

AN ABSTRACT OF THE DISSERTATION OF

Phyllis Egby for the degree of Doctor of Philosophy in Education
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Abstract approved:

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The 2004 Individuals with Disabilities Education Act (IDEA) and No Child Left Behind (NCLB) are two federal mandates which impact general education teachers working with special needs students and diverse learners (second language learners, students from severe poverty, students from different cultures, students who experience occasional emotional needs, and students who learn best through technology). Special education students typically do not pass standardized tests. NCLB requires most special needs students to take the high-stakes standardized tests. General education teachers rather than specialist are now responsible for special needs students' preparation and success on these tests. The purpose of this study was to examine general education teachers' knowledge and preparedness to meet the learning needs of the two groups. Teachers in two school districts took a survey which asked questions about their preparedness and knowledge to meet the learning needs of these two student groups. Data was also collected during a teacher training at one school district, and individual interviews were held. The data suggests that teachers have the knowledge, but lack time and resources. The respondents indicated that they received more training to work with diverse learners

through district professional developments than through their pre-service training.

Although the survey did not find statistically significant differences between the ages of the respondents and the answers they provided, the interview indicated that those teachers who received their training after 2004 were given more preparation to differentiate instruction for special needs and diverse learners. There also were no statistically significant differences between the smaller rural school district and the larger urban school district on survey responses. In the training phase teachers wanted more information on the differences between accommodations and modifications. Data also revealed that teacher credentialing institutions and school districts are making progress towards preparing teachers to work with diverse learners in the districts studied.

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Teacher Attitudes and Understanding about Their Preparation to Work with Special
Needs and Diverse Learners

by
Phyllis Egby

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I understand that my dissertation will become part of the permanent collection of Oregon State University Libraries. My signature below authorizes release of my dissertation to any reader upon request.

Phyllis Egby, Author

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Chapter 1 Introduction

“Why have our expectations for success diminished to the point that often the best we hope for is endurance and patience to survive the frequent disruptive forces in our organizations and lives” (Wheatley, 2006, p. 3)? Since this researcher first began working as a special educator over 17 years ago, the many changes in policies and laws have reshaped the way special needs students are educated. Special needs students are being sent back into general education classrooms to general education teachers who have had little or no training. Special educators are also being asked to provide supports to the general educators. Section 654 (A) i and ii of the 2004 IDEA states that special education teachers and general education teachers should have the “training and information necessary to address the full range of needs of children with disabilities across disability categories.” (IDEA, 2004)

Unless general education teachers received training in credentialing programs or professional development workshops and training sessions, special education teachers are the main source of support for general education teachers working with special needs students (Volonino, and Zigmond, 2007). Because these radical changes in education have so deeply impacted teachers, the focus of this study was on the preparedness of general education teachers to meet the learning needs of special education and diverse learners (second language learners, students from severe poverty or from different cultures, students with episodic emotional stress, and students who learn best through technology). As Dewey (1938) noted “The central problem of an education based experience is to select the kind of present experiences that live fruitfully and creatively in

subsequent experiences” (p. 28). This study will examine the types of training and supports general educators receive to meet diverse needs.

Pre-service teachers learned about pedagogy and instructional strategies that have been proven to be effective in previous studies. Marzano, Pickering, and Pollock (2005), and Tomlinson (1999) are two examples of authors whose research-based instructional strategies have been cited in numerous articles. Student teachers were taught various classroom management strategies that had been suitable for a number of students in prior studies. They had brief opportunities to student teach under the watchful eyes of master teachers and a university supervisor. They received information about policies and procedures that were thought to be consistent throughout school districts. Upon leaving their teacher credentialing institution, new teachers were ready to go into the classroom and make a difference. For too many, however, the research-based methods did not work as well as they did in the studies that proclaimed their worth; the school site’s policies and procedures were not quite as they were taught in class; and the students and sometimes parents were not receptive to the new teachers’ best intentions and interventions. Consequently many general education teachers were being asked to do tasks they were ill-equipped to carry out, which was made evident in a study conducted by Darling-Hammond and Bransford (2005), discussed in the next chapter.

Science and technology continue to provide new information about learning. Since there has been more information about how the brain functions and the impact on learning, educators can apply numerous strategies to increase and support students’ learning needs. Executive functioning for example, is a set of mental processes that helps connect past experience with present action (National Center for Learning Disabilities,

2010). The National Center for Learning Disabilities (2010) noted that there were degrees of executive functioning. Therefore the strategies needed to support student learning will vary depending on the students' needs. The changes in the 2004 Individuals with Disabilities Education Act has made all teachers responsible for understanding the characteristics and learning needs of special needs students. However, it is important to ask the question, are teachers getting this information in their pre-service credentialing programs?

The first big change brought about by the Individuals with Disabilities Education Act (IDEA) of 2004 places students on active Individual Education Plans (IEP) in general education classes. Students with special needs have been found eligible for special education services if they have a behavioral, learning, or physical disability which impacts their academic progress. The second education mandate, No Child Left Behind (NCLB) of 2002, made general education teachers accountable for all students' standardized test scores. Oregon and California's Teachers Standards and Practices and the National Council for Accreditation of Teacher Education (NCATE) are paying some much needed attention to IDEA and NCLB in the form of guidelines for teacher pre-service training. NCATE's fourth standard discusses teachers' ability to work with diverse populations. Originally this study was limited to investigating general education teacher preparation related to instructional practices for special needs and diverse learners. As the research progressed, the impact IDEA and NCLB has had on policies and practices for general educators kept appearing in the research and participant responses. Research literature and participant responses detailed disruptive forces between the two policies, as students on IEPs typically do not pass standardized tests, and

many general education teachers had not received significant training to work with special needs students prior to 2004 (Ford, Pugac, and Otis-Wilburn, 2001). The question that provided the framework for this study was “What are teacher attitudes and understanding about their preparation to work with special needs and diverse learners?”

