectively

Teachers use a variety of methods to assess what each student has learned.

Teachers use multiple indicators, including formative and summative assessments, to evaluate student progress and growth as they strive to eliminate achievement gaps. Teachers provide opportunities, methods, feedback, and tools for students to assess themselves and each other. Teachers use 21st Century assessment systems to inform instruction and demonstrate evidence of 21st Century knowledge, skills, performance, and dispositions.

- Use multiple indicators, both formative and summative, to evaluate students progress
- Provide opportunities for self-assessment
- Use 21st Century knowledge, skills, performance and dispositions

STANDARD 5: TEACHERS REFLECT ON THEIR PRACTICE.

Teachers analyze student learning.

Teachers think systematically and critically about student learning in their classrooms and schools: why learning happens and what can be done to improve achievement. Teachers collect and analyze student performance data to improve school and classroom effectiveness. They adapt their practice based on research and data to best meet the needs of students.

- Think systematically about learning in their classroom: why learning happens and what can be done to improve student achievement
- Collect and analyze student performance data to improve effectiveness

Teachers link professional growth to their professional goals.

Teachers participate in continued, high quality professional development that reflects a global view of educational practices; includes 21st Century skills and knowledge; aligns with the State Board of Education priorities; and meets the needs of students and their own professional growth.

- Participate in continued, high quality professional development

Teachers function effectively in a complex, dynamic environment.

Understanding that change is constant, teachers actively investigate and consider new ideas that improve teaching and learning. They adapt their practice based on research and data to best meet the needs of their students.

- Actively investigate and consider new ideas that improve teaching and learning
- Adapt practice based on data

Appendix G: Ohio Teacher Education Standards

Section Two: Ohio Standards for the Teaching Profession

1 Teachers understand student learning and development and respect the diversity of the students they teach.
- Teachers display knowledge of how students learn and of the developmental characteristics of age groups.
- Teachers understand what students know and are able to do and use this knowledge to meet the needs of all students.
- Teachers expect that all students will achieve to their full potential.
- Teachers model respect for students' diverse cultures, language skills and experiences.
- Teachers recognize characteristics of gifted students, students with disabilities and at-risk students in order to assist in appropriate identification, instruction and intervention.

2 Teachers know and understand the content area for which they have instructional responsibility.
- Teachers know the content they teach and use their knowledge of content-area concepts, assumptions and skills to plan instruction.
- Teachers understand and use content-specific instructional strategies to effectively teach the central concepts and skills of the discipline.
- Teachers understand school and district curriculum priorities and the Ohio academic content standards.
- Teachers understand the relationship of knowledge within the discipline to other content areas.
- Teachers connect content to relevant life experiences and career opportunities.

3 Teachers understand and use varied assessments to inform instruction, evaluate and ensure student learning.
- Teachers are knowledgeable about assessment types, their purposes and the data they generate.
- Teachers select, develop and use a variety of diagnostic, formative and summative assessments.
- Teachers analyze data to monitor student progress and learning, and to plan, differentiate and modify instruction.
- Teachers collaborate and communicate student progress with students, parents and colleagues.
- Teachers involve learners in self-assessment and goal setting to address gaps between performance and potential.

4 Teachers plan and deliver effective instruction that advances the learning of each individual student.
- Teachers align their instructional goals and activities with school and district priorities and Ohio's academic content standards.
- Teachers use information about students' learning and performance to plan and deliver instruction that will close the achievement gap.
- Teachers communicate clear learning goals and explicitly link learning activities to those defined goals.
- Teachers apply knowledge of how students think and learn to instructional design and delivery.
- Teachers differentiate instruction to support the learning needs of all students, including students identified as gifted, students with disabilities and at-risk students.
- Teachers create and select activities that are designed to help students develop as independent learners and complex problem-solvers.
- Teachers use resources effectively, including technology, to enhance student learning.

5 Teachers create learning environments that promote high levels of learning and achievement for all students.
- Teachers treat all students fairly and establish an environment that is respectful, supportive and caring.
- Teachers create an environment that is physically and emotionally safe.
- Teachers motivate students to work productively and assume responsibility for their own learning.
- Teachers create learning situations in which students work independently, collaboratively and/or as a whole class.
- Teachers maintain an environment that is conducive to learning for all students.

6 Teachers collaborate and communicate with students, parents, other educators, administrators and the community to support student learning.
- Teachers communicate clearly and effectively.
- Teachers share responsibility with parents and caregivers to support student learning, emotional and physical development and mental health.
- Teachers collaborate effectively with other teachers, administrators and school and district staff.
- Teachers collaborate effectively with the local community and community agencies, when and where appropriate, to promote a positive environment for student learning.

7 Teachers assume responsibility for professional growth, performance and involvement as an individual and as a member of a learning community.
- Teachers understand, uphold and follow professional ethics, policies and legal codes of professional conduct.
- Teachers take responsibility for engaging in continuous, purposeful professional development.
- Teachers are agents of change who seek opportunities to positively impact teaching quality, school improvements and student achievement.

Appendix H: Pennsylvania Teacher Education Standards

Candidate Competencies

This section outlines the competencies required for certification by Chapter 354: "The preparing institution shall ensure that candidates complete a well planned sequence of professional educator courses and field experiences to develop an understanding of the structure, skills, core concepts, facts, methods of inquiry, and application of technology related to each academic discipline the candidates plan to teach or in the academic disciplines related to the non-instructional certificate categories in which they plan to serve." (22 Pa. Code §354.25(a)(3)).

Aligned resources and tools to support the acquisition of these competencies can be found on the Standards-Aligned System (SAS) portal.

I. Development, Cognition, and Learning

A. Child development

1. Effectively apply the principles and theories of child development, including:
   a. Developmentally appropriate practices;
   b. Constructivism;
   c. Socio-cultural theory;
   d. Attachment theory;
   e. Activity theory; and
   f. Play.
2. Demonstrate an understanding of Physical and Motor Development (stages of physical growth, gross and fine motor skills).
3. Demonstrate an understanding of Social Emotional Development (self-regulation, self concept, self-awareness, resilience, and stress).

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(1) Provision of advisory services to college and school personnel in matters pertaining to teacher education and certification.
(2) Designation of professional titles for personnel.
(3) Prescription of procedures for issuance of certificates and permits.
(4) Evaluation and approval of teacher education programs leading to the certification and permitting of professional personnel.
(i) The evaluation by the Department will provide assurance that, on or before January 1, 2011, teacher education programs will require at least 9 credits or 270 hours, or an equivalent combination thereof, regarding accommodations and adaptations for students with disabilities in an inclusive setting. Within the content of these 9 credits or 270 hours, instruction in literacy skills development and cognitive skill development for students with disabilities must be included, as determined by the institution. At least 3 credits or 90 additional hours, or an equivalent combination thereof, must address the instructional needs of English language learners. For purposes of this requirement, 1 credit equals 30 hours of coursework. Applicable hours are limited to a combination of seat hours of classroom instruction, field observation experiences, major research assignments, and development and implementation of lesson plans with accommodations and adaptations for diverse learners in an inclusive setting.

B. Early childhood theory - Implement lessons based on early childhood education foundations, theory and policy, including:
1. Current issues with historical and philosophical background, including inclusionary practices;
2. Theory, research, analysis, and practice; and
3. Social, economic, and cultural diversity, and implications for learning.

C. Adolescent development
1. Recognize and implement the major concepts, principles, theories, and research related to adolescent cognitive, social, sexual, emotional, and moral development.
2. Design and implement strategies that encourage students' positive self-esteem, self-efficacy, and motivation.
3. Identify and respect the range of individual and cultural differences of all adolescents and the implications of those differences in teaching and learning.
4. Identify how the development of all adolescents occurs in the context of classrooms, families, peer groups, communities, and society.
5. Design and implement strategies that provide students with appropriate skills in making the transition from middle level to high school, and then to full citizenship (work, college, military, etc.).
6. Incorporate knowledge of adolescent development into educating students in goal setting and decision making.
7. Create and support learning environments that promote the healthy development of all adolescents.
8. Demonstrate effective adolescent behavior strategies for the classroom.

D. Organizational Structure of the School
1. Make curricular decisions that are grounded in the social, philosophical, and historical foundations of education.
2. Engage children in activities related to their interpersonal, community, and societal responsibilities.
3. Develop classrooms as communities of practice that are learner - oriented.
4. Use student assistance and student support programs that attend to the intellectual, social, and emotional needs of children.
5. Interact with various professionals that serve children (e.g., school counselors, social service workers, home school coordinators).
6. Understand the philosophy of Pre K-4, 4-8, and secondary education.
7. Identify the multiple interacting influences on children's development and learning;
8. Implement multiple approaches to learning.
9. Create environments that are educationally focused, respectful, supportive, and challenging for all children;
10. Demonstrate awareness of the roles of building-specific personnel and staffing patterns within different grade bands and building configurations (e.g. elementary schools, middle schools, high schools).

11. Demonstrate awareness of facilities planning, budgeting, scheduling, and ordering of equipment at various grade bands.
12. Demonstrate awareness of program safety, injury prevention and treatment, and liability.
13. Demonstrate awareness of the ways different building configurations emphasize public relations.

II. Subject-Matter Content and Pedagogy

A. Subject-matter content for each K-12 subject area is found in the Specific Program Guidelines. (See p. 8 for additional information.)

B. Pedagogy

1. Use effective instructional principles, especially those that draw on the research on pedagogical content knowledge in course content.
2. Employ teaching and learning strategies, including the use of technology, that consider and capitalize upon the developmental characteristics of all children.
3. Use effective comprehensive instructional principles responsive to the needs of students.
4. Use materials designed explicitly for the grade levels assigned.
5. Use subject-specific methodologies.
6. Incorporate the ideas, interests, and experiences of children and/or adolescents into instruction.
7. Design successful interventions responsive to the needs of individual students.
8. Integrate technology and other resources appropriately in order to prepare students for further education, higher education, full citizenship, and the workforce.
9. Apply PA core standards into both short-term and long-term instructional goals.
10. Prepare students to gain, process, and use information in different contexts.
11. Design educational experiences that help students communicate using various tools and means, including technology.
12. Create lessons that demonstrate an understanding of literacy both broadly and in discipline contexts.
13. Use literature, classic texts in different genres, commercial reading materials, electronic-based information, and locally created materials.
14. Demonstrate the adaptation of educational or subject-specific research in lessons.
15. Differentiate instruction, assessment, and management strategies to represent a broad spectrum of learning abilities, learning styles, multiple intelligences, and interests.
16. Develop inclusionary practices that respect differences and encourage students to work together to maximize their own and one another's learning.

C. Curriculum Development

Candidates will be able to develop, implement, assess, and modify curriculum and lessons as evidenced by their ability to:

1. Delineate how individuals acquire and process information;
2. Make decisions about curriculum and resources that reflect an understanding of child and adolescent development;
3. Design learning environments to facilitate encoding, storage, and retrieval of knowledge and information for memory, attention, perception, action, and problem solving.
4. Describe the developmental patterns of change, physical, cognitive, and psychosocial areas that have been identified for each stage of development.
5. Apply concepts of human development to education and learning regarding attention, memory, conceptual knowledge and its formation, reasoning, decision making, problem solving, executive functioning, and principles and mechanisms of development, intelligence, action, and motor control;
6. Deliver curriculum that is relevant, challenging, integrative, and exploratory.
7. Identify interactions with adults and peers, the K-12 teaching methods and curricula, and comprehensive interventions that support learning and development, specifically in domains that prepare children from diverse backgrounds for school success.
8. Create lessons that support literacy across the curriculum.
9. Demonstrate an understanding of and ability to plan for type, identification, prevalence, effective, evidenced-based instructional practices and adaptations;
10. Demonstrate understanding of the legal rights and responsibilities of the teacher for special educational referral and evaluation and the rights and procedural safeguards that students are guaranteed.
11. Demonstrate an understanding of overrepresentation of minorities in special education so as to not misinterpret behaviors that represent cultural or linguistic differences as indicative of learning problems.
12. Know and understand young children's characteristics and needs.
13. Know the range of development, including special learning and developmental needs, in the following areas of language:
    a. Receptive vocabulary;
    b. Expressive vocabulary;
    c. Auditory comprehension; and
    d. Pragmatic language.
14. Implement lessons based on students' stages of cognitive development, use of senses for exploration and understanding of the world, and development of age-appropriate problem solving and critical thinking skills.

III. Assessment

A. Use assessment practices that match instructional strategies which are culturally relevant, and authentically measure student performance.
B. Monitor, continuously, the results of interventions and alter instruction accordingly.

C. Use multiple assessments (authentic screening, diagnostic, formative, benchmark, and summative) that are developmentally appropriate for all learners, including graduation and end-of-course examinations.
D. Implement technology in student assessment and measures.
E. Use assessment data to guide instruction.
F. Tutor, strategically, students whose assessments indicate need for additional instruction.
G. Use multiple assessment strategies that effectively measure student mastery of the curriculum in more than one way.
H. Design assessments that target academic standards and assessment anchor content standards in subject areas.
I. Develop assessments that impact instruction, facilitate learning communities, and support diverse students' development and learning.
J. Apply assessments that help reveal readiness in making the transition from school (to work, to higher education, to military service, to full citizenship, etc.).

IV. Professionalism

A. Act as positive role models, coaches, and mentors for all children.
B. Communicate deep content knowledge in the subjects taught.
C. Serve on an advisory program, co-curricular activities, and other programs supporting the curriculum.
D. Uphold high professional standards.
E. Use research and data-based decision making.
F. Participate fully in grade and building level structures.
G. Develop effective teaching practices and focus on continual improvement within the teacher preparation apprenticeship model.
H. Understand and comply with Pennsylvania's *Code of Professional Practice and Conduct for Educators*.
I. Participate in professional organizations related to a subject area specialization, academic discipline, and/or teaching.

Appendix I: West Virginia Teacher Education Standards

Standard 1
Curriculum and Planning

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The teacher displays deep and extensive knowledge of the core content and designs instructional experiences that move beyond a focus on basic competency in the subject to include, as appropriate, the integration of 21st century interdisciplinary themes of global awareness; economic, business and entrepreneurial literacy; civic literacy and health literacy. Knowledge of content is absolutely necessary for good teaching, and it must be combined with an understanding of the complex and sophisticated relationships within the content and made relevant to the learner. The teacher designs instruction that is aligned with the West Virginia Content Standards and Objectives and uses a standards-based approach to instruction supported by a variety of instructional resources that may include textbooks. Information media and technology tools are frequently incorporated into lesson design and teaching strategies are supported by a variety of technologies that promote self-directed learning, problem solving and collaboration. A balanced instructional assessment program is designed to assist students to achieve mastery of the content and depth of knowledge of the West Virginia Content Standards and Objectives. The teacher uses his/her knowledge of content, process and development of 21st century skills to move beyond being a provider of knowledge to being a facilitator of learning. Experiences are created to advance student learning through processes such as critical thinking, collaboration and problem solving that encourage creativity, innovation and self-direction.

Function 1A: Core Content – The teacher has a deep knowledge of the content and its inter-relatedness within and across the disciplines and can move beyond basic content competency to ensure student mastery of skills necessary for success in life and work. **1A1** pg. 2 ; **1A2** pg. 3 ; **1A3** pg. 4

Function 1B: Pedagogy – The teacher has a deep knowledge of the art and science of teaching in his/her specific content and can facilitate experiences that advance creativity, innovation, and problem solving. **1B1** pg. 5 ; **1B2** pg. 6 ; **1B3** pg. 7

Function 1C: Setting Goals and Objectives for Learning – The teacher uses a standards-based approach to instruction aligned with the state and local curriculum and sets instructional goals and objectives that describe what students will learn. **1C1** pg. 8 ; **1C2** pg. 9 ; **1C3** pg. 10

Function 1D: Designing Instruction – The teacher designs instruction that engages students in meaningful instructional activities that support the WV Content Standards and Objectives and that result in intentional student learning. **1D1** pg. 11 ; **1D2** pg. 12

Function 1E: Student Assessment – The teacher uses a balanced approach to ensure both assessment of learning and assessment for learning to provide both teacher and students information to guide future learning. **1E1** pg. 13 ; **1E2** pg. 14

◀ 1 ▶

Standard 1
Standard 2
Standard 3
Standard 4
Standard 5

Standard 2
The Learner and the Learning Environment

The teacher demonstrates knowledge of the underlying principles of how students develop and learn and creates an environment that supports the learning of all students. The teacher sets high expectations based on a conceptual understanding of what is developmentally appropriate for all students. The teacher establishes a learner-centered culture that allows all students to be successful while respecting their differences in learning styles, as well as socio-economic, cultural and developmental characteristics. Respect for diversity is apparent in the design of the learning environment, the activities and tasks, the materials and student groupings – to ensure student learning. The learning environment is characterized by effective classroom procedures, appropriate use of technology and efficient management of behaviors and physical space. Students' misconceptions are addressed in lesson design to ensure that appropriate next steps in learning are taken. Students are encouraged to collaborate and to assume responsibility for their positive interaction in the learning environment.

Function 2A: Understanding Intellectual/Cognitive, Social, and Emotional Development – The teacher's understanding of the unique characteristics of the learner is evidenced in the design of learning activities which are developmentally appropriate and differentiated to engage all students in the learning process. **2A1** pg. 16 ; **2A2** pg. 17 ; **2A3** pg. 18

Function 2B: Creating an Environment of Respect and Rapport – The teacher shows respect for students by having high expectations, providing management frameworks that clearly define roles and procedures, using respectful language, communicating interest in students as individuals and encouraging student collaboration. **2B1** pg. 19 ; **2B2** pg. 20 ; **2B3** pg. 21

Function 2C: Establishing a Culture for Learning – The teacher establishes a culture in the learning environment that is focused on learning and that reflects the importance of the work undertaken by both students and the teacher. **2C1** pg. 22 ; **2C2** pg. 23

Function 2D: Implementing Classroom Procedures – The teacher ensures that rules and procedures are in place for a smoothly functioning learning environment evidenced by the efficient use of time and resources. **2D1** pg. 24 ; **2D2** pg. 25

Function 2E: Managing Student Behaviors – The teacher collaborates with students to establish norms of behavior for the learning environment that ensure a focus on learning. **2E1** pg. 26 ; **2E2** pg. 27 ; **2E3** pg. 28

Function 2F: Organizing the Learning Environment – The teacher ensures that the physical or virtual learning environment is safe, and that there is maximum flexibility in the use of physical space in a physical learning environment. **2F1** pg. 29 ; **2F2** pg. 30

Standard 1
Standard 2
Standard 3
Standard 4
Standard 5

Standard 3
Teaching

The teacher displays a deep knowledge of content that, when combined with the knowledge of teaching and knowledge of the learner and the learning environment, enables the development of instructional experiences that create and support the best possible opportunities for students to learn. The instructional delivery methods and tools are appropriate for the type of learning target, and the teacher facilitates a challenging and active learning environment and encourages students to make decisions regarding their own learning. The teacher selects questioning, discussion, pacing and grouping techniques that engage all students and elicit clear evidence of their learning.

The teacher engages in the instructional cycle of planning, instructing, assessing, and adjusting based on data. The teacher extracts data from ongoing formative assessments to inform and adjust instruction for intervention, enrichment or the next acquisition lesson. The teacher uses summative assessment data to measure student progress toward mastery of the West Virginia Content Standards and Objectives. The teacher provides timely, specific descriptive feedback through classroom assessment for learning practices, thus enabling students to self-assess and set their own goals. Excitement about learning is not only demonstrated in the instruction, but also by the engagement of the students in learning activities that are relevant and based on individual needs and learning characteristics.

Function 3A: Importance of Content – The teacher utilizes content knowledge to focus learning targets that create meaningful learning experiences for students. **3A1** pg. 32 ; **3A2** pg. 33 ; **3A3** pg. 34

Function 3B: Communicating with Students – The teacher creates and maintains a positive, supportive classroom climate and communicates with students in a variety of ways. **3B1** pg. 35 ; **3B2** pg. 36 ; **3B3** pg. 37

Function 3C: Questioning and Discussion Techniques – The teacher practices quality questioning techniques and engages students in discussion. **3C1** pg. 38 ; **3C2** pg. 39

Function 3D: Student Engagement – The teacher delivers instruction to motivate and engage students in a deep understanding of the content. **3D1** pg. 40 ; **3D2** pg. 41 ; **3D3** pg. 42

Function 3E: Use of Assessments in Instruction – The teacher uses both classroom formative and summative assessment as a balanced approach to instructional decision making. **3E1** pg. 43 ; **3E2** pg. 44 ; **3E3** pg. 45 ; **3E4** pg. 46

Function 3F: Flexibility and Responsiveness – The teacher adjusts instruction based on the needs of the students and in response to "teachable moments." **3F1** pg. 47 ; **3F2** pg. 48 ; **3F3** pg. 49

Standard 1
Standard 2
Standard 3
Standard 4
Standard 5

Standard 4
Professional Responsibilities for Self-Renewal

The teacher persistently and critically examines his/her practice through a continuous cycle of self-improvement focused on how he/she teaches and works in a global, digital society. The teacher is responsible for engaging in professional, collaborative self-renewal in which colleagues, as critical friends, examine each other's practice in order to adjust instruction and practice based on analysis of a variety of data. Participation in this form of professional dialogue enables the teacher to discover better practice, to be supported by colleagues and significantly contribute to the learning of others as a member of a collaborative team. The teacher who contributes to the teaching profession through the implementation of practices that improve teaching and learning demonstrates characteristics of informal teacher leadership.

Function 4A: Professional Learning – The teacher engages in professional learning to critically examine his/her professional practice and to engage in a continuous cycle of self-improvement focused on how to learn, teach and work in a global, digital society. **4A1** pg. 51

Function 4B: Professional Collaborative Practice – The teacher is actively engaged in learning with colleagues in a way that models collaboration and collegiality to improve his/her practice, addressing questions and issues related to the school and student achievement. **4B1** pg. 52

Function 4C: Reflection on Practice – The teacher engages in continuous, critical examination of his/her teaching practice and makes adjustments based on data. **4C1** pg. 53

Function 4D: Professional Contribution – The teacher contributes to the effectiveness, vitality and self-renewal of the teaching profession through investigation of new ideas that improve teaching practice and learning for students. **4D1** pg. 54

Standard 1
Standard 2
Standard 3
Standard 4
Standard 5

Standard 5
Professional Responsibilities for School and Community

GL BAL21
Students deserve it • The world demands it

The teacher's primary responsibility is to create and support a learning environment that allows students to achieve at high levels; however, every teacher also has a responsibility to improve the school in which they work. The teacher uses the strategic plan as a guide to help sustain the mission and continuous improvement of the school and thereby contributes to shaping a cohesive, learner-centered culture. Through a commitment to group accountability, the teacher helps develop and maintain student support, management and assessment systems that enable learning to take place. A teacher's professional responsibilities also include working collaboratively with colleagues, parents, guardians and adults significant to students on activities that connect school, families and the larger community. The teacher demonstrates leadership by contributing to positive changes in policy and practice that affect student learning and by modeling ethical behavior.

Function 5A: School Mission – The teacher works collaboratively with the principal and colleagues to develop and support the school mission.
5A1 pg. 56 ; **5A2** pg. 57

Function 5B: School-wide Activities – The teacher participates in the development and implementation of school-wide initiatives in curriculum, instruction, and assessment. **5B1** pg. 58 ; **5B2** pg. 59

Function 5C: Learner-Centered Culture – The teacher participates in activities and models behaviors that build and sustain a learner-centered culture. **5C1** pg. 60

Function 5D: Student Support Systems – The teacher works collaboratively with the principal and colleagues to develop and sustain student support systems that enable learning. **5D1** pg. 61 ; **5D2** pg. 62

Function 5E: Student Management Systems – The teacher works collaboratively with the principal, colleagues and students to develop and sustain management systems that support and extend learning. **5E1** pg. 63 ; **5E2** pg. 64

Function 5F: School, Family and Community Connections – The teacher works collaboratively with the principal, colleagues, parents, students and the community to develop and sustain school activities that make meaningful connections among the school, families and the community. **5F1** pg. 65 ; **5F2** pg. 66

Function 5G: Strategic Planning/Continuous Improvement – The teacher participates in the development and implementation of the school's strategic planning and continuous improvement. **5G1** pg. 67

Function 5H: Teacher Leadership – The teacher demonstrates leadership by implementing classroom and school initiatives that improve education as well as by making positive changes in policy and practice that affect student learning. **5H1** pg. 68

Function 5I: Ethical Standards – The teacher models the ethical standards expected for the profession in the learning environment and in the community. **5I1** pg. 69

Standard 1

Standard 2

Standard 3

Standard 4

Standard 5

Appendix J: InTASC Teacher Education Standards

Standard #1: Learner Development

The teacher understands how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.

PERFORMANCES

1(a) The teacher regularly assesses individual and group performance in order to design and modify instruction to meet learners' needs in each area of development (cognitive, linguistic, social, emotional, and physical) and scaffolds the next level of development.

1(b) The teacher creates developmentally appropriate instruction that takes into account individual learners' strengths, interests, and needs and that enables each learner to advance and accelerate his/her learning.

1(c) The teacher collaborates with families, communities, colleagues, and other professionals to promote learner growth and development.

ESSENTIAL KNOWLEDGE

1(d) The teacher understands how learning occurs—how learners construct knowledge, acquire skills, and develop disciplined thinking processes—and knows how to use instructional strategies that promote student learning.

1(e) The teacher understands that each learner's cognitive, linguistic, social, emotional, and physical development influences learning and knows how to make instructional decisions that build on learners' strengths and needs.

1(f) The teacher identifies readiness for learning, and understands how development in any one area may affect performance in others.

1(g) The teacher understands the role of language and culture in learning and knows how to modify instruction to make language comprehensible and instruction relevant, accessible, and challenging.

CRITICAL DISPOSITIONS

1(h) The teacher respects learners' differing strengths and needs and is committed to using this information to further each learner's development.

1(i) The teacher is committed to using learners' strengths as a basis for growth, and their misconceptions as opportunities for learning.

1(j) The teacher takes responsibility for promoting learners' growth and development.

1(k) The teacher values the input and contributions of families, colleagues, and other professionals in understanding and supporting each learner's development.

Standard #2: Learning Differences

The teacher uses understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards.

PERFORMANCES

2(a) The teacher designs, adapts, and delivers instruction to address each student's diverse learning strengths and needs and creates opportunities for students to demonstrate their learning in different ways.

2(b) The teacher makes appropriate and timely provisions (e.g., pacing for individual rates of growth, task demands, communication, assessment, and response modes) for individual students with particular learning differences or needs.

2(c) The teacher designs instruction to build on learners' prior knowledge and experiences, allowing learners to accelerate as they demonstrate their understandings.

2(d) The teacher brings multiple perspectives to the discussion of content, including attention to learners' personal, family, and community experiences and cultural norms.

2(e) The teacher incorporates tools of language development into planning and instruction, including strategies for making content accessible to English language learners and for evaluating and supporting their development of English proficiency.

2(f) The teacher accesses resources, supports, and specialized assistance and services to meet particular learning differences or needs.

ESSENTIAL KNOWLEDGE

2(g) The teacher understands and identifies differences in approaches to learning and performance and knows how to design instruction that uses each learner's strengths to promote growth.

2(h) The teacher understands students with exceptional needs, including those associated with disabilities and giftedness, and knows how to use strategies and resources to address these needs.

2(i) The teacher knows about second language acquisition processes and knows how to incorporate instructional strategies and resources to support language acquisition.

2(j) The teacher understands that learners bring assets for learning based on their individual experiences, abilities, talents, prior learning, and peer and social group interactions, as well as language, culture, family, and community values.

2(k) The teacher knows how to access information about the values of diverse cultures and communities and how to incorporate learners' experiences, cultures, and community resources into instruction.

CRITICAL DISPOSITIONS

2(l) The teacher believes that all learners can achieve at high levels and persists in helping each learner reach his/her full potential.

2(m) The teacher respects learners as individuals with differing personal and family backgrounds and various skills, abilities, perspectives, talents, and interests.

2(n) The teacher makes learners feel valued and helps them learn to value each other.

2(o) The teacher values diverse languages and dialects and seeks to integrate them into his/her instructional practice to engage students in learning.

Standard #3: Learning Environments

The teacher works with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self motivation.

PERFORMANCES

3(a) The teacher collaborates with learners, families, and colleagues to build a safe, positive learning climate of openness, mutual respect, support, and inquiry.

3(b) The teacher develops learning experiences that engage learners in collaborative and self-directed learning and that extend learner interaction with ideas and people locally and globally.

3(c) The teacher collaborates with learners and colleagues to develop shared values and expectations for respectful interactions, rigorous academic discussions, and individual and group responsibility for quality work.

3(d) The teacher manages the learning environment to actively and equitably engage learners by organizing, allocating, and coordinating the resources of time, space, and learners' attention.

3(e) The teacher uses a variety of methods to engage learners in evaluating the learning environment and collaborates with learners to make appropriate adjustments.

3(f) The teacher communicates verbally and nonverbally in ways that demonstrate respect for and responsiveness to the cultural backgrounds and differing perspectives learners bring to the learning environment.

3(g) The teacher promotes responsible learner use of interactive technologies to extend the possibilities for learning locally and globally.

3(h) The teacher intentionally builds learner capacity to collaborate in face-to-face and virtual environments through applying effective interpersonal communication skills.

ESSENTIAL KNOWLEDGE

3(i) The teacher understands the relationship between motivation and engagement and knows how to design learning experiences using strategies that build learner self-direction and ownership of learning.

3(j) The teacher knows how to help learners work productively and cooperatively with each other to achieve learning goals.

3(k) The teacher knows how to collaborate with learners to establish and monitor elements of a safe and productive learning environment including norms, expectations, routines, and organizational structures.

3(l) The teacher understands how learner diversity can affect communication and knows how to communicate effectively in differing environments.

3(m) The teacher knows how to use technologies and how to guide learners to apply them in appropriate, safe, and effective ways.

CRITICAL DISPOSITIONS

3(n) The teacher is committed to working with learners, colleagues, families, and communities to establish positive and supportive learning environments.

3(o) The teacher values the role of learners in promoting each other's learning and recognizes the importance of peer relationships in establishing a climate of learning.

3(p) The teacher is committed to supporting learners as they participate in decision making, engage in exploration and invention, work collaboratively and independently, and engage in purposeful learning.

3(q) The teacher seeks to foster respectful communication among all members of the learning community.

3(r) The teacher is a thoughtful and responsive listener and observer.

Standard #4: Content Knowledge

The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make these aspects of the discipline accessible and meaningful for learners to assure mastery of the content.

PERFORMANCES

4(a) The teacher effectively uses multiple representations and explanations that capture key ideas in the discipline, guide learners through learning progressions, and promote each learner's achievement of content standards.

4(b) The teacher engages students in learning experiences in the discipline(s) that encourage learners to understand, question, and analyze ideas from diverse perspectives so that they master the content.

4(c) The teacher engages learners in applying methods of inquiry and standards of evidence used in the discipline.

4(d) The teacher stimulates learner reflection on prior content knowledge, links new concepts to familiar concepts, and makes connections to learners' experiences.

4(e) The teacher recognizes learner misconceptions in a discipline that interfere with learning, and creates experiences to build accurate conceptual understanding.

4(f) The teacher evaluates and modifies instructional resources and curriculum materials for their comprehensiveness, accuracy for representing particular concepts in the discipline, and appropriateness for his/her learners.

4(g) The teacher uses supplementary resources and technologies effectively to ensure accessibility and relevance for all learners.

4(h) The teacher creates opportunities for students to learn, practice, and master academic language in their content.

4(i) The teacher accesses school and/or district-based resources to evaluate the learner's content knowledge in their primary language.

ESSENTIAL KNOWLEDGE

4(j) The teacher understands major concepts, assumptions, debates, processes of inquiry, and ways of knowing that are central to the discipline(s) s/he teaches.

4(k) The teacher understands common misconceptions in learning the discipline and how to guide learners to accurate conceptual understanding.

4(l) The teacher knows and uses the academic language of the discipline and knows how to make it accessible to learners.

4(m) The teacher knows how to integrate culturally relevant content to build on learners' background knowledge.

4(n) The teacher has a deep knowledge of student content standards and learning progressions in the discipline(s) s/he teaches.

CRITICAL DISPOSITIONS

4(o) The teacher realizes that content knowledge is not a fixed body of facts but is complex, culturally situated, and ever evolving. S/he keeps abreast of new ideas and understandings in the field.

4(p) The teacher appreciates multiple perspectives within the discipline and facilitates learners' critical analysis of these perspectives.

4(q) The teacher recognizes the potential of bias in his/her representation of the discipline and seeks to appropriately address problems of bias.

4(r) The teacher is committed to work toward each learner's mastery of disciplinary content and skills.

Standard #5: Application of Content

The teacher understands how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.

PERFORMANCES

5(a) The teacher develops and implements projects that guide learners in analyzing the complexities of an issue or question using perspectives from varied disciplines and cross-disciplinary skills (e.g., a water quality study that draws upon biology and chemistry to look at factual information and social studies to examine policy implications).

5(b) The teacher engages learners in applying content knowledge to real world problems through the lens of interdisciplinary themes (e.g., financial literacy, environmental literacy).

5(c) The teacher facilitates learners' use of current tools and resources to maximize content learning in varied contexts.

5(d) The teacher engages learners in questioning and challenging assumptions and approaches in order to foster innovation and problem solving in local and global contexts.

5(e) The teacher develops learners' communication skills in disciplinary and interdisciplinary contexts by creating meaningful opportunities to employ a variety of forms of communication that address varied audiences and purposes.

5(f) The teacher engages learners in generating and evaluating new ideas and novel approaches, seeking inventive solutions to problems, and developing original work.

5(g) The teacher facilitates learners' ability to develop diverse social and cultural perspectives that expand their understanding of local and global issues and create novel approaches to solving problems.

5(h) The teacher develops and implements supports for learner literacy development across content areas.

ESSENTIAL KNOWLEDGE

5(i) The teacher understands the ways of knowing in his/her discipline, how it relates to other disciplinary approaches to inquiry, and the strengths and limitations of each approach in addressing problems, issues, and concerns.

5(j) The teacher understands how current interdisciplinary themes (e.g., civic literacy, health literacy, global awareness) connect to the core subjects and knows how to weave those themes into meaningful learning experiences.

5(k) The teacher understands the demands of accessing and managing information as well as how to evaluate issues of ethics and quality related to information and its use.

5(l) The teacher understands how to use digital and interactive technologies for efficiently and effectively achieving specific learning goals.

5(m) The teacher understands critical thinking processes and knows how to help learners develop high level questioning skills to promote their independent learning.

5(n) The teacher understands communication modes and skills as vehicles for learning (e.g., information gathering and processing) across disciplines as well as vehicles for expressing learning.

5(o) The teacher understands creative thinking processes and how to engage learners in producing original work.

5(p) The teacher knows where and how to access resources to build global awareness and understanding, and how to integrate them into the curriculum.

CRITICAL DISPOSITIONS

5(q) The teacher is constantly exploring how to use disciplinary knowledge as a lens to address local and global issues.

5(r) The teacher values knowledge outside his/her own content area and how such knowledge enhances student learning.

5(s) The teacher values flexible learning environments that encourage learner exploration, discovery, and expression across content areas.

Standard #6: Assessment

The teacher understands and uses multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and to guide the teacher's and learner's decision making.

PERFORMANCES

6(a) The teacher balances the use of formative and summative assessment as appropriate to support, verify, and document learning.

6(b) The teacher designs assessments that match learning objectives with assessment methods and minimizes sources of bias that can distort assessment results.

6(c) The teacher works independently and collaboratively to examine test and other performance data to understand each learner's progress and to guide planning.

6(d) The teacher engages learners in understanding and identifying quality work and provides them with effective descriptive feedback to guide their progress toward that work.

6(e) The teacher engages learners in multiple ways of demonstrating knowledge and skill as part of the assessment process.

6(f) The teacher models and structures processes that guide learners in examining their own thinking and learning as well as the performance of others.

6(g) The teacher effectively uses multiple and appropriate types of assessment data to identify each student's learning needs and to develop differentiated learning experiences.

6(h) The teacher prepares all learners for the demands of particular assessment formats and makes appropriate accommodations in assessments or testing conditions, especially for learners with disabilities and language learning needs.

6(i) The teacher continually seeks appropriate ways to employ technology to support assessment practice both to engage learners more fully and to assess and address learner needs.

ESSENTIAL KNOWLEDGE

6(j) The teacher understands the differences between formative and summative applications of assessment and knows how and when to use each.

6(k) The teacher understands the range of types and multiple purposes of assessment and how to design, adapt, or select appropriate assessments to address specific learning goals and individual differences, and to minimize sources of bias.

6(l) The teacher knows how to analyze assessment data to understand patterns and gaps in learning, to guide planning and instruction, and to provide meaningful feedback to all learners.

6(m) The teacher knows when and how to engage learners in analyzing their own assessment results and in helping to set goals for their own learning.

6(n) The teacher understands the positive impact of effective descriptive feedback for learners and knows a variety of strategies for communicating this feedback.

6(o) The teacher knows when and how to evaluate and report learner progress against standards.

6(p) The teacher understands how to prepare learners for assessments and how to make accommodations in assessments and testing conditions, especially for learners with disabilities and language learning needs.

CRITICAL DISPOSITIONS

6(q) The teacher is committed to engaging learners actively in assessment processes and to developing each learner's capacity to review and communicate about their own progress and learning.

6(r) The teacher takes responsibility for aligning instruction and assessment with learning goals.

6(s) The teacher is committed to providing timely and effective descriptive feedback to learners on their progress.

6(t) The teacher is committed to using multiple types of assessment processes to support, verify, and document learning.

6(u) The teacher is committed to making accommodations in assessments and testing conditions, especially for learners with disabilities and language learning needs.

6(v) The teacher is committed to the ethical use of various assessments and assessment data to identify learner strengths and needs to promote learner growth.

Standard #7: Planning for Instruction

The teacher plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.

PERFORMANCES

7(a) The teacher individually and collaboratively selects and creates learning experiences that are appropriate for curriculum goals and content standards, and are relevant to learners.

7(b) The teacher plans how to achieve each student's learning goals, choosing appropriate strategies and accommodations, resources, and materials to differentiate instruction for individuals and groups of learners.

7(c) The teacher develops appropriate sequencing of learning experiences and provides multiple ways to demonstrate knowledge and skill.

7(d) The teacher plans for instruction based on formative and summative assessment data, prior learner knowledge, and learner interest.

7(e) The teacher plans collaboratively with professionals who have specialized expertise (e.g., special educators, related service providers, language learning specialists, librarians, media specialists) to design and jointly deliver as appropriate learning experiences to meet unique learning needs.

7(f) The teacher evaluates plans in relation to short- and long-range goals and systematically adjusts plans to meet each student's learning needs and enhance learning.

ESSENTIAL KNOWLEDGE

7(g) The teacher understands content and content standards and how these are organized in the curriculum.

7(h) The teacher understands how integrating cross-disciplinary skills in instruction engages learners purposefully in applying content knowledge.

7(i) The teacher understands learning theory, human development, cultural diversity, and individual differences and how these impact ongoing planning.

7(j) The teacher understands the strengths and needs of individual learners and how to plan instruction that is responsive to these strengths and needs.

7(k) The teacher knows a range of evidence-based instructional strategies, resources, and technological tools and how to use them effectively to plan instruction that meets diverse learning needs.

7(l) The teacher knows when and how to adjust plans based on assessment information and learner responses.

7(m) The teacher knows when and how to access resources and collaborate with others to support student learning (e.g., special educators, related service providers, language learner specialists, librarians, media specialists, community organizations).

CRITICAL DISPOSITIONS

7(n) The teacher respects learners' diverse strengths and needs and is committed to using this information to plan effective instruction.

7(o) The teacher values planning as a collegial activity that takes into consideration the input of learners, colleagues, families, and the larger community.

7(p) The teacher takes professional responsibility to use short- and long-term planning as a means of assuring student learning.

7(q) The teacher believes that plans must always be open to adjustment and revision based on learner needs and changing circumstances.

Standard #8: Instructional Strategies

The teacher understands and uses a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways.

PERFORMANCES

8(a) The teacher uses appropriate strategies and resources to adapt instruction to the needs of individuals and groups of learners.

8(b) The teacher continuously monitors student learning, engages learners in assessing their progress, and adjusts instruction in response to student learning needs.

8(c) The teacher collaborates with learners to design and implement relevant learning experiences, identify their strengths, and access family and community resources to develop their areas of interest.

8(d) The teacher varies his/her role in the instructional process (e.g., instructor, facilitator, coach, audience) in relation to the content and purposes of instruction and the needs of learners.

8(e) The teacher provides multiple models and representations of concepts and skills with opportunities for learners to demonstrate their knowledge through a variety of products and performances.

8(f) The teacher engages all learners in developing higher order questioning skills and metacognitive processes.

8(g) The teacher engages learners in using a range of learning skills and technology tools to access, interpret, evaluate, and apply information.

8(h) The teacher uses a variety of instructional strategies to support and expand learners' communication through speaking, listening, reading, writing, and other modes.

8(i) The teacher asks questions to stimulate discussion that serves different purposes (e.g., probing for learner understanding, helping learners articulate their ideas and thinking processes, stimulating curiosity, and helping learners to question).

ESSENTIAL KNOWLEDGE

8(j) The teacher understands the cognitive processes associated with various kinds of learning (e.g., critical and creative thinking, problem framing and problem solving, invention, memorization and recall) and how these processes can be stimulated.

8(k) The teacher knows how to apply a range of developmentally, culturally, and linguistically appropriate instructional strategies to achieve learning goals.

8(l) The teacher knows when and how to use appropriate strategies to differentiate instruction and engage all learners in complex thinking and meaningful tasks.

8(m) The teacher understands how multiple forms of communication (oral, written, nonverbal, digital, visual) convey ideas, foster self expression, and build relationships.

8(n) The teacher knows how to use a wide variety of resources, including human and technological, to engage students in learning.

8(o) The teacher understands how content and skill development can be supported by media and technology and knows how to evaluate these resources for quality, accuracy, and effectiveness.

CRITICAL DISPOSITIONS

8(p) The teacher is committed to deepening awareness and understanding the strengths and needs of diverse learners when planning and adjusting instruction.

8(q) The teacher values the variety of ways people communicate and encourages learners to develop and use multiple forms of communication.

8(r) The teacher is committed to exploring how the use of new and emerging technologies can support and promote student learning.

8(s) The teacher values flexibility and reciprocity in the teaching process as necessary for adapting instruction to learner responses, ideas, and needs.

Standard #9: Professional Learning and Ethical Practice

The teacher engages in ongoing professional learning and uses evidence to continually evaluate his/her practice, particularly the effects of his/her choices and actions on others (learners, families, other professionals, and the community), and adapts practice to meet the needs of each learner.

PERFORMANCES

9(a) The teacher engages in ongoing learning opportunities to develop knowledge and skills in order to provide all learners with engaging curriculum and learning experiences based on local and state standards.

9(b) The teacher engages in meaningful and appropriate professional learning experiences aligned with his/her own needs and the needs of the learners, school, and system.

9(c) Independently and in collaboration with colleagues, the teacher uses a variety of data (e.g., systematic observation, information about learners, research) to evaluate the outcomes of teaching and learning and to adapt planning and practice.

9(d) The teacher actively seeks professional, community, and technological resources, within and outside the school, as supports for analysis, reflection, and problem-solving.

9(e) The teacher reflects on his/her personal biases and accesses resources to deepen his/her own understanding of cultural, ethnic, gender, and learning differences to build stronger relationships and create more relevant learning experiences.

9(f) The teacher advocates, models, and teaches safe, legal, and ethical use of information and technology including appropriate documentation of sources and respect for others in the use of social media.

ESSENTIAL KNOWLEDGE

9(g) The teacher understands and knows how to use a variety of self-assessment and problem-solving strategies to analyze and reflect on his/her practice and to plan for adaptations/adjustments.

9(h) The teacher knows how to use learner data to analyze practice and differentiate instruction accordingly.

9(i) The teacher understands how personal identity, worldview, and prior experience affect perceptions and expectations, and recognizes how they may bias behaviors and interactions with others.

9(j) The teacher understands laws related to learners' rights and teacher responsibilities (e.g., for educational equity, appropriate education for learners with disabilities, confidentiality, privacy, appropriate treatment of learners, reporting in situations related to possible child abuse).

9(k) The teacher knows how to build and implement a plan for professional growth directly aligned with his/her needs as a growing professional using feedback from teacher evaluations and observations, data on learner performance, and school- and system-wide priorities.

CRITICAL DISPOSITIONS

9(l) The teacher takes responsibility for student learning and uses ongoing analysis and reflection to improve planning and practice.

9(m) The teacher is committed to deepening understanding of his/her own frames of reference (e.g., culture, gender, language, abilities, ways of knowing), the potential biases in these frames, and their impact on expectations for and relationships with learners and their families.

9(n) The teacher sees him/herself as a learner, continuously seeking opportunities to draw upon current education policy and research as sources of analysis and reflection to improve practice.

9(o) The teacher understands the expectations of the profession including codes of ethics, professional standards of practice, and relevant law and policy.

Standard #10: Leadership and Collaboration

The teacher seeks appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and to advance the profession.

PERFORMANCES

10(a) The teacher takes an active role on the instructional team, giving and receiving feedback on practice, examining learner work, analyzing data from multiple sources, and sharing responsibility for decision making and accountability for each student's learning.

10(b) The teacher works with other school professionals to plan and jointly facilitate learning on how to meet diverse needs of learners.

10(c) The teacher engages collaboratively in the school-wide effort to build a shared vision and supportive culture, identify common goals, and monitor and evaluate progress toward those goals.

10(d) The teacher works collaboratively with learners and their families to establish mutual expectations and ongoing communication to support learner development and achievement.

10(e) Working with school colleagues, the teacher builds ongoing connections with community resources to enhance student learning and well being.

10(f) The teacher engages in professional learning, contributes to the knowledge and skill of others, and works collaboratively to advance professional practice.

10(g) The teacher uses technological tools and a variety of communication strategies to build local and global learning communities that engage learners, families, and colleagues.

10(h) The teacher uses and generates meaningful research on education issues and policies.

10(i) The teacher seeks appropriate opportunities to model effective practice for colleagues, to lead professional learning activities, and to serve in other leadership roles.

10(j) The teacher advocates to meet the needs of learners, to strengthen the learning environment, and to enact system change.

10(k) The teacher takes on leadership roles at the school, district, state, and/or national level and advocates for learners, the school, the community, and the profession.

ESSENTIAL KNOWLEDGE

10(l) The teacher understands schools as organizations within a historical, cultural, political, and social context and knows how to work with others across the system to support learners.

10(m) The teacher understands that alignment of family, school, and community spheres of influence enhances student learning and that discontinuity in these spheres of influence interferes with learning.

10(n) The teacher knows how to work with other adults and has developed skills in collaborative interaction appropriate for both face-to-face and virtual contexts.

10(o) The teacher knows how to contribute to a common culture that supports high expectations for student learning.

CRITICAL DISPOSITIONS

10(p) The teacher actively shares responsibility for shaping and supporting the mission of his/her school as one of advocacy for learners and accountability for their success.

10(q) The teacher respects families' beliefs, norms, and expectations and seeks to work collaboratively with learners and families in setting and meeting challenging goals.

10(r) The teacher takes initiative to grow and develop with colleagues through interactions that enhance practice and support student learning.

10(s) The teacher takes responsibility for contributing to and advancing the profession.

10(t) The teacher embraces the challenge of continuous improvement and change.

Appendix K: Educational Placement Data Tables by Eligibility Category

2017 State	2017 80% all	2016 State	2016 80% all	2015 State	2015 80% all	2014 State	2014 80% all	2013 State	2013 80% all	2012 State	2012 80% all	2011 State	2011 80% all	2010 State	2010 80% all	2009 State	2009 80% all	2008 State	2008 80% all
Alabama	0.83653	Alabama	0.835156	Alabama	0.835626	Alabama	0.836312	Alabama	0.83832	Alabama	0.836846	Alabama	0.835096	Alabama	0.829492	Alabama	0.823011	Alabama	0.809797
Nebraska	0.777841	Vermont	0.767733	Vermont	0.757606	Alaska	0.774658	North Dak	0.753207	North Dak	0.760192	North Dak	0.762962	North Dak	0.768593	North Dak	0.76392	North Dak	0.765083
Colorado	0.746859	Nebraska	0.767494	Nebraska	0.755362	Nebraska	0.760698	Nebraska	0.745854	Nebraska	0.748638	Nebraska	0.744666	Rhode Isla	0.755124	Nebraska	0.73059	Nebraska	0.718013
Florida	0.741966	North Dak	0.738103	North Dak	0.740756	Vermont	0.749282	Vermont	0.741526	New Ham	0.737834	Montana	0.737283	Nebraska	0.739841	Rhode Isla	0.720585	Rhode Isla	0.70583
Indiana	0.739845	Kentucky	0.7356	North Dak	0.737278	Vermont	0.745839	New Ham	0.729058	Vermont	0.732319	Utah	0.737108	Vermont	0.734434	Oregon	0.716829	Oregon	0.700722
Oregon	0.73663	Colorado	0.734886	Florida	0.736174	Oregon	0.737288	Oregon	0.728462	Colorado	0.726276	Colorado	0.720692	Colorado	0.720352	Connecticu	0.70972	Connecticu	0.698566
North Dak	0.734804	Oregon	0.732473	Kentucky	0.733663	North Dak	0.736174	New Ham	0.731974	Oregon	0.723105	Pennsylva	0.718181	Kentucky	0.713852	Kentucky	0.704343	Kentucky	0.696307
Kentucky	0.734304	New Ham	0.726159	Colorado	0.733663	Kentucky	0.731547	Colorado	0.723105	Colorado	0.717528	Kentucky	0.717975	Connecticu	0.713661	West Virgi	0.700981	West Virgi	0.678351
South Dak	0.710066	Florida	0.726072	Oregon	0.724353	Colorado	0.729227	Kentucky	0.721058	Rhode Isla	0.717528	Rhode Isla	0.71358	Colorado	0.709848	Colorado	0.700226	Colorado	0.678106
New Ham	0.708136	Indiana	0.71711	New Ham	0.718654	Rhode Isla	0.728203	Rhode Isla	0.707455	Kentucky	0.71602	Connecticu	0.71358	West Virgi	0.70849	West Virgi	0.68051	Texas	0.666815
Rhode Isla	0.701069	Oklahoma	0.708668	Indiana	0.714021	Florida	0.723388	Connecticu	0.700412	Connecticu	0.694417	Oklahoma	0.694798	Oklahoma	0.70849	Texas	0.680515	South Dak	0.664376
Maryland	0.700927	South Dak	0.703997	Rhode Isla	0.704604	Indiana	0.710501	Florida	0.70071	Indiana	0.692753	Indiana	0.692817	West Virgi	0.678584	South Dak	0.674092	Mississipp	0.651852
Tennessee	0.696886	Rhode Isla	0.701618	Rhode Isla	0.695067	Indiana	0.705456	Indiana	0.686084	Indiana	0.688158	Florida	0.67826	Texas	0.67826	Florida	0.670697	North Car	0.639447
Iowa	0.694449	Maryland	0.697349	South Dak	0.692071	Maryland	0.700648	Maryland	0.684	Maryland	0.679684	South Car	0.671163	Mississipp	0.677394	North Car	0.663888	Maryland	0.639247
Texas	0.687501	Kansas	0.696907	Kansas	0.689519	Connecticu	0.69323	South Dak	0.680674	Texas	0.677461	Washingtc	0.667369	Washingtc	0.674061	Maryland	0.661686	Indiana	0.637684
Wyoming	0.685872	Texas	0.68928	Maryland	0.689095	South Dak	0.688579	Kansas	0.678409	Florida	0.671721	Tennessee	0.663995	Tennessee	0.670083	Indiana	0.64885	Florida	0.630502
Kansas	0.684668	Connecticu	0.684226	Connecticu	0.681255	Mississipp	0.686689	Mississipp	0.672043	Mississipp	0.670481	Minnesot	0.662512	Maryland	0.669694	Florida	0.647923	Nevada	0.628849
Oklahoma	0.679827	North Car	0.673301	Texas	0.684226	West Virgi	0.684403	Texas	0.671991	West Virgi	0.663208	Maryland	0.661629	Nevada	0.661414	Nevada	0.638266	Idaho	0.625913
Connecticu	0.676902	Oklahoma	0.668879	Delaware	0.66785	North Car	0.676832	North Car	0.662524	Kansas	0.662031	Kansas	0.660195	North Car	0.650607	Idaho	0.63072	Kansas	0.621575
Michigan	0.671908	Michigan	0.668562	Oklahoma	0.667565	Texas	0.67531	Delaware	0.661714	North Car	0.647872	New York	0.657326	Kansas	0.64727	Kansas	0.628211	Iowa	0.618076
North Car	0.668453	Delaware	0.667983	Texas	0.663891	Tennessee	0.664514	Nevada	0.660674	Nevada	0.64666	Nebraska	0.649389	Idaho	0.646441	Iowa	0.628086	Louisiana	0.613206
Arizona	0.665684	Wisconsin	0.661468	Michigan	0.663425	Michigan	0.658971	Georgia	0.653668	Delaware	0.644504	Iowa	0.63616	Tennessee	0.634687	Louisiana	0.622544	Oklahoma	0.611391
Delaware	0.657434	Arizona	0.657563	North Car	0.662248	Georgia	0.658901	Michigan	0.648813	Georgia	0.642506	Idaho	0.635802	Oklahoma	0.633871	Oklahoma	0.619298	Georgia	0.608732
Mississipp	0.652812	Wyoming	0.657209	Oklahoma	0.656313	Arizona	0.651012	Iowa	0.646784	Tennessee	0.640311	South Dak	0.633871	South Dak	0.625534	Georgia	0.617237	Minnesot	0.607432
Virginia	0.650674	West Virgi	0.646482	Wisconsin	0.653786	Iowa	0.649225	West Virgi	0.645109	Michigan	0.639422	Georgia	0.633676	Georgia	0.623898	Minnesot	0.616824	Tennessee	0.591536
West Virgi	0.646438	Georgia	0.642775	Wyoming	0.649415	Nevada	0.646961	Tennessee	0.642556	Oklahoma	0.63319	Ohio	0.627146	Minnesot	0.622604	Tennessee	0.61370	Wyoming	0.585502
Alaska	0.641464	Virginia	0.640081	Arizona	0.646482	West Virgi	0.642688	Oklahoma	0.640034	Pennsylva	0.629128	Idaho	0.625232	Tennessee	0.61370	Wyoming	0.608472	Missouri	0.579621
Georgia	0.640641	Alaska	0.637053	Georgia	0.646994	Wisconsin	0.638826	Wyoming	0.635358	Virginia	0.621729	Michigan	0.621699	Wyoming	0.608472	Missouri	0.59954	South Car	0.567895
Nevada	0.638307	Nevada	0.636271	Mississipp	0.644628	Arizona	0.638286	Arizona	0.629323	Louisiana	0.61862	Louisiana	0.618152	Louisiana	0.611382	South Car	0.596802	Michigan	0.566418
Utah	0.634724	Mississipp	0.630105	West Virgi	0.644628	Virginia	0.636496	Pennsylva	0.629323	Minnesot	0.621064	Oregon	0.615462	Michigan	0.60747	Michigan	0.587802	Alaska	0.565804
Ohio	0.632757	Massachu	0.628171	Massachu	0.634809	Pennsylva	0.627944	Minnesot	0.626893	Louisiana	0.62018	Delaware	0.612139	Virginia	0.60747	Alaska	0.583825	Massachu	0.564463
Nevada	0.622675	Ohio	0.623656	Virginia	0.633593	Louisiana	0.619605	Wisconsin	0.624281	Idaho	0.619136	Wisconsin	0.606728	Missouri	0.602092	Massachu	0.58232	Virginia	0.561194
South Car	0.621676	Pennsylva	0.616082	Pennsylva	0.630197	Minnesot	0.613855	Virginia	0.62371	Wyoming	0.618827	Arizona	0.605922	Delaware	0.592707	Virginia	0.580591	Arizona	0.560989
Idaho	0.620189	South Car	0.615705	Massachu	0.627223	Wyoming	0.613532	Virginia	0.612	Arizona	0.616502	Alaska	0.603833	Arizona	0.588246	Arizona	0.575109	Delaware	0.55357
Pennsylva	0.619744	Idaho	0.608065	Ohio	0.622817	Ohio	0.613351	Alaska	0.618444	Alaska	0.611122	Mississipp	0.599849	Mississipp	0.586378	Delaware	0.569031	New York	0.553503
Minnesot	0.609133	Minnesot	0.607178	Louisiana	0.618412	Ohio	0.610946	Ohio	0.610946	Wisconsin	0.60187	Massachu	0.594203	Massachu	0.575485	New York	0.566578	Pennsylva	0.551009
Louisiana	0.608711	Utah	0.607101	Idaho	0.607078	Massachu	0.608489	Massachu	0.606762	Missouri	0.587619	Rhode Isla	0.58861	Rhode Isla	0.572641	Pennsylva	0.56226	Wisconsin	0.547367
New Mexi	0.584847	Louisiana	0.582575	Minnesot	0.605525	Alaska	0.605152	Missouri	0.601337	Ohio	0.580811	North Dak	0.586503	North Dak	0.568127	Wisconsin	0.557881	Ohio	0.538534
New York	0.570444	New York	0.573556	Minnesot	0.604503	Missouri	0.582863	New York	0.601184	South Car	0.57525	West Virgi	0.578468	South Car	0.561095	Ohio	0.556581	Maine	0.53796
Missouri	0.561022	Missouri	0.568834	South Car	0.604476	New York	0.581096	South Car	0.581602	New Mexi	0.573101	New Mexi	0.577542	West Virgi	0.558851	Maine	0.552434	New Mexi	0.527591
California	0.560072	Maine	0.565	New York	0.596712	Missouri	0.578025	Utah	0.580959	Massachu	0.561875	Oregon	0.615462	New Mexi	0.554911	New Mexi	0.548869	New Jerse	0.527591
Washingtc	0.533416	Washingtc	0.552061	Missouri	0.57982	South Car	0.576499	Maine	0.57585	New York	0.556882	Maine	0.569186	Maine	0.554046	Utah	0.545521	Utah	0.522092
Arkansas	0.525272	California	0.549941	Maine	0.575889	Utah	0.564074	Illinois	0.56806	Utah	0.530678	Vermont	0.558962	Vermont	0.549537	Wisconsin	0.535786	Montana	0.5217
Illinois	0.49935	Illinois	0.530845	Washingtc	0.566904	Maine	0.534893	Arkansas	0.556655	Arkansas	0.528752	Texas	0.552864	Texas	0.538662	Montana	0.535786	Arkansas	0.521466
New Mexi	0.495071	Arkansas	0.525109	California	0.543531	Washingtc	0.533798	California	0.533617	California	0.525974	Arkansas	0.532641	Arkansas	0.538499	Arkansas	0.530954	California	0.516202
Montana	0.446242	New Mexi	0.498224	Illinois	0.540734	California	0.530047	Illinois	0.529359	New Mexi	0.52438	New Mexi	0.523778	New Mexi	0.524546	California	0.514029	Washingtc	0.501976
Hawaii	0.406319	Montana	0.477169	Arkansas	0.526804	Illinois	0.525102	Washingtc	0.528982	Illinois	0.504404	California	0.523523	Illinois	0.519584	Washingtc	0.513911	Illinois	0.492701
New Jerse		New Jerse	0.45097	New Mexi	0.526485	Arkansas	0.50608	New Mexi	0.525688	Washingtc	0.472582	Illinois	0.523398	Missouri	0.508573	Illinois	0.505193	New Jerse	0.439484
Maine		Hawaii	0.373253	New Jerse	0.497997	Washingtc	0.449338	Montana	0.471869	Montana	0.449257	Missouri	0.523205	Washingtc	0.508113	New Jerse	0.500633	New Ham	0.434917
Vermont				Hawaii	0.459872	New Jerse	0.449338	New Jerse	0.497415	New Jerse	0.449257	Virginia	0.489816	Virginia	0.508113	New Jerse	0.500633	Hawaii	0.152646
Wisconsin		Wisconsin		Wyoming	0.368318	Hawaii	0.368966	Idaho	0.458462	Hawaii	0.358243	New Ham	0.466219	New Ham	0.449665	New Ham	0.487094	Vermont	n/a
								Louisiana	0.367144	Louisiana		Hawaii	0.307939	Hawaii	0.309967	Hawaii	0.448379		
												Wyoming		Wyoming		Vermont	0.318852		
	0.645969		0.64209		0.6386		0.646961		0.631974		0.628801		0.624158		0.620147		0.607189		0.591266