There were six sub-questions which were used to answer the larger question:

Do teachers feel prepared to work with special needs and diverse learners?

Are teachers knowledgeable about researched-based instructional practices?

Is age a factor when it comes to teacher preparedness?

Is there a difference between teacher preparedness in a large urban school district and a small rural school district?

What are some of the constraints teachers face when working with these groups of learners?

What can teacher credentialing institutions do to better prepare teachers to work with these two groups?

Responses to the questions were sought on a survey designed by the researcher, during training sessions lead by the researcher, and interviews conducted by the researcher. There was also a study of three Pacific Northwest credentialing institutions to determine which courses they offered to address special needs and diverse learners.

Chapter three will explain how each question was addressed in this study.

Today’s students are diverse; their needs are many. Still, the outcomes for these diverse learners are consistent: pre-determined cut scores on norm-referenced tests. When considering the diverse learners, teachers face some of the same struggles as with special needs students. Diverse learners were determined by the U. S. Department of Education 1995 Title I criteria (high poverty, limited English, migratory children, Indian

children, neglected or delinquent children), and the researcher's experience working with special needs students and students who retain information best through technology.

Wheatley (2006) asked the question, "How do we resolve personal need for autonomy and growth with organizational needs for prediction and accountability" (p. 9)? IDEA and NCLB are two federal mandates which attempt to standardize policy throughout the nation. However the needs, abilities, demographics, and budgets of school districts around the nation vary greatly. In addition, many of the research-based studies presented in the pre-service credentialing institutions may not have suited the needs of the student population the pre-service teachers encountered. Tan (2010) did an international study about the disconnectedness between teacher training and the new teacher experience. This will be examined more in the next chapter.

This study examined how general education teachers feel about their pre-service training to work with special needs students and diverse learners. There have been previous studies questioning general education teachers about their feelings towards working with students with learning disabilities and limited English proficiency (Darling-Hammond, and Bransford, 2005). There has also been research about the best practices for differentiating instruction to meet diverse learning needs such as Hoover and Patton's (2005) study, which showed the positive impact of differentiation for special needs learners and second language learners. For example Ford, Pugach and Otis-Wilborn (2001) focused on general education teacher training to work with special needs and diverse learners. The structure of the Ford et al.. (2001) study and the findings will be discussed later in this work.

The data for this study was collected from August 2008 to April 2011.

Combinations of quantitative and qualitative methods were used. Quantitative data was collected through an online survey that contained two categories of questions, *knowledge* and *instruction*, related to each section (special education, second language learners, poverty/culture, emotional needs, technology, and student strengths/data). Student strengths and data were combined because data has been used to determine students' areas of strength and weaknesses (Marzano, et al., 2001). The survey also had an area for comments after each section that provided the first source of qualitative data. The second source of qualitative data came from two training sessions the researcher provided to a small rural school district in the Pacific Northwest. The survey responses were used to shape the agenda for the trainings. There were feedback forms and observer notes during the trainings; they were used to probe more deeply during the individual interviews. The third and final source of qualitative data came from individual interviews.

The study was designed using a mixed method approach because the knowledge and instruction survey data was quantified, and the pre-service training and teacher attitudes were best examined through qualitative data. Once the data was gathered, it was triangulated to analyze and validate the findings.

This chapter identifies the problems and challenges general education teachers face when teaching a class with special needs students and diverse learners without adequate training. It also compares the impact Individuals with Disabilities Education Act (IDEA) and No Child Left Behind (NCLB) have had on teachers' attitudes and understandings about working with special needs and diverse learners.

Special Education

The 2004 IDEA defines a special education student in section 300.8 as:

Child with a disability means a child evaluated in accordance with Sec. 300.304 through 300.311 as having mental retardation, a hearing impairment (including deafness), a speech or language impairment, a visual impairment (including blindness), a serious emotional disturbance (referred to in this part as "emotional disturbance"), an orthopedic impairment, autism, traumatic brain injury, any other health impairment, a specific learning disability, deaf-blindness, or multiple disabilities, and who, by reason thereof, needs special education and related services.

The disability for each student who falls in one or more of these categories must impact the students' academic progress. Each school district designs its own process for qualifying students for special education services according to IDEA, 2004. General education teachers have a specific role in the identification, assessment, and instruction of students with special needs. The federal government has provided guidelines for assessing students for special education services; it begins with interventions according to the 2004 IDEA mandate.

Intervention model. The 2004 Individuals with Disabilities Education Act (IDEA) provides states with Early Intervening Funds so schools can provide interventions before students are sent for special education assessment. Before general education teachers can refer a student for assessment, the teachers must employ and log the classroom interventions that they have tried (IDEA, 2004). School districts can adopt a district wide intervention model, or each school site develops its own. Every school is

mandated by IDEA to have an intervention model. These interventions are for students who have not been identified and are at risk of being assessed for special education services. The funds are earmarked for kindergarten through twelfth grade (IDEA, 2004). IDEA (2004) also suggests interventions are best done in the primary grades.