	2017		2016		2015		2014		2013		2012		2011		2010		2009		2008
State	**40% all**	**State**	40% all	**State**	**40% all**	**State**	40% all	**State**	40% all	**State**	40% all	**State**	40% all	**State**	40% all	**State**	40% all	**State**	40% all
South Dak	0.054633	Vermont	0.051535	Connectic	0.052096	North Dak	0.05112	North Dak	0.045423	North Dak	0.040945	North Dak	0.04017	North Car	0.039455	North Dak	0.040941	North Dak	0.048282
Connectic	0.056669	South Dak	0.053974	North Dak	0.053334	Connectic	0.051987	South Dak	0.053725	South Dak	0.05365	South Dak	0.051967	Iowa	0.043666	South Dak	0.053486	South Dak	0.053459
North Dak	0.058624	North Dak	0.056878	South Dak	0.05645	South Dak	0.055403	Connectic	0.059091	Connectic	0.056819	Connectic	0.056014	South Car	0.051217	Connectic	0.054052	Connectic	0.054937
Colorado	0.060696	Wyoming	0.060996	Vermont	0.057218	Alaska	0.060479	Nebraska	0.063446	Nebraska	0.062038	Nebraska	0.059641	Connectic	0.053359	Alabama	0.061223	Alabama	0.059777
Wyoming	0.062315	Colorado	0.06393	Wyoming	0.064946	Vermont	0.062926	Vermont	0.066062	Alabama	0.065975	Alabama	0.063549	Montana	0.060486	Nebraska	0.066854	Nebraska	0.067188
Nebraska	0.062582	Nebraska	0.066847	Nebraska	0.066173	Nebraska	0.063616	Alabama	0.067899	Wyoming	0.070689	Vermont	0.068951	Alabama	0.061903	Kansas	0.07391	Kansas	0.072107
Alabama	0.072262	Alabama	0.071632	Colorado	0.066807	Kansas	0.067181	Kansas	0.06933	Vermont	0.071168	Wyoming	0.070976	Utah	0.070889	West Virgi	0.079698	Iowa	0.077225
Kansas	0.072583	Connectic	0.073108	Kansas	0.069726	Alabama	0.069956	Wyoming	0.070875	Colorado	0.072044	Kansas	0.073156	Kansas	0.071514	Vermont	0.080722	West Virgi	0.079043
West Virgi	0.074728	Kansas	0.074069	Alabama	0.07185	Colorado	0.070174	Colorado	0.071903	Kansas	0.072135	Colorado	0.073927	Wisconsin	0.077071	Iowa	0.083553	Wyoming	0.084731
Kentucky	0.082657	West Virgi	0.076729	West Virgi	0.080684	West Virgi	0.080278	New Ham	0.079728	New Ham	0.08007	West Virgi	0.082639	Nevada	0.078029	Wyoming	0.083911	Idaho	0.091778
Missouri	0.084533	Oklahoma	0.082559	Kentucky	0.082771	Kentucky	0.082177	West Virgi	0.082026	Iowa	0.083712	New Ham	0.083156	Colorado	0.080562	Colorado	0.091568	Oklahoma	0.097034
New Ham	0.090457	Kentucky	0.083106	New Ham	0.084449	New Ham	0.084692	Iowa	0.083772	West Virgi	0.086991	Kentucky	0.088836	Washingt	0.083832	Idaho	0.092811	Missouri	0.097892
Idaho	0.091345	Iowa	0.084466	Missouri	0.087643	Iowa	0.086021	Kentucky	0.084308	Kentucky	0.087291	Pennsylva	0.091706	Kentucky	0.091627	Kentucky	0.09524	Kentucky	0.098423
Alaska	0.091698	Missouri	0.085779	Alaska	0.088356	Missouri	0.089224	Pennsylva	0.089289	Pennsylva	0.089339	Missouri	0.093674	Mississipp	0.09332	Missouri	0.095895	Colorado	0.099845
Oklahoma	0.091851	New Ham	0.087916	Iowa	0.089017	Pennsylva	0.094853	Missouri	0.09109	Missouri	0.094271	Oklahoma	0.098563	Oregon	0.095876	Oklahoma	0.097782	Pennsylva	0.107571
Pennsylva	0.092696	Pennsylva	0.090111	Wisconsin	0.091587	Oklahoma	0.095316	Oklahoma	0.095148	Oklahoma	0.096522	Wisconsin	0.100094	Ohio	0.098244	Minnesota	0.10311	Oregon	0.107819
Indiana	0.093376	Alaska	0.09054	Oklahoma	0.094392	Wisconsin	0.095642	Wisconsin	0.097513	Wisconsin	0.099746	Minnesota	0.102609	Michigan	0.103021	Pennsylva	0.10452	Wisconsin	0.111983
Oregon	0.098411	Idaho	0.094792	Pennsylva	0.095321	Minnesota	0.100934	Minnesota	0.101434	Minnesota	0.102879	Maine	0.106348	West Virgi	0.105621	Oregon	0.105616	Montana	0.116564
Minnesota	0.100421	Indiana	0.098437	Idaho	0.098647	Idaho	0.101031	Oregon	0.105985	Oregon	0.107873	Oregon	0.107388	Oklahoma	0.107455	Maine	0.106144	Texas	0.121779
Virginia	0.101555	Oregon	0.099049	Minnesota	0.10077	Indiana	0.105511	Indiana	0.106484	Maine	0.108024	Idaho	0.112966	Idaho	0.107767	Wisconsin	0.109999	Mississipp	0.124587
Utah	0.102566	Minnesota	0.10066	Oregon	0.10152	Oregon	0.105722	Maine	0.107064	Indiana	0.109027	Alaska	0.113097	Maine	0.108099	Montana	0.110709	Maine	0.125101
Michigan	0.111022	Utah	0.106831	Indiana	0.104168	Maine	0.106971	Idaho	0.108335	Alaska	0.11109	Ohio	0.115368	Alaska	0.115028	Ohio	0.120091	Nevada	0.127568
Montana	0.113224	Virginia	0.10869	Maine	0.107757	Tennessee	0.107376	Alaska	0.110417	Ohio	0.113824	Rhode Isla	0.115511	North Dak	0.116983	Mississipp	0.121128	Ohio	0.12827
Tennessee	0.114944	Maine	0.108812	Michigan	0.108615	Virginia	0.110097	Michigan	0.112443	Michigan	0.113852	Michigan	0.119043	South Dak	0.123816	Arkansas	0.12489	Indiana	0.129432
Ohio	0.119636	Michigan	0.108992	Tennessee	0.111125	Michigan	0.110762	Tennessee	0.11267	Rhode Isla	0.117666	Indiana	0.120253	Arkansas	0.124173	Texas	0.125098	Alaska	0.131607
Maryland	0.120394	Tennessee	0.114806	Virginia	0.111458	Ohio	0.113118	Virginia	0.113595	Tennessee	0.119022	Tennessee	0.123165	Indiana	0.126035	Indiana	0.125107	Arkansas	0.131621
Rhode Isla	0.127211	Ohio	0.118238	Ohio	0.112518	Utah	0.123734	Ohio	0.115039	Virginia	0.12538	Arkansas	0.125187	Missouri	0.126581	Tennessee	0.127291	Tennessee	0.132375
Washingt	0.131287	Maryland	0.120383	Utah	0.113679	Rhode Isla	0.124988	Rhode Isla	0.11734	Montana	0.131024	Virginia	0.125435	Tennessee	0.127785	Alaska	0.127562	Washingt	0.139336
Arkansas	0.131481	Montana	0.122807	Montana	0.120165	Florida	0.126919	Montana	0.129999	Arkansas	0.131827	Texas	0.13124	Minnesota	0.128902	Rhode Isla	0.127705	Louisiana	0.142801
Illinois	0.132219	Rhode Isla	0.127719	Maryland	0.129525	Montana	0.127368	Washingt	0.132242	Washingt	0.132173	Washingt	0.132104	Pennsylva	0.132354	Virginia	0.129405	New Jerse	0.146295
Massachu	0.133954	Washingt	0.131343	Rhode Isla	0.131655	Maryland	0.131208	Maryland	0.132595	Maryland	0.133423	Mississipp	0.134743	Virginia	0.134728	Nevada	0.13195	Michigan	0.147599
Florida	0.135969	Arkansas	0.133954	Washingt	0.132355	Illinois	0.131946	Illinois	0.132727	Texas	0.135462	Louisiana	0.134806	Nebraska	0.134754	Washingt	0.135674	Arizona	0.14882
Mississipp	0.138921	Illinois	0.134385	Illinois	0.132921	Washingt	0.132682	Mississipp	0.133269	Utah	0.135464	Nevada	0.135986	Louisiana	0.137349	Michigan	0.137713	Rhode Isla	0.149031
North Car	0.140156	Florida	0.13533	Arkansas	0.135515	Arkansas	0.135635	Arkansas	0.133917	North Car	0.136001	Montana	0.136509	Maryland	0.140926	Louisiana	0.141232	Maryland	0.151006
Arizona	0.141901	Massachu	0.13823	Florida	0.136892	North Car	0.13738	North Car	0.135492	Illinois	0.137603	Maryland	0.136596	Texas	0.14192	Maryland	0.145547	Massachu	0.153003
Louisiana	0.146605	North Car	0.139755	North Car	0.138669	Texas	0.142593	Utah	0.135696	Mississipp	0.138183	North Car	0.138726	New York	0.144594	Arizona	0.145975	Utah	0.154854
New Jerse	0.147372	New Jerse	0.143611	Louisiana	0.139123	Louisiana	0.143106	Louisiana	0.139004	Nevada	0.138702	Utah	0.139587	Florida	0.146144	New Jerse	0.147558	North Car	0.155833
Delaware	0.149417	Nevada	0.146495	Massachu	0.140485	Massachu	0.143153	Texas	0.139341	Florida	0.141538	Illinois	0.144208	Arizona	0.147794	Utah	0.150621	Virginia	0.160719
Texas	0.149427	Louisiana	0.147089	Texas	0.145953	Mississipp	0.144167	Nevada	0.14211	Georgia	0.146061	Arizona	0.146807	Illinois	0.149282	Massachu	0.153027	Georgia	0.163654
Georgia	0.152	Arizona	0.147383	Nevada	0.14663	Nevada	0.144544	Florida	0.143645	Massachu	0.148518	Georgia	0.147399	Massachu	0.150016	Florida	0.155155	Florida	0.165448
Nevada	0.153405	Texas	0.147941	New Jerse	0.147249	Georgia	0.145225	Georgia	0.144974	Delaware	0.152778	Massachu	0.149134	Georgia	0.150353	North Car	0.155845	Delaware	0.174571
South Car	0.153863	Delaware	0.149605	Arizona	0.147564	Arizona	0.147507	Massachu	0.145796	Arizona	0.153585	Delaware	0.156235	New Ham	0.152171	Georgia	0.155911	Illinois	0.181677
New Mexi	0.181373	Georgia	0.150702	Georgia	0.149957	Delaware	0.151017	Arizona	0.150581	New Jerse	0.165514	New Jerse	0.161437	Delaware	0.161419	Delaware	0.168216	New Mexi	0.194502
Hawaii	0.189385	Mississipp	0.150944	Delaware	0.150973	New Jerse	0.160907	Delaware	0.155366	South Car	0.186212	Florida	0.163178	Vermont	0.185086	Illinois	0.170038	South Car	0.197481
New York	0.190446	South Car	0.158399	Mississipp	0.151035	South Car	0.178344	New Jerse	0.161158	Hawaii	0.194493	South Car	0.189743	Rhode Isla	0.193541	New Ham	0.191814	California	0.224628
California	0.198198	New Mexi	0.186204	South Car	0.16314	New Mexi	0.19643	South Car	0.184805	New Mexi	0.20598	New Mexi	0.206313	New Jerse	0.202686	South Car	0.199632	New York	0.235552
Maine	*	New York	0.195608	New Mexi	0.191933	New York	0.197963	Hawaii	0.193472	New York	0.213165	New York	0.220471	California	0.224003	New Mexi	0.201878	New Ham	0.269173
Iowa		Hawaii	0.20398	New York	0.198171	Hawaii	0.200873	New Mexi	0.206796	California	0.22189	California	0.221069	New Mexi	0.22889	California	0.226891	Hawaii	0.270861
Vermont		California	0.206988	Hawaii	0.202396	California	0.220112	New York	0.214684	Idaho		Hawaii	0.222837	Hawaii	0.30373	New York	0.229694	Minnesota	17.18483
Wisconsin		Wisconsin		California	0.215379	Wyoming		California	0.218832	Louisiana		Iowa		Wyoming		Hawaii	0.264998	Vermont	n/a
	0.115228		0.114946		0.115415		0.116538		0.117759		0.118576		0.121072		0.123144		0.126588		0.133434

2017 State	2017 sep all	2016 State	2016 sep all	2015 State	2015 sep all	2014 State	2014 sep all	2013 State	2013 sep all	2012 State	2012 sep all	2011 State	2011 sep all	2010 State	2010 sep all	2009 State	2009 sep all	2008 State	2008 sep all
Oklahoma	0.000537	West Virgi	0.00039	West Virgi	0.001638	West Virgi	0.001748	West Virgi	0.001461	West Virgi	0.001231	Washingto	0.001135	Oklahoma	0.001244	Oklahoma	0.003834	Oklahoma	0.003803
West Virgi	0.001875	Oklahoma	0.001711	Oklahoma	0.002796	Oklahoma	0.002749	Oklahoma	0.002888	Oklahoma	0.002922	Ohio	0.002874	Louisiana	0.003181	Louisiana	0.004058	Louisiana	0.003886
Louisiana	0.003606	Louisiana	0.003592	Louisiana	0.003415	Louisiana	0.003466	North Dak	0.00347	Louisiana	0.003937	Louisiana	0.003305	Texas	0.003406	Texas	0.004865	Texas	0.004938
New Mexi	0.004254	New Mexi	0.004585	New Mexi	0.004966	New Mexi	0.004675	Wyoming	0.004503	Wyoming	0.004208	Wyoming	0.004587	Wyoming	0.0041	Wyoming	0.004991	Wyoming	0.005563
South Car	0.004552	Texas	0.004614	Texas	0.005277	Wyoming	0.005177	Montana	0.004751	Montana	0.004948	Tennessee	0.004689	Tennessee	0.004879	New Mexi	0.005258	New Mexi	0.006233
Montana	0.005133	South Car	0.005658	Montana	0.005306	Montana	0.005191	New Mexi	0.00532	New Mexi	0.005071	North Dak	0.004813	North Dak	0.005241	North Dak	0.005528	Mississipp	0.006963
North Dak	0.005477	North Dak	0.005687	North Dak	0.005523	Washingto	0.005577	Texas	0.005378	Texas	0.00529	Virginia	0.004956	Virginia	0.0062	Tennessee	0.006072	South Car	0.00699
Kentucky	0.005477	Washingto	0.006132	Kentucky	0.005592	North Dak	0.005691	Washingto	0.005461	Washingto	0.005723	New Mexi	0.005249	Rhode Isla	0.007197	Mississipp	0.006562	North Dak	0.00752
Wyoming	0.005742	Wyoming	0.006225	South Car	0.005972	South Car	0.005747	Hawaii	0.005781	Hawaii	0.006709	Kentucky	0.005673	Kentucky	0.007393	South Car	0.006621	Montana	0.00752
Texas	0.006017	Montana	0.006332	Wyoming	0.006127	Hawaii	0.005862	South Car	0.005946	Mississipp	0.007109	West Virgi	0.006576	West Virgi	0.00775	Washingto	0.007444	Washingto	0.007626
Washingto	0.006155	Hawaii	0.006574	Washingto	0.006458	Kentucky	0.006141	Kentucky	0.006264	Kentucky	0.007179	Minnesot	0.007344	Minnesot	0.00819	Kentucky	0.007453	Wisconsin	0.008107
Hawaii	0.006272	South Dak	0.007583	Hawaii	0.006496	South Dak	0.008228	Tennessee	0.007264	South Car	0.008002	South Dak	0.007357	South Dak	0.008435	West Virgi	0.007661	Kentucky	0.008911
Arkansas	0.007199	Oregon	0.007681	South Dak	0.006496	Mississipp	0.008579	Mississipp	0.007839	Missouri	0.008276	Missouri	0.007485	Missouri	0.008673	Wisconsin	0.008469	Tennessee	0.009001
Indiana	0.007561	Indiana	0.008164	Tennessee	0.008416	Tennessee	0.008677	Wisconsin	0.00809	Wisconsin	0.008452	Idaho	0.007594	Idaho	0.008826	Montana	0.009028	Hawaii	0.009473
Tennessee	0.008021	Tennessee	0.008416	Mississipp	0.008662	Indiana	0.009242	Arkansas	0.0081	Tennessee	0.009016	Hawaii	0.008257	Hawaii	0.00895	Indiana	0.009748	Indiana	0.010726
South Dak	0.008312	Arkansas	0.008465	Idaho	0.008732	Oregon	0.009509	Oregon	0.008777	Oregon	0.01037	Indiana	0.009958	Indiana	0.010411	Indiana	0.010587	Arkansas	0.012435
Mississipp	0.008603	Mississipp	0.008557	Arkansas	0.008738	Arkansas	0.009609	Indiana	0.009494	Idaho	0.010809	Oklahoma	0.010049	Arkansas	0.011052	Arkansas	0.010648	North Car	0.012659
North Car	0.009014	South Dak	0.009337	Wisconsin	0.008876	Idaho	0.009742	North Car	0.009532	Indiana	0.011579	Arkansas	0.011091	Alabama	0.0119	North Car	0.011385	Georgia	0.012757
Iowa	0.009978	North Car	0.0102	Indiana	0.009255	Wisconsin	0.010366	South Dak	0.009913	Arkansas	0.011816	New York	0.011259	Oregon	0.012425	Georgia	0.012332	Idaho	0.012902
Oregon	0.010075	Iowa	0.010689	Oregon	0.009775	South Dak	0.010548	Nevada	0.010354	North Car	0.012037	Alabama	0.012072	North Car	0.012528	Idaho	0.012374	Oregon	0.013268
Idaho	0.01121	Wisconsin	0.012265	Iowa	0.010012	Nevada	0.011109	Alabama	0.011618	South Dak	0.012894	Nebraska	0.012435	Alaska	0.013373	Oregon	0.013403	Alabama	0.013552
Nevada	0.011482	Idaho	0.012803	North Car	0.010638	North Car	0.011898	Iowa	0.011951	Alabama	0.013271	Iowa	0.012625	Nevada	0.014135	Alabama	0.013643	Nevada	0.014588
Georgia	0.011791	Nevada	0.013435	Nevada	0.012571	Iowa	0.01355	Missouri	0.012807	Nevada	0.015157	Idaho	0.012934	Iowa	0.015895	Nevada	0.014887	South Dak	0.016124
Alabama	0.013048	Alabama	0.014438	Alabama	0.012571	Alabama	0.015635	Georgia	0.012934	Georgia	0.015279	South Car	0.015877	South Dak	0.015906	South Dak	0.015441	Alaska	0.016984
Colorado	0.013407	Georgia	0.016434	Georgia	0.013145	Georgia	0.016668	Nebraska	0.013933	New Ham	0.015714	New Ham	0.016089	Georgia	0.01639	Alaska	0.016042	New Ham	0.020539
Nebraska	0.018227	Nebraska	0.016676	Nebraska	0.015154	Nebraska	0.017315	Arizona	0.014486	Alaska	0.015714	Nevada	0.016089	Nevada	0.01639	New Ham	0.016151	Colorado	0.020575
Kansas	0.019141	Colorado	0.018239	Arizona	0.01636	Arizona	0.018273	Kansas	0.015862	Kansas	0.018029	Kansas	0.018252	Kansas	0.018589	Colorado	0.018326	Kansas	0.020883
Arizona	0.019465	Kansas	0.018538	Colorado	0.017667	Kansas	0.01861	New Ham	0.015962	New Ham	0.018811	Alaska	0.018583	Alaska	0.019318	Kansas	0.018581	Nebraska	0.02356
Alaska	0.019769	Arizona	0.023226	Kansas	0.01778	Colorado	0.021251	Alaska	0.018639	Colorado	0.020072	Colorado	0.021032	Colorado	0.019503	Nebraska	0.020942	Virginia	0.023856
New Ham	0.020278	New Ham	0.02388	New Ham	0.018038	Alaska	0.021765	Colorado	0.018844	Arizona	0.021796	Arizona	0.02449	Virginia	0.023294	Virginia	0.023038	Arizona	0.024629
Florida	0.02345	Utah	0.023948	Alaska	0.021907	New Ham	0.022951	Utah	0.019675	Virginia	0.026075	Montana	0.025505	Nebraska	0.02395	Arizona	0.023115	Florida	0.026152
Utah	0.023802	Maine	0.02549	Utah	0.022367	Utah	0.02532	Maine	0.019893	Maine	0.026443	Vermont	0.026976	Arizona	0.025252	Florida	0.023591	Maine	0.027447
Ohio	0.024406	Florida	0.028269	Maine	0.022611	Maine	0.029221	Virginia	0.023228	Utah	0.026676	Maine	0.027478	Maine	0.026198	Maine	0.025481	Utah	0.028192
California	0.02892	Virginia	0.029089	Florida	0.025294	Virginia	0.029828	Florida	0.026178	Florida	0.028899	Florida	0.027641	Florida	0.026393	Utah	0.026429	Iowa	0.03118
Missouri	0.029874	Missouri	0.030693	Virginia	0.029191	Missouri	0.030309	Missouri	0.029062	Missouri	0.029181	Texas	0.029232	Utah	0.027477	Iowa	0.027055	Ohio	0.031365
Virginia	0.030325	Ohio	0.031381	Missouri	0.030484	Florida	0.031293	Ohio	0.02982	Ohio	0.032199	Mississipp	0.03291	Missouri	0.029279	Ohio	0.030491	Missouri	0.032107
Minnesot	0.032828	California	0.031767	Ohio	0.030517	Ohio	0.032318	California	0.029942	California	0.036026	North Dak	0.036564	Ohio	0.034312	Missouri	0.033867	Minnesot	0.037821
Pennsylva	0.038476	Virginia	0.037743	California	0.030547	California	0.039413	Minnesot	0.033876	Pennsylva	0.037725	California	0.03843	Pennsylva	0.036971	Minnesot	0.038308	Pennsylva	0.037832
Delaware	0.04317	Minnesot	0.043255	Minnesot	0.038105	Minnesot	0.04284	Pennsylva	0.034446	Minnesot	0.04221	Oregon	0.039336	Minnesot	0.037605	Pennsylva	0.038817	California	0.039136
Rhode Isla	0.043197	Pennsylva	0.044521	Pennsylva	0.043302	Pennsylva	0.043687	Vermont	0.039101	Vermont	0.044345	Michigan	0.047926	California	0.038776	California	0.039179	Rhode Isla	0.040988
Michigan	0.043683	Delaware	0.04631	Rhode Isla	0.043608	Vermont	0.045533	Michigan	0.041993	Michigan	0.049486	Pennsylva	0.051257	Michigan	0.038776	Rhode Isla	0.041829	Michigan	0.045274
New York	0.045109	Vermont	0.047408	Vermont	0.047408	Delaware	0.046282	Rhode Isla	0.04603	Rhode Isla	0.053817	Rhode Isla	0.051735	Rhode Isla	0.043239	Michigan	0.045458	Delaware	0.049386
Illinois	0.048613	Rhode Isla	0.047569	Michigan	0.047407	Michigan	0.046864	Delaware	0.047432	Illinois	0.054811	Utah	0.054466	Vermont	0.048875	Vermont	0.049061	Illinois	0.051518
Massachu	0.059889	New York	0.048569	Delaware	0.047868	New York	0.053616	New York	0.047918	Delaware	0.055615	Delaware	0.054735	Delaware	0.052715	Delaware	0.051204	New York	0.052261
Maryland	0.060107	Illinois	0.053744	New York	0.048296	Rhode Isla	0.05698	Illinois	0.05124	New York	0.05599	Illinois	0.055361	Illinois	0.052973	Illinois	0.052776	Connecti	0.053247
New Jerse	0.064221	Massachu	0.054959	Illinois	0.049773	Illinois	0.060483	Connecti	0.054352	Connecti	0.057046	New York	0.057009	New Mexi	0.053827	New York	0.053429	Massachu	0.057636
Connecti	0.066023	Maryland	0.056497	Massachu	0.055623	Massachu	0.065439	Massachu	0.05677	Massachu	0.060512	Massachu	0.060029	Massachu	0.057615	Connecti	0.055452	New Jerse	0.069908
Maine	0.072836	New Jerse	0.0611	Maryland	0.060246	Connecti	0.059951	Maryland	0.059951	Maryland	0.065311	Connecti	0.065694	Connecti	0.057675	Massachu	0.058321	Maryland	0.070402
*		Connecti	0.065016	New Jerse	0.069505	Maryland	0.070512	New Jerse	0.059973	New Jerse	0.068529	Maryland	0.065528	Maryland	0.06649	Maryland	0.068906	Vermont	
Arkansas		Maine	0.067221	Connecti	0.07519	New Jerse	0.074666	Idaho	0.065625	Georgia		New Jerse	0.069528	New Carc	n/a	Vermont	0.069816	West Virginia	
Wisconsin		Connecti	0.133954	Wyoming		New Jerse		Louisiana	0.070959	Iowa		Georgia	0.24816	North Carc	n/a	West Virgi	n/a	West Virginia	
	0.02245		0.025513		0.023081		0.02349		0.023043		0.023908	Wyoming	0.028339	Wyoming	0.023267		0.023927		0.023925