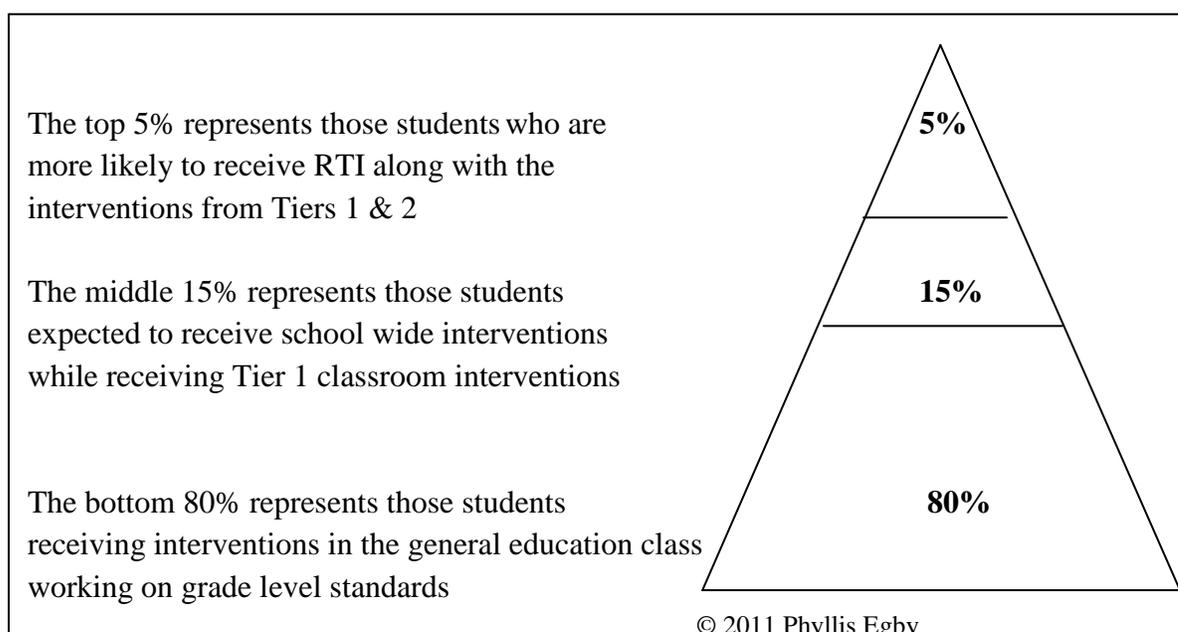
IDEA addressed the problem of *disproportionality* and *overrepresentation* in section 34 CFR Part 300 and with section 618(d) of the 2004 document as a means to reduce the rising number of students receiving special education services (IDEA, 2004). This document provides federal guidelines for the Response to Intervention (RTI) model which is designed to decrease the number of students entering special education.

According to a study conducted by the U. S. Department of Education (1996), in the past 10 years, the rise of students who qualify for special education services is over 30 percent. This has been the catalyst for RTI. Greenfield, Rinaldi, Proctor, and Cardarelli (2010) said, “RTI is a federal policy intended to reform instruction by using a tiered, school wide system” (p. 47). Considering the two schools of thought, RTI being used as a means to decrease the number of students being placed in special education classes, and also as a means to reform instruction, the implication is that with better instructional practices, fewer students will be found to be disabled (IDEA, 2004). This researcher contends that better instructional practices begin at the pre-service teacher level.

The guidelines in IDEA do not standardize the tiered model; therefore they may vary between schools and districts. According to Mac Iver and Mac Iver (2010), RTI is mostly used at an elementary level and is usually a packaged research-based intervention designated for a specific timeframe. The staff usually has to be trained to effectively use

the materials (Mac Iver and Mac Iver, 2010). Students are given a pre-assessment, next students receive research-based instruction for a specific amount of time, followed by a post-assessment. The instruction is one-to-one or small group. The premise is that with intensive small-group instruction that includes a pre and post assessment, the student can make suitable academic growth and therefore would not need special education services (IDEA, 2004). This creates another filter to prevent identifying students who should not qualify. Figure 1.1 provides a graphic of the three tiered model:

Figure 1.1 Response to intervention Three-Tiered Model



This model, designed by the researcher and based on the 2004 IDEA guidelines for RTI, indicates that general education teachers are to successfully provide interventions for 80% of all struggling students who are not on IEPs. Greenfield Rinaldi, Proctor, and Cardarelli (2010) also suggest that RTI facilitates teacher collaboration and communication through monitoring students as they proceed through grade levels. “In short, RTI forces schools to adopt universal screening and continuous progress

monitoring, while examining and refining their instructional practices and delivery options” (p. 48). Because of this active role, the general education teacher must fully understand the purpose and procedural outcomes of their school’s RTI model.

Universities and other teacher preparation institutions can prepare teachers by teaching the purpose of RTI and discussing the components as outlined in IDEA. However the actual procedures can vary among school districts and schools.

General education teacher participation in special education services.

According to the 2004 IDEA, once interventions have been exhausted, the general education teacher takes part in the assessment process by submitting work samples, doing student observations, and possibly being interviewed by the staff conducting the assessment. The assessment process establishes the student’s *present levels of performance*, and eligibility to receive special education services. The present level of performance is a section of the IEP that contains the academic levels, cognitive functioning, emotional needs, and any other information pertinent to the students’ academic success (IDEA, 2004). Once the student has been found eligible, IDEA mandates that general education teachers be part of the IEP team. The teacher assists the team in determining the learning goals (based on present levels of performance). She or he helps with suggestions for accommodation or modifications to support the student’s learning needs in a general education setting. Finally, the teacher collaborates with the IEP team about placement recommendations. In some cases the teachers also set up periodic reports or testing.

If the student is found eligible for special education services, and then sent back to the general education classroom, the general education teacher must provide the

accommodations and or modifications addressed in the IEP document (IDEA, 2004). It has been this researcher's experience that some of the modifications or accommodations may suggest preferential seating or instructions in written form. During the IEP meeting the general education teacher can collaborate with the special education case manager about how to best meet the student's learning needs.

Another important piece of information discussed during the IEP is whether the student will receive accommodations or modifications in the general education placement (IDEA, 2004). If a student on an IEP is being graded by a general education teacher, the teacher needs to know the difference between accommodations and modifications.

Teachers can make accommodations for any student to access the grade level curriculum without it affecting their diploma (Oregon Department of Education, 2010).

Modifications occur when teachers use materials or give assignments which are not in accordance with grade level standards (Oregon Department of Education, 2010). They are exclusive to those students with documentation, usually in the form of an IEP, 504 Plan, or English Language Proficiency Assessment (ELPA) testing. Modifications impact the type of diploma a student is eligible to receive, and parents must be informed if their children are receiving modified grades. For example in the Diploma Options section of Oregon Department of Education (2010) these are criteria for students who are eligible for a modified diploma.

- Have a documented history of an *inability to maintain grade level achievement* due to significant learning and instructional barriers inherent in the student; or

- A documented history of a *medical condition* that creates a barrier to achievement.

General education teachers need to be aware of how grading can impact their student's ability to obtain a high school diploma. They also need to understand how instructional practices involving accommodations and modifications impact grades. For example, a student in a sixth-grade English class who is given a fourth-grade reader is being provided a modification because the text is out of grade level (Oregon Department of Education, 2010). In contrast a sixth-grade science teacher who is teaching a velocity lesson as part of the grade level standards, and uses a supplemental book about velocity that is at a lower reading level is providing an accommodation. The content is still a grade level standard *velocity*; the teacher is simply providing the grade level content at the student's functioning level.

Inclusion. The U.S. Department of Education (1996) found special needs students had higher dropout rates, higher incarceration rates, and higher unemployment rates than their non-disabled peers. Consequently, they determined that special needs students needed more instruction alongside their non-disabled peers in general education classrooms (U. S. Department of Education, 1996). This resulted in students on IEPs being sent back into general education classes before teachers had been trained to meet their needs. When surveying pre-service and new teachers, D'Aniello (2008), and Darling-Hammond (2002) found that most did not feel prepared to meet the learning needs of special needs students even with guidance from an IEP. It has only been in the last fifteen years that pre-service teachers are being asked to have any special education

training in their pre-service programs in many states, which will be discussed later in this work. The 2004 IDEA also addresses inclusion by requiring that:

Each public agency shall ensure (1) that to the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are nondisabled and (2) that special classes, separate schooling, or other removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily (34 CFR 300.550).

School districts have responded in various ways which will be discussed later in Chapter 2. Part two of the statute mentions *supplementary aids and services*, which are often tied to budget or funding availability.

Section 300.135 of the 2004 IDEA states: “Regular education teachers need to be trained to work with children with disabilities to ensure that their inclusion in the regular classroom is successful as well as keeping a strong curriculum and rigor for the non-disabled students.” The document does not state how teachers are to be trained to accomplish these goals or who will train them. It does provide guidelines for Inclusion and Least Restrictive Environment (LRE). Both of these terms refer to placement determinations which encourage students being placed in general education settings.

Inclusion is a placement determination that places a student who is on an IEP in a general education setting while receiving instruction along with his or her non-disabled peers (IDEA, 2004). The least restrictive environment means the IEP team will consider

a placement that is least different from the student's non-disabled peers. Placement consists of academic time, such as classes, and non-academic time, such as lunch and assemblies. Both terms within the 2004 IDEA document contribute to special needs students returning to general education settings, unless the student has a disability which profoundly inhibits his or her academic progress or the progress of others. Because of these two policies, special needs students have been placed in general education classrooms, whether or not general education teachers are prepared to meet the students' learning needs.

Having general education teachers participate in the IEP decision process for special education services gives the teachers a voice in how accommodation and modifications will be provided in their classroom. The IEP team meeting is also an important collaboration forum because all parties and data are present.

Court cases and policy. Because the IEP is tailored to meet the learning needs of individual students, the document can be structured based on the IEP team's determinations. The team consists of the parents, the special education teachers, the general education teachers, the administrators, and sometimes the student (IDEA, 2004). There can be other participants depending on the needs of the student. For example, if a student qualifies for speech services, the speech pathologist is likely to attend the meeting. All team members contribute information and decide on goals and placement. If the team members cannot come to a consensus, parents can go through the school district's due process procedures. If the district and the parents still cannot come to a consensus through due process, parents may take their dispute to court. Often the federal

law is interpreted in the courts. It is not uncommon for special education policies and procedures to be shaped by court decisions.

Weishaar (1997) identified three principles that would decrease the number of special education court cases and protect student rights and those of school districts. However, the three principles involve general education teacher knowledge and skills as well as that of the special education teachers and administrators. Weishaar's (1997) first principle is, placement decisions should include consideration of regular education with supplemental aids and services. This is highlighted in the *least restrictive environment* section of the 2004 IDEA mandate. Having a general education teacher at the meeting provides the IEP team with information about grade level content expectations. For example, if a sixth grade student has a third grade math functioning level, the sixth grade general education math teacher along with the special education teacher can best determine what supports the student will need to be successful in a general education setting. Usually without training and support from the special education teacher, it will be difficult for the general education teacher to provide remedial or differentiated instruction for a student so far below grade level. In addition, if the general education teacher feels the student's functioning level is too low to meet grade level standards, the teacher can also be a part of the discussion determining which accommodations or modifications might be needed to meet the student's learning goals outlined in the IEP document (IDEA, 2004). Without training, a general education teacher might feel that he or she is lacking in the skill to move a child from a low level to grade level, and may suggest a more restrictive placement, a practice inconsistent with LRE. This is another

argument for training in differentiation and remediation among general education teachers.

The IEP team needs the perspective of the general educator for placement determinations. The information in the present levels of performance provides more than just grade level functioning; it gives specific information about the student's abilities. Simply saying a student is functioning at a third grade math level is not sufficient for writing goals and objectives. The present levels of performance assessments provide specific information like, the student can regroup when adding and subtracting double-digit numbers; however she is unable to multiply or divide. With this specific information, the teacher knows the instructional implications and can make a more informed decision about goals, placement, and strategies for remediation.