2017		2016		2015		2014		2013		2012		2011		2010		2009		2008	
State	80% aut	State	80% aut	State	80% aut	State	80% aut	State	80% aut	State	80% aut	State	80% aut	State	80% aut	State	80% aut	State	80% aut
Iowa	0.699545	Iowa	0.664122	Iowa	0.659938	Iowa	0.651235	Iowa	0.651306	Iowa	0.644917	Iowa	0.609023	Iowa	0.640762	Iowa	0.619118	Iowa	0.621037
Nebraska	0.628341	Nebraska	0.616396	Alaska	0.607319	Nebraska	0.635445	Nebraska	0.618056	Nebraska	0.623028	Montana	0.579674	Nebraska	0.608998	Nebraska	0.601993	Nebraska	0.596974
Alabama	0.603904	Alabama	0.603351	Nebraska	0.602448	Alabama	0.624955	Alabama	0.605113	Alabama	0.595727	Alabama	0.567485	North Dak	0.572373	North Dak	0.545455	North Dak	0.549683
Vermont	0.550126	Vermont	0.567839	Nebraska	0.567568	North Dak	0.611815	North Dak	0.575758	North Dak	0.5811	Nevada	0.548146	Alabama	0.561104	Minnesota	0.532599	Minnesota	0.506947
Indiana	0.544679	Wisconsin	0.542399	Vermont	0.545184	Vermont	0.55776	Vermont	0.561105	Colorado	0.543017	Indiana	0.537675	Indiana	0.540332	Alabama	0.527512	Alabama	0.50169
North Dak	0.526837	North Dak	0.540361	Indiana	0.543541	Indiana	0.542013	Colorado	0.541345	Indiana	0.536962	Colorado	0.536875	Minnesota	0.539642	Oregon	0.513019	Oregon	0.500837
Oklahoma	0.521111	Indiana	0.528232	North Dak	0.534229	Wisconsin	0.539894	Indiana	0.535244	Minnesota	0.536929	Colorado	0.529343	Rhode Isla	0.539181	Indiana	0.511671	Indiana	0.493092
New Hamp	0.500373	Colorado	0.519968	New Hamp	0.524207	Colorado	0.534993	Minnesota	0.526439	New Hamp	0.529381	North Car	0.52202	Colorado	0.538983	Colorado	0.509592	Colorado	0.490894
Colorado	0.499462	New Hamp	0.519912	Colorado	0.504787	Minnesota	0.531073	New Hamp	0.526359	Wisconsin	0.519859	Michigan	0.516554	Connecticu	0.533267	Connecticu	0.505569	Connecticu	0.480561
Oregon	0.496475	Minnesota	0.503691	Wisconsin	0.503635	Oregon	0.513115	Colorado	0.525823	Rhode Isla	0.51721	Connecticu	0.507876	Vermont	0.519588	Rhode Isla	0.50289	Rhode Isla	0.471741
Minnesota	0.493623	Oregon	0.499881	Connecticu	0.501174	Connecticu	0.513053	Wisconsin	0.507107	Oregon	0.509255	Pennsylva	0.502744	Oregon	0.505604	Idaho	0.49803	Idaho	0.464808
Wyoming	0.486425	Wyoming	0.496544	Oregon	0.4889	Minnesota	0.513053	Connecticu	0.506851	Idaho	0.494505	Idaho	0.495953	Idaho	0.501326	Wisconsin	0.470163	Wisconsin	0.433269
Connecticu	0.483905	Connecticu	0.486655	Minnesota	0.47291	Rhode Isla	0.499274	Oregon	0.503003	Michigan	0.464689	Oklahoma	0.487425	Wisconsin	0.498845	Michigan	0.449727	Michigan	0.422135
South Dak	0.474213	Idaho	0.486123	Rhode Isla	0.466683	Idaho	0.496413	Rhode Isla	0.4581	Kansas	0.459776	West Virgi	0.451008	Michigan	0.465129	Nevada	0.438254	Nevada	0.418376
Idaho	0.45971	South Dak	0.466859	Idaho	0.452281	Michigan	0.480299	Wyoming	0.472185	Wyoming	0.439332	Wisconsin	0.433888	Maine	0.441441	Texas	0.432141	Texas	0.409536
Tennessee	0.457766	Texas	0.458977	Tennessee	0.450048	Wyoming	0.468705	Michigan	0.445893	Texas	0.438189	Maine	0.433384	Wyoming	0.430611	Maine	0.41875	Maine	0.407489
Texas	0.455908	Tennessee	0.456065	Kansas	0.449058	Kansas	0.460842	Kansas	0.445645	Ohio	0.434928	Kansas	0.431139	Texas	0.428524	Tennessee	0.41695	Tennessee	0.403338
Kentucky	0.442954	Oklahoma	0.451022	Texas	0.448616	Tennessee	0.455367	Texas	0.441308	Pennsylva	0.434598	Nebraska	0.428738	Tennessee	0.42325	Ohio	0.40994	Ohio	0.403259
Michigan	0.441425	Rhode Isla	0.447966	Michigan	0.448398	Texas	0.448707	Pennsylva	0.439211	Pennsylva	0.434598	South Dak	0.426811	South Dak	0.42325	West Virgi	0.408825	West Virgi	0.392271
Rhode Isla	0.439688	Kansas	0.447966	Oklahoma	0.448398	Pennsylva	0.447858	Tennessee	0.436424	Nevada	0.426765	Minnesota	0.424304	Nevada	0.418807	Oklahoma	0.402803	Oklahoma	0.386636
Kansas	0.429597	Michigan	0.445057	Kentucky	0.439405	Oklahoma	0.44049	Nevada	0.436316	Maine	0.42638	North Dak	0.421164	North Dak	0.415384	Maryland	0.39664	Maryland	0.378303
Pennsylva	0.426087	Michigan	0.435858	Pennsylva	0.433731	Kentucky	0.44049	Maine	0.430802	Maryland	0.420387	Oregon	0.417575	Maryland	0.414177	Kentucky	0.393136	Kentucky	0.376628
Alaska	0.422101	Pennsylva	0.435693	Nevada	0.42773	Mississipp	0.433797	Maryland	0.429314	Kentucky	0.419116	Mississipp	0.403839	Mississipp	0.408916	Kansas	0.3914	Kansas	0.371079
Maryland	0.418222	Nevada	0.434717	Maryland	0.422639	Maryland	0.425099	Kentucky	0.427243	Virginia	0.418103	Virginia	0.398818	Pennsylva	0.402627	Pennsylva	0.388822	Pennsylva	0.367875
Nevada	0.41331	Maine	0.41728	Maine	0.420287	Nevada	0.424548	Ohio	0.418702	Maine	0.417801	Kentucky	0.397081	Oklahoma	0.400943	Georgia	0.385958	Georgia	0.364811
Maine	0.406178	Maryland	0.416431	Maryland	0.420287	Maine	0.417649	Nevada	0.411991	Oklahoma	0.416518	Ohio	0.394861	Kentucky	0.391994	Virginia	0.38183	Virginia	0.36004
Mississipp	0.405474	Mississipp	0.411994	Mississipp	0.412885	Mississipp	0.415309	Oklahoma	0.407659	Georgia	0.407207	Georgia	0.393109	Georgia	0.38358	Wyoming	0.381575	Wyoming	0.359036
Virginia	0.398086	Alaska	0.411994	Florida	0.410108	Virginia	0.413245	Georgia	0.407455	Virginia	0.39979	New York	0.389247	West Virgi	0.372219	North Car	0.373198	North Car	0.345957
Massachu	0.397612	Virginia	0.407491	Montana	0.401711	Florida	0.413245	Virginia	0.400985	North Car	0.399151	North Car	0.37003	Virginia	0.357028	Virginia	0.368421	Virginia	0.340136
North Car	0.397332	Massachu	0.407491	Massachu	0.390161	Georgia	0.403685	North Car	0.396054	Massachu	0.39979	Massachu	0.366458	South Car	0.356808	Massachu	0.359016	Massachu	0.334519
Utah	0.396636	North Car	0.400267	North Car	0.387701	Montana	0.402375	Massachu	0.390508	Montana	0.37945	Montana	0.361404	New Mexi	0.354801	Missouri	0.357388	Missouri	0.332975
Arizona	0.392334	Virginia	0.397242	Virginia	0.376551	Nevada	0.401287	Montana	0.387833	West Virgi	0.375267	West Virgi	0.353987	New Hamp	0.345773	Arkansas	0.357143	Arkansas	0.325615
Georgia	0.381464	Ohio	0.392088	Virginia	0.361481	Virginia	0.400772	Arizona	0.375173	Arizona	0.362889	Washingto	0.353921	North Car	0.344432	South Dak	0.353611	South Dak	0.324698
Montana	0.371708	Georgia	0.390578	Ohio	0.355202	Massachu	0.397763	Missouri	0.360051	Missouri	0.35214	Vermont	0.346424	Missouri	0.341931	Arizona	0.352837	Arizona	0.32363
Ohio	0.36735	Arizona	0.389194	Georgia	0.349226	Montana	0.395243	South Dak	0.356603	Alaska	0.345946	Arizona	0.335398	Arizona	0.338134	California	0.336654	California	0.321881
Florida	0.364644	Montana	0.38175	Arizona	0.349092	Arizona	0.38345	Alaska	0.355314	Washingto	0.344407	California	0.333915	Massachu	0.326939	Mississipp	0.334627	Mississipp	0.320571
South Car	0.348178	Utah	0.365857	South Dak	0.331409	South Dak	0.379986	Washingto	0.341483	Utah	0.343461	Texas	0.327476	California	0.326087	Utah	0.328307	Utah	0.319708
Washingto	0.347551	Florida	0.355369	Washingto	0.33114	Florida	0.350771	Utah	0.335654	Florida	0.342199	Missouri	0.327304	Arkansas	0.323351	New Mexi	0.325214	New Mexi	0.318565
Missouri	0.340089	South Car	0.34716	South Car	0.315132	Missouri	0.340246	Florida	0.335616	Illinois	0.338983	Arkansas	0.324232	Utah	0.323213	Illinois	0.315872	Illinois	0.307647
West Virgi	0.328155	Missouri	0.344368	California	0.307871	Washingto	0.338824	West Virgi	0.328685	West Virgi	0.336601	Illinois	0.308133	Montana	0.321963	Washingto	0.315011	Washingto	0.293883
California	0.318422	Washingto	0.333114	West Virgi	0.306834	South Car	0.334062	Arkansas	0.325135	Florida	0.333643	Florida	0.307416	Illinois	0.318182	New Ham	0.314875	New Ham	0.287356
Arkansas	0.31101	California	0.321264	Arkansas	0.301254	California	0.334062	Florida	0.32427	California	0.333151	Alaska	0.304511	Washingto	0.313406	Alaska	0.302466	Alaska	0.253913
Delaware	0.306708	West Virgi	0.31787	Illinois	0.272662	Alaska	0.319217	Illinois	0.319804	New Mexi	0.328277	Hawaii	0.274492	Virginia	0.291723	Florida	0.284026	Florida	0.25391
Louisiana	0.306708	Arkansas	0.305355	Delaware	0.259395	West Virgi	0.313183	New Mexi	0.316017	Hawaii	0.305254	Rhode Isla	0.274417	Alaska	0.25716	New York	0.271605	New York	0.247963
New Mexi	0.303181	Illinois	0.304163	Utah	0.24967	Arkansas	0.312935	Hawaii	0.300366	South Car	0.297701	Hawaii	0.265976	New York	0.256579	New Jerse	0.247341	New Jerse	0.226652
Illinois	0.300885	Delaware	0.29591	New Mexi		Illinois	0.312525	South Car	0.294976	New Mexi	0.291273	New York	0.256566	South Car	0.251861	Louisiana	0.232414	Louisiana	0.222581
New York	0.26597	Louisiana	0.276119	Louisiana		South Car	0.305154	New Mexi	0.292435	Delaware	0.279686	South Car	0.248152	New Mexi	0.247325	South Car	0.228786	South Car	0.221669
Hawaii	0.22471	New Mexi	0.255142	Hawaii		Delaware	0.288778	Delaware	0.290428	New York	0.253038	Delaware	0.237239	New Jerse	0.245234	Delaware	0.226716	Delaware	0.217213
		Hawaii	0.235157	New York		New Mexi	0.280848	New York	0.256833	New Jerse	0.238746	New Jerse		Louisiana	0.233173	Hawaii	0.223774	Hawaii	0.145194
New Jerse		New York		New Jerse		Hawaii	0.253789	Louisiana	0.236581	Iowa		New Ham		Hawaii		Vermont	0.166027	Vermont	n/a
Wisconsin		New Jerse		New Mexico		Louisiana	0.228642	New Jerse		Tennessee		Wyoming		Wyoming					
Maine	*	North Dakota		Wyoming		New Jerse						Tennessee							
		Wisconsin																	
	0.425305		0.426013		0.425486		0.428895		0.420251		0.420292		0.405546		0.404004		0.388193		0.371808

State	2017 40% aut	State	2016 40% aut	State	2015 40% aut	State	2014 40% aut	State	2013 40% aut	State	2012 40% aut	State	2011 40% aut	State	2010 40% aut	State	2009 40% aut	State	2008 40% aut
Iowa	0.081942	Iowa	0.083969	Iowa	0.088509	Iowa	0.089506	Iowa	0.084485	Iowa	0.081942	Iowa	0.024347	Iowa	0.045455	Iowa	0.085294	Iowa	0.079251
Connecticut	0.151235	Vermont	0.117588	Connecticut	0.113131	Connecticut	0.122093	Connecticut	0.125487	Connecticut	0.118794	Connecticut	0.113326	Connecticut	0.116086	Connecticut	0.120724	Connecticut	0.123644
Nebraska	0.157572	Connecticut	0.138834	Vermont	0.143975	Vermont	0.129803	North Dak	0.144527	North Dak	0.143865	North Dak	0.134969	North Dak	0.162712	North Dak	0.176364	North Dak	0.167019
South Dak	0.161314	North Dak	0.168091	North Dak	0.162716	North Dak	0.163361	Vermont	0.162055	Vermont	0.157542	Montana	0.156103	Nebraska	0.166577	Nebraska	0.184056	Nebraska	0.177442
North Dak	0.168492	Nebraska	0.172836	Nebraska	0.170129	Nebraska	0.165775	Nebraska	0.167824	Nebraska	0.167591	Vermont	0.166353	Minnesota	0.168798	Minnesota	0.184613	Minnesota	0.190545
Colorado	0.174656	Wisconsin	0.175115	Minnesota	0.182657	Minnesota	0.1875	Minnesota	0.186936	Minnesota	0.187144	Minnesota	0.184483	South Dak	0.181881	South Dak	0.211475	South Dak	0.214162
Wyoming	0.193439	Wyoming	0.180824	Wyoming	0.183099	Alaska	0.18246	Wisconsin	0.195599	Wisconsin	0.19344	Colorado	0.202109	Vermont	0.184664	Wisconsin	0.216763	Wisconsin	0.246648
Minnesota	0.199693	Colorado	0.181718	Colorado	0.188203	Wisconsin	0.183099	Colorado	0.196429	Colorado	0.19599	South Dak	0.206171	Colorado	0.20848	Colorado	0.229819	Colorado	0.261589
Idaho	0.224715	Minnesota	0.193719	Wisconsin	0.190686	New Hamp	0.18917	Wisconsin	0.199917	Wyoming	0.199153	West Virgi	0.211332	West Virgi	0.213471	Michigan	0.233638	Michigan	0.264231
New Hamp	0.226322	South Dak	0.224784	Colorado	0.193986	Colorado	0.192039	Wyoming	0.199917	Rhode Isla	0.199688	Nevada	0.21899	Colorado	0.213483	Kansas	0.242414	Kansas	0.274854
Missouri	0.228429	Missouri	0.22912	New Hamp	0.220076	South Dak	0.207004	South Dak	0.216285	Alabama	0.221643	Wisconsin	0.228384	Wyoming	0.214414	Indiana	0.25	Indiana	0.275892
Alabama	0.235011	Alabama	0.234577	South Dak	0.229325	Alabama	0.226107	Alabama	0.225676	New Hamp	0.225025	Pennsylva	0.232531	Kansas	0.22665	Alabama	0.256183	Alabama	0.2762
Pennsylva	0.25442	Idaho	0.23544	Missouri	0.23198	Rhode Isla	0.228767	Alabama	0.229229	Pennsylva	0.227608	Alabama	0.244944	Idaho	0.240402	Idaho	0.257987	Idaho	0.277352
Kansas	0.255903	Alabama	0.236043	Idaho	0.232198	Pennsylva	0.236818	Pennsylva	0.231891	Pennsylva	0.231891	Maine	0.245985	Alabama	0.242749	Missouri	0.259635	Missouri	0.278762
Indiana	0.256293	New Hamp	0.243714	Kansas	0.232925	Wyoming	0.23758	Rhode Isla	0.233377	Michigan	0.232339	Oregon	0.248314	Maine	0.250431	Wyoming	0.259677	Wyoming	0.279518
Montana	0.256488	Kansas	0.251674	Missouri	0.240633	Kansas	0.23966	Michigan	0.24336	Maine	0.251372	Kansas	0.250594	Oregon	0.25729	Maine	0.26091	Maine	0.2913
Oklahoma	0.258696	Ohio	0.256728	Ohio	0.246397	Missouri	0.242633	Missouri	0.245143	Kansas	0.252682	Mississipp	0.255257	Kansas	0.260661	Pennsylva	0.265828	Pennsylva	0.295214
Alaska	0.260656	Maine	0.258868	Rhode Isla	0.247646	Michigan	0.248426	Maine	0.258881	Missouri	0.255486	North Dak	0.261089	North Dak	0.261747	Ohio	0.269517	Ohio	0.296644
Virginia	0.273251	Alaska	0.259259	Maine	0.252848	Maine	0.253709	Kansas	0.260184	Maine	0.25801	Idaho	0.269633	Idaho	0.266435	Oregon	0.269732	Oregon	0.299954
Ohio	0.274691	Montana	0.262918	Idaho	0.261806	Indiana	0.25674	Indiana	0.260791	Ohio	0.258617	Indiana	0.274988	Pennsylva	0.27309	Maryland	0.272636	Maryland	0.303616
Rhode Isla	0.275538	Indiana	0.265312	Indiana	0.263704	Montana	0.261196	Ohio	0.262357	Indiana	0.262929	Maryland	0.280181	Oregon	0.278778	Rhode Isla	0.284797	Rhode Isla	0.306707
Maryland	0.275979	Michigan	0.269096	Indiana	0.264849	Ohio	0.261987	Maryland	0.269153	Maryland	0.27347	Oklahoma	0.29089	Maryland	0.293462	New Jersey	0.287079	New Jersey	0.309339
Kentucky	0.276378	Maryland	0.271273	Maryland	0.265079	Idaho	0.274463	Oregon	0.271028	Idaho	0.27347	Massachu	0.295567	Massachu	0.31172	Massachu	0.3191	Massachu	0.313556
Oregon	0.281192	Kentucky	0.271402	Kentucky	0.275409	Kentucky	0.274707	Montana	0.281081	Oregon	0.295005	Montana	0.306342	New Jerse	0.317716	Kentucky	0.325234	Kentucky	0.33864
Michigan	0.298301	Michigan	0.278709	Kentucky	0.275927	Kentucky	0.277907	Kentucky	0.282363	Montana	0.296375	Kentucky	0.310036	Kentucky	0.322102	Illinois	0.326874	Illinois	0.351883
Massachu	0.304962	Virginia	0.280201	Virginia	0.277877	Virginia	0.286716	Massachu	0.294578	Massachu	0.298079	New Hamp	0.316836	Montana	0.328139	West Virgi	0.32981	West Virgi	0.361353
Utah	0.307146	Oregon	0.289655	Massachu	0.286394	Oregon	0.301416	Illinois	0.296509	Kentucky	0.302796	Ohio	0.329006	New Hamp	0.328139	Virginia	0.331879	Virginia	0.363073
Tennessee	0.311157	Rhode Isla	0.298564	Oklahoma	0.289209	Illinois	0.303765	Virginia	0.298736	Illinois	0.305523	South Dak	0.33316	Illinois	0.342995	Nevada	0.351457	Nevada	0.367521
Illinois	0.315456	Massachu	0.310259	Illinois	0.289562	Oklahoma	0.306639	Oklahoma	0.301271	Virginia	0.312954	Missouri	0.341701	Virginia	0.350431	Tennessee	0.352572	Montana	0.369615
West Virgi	0.32715	Oklahoma	0.316496	Tennessee	0.304883	Illinois	0.317241	Utah	0.302558	New Jersey	0.316287	Nebraska	0.349917	Tennessee	0.356884	Montana	0.358191	Oklahoma	0.370046
New Jersey	0.351456	Illinois	0.321612	Utah	0.307966	Massachu	0.317241	Tennessee	0.327278	Oklahoma	0.338397	Tennessee	0.352604	Oklahoma	0.358366	Oklahoma	0.358191	Tennessee	0.370952
Hawaii	0.35175	Tennessee	0.322403	West Virgi	0.31898	New Jersey	0.344847	New Jersey	0.334213	Tennessee	0.340426	New Jersey	0.357193	New Hamp	0.370514	New Hamp	0.362915	Tennessee	0.376865
Mississipp	0.358951	New Jerse	0.325977	New Jerse	0.328266	Utah	0.347047	Hawaii	0.348706	Utah	0.341202	Texas	0.357193	West Virgi	0.374075	West Virgi	0.369805	Arkansas	0.407622
Washington	0.360767	West Virgi	0.337708	West Virgi	0.337708	West Virgi	0.359935	Texas	0.34913	West Virgi	0.356964	West Virgi	0.360209	Nevada	0.376469	Nevada	0.374032	Washington	0.408241
Texas	0.376086	Utah	0.364045	Nevada	0.339073	Mississipp	0.362253	Alaska	0.360853	Nevada	0.360734	Georgia	0.36326	Texas	0.38211	Arkansas	0.374228	Georgia	0.414771
Arizona	0.389136	Texas	0.366523	Hawaii	0.364999	Texas	0.36097	Mississipp	0.362253	Texas	0.366486	Minnesota	0.377127	Georgia	0.383854	Washington	0.38628	Utah	0.422628
Arkansas	0.394771	Nevada	0.367877	Texas	0.367844	Georgia	0.362627	Nevada	0.36097	Mississipp	0.368685	Washington	0.377127	Georgia	0.383854	Georgia	0.394444	California	0.424521
Georgia	0.399027	Hawaii	0.371777	Georgia	0.37102	Hawaii	0.374255	Georgia	0.371834	Hawaii	0.368848	Vermont	0.383054	Vermont	0.38463	Utah	0.396321	New York	0.43024
Nevada	0.401815	Georgia	0.381528	Washington	0.373277	Alaska	0.380871	Washington	0.372771	Mississipp	0.369448	Virginia	0.384254	Utah	0.390122	California	0.399394	Delaware	0.43306
North Carr	0.405421	Mississipp	0.390214	North Carr	0.381295	Washington	0.386675	West Virgi	0.373506	Washington	0.375148	Arkansas	0.384732	Washington	0.403536	New York	0.401323	New Hamp	0.437603
California	0.409194	Washington	0.39369	Nevada	0.38143	North Carr	0.391295	Arkansas	0.377706	Arkansas	0.375163	New York	0.39215	Mississipp	0.413269	Delaware	0.415547	Hawaii	0.437628
Delaware	0.426219	Nevada	0.391682	Arizona	0.385143	Nevada	0.388339	Arizona	0.391723	Arkansas	0.390591	California	0.394737	Hawaii	0.421139	Arizona	0.420693	New Mexi	0.443038
South Carr	0.437165	Arkansas	0.39763	Georgia	0.387627	Arizona	0.391212	Delaware	0.394034	Alaska	0.393523	Delaware	0.402157	California	0.422117	Hawaii	0.420693	North Carr	0.447448
New York	0.440944	Arizona	0.400778	Arizona	0.394544	North Carr	0.395902	North Carr	0.394963	Delaware	0.395455	Alaska	0.403379	California	0.428765	New Mexi	0.433685	Arizona	0.451865
Florida	0.465103	Delaware	0.409659	Delaware	0.395397	Arizona	0.410298	Arizona	0.401066	California	0.413705	New Mexi	0.414704	North Carr	0.433942	North Carr	0.433824	Mississipp	0.465465
Louisiana	0.474818	Georgia	0.391369	California	0.398629	Delaware	0.417081	California	0.411172	Arizona	0.419618	Arizona	0.420391	New Mexi	0.434109	Arizona	0.438144	Alaska	0.486957
		California	0.430104	New York	0.415701	California	0.439608	New York	0.411289	New York	0.425427	New Jerse	0.428234	New York	0.477273	New York	0.439487	Louisiana	0.533468
New Mexi		North Carr	0.431014	South Carr	0.429558	Florida	0.464886	Florida	0.452012	Florida	0.459808	Louisiana	0.471302	Louisiana	0.487561	Alaska	0.440302	Florida	0.537584
Maine		South Carr	0.435688	Florida	0.443808	South Carr	0.471289	New Mexi	0.457768	New Mexi	0.490828	New Mexi	0.489348	Arizona	0.488888	Louisiana	0.487654	South Carr	0.581547
Vermont		Florida	0.469324	Louisiana	0.452431	New Mexi	0.473327	South Carr	0.460957	Florida	0.497657	Hawaii	0.501885	Alaska	0.524436	Florida	0.512352	Vermont	
Wisconsin		New York	0.480825	New Mexi	0.461073	New Mexi		Idaho	0.480601	South Carr		Rhode Isla	0.501885	Louisiana	0.542961	Florida	0.532728		
Louisiana	0.469324	Louisiana	0.480825	Oregon		South Carr		Louisiana	0.488587	Iowa		South Carr	0.524483	Rhode Isla		South Carr	0.572759		
New Mexi	0.480825	New Mexico		Wyoming								Louisiana		Wyoming							
Wisconsin		New Mexico																			
Avg	0.296992		0.294017		0.290922		0.294673					0.298772		0.307933		0.317507		0.327204		0.34363

State	2017 sep aut	State	2016 sep aut	State	2015 sep aut	State	2014 sep aut	State	2013 sep aut	State	2012 Sep aut	State	2011 sep aut	State	2010 Sep aut	State	2009 Sep aut	State	2008 Sep aut
Oklahoma	0.001282	New Mexi	0.00142	Montana	0.002374	New Mexi	0	New Mexi	0.00194	West Virgi	0.000556	Louisiana	0	Louisiana	0.001616	Montana	0	Montana	0
New Mexi	0.001325	Louisiana	0.001809	New Mexi	0.002379	Louisiana	0.001356	West Virgi	0.002015	Wyoming	0.001307	Virginia	0.009188	Virginia	0.009878	New Mexi	0.002236	New Mexi	0
Montana	0.002288	Oklahoma	0.002646	Louisiana	0.002691	Oklahoma	0.002813	Oklahoma	0.002813	Oklahoma	0.001534	Tennessee	0.009709	Louisiana	0.009974	Louisiana	0.003222	West Virgi	0
Louisiana	0.002326	Montana	0.002963	Oklahoma	0.002963	West Virgi	0.003336	Montana	0.004799	Montana	0.002132	Wisconsin	0.01018	Wisconsin	0.010811	Oklahoma	0.009664	Oklahoma	0.004147
West Virgi	0.00549	West Virgi	0.004598	Mississipp	0.005553	Wyoming	0.004155	Wyoming	0.006483	Texas	0.00565	Idaho	0.010474	Texas	0.011141	Texas	0.011037	Texas	0.011333
South Car	0.00791	Iowa	0.008896	West Virgi	0.007764	Washingtc	0.005096	Hawaii	0.007823	Hawaii	0.007506	Hawaii	0.013078	North Dak	0.013158	Washingtc	0.014545	Washingtc	0.013736
Iowa	0.009105	Hawaii	0.010176	Iowa	0.009353	Idaho	0.007716	Washingtc	0.009217	Iowa	0.011218	Iowa	0.014081	Hawaii	0.014663	Wisconsin	0.014706	Wisconsin	0.016922
Kentucky	0.010022	South Car	0.010687	Hawaii	0.010372	North Dak	0.009084	Texas	0.010472	Washingtc	0.011854	Nebraska	0.014101	Idaho	0.016469	Idaho	0.015069	Idaho	0.018118
North Dak	0.01011	Kentucky	0.011049	South Car	0.010398	Kentucky	0.010751	Nevada	0.010681	Nevada	0.012042	West Virgi	0.014211	Hawaii	0.016706	Hawaii	0.015355	North Dak	0.019027
Texas	0.011833	Washingtc	0.011396	Texas	0.011403	Idaho	0.011837	North Dak	0.011858	Arkansas	0.012694	Kentucky	0.016041	Wisconsin	0.017133	North Dak	0.016087	Indiana	0.019591
Arkansas	0.012519	Texas	0.011711	Washingtc	0.011982	Nevada	0.011863	Iowa	0.012128	Tennessee	0.013657	Minnesott	0.016805	North Dak	0.018349	Indiana	0.017089	Tennessee	0.019681
Hawaii	0.012945	Nevada	0.013433	Kentucky	0.012847	North Dak	0.012858	Kentucky	0.012682	North Dak	0.013886	Indiana	0.016871	Tennessee	0.019215	Tennessee	0.019448	Alaska	0.02087
Washingtc	0.013333	North Dak	0.013982	Idaho	0.012931	Oregon	0.013775	Indiana	0.013738	Wisconsin	0.015926	Arkansas	0.016924	Arkansas	0.019216	Alaska	0.019658	Nevada	0.02094
Wyoming	0.013575	Arkansas	0.014168	Nevada	0.013957	Indiana	0.014002	Tennessee	0.014196	Indiana	0.01696	South Dak	0.017674	Nevada	0.019843	Nevada	0.019919	Kentucky	0.020984
Nevada	0.014436	Wyoming	0.014371	North Dak	0.014085	Arkansas	0.014029	South Carc	0.015711	Oregon	0.01763	Oklahoma	0.018771	Alaska	0.02134	Kentucky	0.020062	Mississipp	0.021021
Mississipp	0.014973	Oregon	0.014977	Arkansas	0.014541	Tennessee	0.015875	Wisconsin	0.01628	South Carc	0.017817	Nevada	0.021995	Indiana	0.024493	Mississipp	0.020204	Oregon	0.021458
Tennessee	0.015512	Tennessee	0.015117	Wyoming	0.014794	South Carc	0.018016	Oregon	0.017049	Mississipp	0.021746	Rhode Isla	0.02537	Kentucky	0.025626	Oregon	0.021601	Arkansas	0.025084
Indiana	0.018784	Mississipp	0.017693	Oregon	0.017798	Mississipp	0.020749	Mississipp	0.017971	Alabama	0.024008	Alabama	0.02852	South Carc	0.029109	South Carc	0.024828	South Carc	0.025651
Oregon	0.021533	Indiana	0.018746	Tennessee	0.01805	Wisconsin	0.021521	Alabama	0.019514	Georgia	0.027967	South Carc	0.029109	Colorado	0.031871	Georgia	0.029299	Georgia	0.026752
Alabama	0.022068	Wisconsin	0.022848	Wisconsin	0.022688	Alabama	0.025856	Georgia	0.019656	Colorado	0.029312	Colorado	0.030321	Alabama	0.03259	Kansas	0.033613	Kansas	0.028177
South Dak	0.023898	Idaho	0.025225	Oregon	0.022833	Georgia	0.029335	Kansas	0.025014	Nebraska	0.029409	Kansas	0.031191	Nebraska	0.032802	Colorado	0.034584	Colorado	0.029387
North Car	0.024131	Alabama	0.025576	Alabama	0.023518	North Car	0.029455	North Car	0.027202	New Ham;	0.029424	Georgia	0.034431	North Car	0.033312	Iowa	0.038796	Iowa	0.030259
Idaho	0.025117	North Car	0.027355	Georgia	0.027091	Nebraska	0.033155	Nebraska	0.028383	South Dak	0.038822	New York	0.036184	Georgia	0.040171	North Car	0.039632	North Car	0.039152
Georgia	0.027034	Nebraska	0.031508	North Car	0.029344	Colorado	0.033201	Colorado	0.032793	Alaska	0.049402	Montana	0.040517	Florida	0.050204	Alabama	0.046898	Alabama	0.04023
Nebraska	0.037584	South Dak	0.034483	Nebraska	0.029664	Kansas	0.037697	New Ham;	0.03377	Arizona	0.051974	Alaska	0.049088	New Ham;	0.055687	Nebraska	0.052074	Nebraska	0.040578
Colorado	0.038318	Kansas	0.040922	Colorado	0.034368	South Dak	0.051282	Arizona	0.034898	Minnesott	0.054759	Michigan	0.052632	Utah	0.057082	Utah	0.052459	Utah	0.05
Alaska	0.048551	Colorado	0.043277	Kansas	0.036311	New Ham;	0.052748	South Dak	0.048872	Maine	0.055866	Arizona	0.056628	South Dak	0.05755	New Ham;	0.053961	New Ham;	0.051724
Kansas	0.052554	Arizona	0.048427	South Dak	0.040737	Arizona	0.053856	Vermont	0.053785	Virginia	0.055949	Texas	0.058044	Minnesott	0.058385	Minnesott	0.054371	Minnesott	0.051967
Arizona	0.056535	Utah	0.058782	Arizona	0.053323	Utah	0.054909	Minnesott	0.054449	Utah	0.05721	Vermont	0.060287	Virginia	0.063811	Virginia	0.056635	Virginia	0.054973
New Ham;	0.059719	Maine	0.058868	Utah	0.054872	Minnesott	0.059028	Maine	0.054707	Missouri	0.063188	Maine	0.062989	Maine	0.070423	South Dak	0.056886	South Dak	0.056995
Florida	0.066074	New Ham;	0.061684	Minnesott	0.058434	Alaska	0.059688	Utah	0.055688	Florida	0.064809	Virginia	0.066783	Arizona	0.073687	Arizona	0.061492	Arizona	0.063927
Utah	0.066947	Alaska	0.062699	Alaska	0.058799	Maine	0.062001	Virginia	0.057754	Vermont	0.064865	South Carc	0.072345	Florida	0.074044	Florida	0.061492	Maine	0.068833
Minnesott	0.067532	Minnesott	0.065293	Maine	0.062857	Vermont	0.06796	Alaska	0.061875	California	0.067752	Mississipp	0.072863	Massachu	0.081226	North Car	0.063927	Vermont	0.071814
Ohio	0.067559	Ohio	0.066261	Ohio	0.062966	Missouri	0.070069	Missouri	0.06695	Pennsylva	0.077587	Florida	0.077465	California	0.081841	Maine	0.077319	Florida	0.080514
California	0.069381	California	0.071932	Missouri	0.067608	Virginia	0.07158	California	0.069257	Ohio	0.084854	California	0.077465	Utah	0.078035	Ohio	0.078035	Missouri	0.083915
Missouri	0.072512	Missouri	0.072754	California	0.072456	California	0.071599	Florida	0.071809	Rhode Isla	0.094131	Utah	0.078279	Oregon	0.093307	Florida	0.086983	California	0.094463
Virginia	0.079023	Virginia	0.076482	Virginia	0.073214	Florida	0.076843	Ohio	0.075053	Massachu	0.096623	Oregon	0.093903	North Dak	0.101872	Missouri	0.094338	Pennsylva	0.094706
Pennsylva	0.091793	Pennsylva	0.081371	Virginia	0.074172	Pennsylva	0.083791	Pennsylva	0.08728	Michigan	0.120163	North Dak	0.097248	Pennsylva	0.113948	California	0.096717	Rhode Isla	0.106255
Michigan	0.103703	Vermont	0.090452	Florida	0.077077	Ohio	0.092063	Michigan	0.092995	Illinois	0.125065	Pennsylva	0.123491	Rhode Isla	0.134011	Pennsylva	0.112597	Michigan	0.126975
Rhode Isla	0.111552	Florida	0.095379	Pennsylva	0.081855	Michigan	0.094431	Rhode Isla	0.093673	ConnecticL	0.129166	Massachu	0.13047	Michigan	0.138938	Rhode Isla	0.123801	Illinois	0.138204
Massachu	0.122483	Pennsylva	0.102069	Michigan	0.093101	Rhode Isla	0.110557	Massachu	0.114314	Maryland	0.135943	Illinois	0.133003	Illinois	0.150208	Michigan	0.140027	Massachu	0.147631
Delaware	0.128263	Michigan	0.107773	Rhode Isla	0.112623	Massachu	0.124759	Illinois	0.121622	Delaware	0.139963	ConnecticL	0.137698	ConnecticL	0.168384	Illinois	0.141797	ConnecticL	0.159584
ConnecticL	0.138827	Massachu	0.112623	Massachu	0.115816	Illinois	0.143404	ConnecticL	0.12399	New York	0.161464	Maryland	0.147422	Maryland	0.188149	Massachu	0.152347	Maryland	0.181697
Illinois	0.151066	Illinois	0.115816	Illinois	0.124336	ConnecticL	0.147647	Maryland	0.139474	New Jerse	0.181551	New Mexi	0.164495	New Mexi	0.192628	Connectic	0.17362	New York	0.193132
Maryland	0.154795	ConnecticL	0.126234	ConnecticL	0.139484	Maryland	0.15366	Delaware	0.139622	Iowa	0.194443	Delaware	0.189018	New York	0.280493	Maryland	0.18535	Delaware	0.218579
New York	0.164416	Delaware	0.131666	Delaware	0.141956	New Jerse		New York	0.157215	Louisiana	0.262078	New Ham;	0.189504	Missouri	n/a	New York	0.198529	New Jerse	0.307045
New Jerse	0.224762	Maryland	0.14263	Maryland	0.152022	New York		New Jerse	0.158425			Missouri	0.27008	New Jerse	n/a	Delaware	0.288788	Louisiana	n/a
Maine		New York	0.146076	New Jerse	0.158921	Montana		Arkansas	0.162385			North Car	n/a	North Carn	n/a	New Jerse	n/a	Vermont	n/a
Vermont		New Jerse	0.160074	New York	0.16377	Louisiana		Idaho	0.256532			Ohio	n/a	Ohio	n/a	New Mexin	n/a	Wyoming	n/a
Wisconsin		Maryland	0.19081	Wyoming	0.2355			Louisiana				Washingtc	n/a	Washingtc	n/a	Vermont	n/a		
		New York	0.231538									Wyoming		Wyoming		Wyoming			
	0.053096		0.055107		0.053959		0.054901		0.055621		0.05899		0.062896		0.062622		0.062031		0.062435

State	2017 80%ID	2016 80%ID	2016 State	2015 80%ID	2015 State	2014 80%ID	2014 State	2013 80%ID	2013 State	2012 80%ID	2012 State	2011 80%ID	2011 State	2010 80%ID	2010 State	2009 80%ID	2009 State	2008 State	2008 80%ID
Iowa	0.694291	0.66139	Iowa	0.656688	Iowa	0.649213	Iowa	0.64483	Iowa	0.640051	Alabama	0.455271	Nevada	0.661677	Iowa	0.617285	Iowa	Iowa	0.617972
Kentucky	0.43226	0.470765	Kentucky	0.432537	Alabama	0.433811	Alabama	0.442988	Alabama	0.454561	Connecticu	0.453522	Iowa	0.634878	Connecticu	0.492673	Connecticu	Connecticu	0.482412
Alabama	0.422794	0.438159	Vermont	0.428148	Alaska	0.429038	Kentucky	0.408682	Connecticu	0.437473	Kentucky	0.414385	Connecticu	0.517511	Kentucky	0.417418	Kentucky	Alabama	0.446528
Ohio	0.334497	0.42102	Alabama	0.424729	Vermont	0.427114	Vermont	0.404762	Vermont	0.407309	Vermont	0.371943	Vermont	0.454828	Alabama	0.359447	Alabama	Kentucky	0.409124
Indiana	0.30956	0.331502	Ohio	0.328427	Kentucky	0.422729	Connecticu	0.368672	Vermont	0.40239	Nebraska	0.320925	Kentucky	0.420095	Nebraska	0.340946	Nebraska	Nebraska	0.346598
North Car	0.289616	0.295618	Connecticu	0.296901	Connecticu	0.360746	Ohio	0.322543	Nebraska	0.317446	Ohio	0.307576	Utah	0.356015	Vermont	0.324201	Ohio	Ohio	0.275216
Nebraska	0.289242	0.279861	Indiana	0.281345	Ohio	0.326866	Nebraska	0.313006	Ohio	0.317389	New Ham	0.263024	Montana	0.331359	Ohio	0.292928	West Virgi	West Virgi	0.268896
Connecticu	0.252937	0.275565	Nebraska	0.269166	Nebraska	0.302409	Indiana	0.284115	Indiana	0.278532	Indiana	0.258227	North Dak	0.297547	Rhode Isla	0.271097	Indiana	Indiana	0.220179
Oklahoma	0.243818	0.263053	West Virgi	0.239028	West Virgi	0.218562	West Virgi	0.21618	Rhode Isla	0.224592	West Virgi	0.234944	Washingt	0.246608	West Virgi	0.262135	Rhode Isla	Rhode Isla	0.218935
West Virgi	0.241384	0.23899	New Ham	0.21447	Rhode Isla	0.214103	New Ham	0.210174	New Ham	0.220472	Rhode Isla	0.227594	Indiana	0.243881	Indiana	0.229104	Louisiana	Louisiana	0.210788
New Ham	0.231884	0.211634	Georgia	0.187111	Georgia	0.191779	Georgia	0.202142	West Virgi	0.210012	Georgia	0.208495	Pennsylva	0.224859	Georgia	0.209587	Georgia	Georgia	0.205607
South Dak	0.194308	0.179387	Louisiana	0.184771	New Ham	0.188329	Rhode Isla	0.196154	Georgia	0.203455	Louisiana	0.194879	Georgia	0.211692	Colorado	0.206726	North Dak	North Dak	0.202591
Rhode Isla	0.18	0.177329	Oklahoma	0.178284	Louisiana	0.18272	Louisiana	0.188942	Louisiana	0.181628	Colorado	0.190965	Colorado	0.208884	Louisiana	0.197849	Colorado	Colorado	0.200515
Maryland	0.176189	0.174278	Alaska	0.168317	Oklahoma	0.164813	Oklahoma	0.165803	Idaho	0.16996	Idaho	0.170604	Louisiana	0.199082	Idaho	0.182215	New Jerse	New Jerse	0.182215
Alaska	0.175559	0.169903	North Dak	0.159401	Idaho	0.155027	Idaho	0.158722	Colorado	0.168717	North Dak	0.156417	North Dak	0.181818	South Dak	0.169118	South Dak	South Dak	0.169118
Louisiana	0.169451	0.165352	Oregon	0.155404	Kansas	0.154942	Delaware	0.154987	Idaho	0.168625	South Dak	0.156118	North Car	0.175694	North Dak	0.16813	Idaho	Idaho	0.167671
Georgia	0.166205	0.161963	South Dak	0.155357	Michigan	0.153346	North Car	0.154546	North Car	0.15851	North Car	0.153682	South Car	0.163384	New Mexi	0.162493	Massachu	Massachu	0.165934
Oregon	0.161102	0.158703	Maryland	0.153804	North Car	0.152782	Oklahoma	0.153645	South Dak	0.148568	Kansas	0.142349	Minnesota	0.153442	Tennessee	0.161294	Mississipp	Mississipp	0.155988
Texas	0.1569	0.153351	Idaho	0.153127	Tennessee	0.147496	South Dak	0.152553	Michigan	0.146737	Virginia	0.141406	South Dak	0.147384	Mississipp	0.158909	Arkansas	Arkansas	0.155546
Michigan	0.15504	0.152521	Michigan	0.152636	Maryland	0.145963	Colorado	0.152236	Oregon	0.146348	Michigan	0.141359	Kansas	0.144628	Massachu	0.14915	Delaware	Delaware	0.153468
Massachu	0.147941	0.152372	North Car	0.147494	South Dak	0.14561	Michigan	0.151932	Oklahoma	0.145498	Oklahoma	0.139182	New York	0.143698	Delaware	0.14594	Oregon	Oregon	0.152542
Idaho	0.146307	0.141145	North Dak	0.147278	Idaho	0.142931	Kansas	0.144431	Kansas	0.143573	Arkansas	0.120452	Delaware	0.142995	Arkansas	0.140664	Tennessee	Tennessee	0.149819
North Dak	0.145833	0.133363	Texas	0.140928	Wisconsin	0.142346	Oregon	0.139626	Maryland	0.142692	Massachu	0.137495	Oregon	0.1407	Oregon	0.13775	Kansas	Kansas	0.146766
Virginia	0.141636	0.129249	Rhode Isla	0.138961	Colorado	0.141822	Wisconsin	0.135371	Mississipp	0.13773	Oregon	0.137337	Vermont	0.140433	Kansas	0.137517	Virginia	Virginia	0.144799
Mississipp	0.134555	0.127896	Delaware	0.130376	Oregon	0.140423	Maryland	0.134188	Alaska	0.136442	Tennessee	0.137273	Florida	0.14022	Oklahoma	0.135515	New Mexi	New Mexi	0.143345
Arkansas	0.129622	0.12695	Tennessee	0.129421	Delaware	0.132482	Mississipp	0.133197	Tennessee	0.135157	Pennsylva	0.136937	Ohio	0.138667	Pennsylva	0.128861	Oklahoma	Oklahoma	0.132886
Colorado	0.12471	0.11999	Massachu	0.128428	Mississipp	0.131625	Tennessee	0.131739	Florida	0.134997	Florida	0.13224	Oklahoma	0.136526	Virginia	0.126336	North Car	North Car	0.128903
Kansas	0.114946	0.116598	Colorado	0.127351	Texas	0.128124	Florida	0.131518	Massachu	0.13008	Alaska	0.130293	Arkansas	0.134026	Florida	0.122909	Pennsylva	Pennsylva	0.121162
Florida	0.11117	0.115431	Kansas	0.125076	Virginia	0.124874	Virginia	0.13077	Virginia	0.128064	Maryland	0.126761	New Jerse	0.12695	Michigan	0.121627	New Ham	New Ham	0.119367
Pennsylva	0.110501	0.114582	Mississipp	0.120769	Massachu	0.124116	Massachu	0.126142	Pennsylva	0.123816	Arkansas	0.120452	Delaware	0.122208	North Car	0.120747	Maryland	Maryland	0.115018
Hawaii	0.105221	0.113743	Arkansas	0.117725	Arkansas	0.107399	Alaska	0.125418	Wisconsin	0.117982	Delaware	0.118125	Maryland	0.112173	New Ham	0.118215	Alaska	Alaska	0.112853
Tennessee	0.100911	0.106183	Delaware	0.116085	Pennsylva	0.103201	Pennsylva	0.114477	Delaware	0.110677	Wisconsin	0.10912	Alaska	0.10356	Montana	0.115464	Florida	Florida	0.111256
Wyoming	0.100616	0.096866	Virginia	0.110749	New Mexi	0.098327	Arkansas	0.114439	New Mexi	0.105541	New Mexi	0.10636	Missouri	0.095833	Maryland	0.110638	Montana	Montana	0.111111
Delaware	0.100128	0.094758	Wyoming	0.109835	Hawaii	0.088619	Texas	0.108666	Texas	0.099899	Montana	0.099638	Mississipp	0.093224	Minnesota	0.090256	Michigan	Michigan	0.109084
New Mexi	0.090662	0.089516	Hawaii	0.095168	Missouri	0.084564	New Mexi	0.099695	Minnesota	0.090852	Missouri	0.097718	Tennessee	0.092056	Wisconsin	0.087232	Wisconsin	Wisconsin	0.098994
Minnesota	0.082612	0.087179	Wyoming	0.086694	Minnesota	0.080095	Missouri	0.096914	Missouri	0.089357	Texas	0.094782	West Virgi	0.090465	Utah	0.086818	Minnesota	Minnesota	0.095477
Missouri	0.082574	0.084781	Missouri	0.083683	Maine	0.07971	Wyoming	0.096192	Illinois	0.088791	Minnesota	0.088638	Michigan	0.086235	Missouri	0.084503	Texas	Texas	0.08476
Arizona	0.082552	0.083024	Utah	0.083185	Montana	0.078809	Wyoming	0.086799	Wyoming	0.087576	Utah	0.087703	Hawaii	0.081218	Texas	0.083857	Utah	Utah	0.079067
South Car	0.079943	0.082103	Minnesota	0.077436	Arizona	0.071967	Minnesota	0.084326	Utah	0.086409	Wyoming	0.081749	Arizona	0.076671	South Car	0.082404	South Car	South Car	0.078364
New York	0.071217	0.079774	Hawaii	0.075519	South Car	0.066778	Montana	0.083189	Hawaii	0.077957	Arizona	0.080499	Wisconsin	0.076067	Maine	0.072503	Missouri	Missouri	0.077821
Utah	0.070228	0.07685	South Car	0.075396	Utah	0.064367	Utah	0.082092	Arizona	0.076007	Hawaii	0.074394	California	0.075294	California	0.071836	Maine	Maine	0.077437
California	0.065751	0.067674	Arizona	0.073496	California	0.061349	Arizona	0.076729	Montana	0.075862	South Car	0.068714	Texas	0.07472	South Car	0.070411	Arizona	Arizona	0.074963
Montana	0.064125	0.066006	New York	0.069284	New York	0.060312	South Car	0.069081	South Car	0.069383	California	0.067172	Rhode Isla	0.073214	New Jerse	0.067266	California	California	0.074892
Washingt	0.058847	0.063122	Maine	0.066841	New Jerse	0.051755	California	0.06789	Maine	0.067449	Illinois	0.060406	Maine	0.070423	Maine	0.057484	Nevada	Nevada	0.063237
Nevada	0.051682	0.062986	Washingt	0.064236	Nevada	0.051583	New York	0.066781	California	0.062424	Maine	0.055556	Illinois	0.067367	Nevada	0.056885	New York	New York	0.057479
Illinois	0.039608	0.050052	Utah	0.061939	Washingt	0.051458	Maine	0.066197	New York	0.056279	New York	0.055435	New Ham	0.062465	Illinois	0.052112	Wyoming	Wyoming	0.053173
New Jerse	0.009417	0.04241	California	0.059957	Illinois	0.048366	New Jerse	0.050924	Nevada	0.055231	New Mexi	0.051791	Wyoming	0.052007	Wyoming	0.051728	Illinois	Illinois	0.052241
Maine		0.041679	Washingt	0.051095	Indiana		Nevada	0.048832	New Jerse	0.048162	Nevada	0.050672	Nebraska	0.051653	Alabama	0.046893	Hawaii	Hawaii	0.045907
North Car		0.040636	Nevada	0.04726	North Dak		Illinois	0.04678	Washingt	0.044005	Washingt	0.044645	Washingt	0.041087	Hawaii	0.044212	Washingt	Washingt	0.043374
Montana	0.040636		Illinois	0.043873	Wyoming		Washingt Arkansas	0.008684	Arkansas		Iowa		Wyoming		Washingt	0.042607	Vermont	Vermont	n/a
Wisconsin			Illinois																
	0.166816	0.165046		0.162504		0.170731		0.16498		0.168789		0.159036		0.179947		0.163681			0.165664