Weisharr's (1997) second principle suggests that IEP decisions should be made in the child's best interest and should always be individualized. This is easily a point of contention because general education teachers have not always been trained to provide supports for students with special needs. It has been this researcher's experience that many times decisions are made based on teacher ability, funding and other staffing considerations.

Weisharr's (1997) third principle states, "at a minimum, make sure that the general education teacher who will have a child with a disability in his or her class is fully aware of the nature and extent of the child's IEP" (1997, p.2). This is usually the special education case manager's responsibility. Classroom teachers need to have a copy of the learning goals and the accommodations or modifications listed on the IEP to plan

instruction. All three of Weisharr's principles involve the general education teacher's participation, observations and knowledge.

Second Language Learners

Learning a new language is a multi-leveled process that teachers of second language learners need to understand to support students' language acquisition. Much like special needs students, students of limited English proficiency (LEP) require specialized training to address their functioning levels and instructional needs. As a special educator, this researcher has noted that without specialized training, many general education teachers misjudge language acquisition for a disability. The 2004 IDEA mandates that states develop policies and procedures to prevent disproportionate representation of children by race and ethnicity in their special education programs. Latino second language learners are one of the groups overrepresented in special education (IDEA, 2004). Teachers need to know how to determine language acquisition levels and employ instructional strategies to move students towards acquiring academic language.

Language acquisition. Language acquisition is difficult to determine without specific training. Hardin, Mereoiu, Hung, and Roach-Scott (2009) noted:

Although children with limited English proficiency may be able to orally communicate in social situations in as little as one to two years in their new language, the skills required to be cognitively and academically proficient in English may take as long as five to eight years to develop (p. 94).

For effective instruction with second language learners, Freeman and Freeman (1994) and Richards (1994) found that teachers need to understand Basic Interpersonal Communication Skills (BICS) and Cognitive Academic Language Proficiency (CALPs) which refer to levels of language acquisition.

When students are in the BICS phase of language acquisition, they may appear to have mastered the language. However, a student with fluid decoding skills and conversation skills (BICS) may struggle to answer conceptual and even concrete questions after reading a text. Hardin, et al. (2009) also noted, “Well intended professionals may lack the tools they need to distinguish learning differences from language/cultural differences, resulting in erroneous referrals to special education” (p. 95). According to Sakai (2005), within the first couple of years of schooling most students are able to speak the second language (BICS). Yet academic language (CALPs) takes much longer and requires conscious effort and repetition. Consequently some second language learners appear to have mastered the language, when they have only mastered social language and not the academic language needed to be successful on standardized tests.

Abedi (2004) said NCLB requires States to include the test scores for LEP students when calculating their Average Yearly Progress (AYP). Just like students with disabilities who do not do well on standardized tests, LEP students face some of the same challenges when it comes to high-stakes testing. For general education teachers whose job performances may be measured by how many of their students pass the state tests, having groups of students who traditionally perform poorly on a state test can create unfair test-performance pressure for the teachers and the students. Without in-depth

training, many teachers are not prepared to design strategic lessons and activities to support the development of academic language (Hoover, and Patton, 2005).

Culture and language acquisition. Cultural diversity usually accompanies second language learners. According to Saville-Troike (2006), second language learners acquire their second languages (L2) at different rates. To understand language acquisition, teachers must also understand the identity and relationship of their first language to the second language. She added, “Personality factors, types and strength of motivation, and different learning strategies as well as sociolinguistics may differ among learners with regard to social, economic, and political differences and learner experiences in negotiated interaction” (p. 5). English language learners (ELL) come from various countries; however their political, economic, and cultural acceptance in the United States usually depends on the country from which they come. Sakai (2005) goes further to say cultural influences may impact the more academic language acquisition skills. For example, many Spanish-speaking students often see their presence in the United States as unwanted through the media. The children are asked to become a part of a social construct, through education, while being exposed to intolerance.

The premise of education is that it will help students in their future by providing employment and educational opportunities. However, what happens to those LEP students who fall into a stereotypical subgroup and find themselves portrayed as criminals and uneducated in the media? In the 2010 Census, data is supplied that shows immigrants who have been deported because of crime related activity with data being disaggregated by nationality. The countries listed are: Mexico, Honduras, El Salvador, Guatemala, Dominican Republic, Columbia, Jamaica, Nicaragua, Canada, Brazil, and

other. With the exceptions of Jamaica, Brazil and Canada, all of the countries are Spanish speaking and only Canada is a country whose immigrants are not traditionally people of color. The document did not provide an explanation why other countries were omitted from the list. This sort of one-sided data perpetuates the intolerance many LEP students experience daily.

Katsarou (2009) stated, “Critical race praxis scholars and practitioners have long argued that colleges of education have been complicit in maintaining the education inequalities that exist in schools that serve children of color, English language learners, and other pupils of non-dominant backgrounds” (p. 253). Artiles, Rueda, Salazar, and Higareda (2005), pointed out the disproportionate overrepresentation of second language learners in special education and their underrepresentation in gifted identification. They raised the question, "Does the school experience itself contribute to racial disproportion in academic outcomes and behavioral problems that lead to placement in special and gifted education" (p.37)? If the theory these authors raised is true, then the social justice approach to pre-service teacher training is a starting point for reshaping the educational experience for second language learners (Artiles, et al., 2005).

Growing population increases need for teacher preparation. According to the 2010 Census Bureau, the Hispanic population has grown 43% since the year 2000. They accounted for 58% of the total population growth. Hardin, Mereoiu, Hung, and Roach-Scott (2009) noted, “Nationally, 19% of children ages five and older speak a language other than English at home, more than half of whom (61%) are Spanish speakers” (p. 93). The Oregon Commission on Hispanic Affairs 2009 Annual Report (2010) stated that 32% of Latino children live in poverty in Oregon. Nationally, three of five children have at

least one parent who is an immigrant (Hardin, Mereoiu, Hung, and Roach-Scott 2009). This may prevent many children from receiving support services, because the parents are unaware of programs of assistance or are concerned about deportation. The report also included a projection for expected population growth of ages 5-24 from 2006 to 2020:

Table 1.1.

Children and Youth Population in Oregon: Changes in the States Population

	2006 Population	2020 Projected Population	Projected Change
Latino	88,968	122,484	38%
Asian	40,319	51,179	27%
Native American	16,165	18,454	14%
African American	21,200	22,997	8%
White	767,786	749,242	-2%
Total	934,438	967,354	3%

This projection indicates that the two largest increases will be the two groups who have higher rates of second language learners, Latino and Asian. Both groups tend to have different cultural norms than the school culture (Oregon Commission on Hispanic Affairs 2009 Annual Report, 2010). How are teachers being prepared to meet the language and cultural needs of all students?

Factors Outside of School

Educational epistemology sometimes conflicts with the students' learning needs. There are many societal factors that push into the classroom and make the learning needs of students very diverse. Code (2006) noted that the educational ecosystem is where socially dominant theories are perpetuated. But what about those students who come from homes with counter-cultural ideologies? How are we preparing new teachers to understand those students who do not fit into the mainstream, middle class, school ecosystem?

Poverty. According to Cross (2010), poverty can impact student achievement in many significant ways. If students are hungry, tired or ill, learning becomes more difficult. How do impoverished households value education? Cuthrell, Stapelton and Ledford (2010) listed the various terms used to describe poverty: situational poverty is usually caused by some event such as illness, or loss of job; generational poverty is an ongoing cycle of poverty which extends to two or more generations; absolute poverty is when the focus is on substance and bare essentials. This form of poverty comes with its own set of belief systems and rules, many times coming into conflict with the school culture.

Payne (2005) suggested that there are *hidden rules* for those who live in poverty, middle class and affluence. She said, “Hidden rules are about the salient, unspoken understandings that cue the members of the group that this individual does or does not fit” (p. 9). How can teachers encourage students to view education as a portal to a different life when these students do not see themselves as contributing participants in society? Payne also noted that poverty is relative. She said the system of poverty can be sustained if the members’ needs are being met. If students live in an impoverished community, they can begin to see poverty as a way of life. If their parents are able to provide sustenance without an education, sometimes their children perceive education as unnecessary (Payne, 2005).

Poverty can impact learning in additional ways. Cross (2010) suggested that poorer children are more likely to receive special education services because of “lack of a stimulating environment which promotes healthy development and school readiness” (p.7). Cross (2010) further warned that children in poverty were also more likely to

suffer from substandard child care during their early years of development. Berliner (2009) listed a number of factors related to poverty and learning:

1. Twice as likely to have low birth weight (LBW)
2. LBW children tend to score 11 points lower on IQ test
3. Alcohol, drug and cigarette use are higher in poor pregnant women
which can cause reduced head circumference in children
4. Diabetes is more common among poor pregnant women
5. If flu shots are not free, poor women receive less protection against influenza. Influenza in the first half of pregnancy has been linked to schizophrenia
6. Dental and vision care are limited for poorer children
7. Inadequate nutrition/Food insecurities
8. Pollution & contaminants are found more often in impoverished areas
9. Exposure to violence is more common in impoverished neighborhoods
10. Impoverished neighborhoods (p. 3)

Berliner (2009), suggested that this list contains *out-of-school factors* (OSF).

OSF are factors that hinder a student's academic progress and contribute to students being placed in special education services. He went further to say NCLB makes schools accountable for achievement without regard to OSF that contributes greatly to student achievement. Are teacher-training institutions preparing teachers to understand or compensate for the OSF?

Cuthrell, et al. (2010) found the number of children living in poverty in the United States is reaching 13 million. This means one in six children will be poor. The United

States leads other industrialized countries with the percentage of children living in poverty. Walker-Dalhouse, and Risko (2008) listed domestic violence, natural disasters and poverty as reasons for homelessness. Poverty was the most common reason for children living in homeless shelters. According to Anooshani (2003), homeless children experience social rejection from both other children and adults. She said, "Poor children become very aware about disparaging social attitudes about poor people and come to know their place" (p. 117). Anooshani went further to say there is a link between success in school and social interaction.

It is important for pre-service teachers to understand that interventions are not exclusive to a disability or diverse learning needs. This researcher contends that some of the challenges caused by special needs can resemble some of the challenges caused by poverty. For example if a disabled student takes medication to sustain him or her while attending school and the medication wears off by the time the student gets home, penalizing the student for not doing homework is probably counterproductive. Some might suggest giving the student more medication so that he or she is able to complete homework. However McKinney and Renk (2011) highlighted the side-effects of overmedicating children. Thus providing extra medication so the student can complete homework is not always a suitable solution. Conversely, a student who lives in severe poverty may not have an area at home suitable for doing homework. In these two scenarios, both students are not getting homework done, one because of a disability and the other because of poverty. The same solution, however, could be beneficial for both: allow them time during the day to complete homework. While it is important for teachers

to understand the cause of their students' struggles, understanding that interventions are interchangeable allows teachers more options when trying to meet all learning needs.

Many of the same research-based interventions used in special education are effective strategies for second language learners (Tomlinson, 1995). For example when introducing new vocabulary, teachers should provide a visual or tangible representation of the word, according to Marzano, et al. (2005). This is a good teaching strategy for any student, regardless of whether the student struggles with learning, regardless of the source of the struggle.