State	2017 40% ID	2017 State	2016 40% ID	2016 State	2015 40% ID	2015 State	2014 40% ID	2014 State	2013 40% ID	2013 State	2012 40% ID	2012 State	2011 40% ID	2011 State	2010 40% ID	2010 State	2009 40% ID	2009 State	2008 40% ID	2008 State
Iowa	0.081398	Iowa	0.084429	Iowa	0.088802	Iowa	0.086057	Iowa	0.083857	Iowa	0.006645	Connecticut	0.070863	Iowa	0.043598	Connecticut	0.059406	Kentucky	0.041613	Kentucky
Connecticut	0.176977	Vermont	0.152924	Connecticut	0.13235	Connecticut	0.109792	Connecticut	0.111207	Connecticut	0.079502	South Dak	0.208158	Connecticut	0.051916	Iowa	0.083542	Connecticut	0.060302	Connecticut
Kentucky	0.209693	Connecticut	0.172579	Vermont	0.174815	Vermont	0.185131	Washingtc	0.121611	Washingtc	0.083794	Iowa	0.209985	South Dak	0.209336	South Dak	0.209336	Iowa	0.077105	Iowa
South Dak	0.221675	Kentucky	0.207632	Kentucky	0.210785	Kentucky	0.206082	Kentucky	0.208696	Kentucky	0.210914	Kentucky	0.23059	Kentucky	0.217011	Kentucky	0.218686	South Dak	0.208431	South Dak
West Virgi	0.246606	South Dak	0.223398	South Dak	0.230952	South Dak	0.228998	South Dak	0.209438	South Dak	0.211155	Vermont	0.232947	Utah	0.222357	Utah	0.234026	Alabama	0.242088	Alabama
Ohio	0.29118	West Virgi	0.258221	Ohio	0.270716	Ohio	0.258492	Vermont	0.217087	Vermont	0.214524	North Dak	0.282086	North Dak	0.228346	North Dak	0.259294	Ohio	0.24408	Ohio
Colorado	0.312936	Ohio	0.282012	West Virgi	0.270839	Alaska	0.269168	Ohio	0.252905	Ohio	0.238903	Ohio	0.283413	North Car	0.248349	North Car	0.263488	Nebraska	0.259294	Ohio
Alabama	0.315	Alabama	0.317451	North Dak	0.30109	West Virgi	0.278129	North Dak	0.278497	North Dak	0.27668	West Virgi	0.283483	Alabama	0.26842	Alabama	0.280897	West Virgi	0.267651	Nebraska
North Dak	0.324219	Oklahoma	0.324825	Alabama	0.317131	North Dak	0.315104	West Virgi	0.281671	West Virgi	0.290475	Alabama	0.289058	Nebraska	0.282698	West Virgi	0.283737	North Dak	0.279433	West Virgi
Missouri	0.33572	North Dak	0.335553	Colorado	0.32525	Alabama	0.341975	Alabama	0.30308	Alabama	0.291448	Kansas	0.367438	Washingtc	0.292397	Washingtc	0.285388	Vermont	0.283863	North Dak
Nebraska	0.339683	Colorado	0.336759	Missouri	0.353473	Colorado	0.353516	Nebraska	0.333541	Nebraska	0.328237	Colorado	0.367899	Kansas	0.345179	Kansas	0.35968	Missouri	0.352851	Kansas
Oklahoma	0.345566	Missouri	0.345976	Kansas	0.372502	Missouri	0.354297	Colorado	0.342441	Colorado	0.348682	Missouri	0.384127	Colorado	0.375381	Colorado	0.389383	Arkansas	0.396487	Missouri
Kansas	0.373649	Nebraska	0.36875	Nebraska	0.381654	Kansas	0.357673	Missouri	0.357305	Missouri	0.365566	New Ham	0.418043	Mississipp	0.383079	Missouri	0.389795	Minnesota	0.403133	Arkansas
Idaho	0.380399	Kansas	0.381282	Alaska	0.39769	Idaho	0.397429	Kansas	0.370161	Kansas	0.38101	Arkansas	0.422466	Nevada	0.407317	Nevada	0.390819	Colorado	0.408112	Minnesota
Indiana	0.387224	Idaho	0.392908	Idaho	0.400788	Michigan	0.434936	Idaho	0.414605	Idaho	0.41224	Indiana	0.426216	Minnesota	0.412636	Minnesota	0.415827	Oklahoma	0.41326	Colorado
Wyoming	0.400411	Wyoming	0.403226	Wyoming	0.417339	Minnesota	0.441453	Minnesota	0.423428	Indiana	0.425774	Pennsylva	0.42712	Oregon	0.417232	Oregon	0.426623	Idaho	0.418963	Oklahoma
Alaska	0.414802	Indiana	0.405532	Indiana	0.429007	Oklahoma	0.447633	Oklahoma	0.431102	Oklahoma	0.429134	New Ham	0.431913	Michigan	0.423241	Michigan	0.426696	Pennsylva	0.419726	Idaho
Arkansas	0.419893	Alaska	0.406143	Wisconsin	0.432361	Wisconsin	0.448008	Wisconsin	0.432224	Pennsylva	0.429532	Oklahoma	0.434018	Indiana	0.437871	Indiana	0.429506	Indiana	0.423238	Pennsylva
Pennsylva	0.440535	Pennsylva	0.433236	Oklahoma	0.436662	Montana	0.448336	New Ham	0.432396	Michigan	0.431369	Michigan	0.442549	Ohio	0.442176	Ohio	0.439065	New Jerse	0.44929	Indiana
New Ham	0.440821	Michigan	0.439977	Michigan	0.440606	Arkansas	0.448662	Montana	0.434326	New Ham	0.433371	Minnesota	0.443045	Idaho	0.450111	Idaho	0.468786	Michigan	0.456591	New Jerse
Montana	0.443674	Arkansas	0.44531	New Ham	0.44186	Pennsylva	0.452549	Arkansas	0.43487	Minnesota	0.443025	Idaho	0.459434	Louisiana	0.464262	Louisiana	0.473913	Virginia	0.468786	Michigan
Michigan	0.447395	Minnesota	0.450477	Arkansas	0.446164	New Ham	0.461538	Michigan	0.43961	Wyoming	0.451724	Louisiana	0.467391	West Virgi	0.475348	Wisconsin	0.48425	Wisconsin	0.473913	Virginia
Oregon	0.448452	Montana	0.452297	Minnesota	0.448221	Louisiana	0.462603	Louisiana	0.446099	Montana	0.457759	Montana	0.469733	Wisconsin	0.492694	Vermont	0.498945	Louisiana	0.479982	Wisconsin
Minnesota	0.456463	Oregon	0.454165	Pennsylva	0.449005	Illinois	0.496927	Wisconsin	0.449922	Louisiana	0.462862	Wisconsin	0.487028	Montana	0.508349	Wisconsin	0.509278	Montana	0.482163	Wisconsin
Louisiana	0.494989	New Ham	0.454208	Montana	0.454861	Rhode Isla	0.501282	Louisiana	0.457653	Wisconsin	0.484725	Wyoming	0.498099	Maine	0.515493	Maine	0.515732	Montana	0.491921	Louisiana
Virginia	0.511081	Louisiana	0.484245	Louisiana	0.465727	Virginia	0.507896	Montana	0.467938	Louisiana	0.501882	Rhode Isla	0.517716	New Ham	0.530765	New Ham	0.524809	Mississipp	0.493997	Wyoming
Rhode Isla	0.511765	Maine	0.511538	Oregon	0.477348	Oregon	0.520392	Illinois	0.491305	Montana	0.503007	North Car	0.522363	Missouri	0.53125	Virginia	0.528012	Georgia	0.505188	Delaware
Illinois	0.511953	New Jerse	0.51219	Illinois	0.498132	Maine	0.523188	Rhode Isla	0.497436	Illinois	0.514944	Virginia	0.525526	New York	0.534321	New York	0.53038	Oregon	0.507788	Montana
New York	0.518369	Illinois	0.513427	New Jerse	0.520103	Illinois	0.536842	Virginia	0.504465	North Car	0.532883	Maine	0.539549	Georgia	0.534613	Delaware	0.5315	Massachu	0.520453	Mississipp
New Jerse	0.530687	Rhode Isla	0.523058	Rhode Isla	0.520103	North Car	0.546363	Maine	0.514035	Oregon	0.536875	Oregon	0.539948	Oklahoma	0.548395	Georgia	0.534375	North Car	0.529168	Georgia
North Car	0.532658	Virginia	0.526052	Maine	0.525186	New Jerse	0.560761	North Car	0.520411	Virginia	0.550612	Illinois	0.54397	Illinois	0.549597	Oregon	0.53979	Tennessee	0.533649	Oregon
Utah	0.533013	North Car	0.537053	North Car	0.534731	New York	0.563223	Oregon	0.528601	New York	0.55132	New Jerse	0.552946	New Jerse	0.554591	Illinois	0.551141	Maryland	0.55076	Massachu
Maryland	0.536162	New York	0.542414	Rhode Isla	0.538998	Georgia	0.566241	New Jerse	0.545812	New Jerse	0.558801	Maryland	0.561451	Pennsylva	0.558192	Pennsylva	0.565489	Florida	0.561164	North Car
Texas	0.559852	Maryland	0.542842	New York	0.541558	Delaware	0.566494	Georgia	0.552885	Maryland	0.561154	Alaska	0.566775	Massachu	0.561056	Massachu	0.571836	Rhode Isla	0.561399	Tennessee
Massachu	0.559986	Utah	0.550629	Maryland	0.557378	Florida	0.57837	Alaska	0.558528	Georgia	0.564767	Massachu	0.570822	Florida	0.563336	Florida	0.579684	Utah	0.574735	Maryland
Hawaii	0.560643	Texas	0.566713	Delaware	0.562805	Maryland	0.581897	Maryland	0.570827	Alaska	0.571648	Delaware	0.57875	Delaware	0.565832	Maryland	0.668275	Nevada	0.576863	Florida
Delaware	0.562259	Delaware	0.568548	Texas	0.573925	Massachu	0.589457	Delaware	0.572102	Maryland	0.576172	New York	0.583716	Minnesota	0.580925	Minnesota	0.670595	South Car	0.586785	Rhode Isla
Tennessee	0.596117	Massachu	0.586757	Georgia	0.5813	Tennessee	0.59354	Massachu	0.586079	New York	0.581015	Florida	0.586183	South Dak	0.582213	South Dak	0.706913	Arizona	0.605637	Washingtc
Washingtc	0.599242	Hawaii	0.599194	Massachu	0.583459	Texas	0.600348	Utah	0.592581	Florida	0.584359	Utah	0.588951	Alaska	0.595469	Washingtc	0.714514	Hawaii	0.607477	Maine
Georgia	0.603863	Georgia	0.599352	Hawaii	0.586139	Hawaii	0.601478	New York	0.594723	Utah	0.601132	Tennessee	0.602015	New Mexi	0.60301	New Mexi	0.721856	Vermont	0.607563	New York
Mississipp	0.631937	Washingtc	0.600757	Utah	0.595851	Utah	0.617708	Hawaii	0.594937	Tennessee	0.607039	Mississipp	0.613012	Virginia	0.603913	Virginia			0.617759	Illinois
California	0.652916	Tennessee	0.602164	Tennessee	0.597546	Washingtc	0.647527	Texas	0.599001	Texas	0.61437	Texas	0.618157	Alaska	0.611768	Alaska			0.631661	Alaska
Florida	0.65605	Florida	0.642639	Washingtc	0.600625	Mississipp	0.68217	Tennessee	0.599649	Washingtc	0.618325	Washingtc	0.619017	Washingtc	0.624362	Tennessee			0.638225	New Mexi
South Car	0.667943	Mississipp	0.660082	Florida	0.613747	New Mexi	0.682717	New Mexi	0.609431	Mississipp	0.62724	Hawaii	0.639273	New Jerse	0.658419	New Jerse			0.649518	Texas
New Mexi	0.703989	California	0.666282	Mississipp	0.627092	California	0.694891	Florida	0.624707	Hawaii	0.661741	New Mexi	0.670764	New Mexi	0.681092	California			0.671748	California
Arizona	0.709595	South Car	0.68378	South Car	0.642283	South Car	0.713873	Mississipp	0.678026	New Mexi	0.689176	California	0.678734	California	0.710174	Rhode Isla			0.686967	New Ham
Nevada	0.772306	New Mexi	0.704179	California	0.682904	Arizona	0.724648	California	0.684717	California	0.713571	South Car	0.7123	Hawaii	0.724196	Hawaii			0.696677	Nevada
Maine		Arizona	0.72582	New Mexi	0.687908	Nevada	0.724648	South Car	0.714766	South Car	0.73349	Arizona	0.721507	Arizona	0.72732	Arizona			0.704314	South Car
Vermont		Nevada	0.75391	Arizona	0.694485	Indiana	0.739019	Arizona	0.729908	Arizona	0.745619	Nevada	0.734747	Nebraska	0.73812	Nevada			0.71939	Arizona
Wisconsin		Wisconsin			0.731872	North Dakota			0.7362	Nevada		Iowa		Wyoming					0.751323	Hawaii
					0.746104	Wyoming													n/a	Vermont
	0.463229		0.463937		0.467861		0.468992		0.458737		0.458983		0.478067		0.471178		0.47511		0.478772	

2017 State	2017 Sep ID	2016 State	2016 Sep ID	2015 State	2015 Sep ID	2014 State	2014 Sep ID	2013 State	2013 Sep ID	2012 State	2012 Sep ID	2011 State	2011 Sep ID	2010 State	2010 Sep ID	2009 State	2009 Sep ID	2008 State	2008 Sep ID
Montana	0	West Virgi	0	New Mexi	0.000442	West Virgi	0.000507	Montana	0.000741	West Virgi	0	Idaho	0	Louisiana	0.004435	West Virgi	0.002404	West Virgi	0
Oklahoma	0.000473	Hawaii	0.000325	West Virgi	0.00083	Kentucky	0.000752	West Virgi	0.000983	Kentucky	0.00073	Ohio	0.005858	Oklahoma	0.004826	New Mexi	0.003513	Oklahoma	0.002844
West Virgi	0.000895	New Mexi	0.000587	Oklahoma	0.001464	New Mexi	0.000897	New Mexi	0.001017	Washingtc	0.001583	Kentucky	0.007298	Mississippi	0.005506	Oklahoma	0.005657	Louisiana	0.003107
Louisiana	0.001604	Louisiana	0.001899	Hawaii	0.002073	Hawaii	0.001738	Oklahoma	0.001808	Mississipp	0.00183	Minnesota	0.008132	Kentucky	0.00578	Indiana	0.010907	Kentucky	0.003807
New Mexi	0.002267	Oklahoma	0.002419	Montana	0.002849	Oklahoma	0.001751	Louisiana	0.001865	Indiana	0.002644	Virginia	0.011604	Indiana	0.008478	Washingtc	0.011601	Mississipp	0.005175
Washingtc	0.002992	Montana	0.002455	Louisiana	0.003472	Louisiana	0.002141	Hawaii	0.002392	Ohio	0.00448	Indiana	0.011781	Washingtc	0.011094	Kentucky	0.0122	Indiana	0.008383
Hawaii	0.004016	Washingtc	0.003995	Washingtc	0.004258	Mississipp	0.003542	Idaho	0.005269	Arkansas	0.00511	North Dak	0.01254	Tennessee	0.011281	North Dak	0.012341	Kentucky	0.009462
Kentucky	0.005105	Kentucky	0.004938	Kentucky	0.004765	Kentucky	0.004829	Kentucky	0.005389	Georgia	0.006222	Georgia	0.013212	Georgia	0.012216	Georgia	0.012573	Ohio	0.009617
Mississipp	0.005497	Mississipp	0.005761	Mississipp	0.004877	Idaho	0.006478	Mississipp	0.006592	Tennessee	0.00642	Tennessee	0.014775	South Dak	0.013979	Ohio	0.012719	Georgia	0.010858
Indiana	0.007584	North Dak	0.006378	Idaho	0.00545	North Dak	0.008226	North Dak	0.009067	Texas	0.007905	Iowa	0.015401	Alaska	0.014058	Washingtc	0.014733	Washingtc	0.011393
Arkansas	0.007974	Indiana	0.007112	Iowa	0.007876	Indiana	0.010694	Washingtc	0.009321	North Dak	0.008929	Arkansas	0.01738	Arkansas	0.015668	North Dak	0.016095	North Dak	0.011779
Iowa	0.010236	Iowa	0.008065	Wyoming	0.009777	Wyoming	0.011894	Indiana	0.01002	New Hamp	0.008983	Tennessee	0.02033	Texas	0.016017	Tennessee	0.016151	Tennessee	0.01351
North Dak	0.010417	Arkansas	0.010753	Arkansas	0.010651	Arkansas	0.01239	Ohio	0.011839	Oregon	0.010379	Wisconsin	0.022193	Iowa	0.018553	Texas	0.016151	Texas	0.017197
Ohio	0.012651	Oregon	0.011336	Ohio	0.011643	Oregon	0.013294	Georgia	0.01196	Maine	0.012246	Colorado	0.024024	Idaho	0.021363	Arkansas	0.020185	Arkansas	0.018464
Texas	0.014135	Idaho	0.011686	Georgia	0.013294	Georgia	0.015309	Wisconsin	0.013225	Wisconsin	0.013225	Oklahoma	0.024026	Oklahoma	0.021651	Alaska	0.02175	Alaska	0.020376
Wyoming	0.014374	Ohio	0.012435	Texas	0.013609	Iowa	0.016971	Wyoming	0.013062	Iowa	0.014257	Nevada	0.025336	Oregon	0.021651	Oregon	0.024064	Oregon	0.022682
Georgia	0.014803	Wyoming	0.013923	South Caro	0.014113	Ohio	0.017189	Oregon	0.013222	Wyoming	0.016636	West Virgi	0.025767	Wisconsin	0.023023	Idaho	0.027366	Idaho	0.024658
South Caro	0.015478	Maine	0.014173	South Dak	0.014417	South Caro	0.021157	Tennessee	0.016901	Colorado	0.016709	Vermont	0.027036	Colorado	0.029224	Wisconsin	0.028244	Wisconsin	0.024698
Idaho	0.015792	Georgia	0.014883	Colorado	0.014509	Colorado	0.024018	Texas	0.016982	Alabama	0.01698	Alabama	0.027036	Virginia	0.02957	Colorado	0.028623	Colorado	0.027679
Oregon	0.016086	Texas	0.01677	Tennessee	0.015048	Tennessee	0.026423	Maine	0.019187	Nebraska	0.021994	Maine	0.028179	Wyoming	0.029577	Virginia	0.031709	Virginia	0.029496
Colorado	0.018203	Colorado	0.017787	Arizona	0.016458	Arizona	0.028019	Colorado	0.027679	Arizona	0.02496	Nebraska	0.030457	Alabama	0.029959	Iowa	0.032757	Iowa	0.031177
Nevada	0.01999	South Caro	0.021795	Maine	0.016755	Nevada	0.028886	Virginia	0.027679	Nevada	0.026023	Arizona	0.031847	Nebraska	0.031246	South Car	0.032812	South Car	0.032116
Tennessee	0.025048	Tennessee	0.022419	Nevada	0.023577	New Hamp	0.029622	Wisconsin	0.028112	South Car	0.026023	Rhode Isla	0.032835	Arizona	0.033577	Wyoming	0.032832	Wyoming	0.03259
New Hamp	0.02657	Arizona	0.023285	New Hamp	0.026981	Wisconsin	0.030504	Arizona	0.028172	Idaho	0.02627	Kansas	0.033898	Maine	0.035262	Virginia	0.033976	North Car	0.033775
Arizona	0.026936	Nevada	0.024588	Wisconsin	0.027149	South Dak	0.030591	South Car	0.028188	South Dak	0.026859	Montana	0.035162	Arizona	0.035788	Wyoming	0.034982	New Hamp	0.035323
South Dak	0.028462	South Dak	0.028465	South Dak	0.027381	Alabama	0.033457	Nebraska	0.02842	Kansas	0.02767	New York	0.039146	New Hamp	0.038631	Nevada	0.035088	Kansas	0.036819
Alabama	0.03	New Hamp	0.03029	Vermont	0.028424	Arizona	0.037901	Colorado	0.028442	North Car	0.028177	South Car	0.039308	Nevada	0.043764	South Dak	0.038158	South Dak	0.037471
North Caro	0.034377	Wisconsin	0.030084	Michigan	0.03082	New Hamp	0.037901	Colorado	0.028	Rhode Isla	0.031283	Massachu	0.056604	Kansas	0.059557	South Dak	0.038444	Nevada	0.038585
Virginia	0.042974	Alabama	0.035417	Connecticu	0.030832	Massachu	0.038737	Massachu	0.032358	Massachu	0.031312	Nevada	0.063019	North Car	0.062874	Nevada	0.047945	Nebraska	0.038725
Kansas	0.043818	Nebraska	0.036746	Virginia	0.033144	Alabama	0.039639	New Hamp	0.033421	Connecticu	0.031496	Utah	0.065861	Vermont	0.064399	Nebraska	0.048523	Arizona	0.039855
Rhode Isla	0.052941	North Caro	0.043289	Kansas	0.038159	North Car	0.041774	Alabama	0.040881	Alaska	0.031807	Connecticu	0.074919	Rhode Isla	0.067985	Arizona	0.048523	Alabama	0.040498
Nebraska	0.063845	Virginia	0.043936	Rhode Isla	0.039303	Kansas	0.044227	North Car	0.041989	Vermont	0.039414	Michigan	0.075933	Massachu	0.085525	Alabama	0.059829	Rhode Isla	0.045365
Maryland	0.069022	Kansas	0.049475	Florida	0.042613	Virginia	0.052564	Kansas	0.042994	Pennsylva	0.040684	Oregon	0.083627	Connecticu	0.085866	Connecticu	0.067723	Maine	0.046729
Massachu	0.071531	Vermont	0.049757	Massachu	0.042963	Vermont	0.06366	Virginia	0.044818	Kansas	0.047809	Mississipp	0.084921	Pennsylva	0.090188	Pennsylva	0.081595	Utah	0.104018
Missouri	0.075846	Rhode Isla	0.071811	Missouri	0.055844	Maryland	0.079599	Vermont	0.060256	Missouri	0.056462	Maryland	0.087304	Maine	0.096685	Massachu	0.090256	Missouri	0.104354
Connecticu	0.080658	Maryland	0.072345	Connecticu	0.066181	Massachu	0.079783	Rhode Isla	0.063124	Minnesota	0.056462	Texas	0.090295	Missouri	0.098381	Connecticu	0.095694	California	0.1075
Minnesota	0.086804	Connecticu	0.078119	Utah	0.078077	Connecticu	0.082662	Massachu	0.063124	Maryland	0.0608	California	0.09762	Utah	0.102576	Pennsylva	0.102139	Florida	0.111447
California	0.087066	Missouri	0.078655	California	0.079268	Missouri	0.086233	Connecticu	0.072696	Connecticu	0.070047	Delaware	0.098002	California	0.117866	Minnesota	0.102498	Illinois	0.117414
Pennsylva	0.093425	Minnesota	0.084878	Minnesota	0.083833	Maryland	0.086283	Missouri	0.080041	Utah	0.078784	Illinois	0.115625	Maryland	0.119775	Delaware	0.110188	Maryland	0.119965
Delaware	0.107189	Pennsylva	0.087309	Pennsylva	0.087837	Utah	0.087654	Minnesota	0.084418	Delaware	0.084183	Florida	0.120438	California	0.123933	California	0.110733	New Jerse	0.140843
Florida	0.114933	California	0.089906	Alaska	0.091729	Alaska	0.089508	Maryland	0.086044	Maryland	0.085	New Hamp	0.124066	Delaware	0.164017	Missouri	0.119822	Michigan	0.170547
New Jersey	0.11849	Alaska	0.109215	Delaware	0.094221	California	0.090301	California	0.090301	Florida	0.086356	New Mexi	0.162495	New Ham	0.196405	California	0.121245	New York	0.186586
Utah	0.153368	Delaware	0.109543	Illinois	0.096349	Pennsylva	0.09208	Pennsylva	0.09208	Alaska	0.089508	Hawaii	0.182843	New Mexi	—	Florida	0.162638	Hawaii	n/a
Illinois	0.153368	Utah	0.109646	New Jersey	0.099462	Utah	0.095425	Utah	0.095425	Louisiana	0.100469	Louisiana	0.210394	Louisiana	—	Missouri	0.173698	Montana	n/a
Michigan	0.163633	Florida	0.128753	New Jersey	0.105611	Delaware	0.108491	Illinois	0.108491	Illinois	0.118045	Missouri	n/a	Missouri	—	Maryland	0.197089	Vermont	n/a
New York	0.20221	New Jersey	0.131417	Michigan	0.12859	Florida	0.156064	Florida	0.130241	Hawaii	0.126302	New Jerse	—	Hawaii	—	New Jerse	n/a		
Maine		Illinois	0.152725	New York	0.149931	Illinois	0.156064	Delaware	0.156064	Alaska	0.129035	North Caro	—	Montana	—	North Caro	n/a		
Vermont		Michigan	0.169578	Indiana	0.153614	New Jersey	0.174397	Illinois	0.161227	Iowa	0.163056	Washingtc	—	New Mexir	n/a	Washingt	n/a		
Wisconsin		New York	0.209002	North Dakota	0.17827	New York	0.210561	New Jerse	0.18199	Montana	0.184573	Alaska		North Dak	n/a				
				Wyoming	0.198933	Michigan	—	New York	0.18199	New Mexico	0.21175	Pennsylvania		South Dak	n/a				
						Montana	—	Arkansas	—	Oklahoma	—	Wyoming		West Virgin	n/a				
avg	0.047251		0.046732		0.046554		0.050161		0.047476		0.047754		0.0547		0.050753		0.052023		0.049229

| 2017 | | 2016 | | 2015 | | 2014 | | 2013 | | 2012 | | 2011 | | 2010 | | 2009 | | 2008 | |
State	80%SLD	State	80%SLD	State	80%SLD	State	80%SLD	State	80%SLD	State	80%SLD	State	80%SLD	State	80%SLD	State	80%SLD	State	80%SLD
Alabama	0.955901	Alabama	0.95354	Alabama	0.951469	Alabama	0.947866	Alabama	0.947989	Alabama	0.941019	Alabama	0.934142	Alabama	0.923028	Alabama	0.911133	Vermont	n/a
Florida	0.86632	Vermont	0.900612	Vermont	0.891969	Vermont	0.880492	Vermont	0.883171	Vermont	0.885229	Vermont	0.884576	Vermont	0.873518	Vermont	0.861158	Alabama	0.889338
Nebraska	0.865816	Maryland	0.849017	Kentucky	0.852019	Kentucky	0.843282	Rhode Isla	0.831834	New Mexi	0.834258	North Car	0.876291	Rhode Isla	0.823032	North Dak	0.824769	North Dak	0.826664
Maryland	0.862757	Nebraska	0.84853	Florida	0.836528	Rhode Isla	0.83643	Kentucky	0.824754	Vermont	0.821747	Connecticut	0.817386	North Dak	0.822032	Connecticut	0.822511	Connecticut	0.803585
Kentucky	0.856108	Florida	0.842754	Oregon	0.8317	Oregon	0.8325	North Dak	0.82289	Rhode Isla	0.821162	New Hamp	0.820711	Connecticut	0.817386	Rhode Isla	0.808912	Rhode Isla	0.793617
Oregon	0.851542	Oregon	0.842552	Rhode Isla	0.828228	North Dak	0.823764	Oregon	0.816125	New Hamp	0.818493	Kentucky	0.818363	Kentucky	0.815717	Kentucky	0.805199	Kentucky	0.787076
Indiana	0.844588	Nebraska	0.832436	Alaska	0.826763	Maryland	0.822164	Nebraska	0.814666	Kentucky	0.812122	North Dak	0.805879	Colorado	0.815045	Colorado	0.777161	Oregon	0.773099
Colorado	0.837402	Indiana	0.824522	Nebraska	0.826039	Nebraska	0.818405	Connecticut	0.807913	North Dak	0.80803	Oregon	0.805737	Oregon	0.798536	Nebraska	0.776718	Nebraska	0.757279
Rhode Isla	0.83452	Colorado	0.823087	Maryland	0.824972	Colorado	0.815795	Maryland	0.802215	Oregon	0.805732	Colorado	0.799612	Nebraska	0.795328	North Car	0.766669	North Car	0.749804
Texas	0.824619	New Hamp	0.822054	New Hamp	0.818269	New Hamp	0.814632	Colorado	0.796111	Connecticut	0.803334	Maryland	0.794402	Maryland	0.791229	Colorado	0.764738	Colorado	0.749458
North Dak	0.811815	North Dak	0.813554	North Dak	0.809995	Florida	0.811983	North Car	0.793553	Colorado	0.7727	New York	0.769847	North Car	0.778808	Maryland	0.742084	Maryland	0.74823
New Hamp	0.805619	Indiana	0.805087	Colorado	0.805053	Connecticut	0.802789	South Car	0.774484	Maryland	0.757089	South Dak	0.756644	South Dak	0.759926	West Virgi	0.741589	West Virgi	0.730107
South Dak	0.805124	Connecticut	0.80124	Indiana	0.80124	Delaware	0.787663	Indiana	0.766382	North Car	0.755723	West Virgi	0.754781	West Virgi	0.754781	South Dak	0.733748	South Dak	0.717826
Tennessee	0.804124	Tennessee	0.796185	Connecticut	0.797657	South Dak	0.783381	Texas	0.763293	South Dak	0.749572	Nebraska	0.751465	Texas	0.742704	Texas	0.732364	Texas	0.712439
North Car	0.796696	North Car	0.791677	Tennessee	0.794935	Texas	0.779413	Delaware	0.753271	Nebraska	0.74706	Florida	0.751409	Florida	0.742141	Florida	0.724003	Florida	0.682499
Connecticut	0.794041	Georgia	0.790481	Delaware	0.785938	Kansas	0.778709	Georgia	0.746739	Indiana	0.733309	Indiana	0.746253	Indiana	0.728026	Indiana	0.692892	Indiana	0.672871
Michigan	0.770741	South Dak	0.763369	North Car	0.779598	Georgia	0.77784	Kansas	0.738243	Texas	0.721944	Washingtc	0.739509	Washingtc	0.723837	New York	0.683944	New York	0.66769
Massachu	0.769097	Delaware	0.760207	South Dak	0.766721	Michigan	0.773671	Michigan	0.725832	Florida	0.70227	Georgia	0.727522	New York	0.70116	Idaho	0.669454	Idaho	0.667304
Delaware	0.764808	Kansas	0.75739	Tennessee	0.754691	Massachu	0.755923	New York	0.722312	Delaware	0.696334	Kansas	0.721707	Idaho	0.69193	Georgia	0.662384	Georgia	0.665971
Ohio	0.759157	Michigan	0.753868	South Dak	0.749814	Tennessee	0.737035	Ohio	0.718374	Georgia	0.69044	Georgia	0.721707	Kansas	0.679726	Kansas	0.660557	Kansas	0.648112
Kansas	0.757241	Massachu	0.745583	Kansas	0.744111	Ohio	0.734789	Tennessee	0.705821	Kansas	0.69044	Delaware	0.705777	Nevada	0.676529	Massachu	0.660342	Massachu	0.643616
Arizona	0.74597	Georgia	0.733618	Michigan	0.735028	New York	0.729213	West Virgi	0.702833	West Virgi	0.690016	New Mexi	0.701422	Tennessee	0.674181	Nevada	0.651155	Nevada	0.637743
Oklahoma	0.729836	Ohio	0.73085	Georgia	0.731289	Mississipp	0.716102	Nevada	0.685258	Michigan	0.683301	Nevada	0.682074	Delaware	0.670338	Iowa	0.650334	Iowa	0.61796
Virginia	0.729836	West Virgi	0.72678	Ohio	0.714679	West Virgi	0.692372	Mississipp	0.684847	New York	0.677408	Louisiana	0.679484	Massachu	0.66775	Louisiana	0.649654	Louisiana	0.616356
Georgia	0.724089	Arizona	0.723916	West Virgi	0.714202	Virginia	0.691526	Tennessee	0.683662	Massachu	0.676432	Nebraska	0.679484	Ohio	0.665434	Minnesota	0.631192	Minnesota	0.615332
West Virgi	0.724008	Virginia	0.717248	Arizona	0.706563	Nevada	0.691421	Virginia	0.676782	Ohio	0.669815	Massachu	0.672728	Mississipp	0.648417	Missouri	0.628681	Missouri	0.609616
Mississipp	0.716243	Oklahoma	0.702226	Virginia	0.694943	Arizona	0.689371	Arizona	0.674103	Tennessee	0.681596	Minnesota	0.669796	Virginia	0.646116	Mississipp	0.628223	Mississipp	0.608076
New York	0.705827	Wisconsin	0.684623	New York	0.689892	Oklahoma	0.680687	Missouri	0.664076	Pennsylva	0.656823	North Dak	0.669144	Missouri	0.639238	Delaware	0.627176	Delaware	0.606181
Idaho	0.700355	New York	0.68168	Arizona	0.689407	Idaho	0.673857	Idaho	0.663835	Louisiana	0.649272	Virginia	0.646116	Minnesota	0.636866	Oklahoma	0.619572	Oklahoma	0.604989
Oklahoma	0.698265	Missouri	0.679412	West Virgi	0.683734	Missouri	0.672049	Oklahoma	0.663284	Idaho	0.639589	Oregon	0.658519	Oklahoma	0.633724	Ohio	0.619312	Arizona	0.600835
Iowa	0.693515	South Car	0.674839	Oklahoma	0.676764	Oklahoma	0.671921	Iowa	0.649288	Arizona	0.630967	Mississipp	0.658067	Louisiana	0.633068	Virginia	0.618573	Virginia	0.592546
South Car	0.69035	Nevada	0.672011	Idaho	0.672824	Idaho	0.668405	Wisconsin	0.647057	Alaska	0.621525	Iowa	0.649363	Iowa	0.622474	Tennessee	0.616856	Tennessee	0.590692
Wyoming	0.689986	Mississipp	0.669827	Missouri	0.666318	Wisconsin	0.664646	Iowa	0.644401	Mississipp	0.648009	Louisiana	0.648791	Idaho	0.615027	Maine	0.6168	Maine	0.584352
Missouri	0.684226	South Car	0.664333	Nevada	0.663063	Iowa	0.657026	Minnesota	0.633235	Maine	0.605074	Mississipp	0.646366	Maine	0.610834	Alaska	0.604903	Alaska	0.583221
Louisiana	0.67246	Pennsylva	0.664333	Wisconsin	0.662596	Alaska	0.656418	Maine	0.627876	Idaho	0.639589	Michigan	0.64569	Alaska	0.610343	South Car	0.599483	South Car	0.571225
Pennsylva	0.670886	Alaska	0.662646	Pennsylva	0.656731	Minnesota	0.648496	South Car	0.608637	Arizona	0.630967	Arizona	0.633396	Pennsylva	0.606928	Michigan	0.589571	Wisconsin	0.563582
Alaska	0.664735	Iowa	0.66086	Mississipp	0.65538	South Car	0.621706	Wyoming	0.603735	Oklahoma	0.618138	Alaska	0.631835	Arizona	0.590709	Arizona	0.587986	California	0.556222
Nevada	0.657084	Louisiana	0.65091	Louisiana	0.649577	Wyoming	0.612561	Utah	0.573324	Wisconsin	0.605074	Oklahoma	0.624759	South Car	0.588887	Pennsylva	0.569484	Washingtc	0.503761
Utah	0.651245	Wyoming	0.62518	Iowa	0.636299	Maine	0.600087	California	0.564192	California	0.537456	Vermont	0.61737	Wyoming	0.569895	Washingtc	0.520989	New Mexi	0.496478
Minnesota	0.63586	Utah	0.623147	South Car	0.614958	Utah	0.58828	Arkansas	0.560759	Arkansas	0.533195	Rhode Isla	0.615089	Wisconsin	0.536819	New Mexi	0.516178	Montana	0.495573
California	0.602855	Minnesota	0.609332	Minnesota	0.609601	California	0.561877	Illinois	0.546517	Utah	0.533001	Minnesota	0.603821	Utah	0.518002	Arkansas	0.541345	Utah	0.494572
Washingtc	0.593462	California	0.586892	Maine	0.608653	Arkansas	0.554568	Washingtc	0.540847	Washingtc	0.47273	Wisconsin	0.587166	New Hamp	0.510587	Wisconsin	0.530252	New Hamp	0.481815
Arkansas	0.5864	Washingtc	0.58405	Utah	0.57411	Illinois	0.553861	New Jerse	0.538584	Illinois	0.465166	Arkansas	0.574623	Washingtc	0.491889	California	0.521822	Illinois	0.473209
Illinois	0.54538	Arkansas	0.573053	California	0.568503	Washingtc	0.544081	New Mexi	0.484961	New Jerse	0.025147	West Virgi	0.544789	Illinois	0.476766	Utah	0.50062	New Jerse	0.448461
New Mexi	0.493884	New Mexi	0.543641	Arkansas	0.565102	New Jerse	0.485645	Hawaii	0.467452	New Mexi	0.426983	Texas	0.542961	Montana	0.472226	Illinois	0.49321	Hawaii	0.140409
New Jerse	0.476461	New Jerse	0.489923	Washingtc	0.486023	New Mexi	0.473083	Florida	0.426983	Montana		Illinois	0.54175	New Jerse	0.326771	Montana	0.479611		
Hawaii	0.469014	Hawaii	0.478566	Illinois	0.485704	Hawaii	0.473083	Montana	0.399638	Hawaii		Washingtc	0.529845	Hawaii		New Jerse	0.470081		
Montana	0.450994	Montana	0.432738	New Mexi	0.427796	Montana	0.426444	Indiana	0.037086	Iowa		New Jerse	0.523449	Wyoming		Hawaii	0.157989		
Vermont		Hawaii	0.429323	New Jerse	0.42469	Indiana	0.408705					New Hamp	0.492172						
Wisconsin		Illinois		Hawaii	0.42469	Wyoming						Hawaii	0.459443						
Illinois				Wyoming								Missouri	0.317429						
												Wyoming							
	0.72152		0.71		0.709034		0.702576		0.674063		0.677116		0.680809		0.664279		0.642327		0.621535