Culture. Landis, Umolu, & Mancha (2010) outlined culture as, "habits of using time, space and language, modes of dress and routine ways of participating in formal and informal events in work and play settings and societal institutions, as well as in family and community social roles and activities" (p. 580). Although as early as the late 1700's and early 1800's, Johann Pestalozzi developed an approach that laid the foundation for addressing diverse learning needs (Landis, et al.. 2010). Today's assembly line approach to education can make meeting student needs difficult. As accountability demands increase, there seems to be a search for a cookie-cutter system that will standardize educational results as highlighted in NCLB (2002). Van Gyn, Schuerholz-Lehr, Caws and Preece (2009) noted a growing awareness of the inability to meet the academic needs of a diverse student population, especially a growing number of international students while using conventional approaches to teaching and learning. The diversity challenges we face in our society extend into the classroom. It has been this researcher's experience that political affiliations, religious beliefs, and socio-economic level find their way into classroom discussions. Sometimes a student's lack of academic progress is more related

to a lack of connection to the school's culture and not a lack of ability (Hardin, et al., 2009). It is important that teachers know how to determine the difference. It is extremely difficult to get students to buy into the value of education when there is no buy-in at home or in the community.

Emotional needs. Like culture, emotions impact a student's connection to school and the educational process. Zemblas (2007) said school is where we learn the "process of determining who must repress as illegitimate, who must foreground as valuable, the feelings and desires that come up for them in given context and relationships" (p. 136).

Some students struggle to find their voice and their power because of their difficulties with emotional regulation (Zemblas, 2007). This is represented in the special education eligibility called Emotional Disturbance. Shami's (2010) work suggested that schools inherently are the best place to identify and treat students who struggle with emotional imbalance. "Therefore schools can be viewed as a major therapeutic environment where staff can closely monitor, adapt and track specific programs" (Zemblas, 2007, p. 105). Shami noted an effort in England to address the emotional well-being for students as well as student academic needs. The study revealed growth in academic progress by addressing the whole student.

Zemblas (2007) discussed emotions saying, "Because they begin with the mind and end with a bodily action, they represent a way of uniting mind and body" (p. 137). Currently in our educational system the focus is on high-stakes testing with little regard to student's emotional well-being. Students are expected to do well on standardized tests with limited attention to their emotional health. Shami (2010) suggested a different view of social-emotional and behavior difficulties to one of emotional and social well-being

and social competence. However this indicates there is a norm for social competence. How are teachers being trained to work in those communities where the social competence does not fit with the school's definition of appropriateness? Foucault (1991) stated that when we suppress emotions or passion, we "limit experiences, a destruction of self from itself, in such a way that it is no longer the subject as such, or that it is completely other than itself so that it may arrive at its annihilation, its disassociation" (p. 31). This suggests that those students who come to school and are forced to suppress their emotions will most likely become disassociated with school.

Lander (2009) added, "Emotion is conceptualized as a complex integration of feelings, bodily felt sensory experiences, meanings, expectations and motivation towards action that guides behavior" (p. 230). Students who come to school emotionally distraught may appear not to be motivated to do well, and often these students need to become emotionally sound before they are able to make academic progress (Lander, 2009). How much teacher preparation is targeted to train teachers to meet or at least identify their students' emotional needs? Also, do teachers understand the difference between an emotional need that is episodic and emotional disturbance that could be a disability?

Technology

Technology has done more than changed the way we retrieve and contain information; it has also changed the way we perceive and understand information. Barseghian (2011) concluded, "Kids between ages 8 and 18 spend an average of 11.5 hours a day using technology" (p. 1). She also noted that some teachers have begun to use technology as incentives in classrooms by giving "texting" breaks, a time when

students may use their cell phones to send messages to each other. Others have used texting to measure comprehension by allowing students to respond to classroom questions via text (Barseghian, 2011). She also highlighted one disadvantage many young people have been experiencing due to technology: they struggle with face-to-face conversations. In this age of computer communication, she suggested that teachers should teach “empathetic behavior” (p. 2). This may be accomplished through the consultation methods discussed in the emotional needs in Chapter 2.

For those of us who were born in the analog age, the new digital world can seem to cause *attention deficit*. Jones, Harmon, and O’Grady-Jones (2001) categorized digital minds as “digital natives and digital immigrants” (p. 2). The article made the distinction between analog and digital technology. During times of analog technology, phones were designed to place and receive calls. Digital technology has made phones capable of doing complex functions such as searching the internet, texting, pinpoint GPS, and many other functions. Receiving information through the use of the phone has been transformed to include multi-functions. Vanderwater, Rideout, Wartella, Huang, Lee, and Shim, (2007) found that, “Twenty-seven percent of 5-6 year-olds used a computer for fifty minutes on average on a typical day” (p. 1007). This means over a fourth of children entering the classroom for the first time have interacted with and received information through technology. The data from these studies makes it clear that some students have well established mediums for understanding and retaining information. How much attention is given to technological usage in pre-service teacher credentialing programs?

Dr. Gary Small (2008), a neuroscientist at UCLA said, “The internet trains our minds to have a staccato train of thought, jumping from idea to idea” (p. 3). He noted that technology helps our brains become flexible and process information more rapidly. Students who have experienced the excitement, lights and sounds as they manipulate their way through a computer program are utilizing all learning modalities, visual, auditory, and kinesthetic. They often struggle with listening to a teacher without those sounds, lights, and interactions. In many of these cases, the student can appear to be hyper active, have an attention deficit or both (Jones, et al., 2001). If the teacher is unaware of the reason why the student might display an inability to sit and attain, many times the student would be referred for special education assessment.