2017 State	2017 40% SLD	2016 State	2016 40% SLD	2015 State	2015 40% SLD	2014 State	2014 40% SLD	2013 State	2013 40% SLD	2012 State	2012 40% SLD	2011 State	2011 40% SLD	2010 State	2010 40% SLD	2009 State	2009 40% SLD	2008 State	2008 40% SLD
South Dak	0.002879	South Dak	0.002201	South Dak	0.002681	South Dak	0.002878	South Dak	0.003507	North Dak	0.002836	North Dak	0.002986	South Car	0.003404	North Dak	0.003848	South Dak	0.007034
Alabama	0.003209	Alabama	0.003427	Alabama	0.003828	Alabama	0.003264	North Dak	0.004064	South Dak	0.003856	South Dak	0.005123	North Dak	0.003863	South Dak	0.004551	Alabama	0.008161
Colorado	0.004072	North Dak	0.004162	North Dak	0.004479	North Dak	0.004705	South Dak	0.004091	West Virgi	0.004235	North Car	0.013443	South Dak	0.005585	West Virgi	0.006311	West Virgi	0.012338
West Virgi	0.007182	Colorado	0.005149	Kentucky	0.007407	Nebraska	0.007163	Nebraska	0.009099	Alabama	0.00906	Alabama	0.013667	Nebraska	0.008851	Idaho	0.011724	Idaho	0.013726
North Dak	0.007384	West Virgi	0.007159	West Virgi	0.008154	Kentucky	0.008956	Kentucky	0.009135	Nebraska	0.012122	Washingtc	0.014056	Washingtc	0.01268	Nebraska	0.012053	Nebraska	0.014265
Idaho	0.007534	Oregon	0.009582	Nebraska	0.008849	Colorado	0.009096	Colorado	0.00975	Kentucky	0.012788	Colorado	0.014978	Idaho	0.014575	North Dak	0.012607	North Dak	0.014682
Kentucky	0.008065	Kentucky	0.009684	Colorado	0.009194	Kansas	0.009168	West Virgi	0.010242	West Virgi	0.013	Kentucky	0.016022	Utah	0.014831	Connecticu	0.017288	Connecticu	0.018384
Nebraska	0.008107	Nebraska	0.009728	Kansas	0.010325	Oregon	0.011241	Kansas	0.010448	Wyoming	0.013768	Wyoming	0.016203	Connecticu	0.01553	Wyoming	0.018415	Wyoming	0.021119
Indiana	0.008649	Connectic	0.009976	Idaho	0.010572	Connectic	0.012104	Oregon	0.014053	Vermont	0.015577	Wisconsin	0.016377	Wisconsin	0.017036	Kansas	0.018652	Kansas	0.022084
Texas	0.009561	Idaho	0.010958	Connectic	0.010572	Vermont	0.013189	Connecticu	0.014611	Connecticu	0.016024	Oklahoma	0.016886	Oregon	0.01733	Oregon	0.018932	Oregon	0.022737
Oregon	0.01	Oregon	0.011018	Oregon	0.011106	Idaho	0.013829	Vermont	0.015752	Texas	0.018013	Kansas	0.020587	Kansas	0.019238	Kentucky	0.019795	Kentucky	0.024582
Connectic	0.010689	Vermont	0.01104	Texas	0.011658	Texas	0.01386	Idaho	0.015934	Maine	0.018507	Colorado	0.02136	Wyoming	0.019363	Texas	0.024496	Texas	0.034433
Kansas	0.011409	Texas	0.013173	Vermont	0.012617	Wyoming	0.01386	Texas	0.016008	Idaho	0.018633	Idaho	0.02227	Idaho	0.021717	Minnesota	0.027567	Minnesota	0.035119
Tennessee	0.014668	Indiana	0.013481	Tennessee	0.015079	Indiana	0.018002	Wyoming	0.017607	Missouri	0.021176	Tennessee	0.026226	Colorado	0.024295	Colorado	0.028689	Colorado	0.03277
Missouri	0.014967	Missouri	0.014926	Indiana	0.016345	Missouri	0.018236	Maine	0.01975	Wisconsin	0.021559	Maine	0.028052	Maine	0.025204	Maine	0.02954	Maine	0.036879
Wyoming	0.01725	Tennessee	0.015828	Missouri	0.016689	Maine	0.01873	Indiana	0.022499	Indiana	0.022077	Wisconsin	0.02867	Missouri	0.029405	Oklahoma	0.032567	Oklahoma	0.037427
Washingtc	0.017254	Wyoming	0.017254	Missouri	0.017891	Tennessee	0.017375	New Ham	0.022582	New Ham	0.025953	New Ham	0.030926	Minnesota	0.032842	Wisconsin	0.035656	Wisconsin	0.037725
Virginia	0.02271	Wisconsin	0.022292	Wisconsin	0.022182	Wisconsin	0.024708	Wisconsin	0.024436	Washingtc	0.026295	West Virgi	0.031035	Wisconsin	0.033551	Missouri	0.036411	Missouri	0.038569
Minnesota	0.02323	Ohio	0.023792	Maine	0.024279	Pennsylva	0.025227	Ohio	0.025994	Indiana	0.028345	North Dak	0.03221	Washingtc	0.033849	North Car	0.03671	North Car	0.041846
Ohio	0.023515	Washingtc	0.024447	Washingtc	0.024377	Washingtc	0.026137	Pennsylva	0.027139	Ohio	0.029323	Indiana	0.033221	North Dak	0.033883	Ohio	0.037697	Arkansas	0.043925
Pennsylva	0.024241	Maine	0.024691	Ohio	0.024533	Ohio	0.026636	Washingtc	0.027267	Pennsylva	0.029588	Ohio	0.033939	Virginia	0.033883	Arkansas	0.039082	Arkansas	0.045771
Maryland	0.024331	New Ham	0.026162	New Ham	0.027127	New Ham	0.029667	North Car	0.027913	North Car	0.030136	Arkansas	0.034679	Oklahoma	0.034756	Indiana	0.041405	Indiana	0.049782
Arkansas	0.024737	Oklahoma	0.026844	Minnesota	0.027849	North Car	0.030424	Tennessee	0.028764	Minnesota	0.030422	Oregon	0.036158	North Car	0.035766	Pennsylva	0.042291	Pennsylva	0.051342
North Car	0.025174	Minnesota	0.027955	Virginia	0.028418	Alaska	0.030459	Alaska	0.03	Tennessee	0.033556	South Dak	0.036857	Indiana	0.03697	Montana	0.042511	Montana	0.058139
Utah	0.026652	Arkansas	0.028316	North Car	0.028892	Minnesota	0.030641	Minnesota	0.030752	Alaska	0.034657	Alaska	0.037873	Arkansas	0.038887	Tennessee	0.044497	Nevada	0.061572
Michigan	0.026926	Florida	0.028494	Oklahoma	0.030059	Oklahoma	0.031045	Oklahoma	0.031725	Arkansas	0.035272	Indiana	0.039826	Alaska	0.039171	Alaska	0.045406	Tennessee	0.052896
New Ham	0.026957	North Car	0.028782	Pennsylva	0.031132	Arkansas	0.031813	Arkansas	0.031891	Oklahoma	0.038614	Pennsylva	0.039826	Pennsylva	0.039475	Arizona	0.047352	Alaska	0.05302
Alaska	0.027275	Pennsylva	0.029413	Arkansas	0.031521	Virginia	0.03474	Arizona	0.035607	Georgia	0.04536	Montana	0.047602	Montana	0.041108	Nevada	0.048257	Arizona	0.058139
Arizona	0.029396	Michigan	0.030595	Michigan	0.031606	Michigan	0.036993	Georgia	0.039246	Arizona	0.045697	Iowa	0.048759	Iowa	0.043794	Georgia	0.052417	Nevada	0.061572
Louisiana	0.031095	Utah	0.030823	Florida	0.032545	Arizona	0.038894	Louisiana	0.040398	Louisiana	0.045999	Arizona	0.052211	Arizona	0.051207	Georgia	0.059399	Massachu	0.076031
Oklahoma	0.034146	Alaska	0.031185	Arizona	0.033025	Arizona	0.039614	Michigan	0.042653	Michigan	0.047343	Georgia	0.052516	Nevada	0.053213	Massachu	0.060463	Louisiana	0.07696
Mississipp	0.037863	Florida	0.033471	Georgia	0.034845	Georgia	0.044169	Virginia	0.044412	Virginia	0.052412	Virginia	0.056577	Virginia	0.061601	Louisiana	0.062528	Virginia	0.077137
Montana	0.039393	Louisiana	0.038199	Louisiana	0.039159	Louisiana	0.044933	Utah	0.044922	Utah	0.056637	Michigan	0.058346	Mississipp	0.061737	Utah	0.069099	Utah	0.080476
Rhode Isla	0.039937	Arizona	0.039078	Utah	0.039485	Mississipp	0.045235	Mississipp	0.046369	Mississipp	0.058481	Nebraska	0.060122	Louisiana	0.062213	Mississipp	0.071423	Mississipp	0.085814
Massachu	0.043146	Georgia	0.046164	Mississipp	0.04719	Florida	0.045235	Massachu	0.049286	Massachu	0.058937	Missouri	0.061104	Nebraska	0.062213	Maryland	0.072088	Maryland	0.090994
Georgia	0.045131	Massachu	0.047736	Massachu	0.051378	Florida	0.052605	Massachu	0.049286	Massachu	0.059349	Minnesota	0.061483	Massachu	0.062806	Florida	0.073804	Florida	0.09622
South Car	0.045713	Rhode Isla	0.048473	Rhode Isla	0.053312	Massachu	0.053956	Rhode Isla	0.054311	Rhode Isla	0.059386	Massachu	0.06294	Minnesota	0.064611	Virginia	0.082314	Virginia	0.099058
Delaware	0.049731	Mississipp	0.053677	Nevada	0.054056	Rhode Isla	0.054723	Nevada	0.057987	Nevada	0.059386	Florida	0.065015	Maryland	0.066768	Rhode Isla	0.08284	New Jerse	0.10148
Illinois	0.057491	Maryland	0.056391	Maryland	0.054408	Utah	0.062756	Maryland	0.058177	Montana	0.069975	Rhode Isla	0.06566	Florida	0.072176	New Jerse	0.08284	Rhode Isla	0.103338
Nevada	0.060859	Montana	0.05974	Montana	0.056212	Nevada	0.062786	Illinois	0.061126	Rhode Isla	0.077278	Pennsylva	0.06566	Rhode Isla	0.077489	Rhode Isla	0.083429	Michigan	0.106033
Hawaii	0.063705	Nevada	0.063515	Illinois	0.060343	Montana	0.067302	Delaware	0.062946	Pennsylva	0.077588	Maryland	0.072284	Iowa	0.079269	Iowa	0.084408	Delaware	0.111369
Iowa	0.064275	Delaware	0.066789	Delaware	0.069732	Maryland	0.068564	Iowa	0.065039	Maryland	0.083714	Delaware	0.082801	Michigan	0.093661	Delaware	0.090163	Delaware	0.130554
New Mexi	0.076741	South Car	0.067882	Delaware	0.071396	Illinois	0.071113	Hawaii	0.071991	Delaware	0.105288	Illinois	0.082839	Delaware	0.094929	Delaware	0.1	South Car	0.1373
New York	0.081331	Iowa	0.084515	South Car	0.071396	Delaware	0.085825	Delaware	0.074991	South Car	0.105469	New Ham	0.085783	New Jerse	0.1082	Illinois	0.104868	Illinois	0.157871
California	0.093635	New Jerse	0.093725	Iowa	0.089022	Iowa	0.090522	Iowa	0.083654	New Jerse	0.117708	Rhode Isla	0.11236	Illinois	0.119498	New York	0.122427	New Mexi	0.158207
Maine	0.109313	Hawaii	0.097777	Hawaii	0.095229	South Car	0.103517	South Car	0.099027	New York	0.133018	New Jerse	0.112694	New Ham	0.119691	New Mexi	0.126775	California	0.170498
Vermont	0.11122	New York	0.116684	New Jerse	0.100834	Hawaii	0.111933	Hawaii	0.104463	California	0.150962	Hawaii	0.134446	South Car	0.150595	California	0.130775	Washingtc	0.174357
Wisconsin	0.117598	New Mexi	0.118403	New York	0.117078	New York	0.118801	New Mexi	0.112539	New Mexi	0.159197	California	0.144448	California	0.15999	Washingtc	0.152774	Hawaii	0.190386
		California	0.128994	New Mexi	0.131989	New Jerse	0.138159	New York	0.128788	New Mexi		South Car	0.153257	New York	0.17108	Hawaii	0.168148	New Ham	0.207124
California		Illinois		California	0.138966	California	0.145639	California	0.147314	Florida		Hawaii	0.167035	California	0.217965	California	0.169577	Vermont	n/a
Vermont				Wyoming		New Mexi		Missouri	0.155517	Iowa		Wyoming		Hawaii		Vermont	0.189801		
Wisconsin								Montana											
	0.035172		0.037027		0.038342		0.041869		0.043715		0.046281		0.050885		0.054781		0.059877		0.070296

State	2017 Sep SLD	2016 State	Sep SLD	2015 State	Sep SLD	2014 State	Sep SLD	2013 State	Sep SLD	2012 State	Sep SLD	2011 State	Sep SLD	2010 State	Sep SLD	2009 State	Sep SLD	2008 State	Sep SLD
West Virgi	0	West Virgi	0	West Virgi	7.44E-05	Louisiana	0.000157	Louisiana	4.29E-05	Louisiana	0	Idaho	0.000543	Tennessee	0.000608	Louisiana	0.00041	Louisiana	0.000478
Oklahoma	0.000103	Oklahoma	5.15E-05	Kentucky	0.000319	Nevada	0.000212	West Virgi	0.000305	West Virgi	0	Georgia	0.000656	Idaho	0.00065	Georgia	0.000674	Georgia	0.000683
Idaho	0.000142	Nevada	0.000145	Louisiana	0.000375	Nevada	0.000345	Nevada	0.000362	Nevada	0.000241	Nevada	0.000676	Georgia	0.000737	Nevada	0.000692	South Carc	0.000745
Louisiana	0.000194	Louisiana	0.00024	Nevada	0.000379	Montana	0.000397	South Dak	0.000468	Texas	0.000047	Washingtc	0.000756	Virginia	0.000786	South Carc	0.000715	Texas	0.000776
North Dak	0.000224	Idaho	0.00029	Montana	0.000453	South Dak	0.000398	Georgia	0.000549	Hawaii	0.000493	South Carc	0.000786	Washingtc	0.000847	Hawaii	0.000866	Hawaii	0.000833
South Dak	0.000288	North Dak	0.000299	Kentucky	0.000471	Georgia	0.000525	Texas	0.000576	South Carc	0.000494	Mississippi	0.000789	Nebraska	0.000896	Nevada	0.000879	Nevada	0.000907
Washingtc	0.00032	Texas	0.000389	North Carc	0.000515	Texas	0.000614	Nevada	0.000618	Mississippi	0.000598	New York	0.000793	Rhode Isla	0.000959	Washingtc	0.000982	Mississippi	0.001093
Nevada	0.000392	North Carc	0.000487	Texas	0.00057	Washingtc	0.000639	Washingtc	0.000629	Georgia	0.00063	North Carc	0.000908	New York	0.000107	Mississippi	0.001311	North Carc	0.001229
Texas	0.0004	Tennessee	0.000497	Washingtc	0.000718	Montana	0.000727	South Carc	0.000657	North Carc	0.000682	Kentucky	0.000932	Kentucky	0.00107	North Carc	0.001441	Idaho	0.001238
Kentucky	0.000409	South Dak	0.000587	Hawaii	0.000758	North Carc	0.000748	Hawaii	0.000778	Kentucky	0.000751	Idaho	0.001058	Idaho	0.00129	Idaho	0.001531	Washingtc	0.001563
Tennessee	0.000481	Montana	0.000644	New Mexi	0.000775	Tennessee	0.000777	Tennessee	0.000779	Wisconsin	0.000795	Hawaii	0.001121	Wisconsin	0.001558	Mississippi	0.001603	North Dak	0.001894
North Carc	0.000615	Wyoming	0.000771	Georgia	0.000871	Idaho	0.000858	Idaho	0.000928	Tennessee	0.001017	Ohio	0.001492	Hawaii	0.001624	Kentucky	0.001656	Michigan	0.001921
South Carc	0.000642	Hawaii	0.000786	Wyoming	0.000942	New Mexi	0.000909	New Mexi	0.000953	Oklahoma	0.001042	Arizona	0.001629	Arizona	0.001667	Oregon	0.0017	Oregon	0.001988
Wyoming	0.000719	Georgia	0.000896	Idaho	0.001042	Oregon	0.000911	Kentucky	0.001015	New Mexi	0.000106	Minnesota	0.001713	Minnesota	0.001713	Tennessee	0.001876	Wisconsin	0.002074
Georgia	0.000746	Oregon	0.00099	South Carc	0.001047	Kentucky	0.000949	Idaho	0.001107	Idaho	0.001365	West Virgi	0.001724	West Virgi	0.001817	Michigan	0.001993	Oklahoma	0.002125
Mississippi	0.000865	Oklahoma	0.000999	Arizona	0.001262	Mississippi	0.001049	Oregon	0.001157	Oregon	0.001761	New Jerse	0.001762	Alaska	0.00184	Oklahoma	0.002137	Alaska	0.002148
New Mexi	0.000968	Indiana	0.001068	Arkansas	0.001268	Mississippi	0.001176	Mississippi	0.001274	Arizona	0.001615	Maine	0.001762	Wisconsin	0.00236	Alaska	0.002184	Wisconsin	0.002282
Indiana	0.001006	Arkansas	0.001156	North Dak	0.001388	Arkansas	0.00122	Arkansas	0.001447	Oregon	0.001629	Arkansas	0.001809	Oklahoma	0.002409	Wisconsin	0.002214	Arizona	0.002328
Arizona	0.001006	Mississippi	0.001182	Oregon	0.001483	Wyoming	0.001472	Wyoming	0.001506	Arkansas	0.001647	Mississippi	0.002013	Oregon	0.002431	Wyoming	0.002421	Wyoming	0.002562
Hawaii	0.001055	Wisconsin	0.001579	Oklahoma	0.001563	Arizona	0.001542	Oklahoma	0.001653	Wyoming	0.001655	Indiana	0.002282	Maine	0.002448	Tennessee	0.00263	Tennessee	0.003029
Arkansas	0.001139	Kansas	0.001751	Indiana	0.001735	Oklahoma	0.001579	Wisconsin	0.001937	Montana	0.001749	South Carc	0.002477	South Carc	0.002593	Arkansas	0.002696	Ohio	0.003094
Oregon	0.001581	Alabama	0.001812	Mississippi	0.001813	Wisconsin	0.001745	Indiana	0.002082	New Mexi	0.001965	North Dak	0.002851	North Dak	0.002898	Kansas	0.002813	Kansas	0.0031
Missouri	0.001594	Missouri	0.002155	Wisconsin	0.001857	Indiana	0.002092	Maine	0.002171	Maine	0.002069	Colorado	0.00297	Colorado	0.003532	Missouri	0.003105	Missouri	0.003245
Montana	0.001598	Louisiana	0.002591	Kansas	0.002049	Missouri	0.002225	Missouri	0.002493	Kansas	0.002528	Missouri	0.003141	Missouri	0.003555	Colorado	0.003202	Montana	0.003354
Alaska	0.001979	Maine	0.002662	Alabama	0.002068	Nebraska	0.002252	Nebraska	0.002696	Alaska	0.002646	Montana	0.003361	Ohio	0.003734	Montana	0.003386	Florida	0.003508
Kansas	0.002089	Nebraska	0.002712	Alaska	0.00223	Colorado	0.002422	Colorado	0.002874	Indiana	0.002704	Alabama	0.003778	Montana	0.003761	Arkansas	0.00361	Arkansas	0.00356
Alabama	0.00235	Colorado	0.002778	Missouri	0.002443	Michigan	0.002433	Ohio	0.00306	Colorado	0.002706	Kansas	0.00379	Alabama	0.00383	New Mexi	0.00401	New Mexi	0.003578
Michigan	0.00235	Maine	0.003066	Colorado	0.002443	Alaska	0.002522	Kansas	0.003244	Ohio	0.002801	Alabama	0.004053	Florida	0.00383	Connectic	0.00414	Alabama	0.003777
Colorado	0.002955	Michigan	0.003157	Alabama	0.002646	Kansas	0.002542	Virginia	0.003428	Virginia	0.00411	Vermont	0.004238	Colorado	0.004307	Alabama	0.004141	Maine	0.003973
Florida	0.002961	Alaska	0.003226	Maine	0.003066	Indiana	0.002838	Colorado	0.003933	Florida	0.001965	New Ham	0.005027	Indiana	0.005254	Maine	0.004254	Colorado	0.004368
Ohio	0.003115	Michigan	0.003157	Ohio	0.003079	Virginia	0.003167	Colorado	0.003933	Ohio	0.002069	Texas	0.005027	Vermont	0.005279	Colorado	0.004906	Colorado	0.004368
Nebraska	0.003128	Colorado	0.003226	Nebraska	0.003283	Alabama	0.003277	Alabama	0.004085	Nebraska	0.004422	Pennsylva	0.005572	Rhode Isla	0.006915	Virginia	0.005917	Indiana	0.004388
Virginia	0.00401	Ohio	0.0038	Utah	0.003354	Utah	0.004037	Virginia	0.004234	Utah	0.004494	Maryland	0.00638	New Ham	0.007033	Indiana	0.006627	Virginia	0.004461
Rhode Isla	0.00403	Virginia	0.004253	Virginia	0.004022	Florida	0.004461	Rhode Isla	0.004762	Michigan	0.005228	Michigan	0.006659	Utah	0.007206	Rhode Isla	0.006948	Rhode Isla	0.004671
California	0.004053	Utah	0.004406	New Ham	0.004258	New Ham	0.005168	New Ham	0.00555	Maryland	0.005692	Montana	0.006739	Minnesota	0.007908	Utah	0.007673	Utah	0.007274
Utah	0.004246	New Ham	0.004541	California	0.004345	Vermont	0.005305	Maryland	0.005632	Minnesota	0.006454	New Ham	0.006982	Maryland	0.008187	Minnesota	0.007726	Minnesota	0.007666
New Ham	0.004339	Minnesota	0.005471	California	0.004916	Minnesota	0.005627	Minnesota	0.006301	New Jerse	0.006857	Oregon	0.007841	Connectic	0.008201	New Ham	0.009106	New Ham	0.008008
Minnesot	0.005322	Florida	0.005662	Minnesota	0.005677	California	0.006382	California	0.006618	California	0.006948	California	0.008005	California	0.00805	Maryland	0.009135	Maryland	0.00816
Florida	0.005351	Florida	0.006595	Minnesota	0.005848	Minnesota	0.006382	Minnesota	0.006796	Rhode Isla	0.007356	Nebraska	0.008251	New Mexi	0.008912	Nebraska	0.009285	Nebraska	0.008705
New York	0.00643	Rhode Isla	0.006661	Florida	0.005848	Maryland	0.006536	Maryland	0.006802	New Jerse	0.007779	Connectic	0.008467	Connectic	0.008948	New York	0.009446	New York	0.008801
New Jerse	0.007441	Maryland	0.006713	Rhode Isla	0.006272	New York	0.006893	New York	0.007528	New York	0.008277	Utah	0.008671	Utah	0.009881	New Jerse	0.009459	Pennsylva	0.009188
Maryland	0.008293	New York	0.007252	Maryland	0.006382	New Jerse	0.007061	Rhode Isla	0.00786	Pennsylva	0.008444	Illinois	0.009154	Illinois	0.01042	Connectic	0.010181	Connectic	0.009878
Pennsylva	0.009653	Vermont	0.0079	Vermont	0.006382	Rhode Isla	0.007852	Connectic	0.008553	Vermont	0.008778	Iowa	0.009826	Vermont	0.0143	Illinois	0.010419	Illinois	0.010086
Illinois	0.010279	Pennsylva	0.008788	New York	0.006995	Pennsylva	0.009166	Pennsylva	0.009247	Indiana	0.009519	Massachu	0.010061	Massachu	0.014805	New Jerse	0.0154	New Jerse	0.010618
Delaware	0.010387	Delaware	0.009143	Pennsylva	0.007805	Pennsylva	0.009166	Illinois	0.009247	Illinois	0.010184	Delaware	0.010471	Delaware	0.018961	Massachu	0.016384	California	0.011075
Iowa	0.011157	Iowa	0.009964	Illinois	0.00917	Illinois	0.009973	Massachu	0.013553	Massachu	0.013553	North Carc	0.014911	Delaware	0.018961	Iowa	0.017483	Massachu	0.014747
Massadhu	0.013147	Delaware	0.010772	Iowa	0.010071	Iowa	0.01085	Iowa	0.013155	Delaware	0.014235	Oklahoma	0.019055	Missouri	n/a	Delaware	n/a	Delaware	0.018653
Connectic		Iowa	0.010913	Massachu	0.010176	Massachu	0.013225	Massachu	0.013658	Delaware	0.019022	Washington	n/a	North Dak	n/a	Missouri	n/a	Iowa	0.031211
Maine		Massachu	0.010913	Delaware	0.012362	Delaware	0.013928	Delaware	0.014601	Iowa		Wisconsin	n/a	South Dak	n/a	North Dak	n/a	South Dak	n/a
Vermont		Connectic	0.01228	Connectic	0.013572	North Dakota	0.014884	North Dakota		Missouri		Louisiana	n/q	West Virgi	n/a	South Dak	n/a	Vermont	n/a
Wisconsin		Illinois		Wyoming		West Virginia		West Virginia		Montana		North Dakota		Wyoming		California		West Virgin/a	0.005214
	0.003093		0.003338		0.003411		0.00376		0.003931		0.004093		0.004508		0.004729		0.004827		0.005214

The following table lists U.S. states ranked each year by their "80% SLI" value, for the years 2008 through 2017. Each year column is an independently sorted list of states with values. State names appear truncated as in the source (e.g., "North Cari", "West Virgi", "Washingtc", "Pennsylva", "Mississipp", "Connectic", "Massachu", "New Mexi", "New Ham", "Rhode Isla", "North Dak", "South Dak", "South Cari", "New Jerse").

2017 State	2017 80% SLI	2016 State	2016 80% SLI	2015 State	2015 80% SLI	2014 State	2014 80% SLI	2013 State	2013 80% SLI	2012 State	2012 80% SLI	2011 State	2011 80% SLI	2010 State	2010 80% SLI	2009 State	2009 80% SLI	2008 State	2008 80% SLI
Delaware	0.996011	Delaware	0.994582	Delaware	0.997657	Delaware	0.9988	Nevada	0.995995	Delaware	0.984327	Nebraska	0.990617	Nevada	0.98735	Nevada	0.9872	Nevada	0.987778
Nevada	0.990308	Nevada	0.989496	Nevada	0.986074	Nevada	0.987405	Delaware	0.987849	Nevada	0.983553	Delaware	0.987713	Delaware	0.980905	North Cari	0.986091	North Cari	0.983864
Alaska	0.984293	Oklahoma	0.98734	Oklahoma	0.979211	Oklahoma	0.984209	Oklahoma	0.98376	Oklahoma	0.979765	Ohio	0.979732	Ohio	0.98032	Delaware	0.984012	Delaware	0.98374
Oklahoma	0.984214	Louisiana	0.982816	Louisiana	0.976074	Louisiana	0.979887	Louisiana	0.981503	Indiana	0.976078	Indiana	0.979329	Indiana	0.978818	Oklahoma	0.978818	South Cari	0.975232
Louisiana	0.982847	Alaska	0.981049	Texas	0.975238	Texas	0.976185	Arizona	0.975439	North Cari	0.975545	New York	0.977755	South Cari	0.978426	South Cari	0.978337	Texas	0.974013
Texas	0.976307	Texas	0.975682	Arizona	0.974059	Arizona	0.974455	Texas	0.975355	South Cari	0.973159	Rhode Isla	0.973406	Kentucky	0.976969	Texas	0.978203	Oklahoma	0.971506
Arizona	0.974314	Arizona	0.97319	North Cari	0.971908	Minnesota	0.971092	Minnesota	0.974035	Minnesota	0.972935	Michigan	0.972945	Minnesota	0.972439	Oklahoma	0.974387	West Virgi	0.970814
Kentucky	0.973438	North Cari	0.970957	Kentucky	0.971232	North Cari	0.970235	North Cari	0.972111	Arizona	0.972367	Washingtc	0.971784	West Virgi	0.972108	Kentucky	0.972943	Kentucky	0.969679
Colorado	0.969756	Kentucky	0.970946	West Virgi	0.966807	Kentucky	0.9698	West Virgi	0.970981	West Virgi	0.968388	Tennessee	0.971648	Arizona	0.971555	West Virgi	0.970701	South Dak	0.964255
West Virgi	0.968215	West Virgi	0.965877	Alabama	0.963258	West Virgi	0.966804	South Cari	0.970786	Kentucky	0.967228	Kentucky	0.970936	South Dak	0.97004	Minnesota	0.968037	Pennsylva	0.960094
Alabama	0.96812	Alabama	0.965408	Georgia	0.961061	Alabama	0.965284	Kentucky	0.966962	Arizona	0.966593	Arizona	0.969279	Kentucky	0.967736	Kentucky	0.966947	Minnesota	0.959662
North Cari	0.964259	Georgia	0.963552	Kansas	0.958734	South Cari	0.958985	Pennsylva	0.961869	Pennsylva	0.960593	Oregon	0.963889	Arizona	0.963861	Minnesota	0.964092	Georgia	0.959129
Georgia	0.963297	Kansas	0.959261	South Dak	0.957613	Alaska	0.953551	Alaska	0.955953	Alabama	0.957408	Alabama	0.963308	Alabama	0.957896	Pennsylva	0.963348	Arizona	0.958488
Pennsylva	0.960035	Colorado	0.957797	Colorado	0.956563	Pennsylva	0.951331	Colorado	0.954259	Alaska	0.956255	Alaska	0.955047	Alaska	0.954634	Arizona	0.954942	Alabama	0.955859
Kansas	0.952523	Pennsylva	0.954487	Pennsylva	0.95101	Georgia	0.948266	South Dak	0.952134	Virginia	0.948525	Georgia	0.954762	Virginia	0.952689	Alabama	0.9504	Mississipp	0.945691
Washingtc	0.951168	South Dak	0.950404	South Cari	0.949161	Virginia	0.94759	Virginia	0.948106	South Dak	0.947408	South Cari	0.952788	Washingtc	0.947953	Mississipp	0.949943	Washingtc	0.936428
Virginia	0.949426	Washingtc	0.948678	Washingtc	0.947029	South Dak	0.945382	Kansas	0.946957	Georgia	0.945927	Virginia	0.949911	Indiana	0.935612	Washingtc	0.94535	Alaska	0.934998
South Dak	0.946576	Virginia	0.945365	Virginia	0.946242	Kansas	0.943529	Colorado	0.944665	Kansas	0.942511	North Cari	0.941251	Kansas	0.93328	Alaska	0.936476	Indiana	0.933294
South Cari	0.94601	Minnesota	0.944148	Indiana	0.92996	Washingtc	0.939809	Washingtc	0.939914	Washingtc	0.936515	Kansas	0.939165	Kansas	0.931982	Indiana	0.933048	Kansas	0.926621
Minnesota	0.933355	North Dak	0.93425	North Dak	0.929515	North Dak	0.9301	North Dak	0.939553	Colorado	0.924169	Florida	0.933449	North Dak	0.921927	Kansas	0.925876	Michigan	0.91659
Florida	0.931638	Florida	0.933888	Minnesota	0.92617	Florida	0.92851	Indiana	0.919879	Mississipp	0.922887	Colorado	0.931262	Colorado	0.914186	Michigan	0.925632	North Dak	0.916014
North Dak	0.930878	Utah	0.927358	Florida	0.920869	Mississipp	0.925405	Mississipp	0.919314	Maryland	0.918966	Illinois	0.90866	Illinois	0.900165	North Dak	0.922143	Florida	0.910905
Michigan	0.930484	Maryland	0.925438	Ohio	0.919805	Indiana	0.916673	Florida	0.918833	Michigan	0.918039	Louisiana	0.907573	Louisiana	0.899966	Florida	0.91849	Illinois	0.909077
Ohio	0.920981	Wisconsin	0.919506	Maryland	0.918837	North Dak	0.916132	North Dak	0.918071	Illinois	0.913501	North Dak	0.905009	North Dak	0.89617	Ohio	0.898854	Louisiana	0.903582
Indiana	0.918327	Indiana	0.917981	Wisconsin	0.916527	Maryland	0.915754	Maryland	0.917011	Ohio	0.908396	Maryland	0.904903	Maryland	0.895079	Louisiana	0.895436	Nebraska	0.894374
Illinois	0.917575	Ohio	0.916927	Illinois	0.915184	Ohio	0.915101	Ohio	0.912901	Wisconsin	0.907933	West Virgi	0.897596	Colorado	0.893801	Nebraska	0.894954	Illinois	0.890147
Maryland	0.915855	Michigan	0.915373	Michigan	0.910683	Illinois	0.911362	Illinois	0.909025	Louisiana	0.907026	Montana	0.896494	Wisconsin	0.882427	Illinois	0.88892	Colorado	0.884672
Michigan	0.909416	Oregon	0.905734	Oregon	0.899779	Wisconsin	0.907266	Wisconsin	0.908823	Missouri	0.906176	Oklahoma	0.895103	Utah	0.878501	Colorado	0.880803	Wisconsin	0.88347
Oregon	0.908498	Rhode Isla	0.905692	Utah	0.894384	Michigan	0.906953	Oregon	0.905113	Utah	0.892145	Arkansas	0.888205	Maryland	0.877243	Wisconsin	0.887117	Oregon	0.878825
Wyoming	0.903622	Tennessee	0.898632	Rhode Isla	0.894115	Utah	0.899051	Utah	0.894447	Oregon	0.889251	Wisconsin	0.881772	Oregon	0.864464	Oregon	0.880791	Utah	0.87649
Tennessee	0.901931	Arkansas	0.895102	Tennessee	0.886762	Oregon	0.893248	Rhode Isla	0.893755	Arkansas	0.889076	Connectic	0.881282	Nebraska	0.856833	Utah	0.879777	Maryland	0.873479
Montana	0.899934	Louisiana	0.890972	Arkansas	0.882066	Arkansas	0.888016	Arkansas	0.886839	Montana	0.887616	Vermont	0.880836	Rhode Isla	0.8567	Maryland	0.878688	Virginia	0.867313
Rhode Isla	0.897268	Nebraska	0.889191	Montana	0.880432	Rhode Isla	0.884103	Rhode Isla	0.88412	Rhode Isla	0.884367	Pennsylva	0.873571	Arkansas	0.856654	California	0.878228	Arkansas	0.86609
Arkansas	0.894053	Montana	0.888439	Wyoming	0.872399	Montana	0.881407	Montana	0.862239	Arkansas	0.871743	Mississipp	0.870059	Colorado	0.850142	Wyoming	0.874176	Colorado	0.865719
Nebraska	0.890879	Wyoming	0.888166	Nebraska	0.868968	Wyoming	0.878979	Wyoming	0.861618	Nebraska	0.865838	South Dak	0.856495	Missouri	0.848942	Virginia	0.871413	Missouri	0.860824
California	0.86884	Mississipp	0.857283	Mississipp	0.862285	Tennessee	0.87686	Tennessee	0.861147	Wyoming	0.862407	Wyoming	0.850135	Connectic	0.838734	Arkansas	0.870488	Rhode Isla	0.858331
Mississipp	0.858761	California	0.853012	Connectic	0.845909	Nebraska	0.846171	Nebraska	0.859215	Missouri	0.845076	Missouri	0.850115	Idaho	0.836413	Colorado	0.855907	Connectic	0.846134
Hawaii	0.855102	Connectic	0.848907	California	0.842031	Connectic	0.836112	Connectic	0.835244	Connectic	0.842676	Hawaii	0.849003	Missouri	0.836413	Missouri	0.852108	Idaho	0.83969
Connectic	0.851624	Hawaii	0.842001	Missouri	0.830317	Missouri	0.825631	Missouri	0.83253	Tennessee	0.842436	California	0.842884	Tennessee	0.827206	Rhode Isla	0.850057	Tennessee	0.839261
Idaho	0.833168	Maine	0.840085	Idaho	0.824368	Idaho	0.8201	Idaho	0.827438	Hawaii	0.842436	New Jerse	0.833431	Hawaii	0.811384	Connectic	0.8435	Montana	0.83597
Missouri	0.824031	Missouri	0.829373	Missouri	0.823331	California	0.816853	California	0.826455	Idaho	0.839399	California	0.81148	California	0.795445	Idaho	0.832174	California	0.806481
New Mexi	0.808673	Vermont	0.823807	Maine	0.818267	Hawaii	0.814005	Hawaii	0.820041	California	0.834997	Maine	0.798468	New Jerse	0.779843	Tennessee	0.803685	New Mexi	0.763366
New Ham	0.797006	Idaho	0.8201	Hawaii	0.812137	Vermont	0.810811	Vermont	0.804124	New Mexi	0.818596	Massachu	0.79429	New Mexi	0.762747	Montana	0.785849	Maine	0.75512
Massachu	0.743104	New Mexi	0.804799	New Ham	0.800729	Maine	0.798557	New Ham	0.798016	Vermont	0.810452	New Mexi	0.792489	Massachu	0.711002	California	0.778515	Massachu	0.713286
Iowa	0.694685	New Ham	0.79986	New Mexi	0.794563	New Mexi	0.797856	Maine	0.796068	New Ham	0.792705	Maine	0.776593	New Mexi	0.640791	New Mexi	0.758799	Hawaii	0.673163
New York	0.650363	Massachu	0.735233	Massachu	0.737331	Massachu	0.734867	Massachu	0.788779	Maine	0.789991	New Ham	0.704506	Iowa	0.635017	Maine	0.7114	New York	0.629917
New Jerse	0.596126	Iowa	0.661425	New York	0.656861	New Ham	0.656843	New York	0.731048	Massachu	0.773148	Texas	0.661841	New Ham	0.604242	Massachu	0.66388	Iowa	0.618508
Maine		New Jerse	0.599097	Iowa	0.649186	New York	0.649728	New Jerse	0.672428	New Jerse	0.70612	Wyoming	0.657009		n/a	Hawaii	0.629888	New Jerse	0.60305
Vermont		Illinois		New Jerse	0.613438	Iowa	0.615919	Iowa	0.645251	New York	0.661629	Idaho			n/a	New York	0.61698	New Ham	0.526815
Wisconsin				Wyoming		New Jerse		New Jerse	0.6361	Iowa	0.640853	Kansas				Iowa	0.610154	Vermont	n/a
				Illinois				North Dakota		North Dakota	0.614268					New Jerse	0.596684		
																Alabama	0.210254		

2017 State	2017 40% SLI	2016 State	2016 40% SLI	2015 State	2015 40% SLI	2014 State	2014 40% SLI	2013 State	2013 40% SLI	2012 State	2012 40% SLI	2011 State	2011 40% SLI	2010 State	2010 40% SLI	2009 State	2009 40% SLI	2008 State	2008 40% SLI
Delaware	0	Delaware	0.000311	South Dak	0	West Virgi	0	West Virgi	9.61E-05	Delaware	0	Indiana	0	Delaware	0.000781	Delaware	0	Delaware	0
South Dak	0	Nevada	0.000438	West Virgi	0.00015	Kentucky	0.0001	Kentucky	0.00031	Kentucky	0	Kentucky	0.000411	South Dak	0.001776	South Dak	0	South Dak	0
Kentucky	0.000208	West Virgi	0.00058	Kentucky	0.00021	Oklahoma	0.000464	Oklahoma	0.000902	Indiana	0.000515	Kansas	0.00097	West Virgi	0.002134	Kentucky	0	Kentucky	0.00079
West Virgi	0.000221	Kentucky	0.001128	Delaware	0.000468	North Car	0.0006	Indiana	0.001223	North Car	0.00057	Michigan	0.001517	Kansas	0.002891	Indiana	0.001178	Indiana	0.000814
Kansas	0.000954	North Car	0.001246	Nevada	0.000652	Delaware	0.00091	Nevada	0.002003	Nevada	0.000776	North Car	0.00169	Michigan	0.003177	North Car	0.001785	North Car	0.001528
Minnesota	0.001164	South Dak	0.001401	Indiana	0.000853	Indiana	0.001166	North Car	0.002126	Ohio	0.001667	North Dak	0.002006	North Car	0.003851	Ohio	0.002373	Ohio	0.002487
Indiana	0.001194	Oklahoma	0.001489	North Car	0.000988	Kansas	0.001294	Ohio	0.002211	Minnesota	0.001851	West Virgi	0.002081	North Dak	0.003868	Kansas	0.002594	Kansas	0.002523
North Car	0.001253	Indiana	0.001646	Oklahoma	0.001366	Minnesota	0.001353	Oklahoma	0.002218	North Dak	0.001974	Louisiana	0.003344	West Virgi	0.00397	Oklahoma	0.003285	Oklahoma	0.003767
Alaska	0.001309	Minnesota	0.001703	Alaska	0.002122	North Dak	0.001803	Kansas	0.002271	Louisiana	0.002186	Alabama	0.003469	Louisiana	0.004302	Mississipp	0.003738	Mississipp	0.004211
Nevada	0.001615	Wisconsin	0.001806	Minnesota	0.002459	Ohio	0.002016	North Dak	0.002341	Wisconsin	0.002217	Wisconsin	0.003832	Alabama	0.004913	Minnesota	0.004153	Minnesota	0.004678
Georgia	0.00243	Alabama	0.002572	Kansas	0.002496	Alabama	0.002131	West Virgi	0.002408	Mississipp	0.002503	Tennessee	0.004484	Tennessee	0.005027	Washingto	0.004666	Washingto	0.004769
Colorado	0.002572	Ohio	0.002742	Ohio	0.002937	Louisiana	0.002471	Minnesota	0.002949	Washingto	0.002572	Virginia	0.005471	Virginia	0.005482	Alabama	0.004897	Alabama	0.004897
Ohio	0.002752	Georgia	0.002807	Wisconsin	0.003465	Wisconsin	0.00261	Louisiana	0.003045	Alabama	0.003416	Minnesota	0.006281	Ohio	0.00572	Texas	0.00518	Texas	0.004994
Alabama	0.002817	North Dak	0.002938	Alabama	0.003605	Alabama	0.002854	Wisconsin	0.003223	Pennsylva	0.003821	Montana	0.006554	Alabama	0.00652	Louisiana	0.005213	Louisiana	0.005316
North Dak	0.003532	Colorado	0.00323	Louisiana	0.004038	Texas	0.00313	Texas	0.003827	Arizona	0.004097	Oregon	0.007728	Washington	0.007263	North Dak	0.005285	North Dak	0.006406
Texas	0.00393	Georgia	0.003578	North Dak	0.004312	Alaska	0.003329	Wisconsin	0.004361	Alaska	0.004158	Georgia	0.009399	North Dak	0.008848	Wisconsin	0.005688	Wisconsin	0.007289
Oklahoma	0.003972	Washingto	0.00388	Texas	0.004358	Arizona	0.003503	Alaska	0.005403	Virginia	0.004237	Virginia	0.009581	Ohio	0.011683	Nebraska	0.006164	Nebraska	0.010079
Washingto	0.004375	Alaska	0.003967	Washingto	0.004431	Pennsylva	0.00395	Arizona	0.006196	Colorado	0.005198	Wisconsin	0.009767	Pennsylva	0.012658	Wyoming	0.008602	Wyoming	0.01025
Louisiana	0.004408	Colorado	0.004054	Georgia	0.00474	Mississipp	0.004749	Mississipp	0.006662	Georgia	0.005455	Mississipp	0.01022	Idaho	0.01335	Pennsylva	0.009958	Pennsylva	0.010257
Pennsylva	0.005039	Arizona	0.005602	Colorado	0.006104	Georgia	0.005543	South Car	0.006807	Wyoming	0.005608	Connecticu	0.01231	Georgia	0.014693	Georgia	0.01014	Georgia	0.010343
Wyoming	0.005077	Pennsylva	0.005936	Arizona	0.0076	Colorado	0.006666	Nebraska	0.007489	Missouri	0.005846	Missouri	0.012376	Virginia	0.015575	Idaho	0.010376	Idaho	0.01181
Arizona	0.006492	Wyoming	0.00669	Pennsylva	0.008552	Virginia	0.007889	Pennsylva	0.007677	Connecticu	0.00622	Colorado	0.012649	Colorado	0.016408	Arizona	0.010766	Arizona	0.013106
Nebraska	0.007492	Nebraska	0.007051	Nebraska	0.008975	Nebraska	0.008698	Georgia	0.00808	Michigan	0.007058	Illinois	0.012998	Arizona	0.019283	Connecticu	0.012114	Connecticu	0.013286
Virginia	0.008124	Virginia	0.007749	Idaho	0.010312	Missouri	0.010932	Colorado	0.012144	Nebraska	0.007846	Arkansas	0.013818	Connecticu	0.023555	Michigan	0.012227	Michigan	0.014839
Illinois	0.00886	Illinois	0.008432	South Car	0.011073	Michigan	0.011046	Mississipp	0.012281	Montana	0.008889	Maryland	0.014286	Michigan	0.024172	Alaska	0.012995	Alaska	0.015791
Idaho	0.009425	South Car	0.009291	Illinois	0.011374	Illinois	0.011762	Michigan	0.013358	Illinois	0.011792	South Dak	0.017019	Nebraska	0.025531	Missouri	0.013943	Missouri	0.017397
South Car	0.00962	Idaho	0.010186	Missouri	0.011862	Idaho	0.013264	Missouri	0.013484	Idaho	0.013251	Oklahoma	0.017687	Missouri	0.02611	Arkansas	0.015202	Arkansas	0.022454
Connecticu	0.01179	Maryland	0.01144	Michigan	0.012029	Virginia	0.013435	Wyoming	0.013849	Maryland	0.013384	Maine	0.018602	Arkansas	0.028928	Oregon	0.023996	Oregon	0.026557
Montana	0.01288	Missouri	0.012052	Maryland	0.012358	Connecticu	0.014885	Connecticu	0.014303	Hawaii	0.013838	Florida	0.022181	Tennessee	0.031298	Tennessee	0.024694	Tennessee	0.027834
Tennessee	0.015532	Idaho	0.012419	Connecticu	0.014535	Wyoming	0.015428	Virginia	0.01476	Tennessee	0.014926	Tennessee	0.024299	Colorado	0.033626	Colorado	0.024708	Colorado	0.029107
Utah	0.018205	Connecticu	0.012971	Virginia	0.017684	Maryland	0.017046	Idaho	0.016032	Arkansas	0.015854	Nevada	0.0245	Illinois	0.037177	Illinois	0.024861	Illinois	0.029119
Oregon	0.019208	Montana	0.014956	Montana	0.017914	Hawaii	0.017139	Hawaii	0.022495	Oregon	0.016859	Iowa	0.02641	Oregon	0.043487	Maryland	0.026407	Maryland	0.034251
Arkansas	0.021267	Tennessee	0.01718	Mississipp	0.021387	Montana	0.019008	Montana	0.023064	Rhode Isla	0.017597	Hawaii	0.026462	Montana	0.044118	Montana	0.027826	Montana	0.036217
Rhode Isla	0.024408	Utah	0.018108	Tennessee	0.021839	Rhode Isla	0.019699	Rhode Isla	0.023605	Maine	0.023508	Utah	0.029585	Hawaii	0.045032	Florida	0.028428	Florida	0.038387
Florida	0.026191	Oregon	0.018887	Oregon	0.025163	Tennessee	0.023405	Tennessee	0.023955	New Ham	0.023601	Texas	0.037829	Utah	0.045346	Maine	0.02911	Maine	0.038665
Hawaii	0.026531	Arkansas	0.01919	Rhode Isla	0.026236	Oregon	0.025097	Oregon	0.02482	Utah	0.025055	Pennsylva	0.038353	Maryland	0.045398	Utah	0.032135	Utah	0.044296
Mississipp	0.027662	Rhode Isla	0.021337	Arkansas	0.026492	Maine	0.026003	Maine	0.025699	Vermont	0.025787	New Jerse	0.040264	Florida	0.069816	Rhode Isla	0.03242	Rhode Isla	0.046351
Maine	0.03656	Oregon	0.023978	Maine	0.02737	Arkansas	0.026287	Arkansas	0.028112	New Mexi	0.026503	Florida	0.053346	Rhode Isla	0.076611	New Mexi	0.04503	New Mexi	0.070579
New Ham	0.037911	Florida	0.026316	Utah	0.027529	Vermont	0.02676	Oregon	0.031721	New Mexi	0.027732	New Mexi	0.069356	New Ham	0.096029	Iowa	0.045856	Iowa	0.077243
New Mexi	0.067289	Mississipp	0.027732	Vermont	0.031674	New Ham	0.027515	New Ham	0.035404	Massachu	0.029896	Massachu	0.077875	Utah	0.099767	Massachu	0.047082	Massachu	0.077971
Massachu	0.070892	Vermont	0.028084	Florida	0.031687	Utah	0.028483	Utah	0.04067	California	0.030421	Vermont	0.099211	New Mexi	0.107521	New Jerse	0.073753	New Jerse	0.088219
California	0.081299	New Ham	0.030716	Hawaii	0.038793	New Mexi	0.033264	New Mexi	0.056016	New Jerse	0.038194	New Mexi	0.11001	New Mexi	0.211276	Virginia	0.078508	Virginia	0.095365
Iowa	0.113844	New Mexi	0.035278	New Ham	0.04437	New Mexi	0.037339	Utah	0.074362	New York	0.042276	New York	0.205488	Nebraska	n/a	California	0.083557	California	0.103189
New Jerse	0.175036	Massachu	0.042565	New Mexi	0.074426	Iowa	0.052711	New Mexi	0.083998	West Virgi	0.063038	West Virgi	n/a	Rhode Islan		New York	0.09284	New York	0.218328
New York		California	0.071974	Massachu	0.08338	California	0.073224	Massachu	0.090542	Iowa	0.079545	Rhode Islan		South Carina		New Ham	0.10473	New Ham	0.224245
Vermont		Iowa	0.077829	Iowa	0.089059	New Jerse	0.085904	Iowa	0.115634	Kansas	0.083959	South Carolina		Washingtc		South Car	0.145408	South Car	n/a
Wisconsin		New Jerse	0.084594	New Jerse	0.115467	New York	0.117701	New York	0.196781	Nevada	0.094183	Washingto		Delaware	n/q	Vermont	0.207401	Vermont	n/a
		New York	0.108938	New York	0.184626	Florida	0.184242	California		Oklahoma	0.110261	Delaware		Kentucky	n/q	West Virgi	n/a	West Virgi	n/a
		Illinois	0.184447	California		South Dak		Florida		South Carolina	0.197267	Kentucky		Nevada	n/q	Nevada	n/a	Nevada	n/a
		Kansas		Wyoming		Washington		South Dakota		South Dakota		Wyoming		South Carina		South Car	n/a	Hawaii	
		Wisconsin						Illinois								Hawaii			
								Washington											