As technology enters most homes in the United States, students are coming to school increasingly savvy in manipulating their way through information electronically. Most kindergartners have had exposure to taking in information through video games or computer-interactive programs by the time they enter the classroom (Jones, et al., 2001). Sitting and listening to a story or reading from a book can be very challenging for some. Waiting one’s turn for a teacher’s assistance when a student is used to pressing a button to get an instantaneous response from a computer can be frustrating and may lead to misbehaviors in the typical classroom, where life is still very often analog.

The issue for many children is that they have *digital minds*. Jones, et al. (2001) said, “when we see five year olds picking up video games with no instruction, it is quite true they understand the world differently” (p. 3). The article goes on to explain how native digital minds think and retain information differently than immigrant digital minds. Native digital brains are wired to take in information through an interactive

process, while watching lights and hearing sounds which respond to their interaction (Jones, et al., 2001). Small (2008) conducted a study on brain activity during internet searches and found that participants showed more frontal lobe activity when searching the internet than they had when reading a book. He noted that the frontal lobe of the brain is where decisions are made. He went on to say that more brain activity is not necessarily a good thing when trying to digest textual information (Small, 2008).

We know that most K-12 students use and are exposed to technological devices which require some degree of understanding of the instrument's operation (Jones, et al., 2001). They noted that students take the time to learn because the device is engaging. How are pre-service teachers being prepared to utilize this medium to create engaging lessons? Moursund and Bielefeldt (1999) conducted a national survey and found that "About 20% of teachers did not feel prepared to implement technology in their classrooms" (p. i). The surveys revealed that teachers felt they needed more integration of technology presented in their credentialing course work. This was also the case when this researcher taught a teacher credentialing class and asked the student teachers to create a brochure. One of the students pointed out in the course evaluation that there was no instruction provided for the technological requirement of creating the brochure. There was an assumption that the graduate level students would know the technology needed for how to prepare a brochure. Schacter (1999) analyzed studies where technology was used for instruction. The results showed that students who were taught using computer-based instruction scored on average in the 64th percentile, while those not using technology scored in the 50th percentile. This study was conducted with general education students, indicating more instruction through technology would benefit

learners; therefore pre-service teacher training should include in-depth classroom technology training (Schacter, 1999).

These studies provide evidence those students who spend several hours a day using technology, need to have at least some of their instruction grounded in technology, and need to have social-skills training which can be taught as part of daily activities in the classroom (Jones, et al., 2001). The studies also show that technology excites more brain activity that may support learning (Small, 2008). And lastly, the studies suggest a need for teachers to understand and utilize technology in the classroom to support student learning (Moursund & Bielefeldt, 1999).

Summary

The plight of general education teachers has been highlighted in this study and even in international studies, when it comes to meeting the learning needs of special needs and diverse learners. Here in the United States, we have NCLB which places the responsibility for passing standardized tests by disabled students and diverse learners squarely on the shoulders of general education teachers. Many diverse learners end up in special education because they cannot pass these standardized tests. Many general education teachers do not receive specific training to accommodate, modify, or differentiate instruction for disabled students or diverse learners to help them do so.

The next chapter reviews the literature about teaching students with special needs and diverse learners. It will also review literature about NCLB and IDEA and how the two federal mandates have contributed to the struggle many general educators have been experiencing.

CHAPTER 2 Literature Review

Chapter two examines the current literature related to teacher preparation to work with special needs and diverse learners, the impact NCLB and IDEA have in relation to inclusion, and how school districts are attempting to provide training to support teacher knowledge and practice. The search began by using Council for Exceptional Children's (CEC) journals and website. CEC is a national organization with professional journals covering laws, policies, and court cases related to special education. Searches for articles about teacher preparation and inclusion were ongoing.

The search continued by using Google Scholar. There, searches for articles and books related to inclusion, teacher preparation, education and technology, education and emotional distress, teacher attitudes about working with special needs students, and second language learners, were conducted. A search was also conducted using the university online library through Academic Search Primer by using the same key word searches as used in Google Scholar. Articles were selected based on content, the reputation of the author and how often the article had been cited.

When the articles or books cited an author or work related to the topic of this study, the work was also considered for the literature review. Through the search two reoccurring national mandates kept being mentioned, NCLB and IDEA. It became clear that the two policies were directly related to the general education teachers' challenges when teaching in a diverse classroom. Therefore information about the two policies was included in this study. To gather information for each mandate, the NCLB document and the IDEA document were located using online searches. The research literature was updated through April 2011.

Gap in Teacher Preparation and Inclusion

Grskovic and Trzcinka (2011), conducted a national study and found, “Despite years of recommendations for curricular reform, general education teachers continue to report feeling ill-prepared to teach students with disabilities” (p. 94). This study highlighted the problem many general education teachers face when working with special needs and diverse learners. NCLB (2002) mandated that instruction be provided by “highly qualified teachers”. The criteria for highly qualified targets content area. It does not address teachers’ preparation to meet diverse learning needs (NCLB, 2002). Grenier (2010) noted that social model of inclusion center on accommodations that include all learners in the educational community. She went further to suggest that educators should rethink what it means to include regardless of the disability or diversity. Grenier (2010) considered disabilities as differences that require different approaches.

According to Silverman, Hong, and Trepanier-Street (2010) the University of Michigan-Dearborn teamed with Oakwood Health Care Center to give their pre-service teachers experience working with exceptional children and their families. The University of Michigan-Dearborn provided their pre-service teachers with a rare glimpse of home life and family interaction for exceptional children. If Grenier’s theory that disabilities are simply differences is valid, this researcher contends that understanding the student’s home life can provide teachers with information about how to support students’ needs. Payne’s (2005) work identified the values and culture of poverty, for example. She discussed how those values impact student motivation (Payne, 2005). Considering Maslow’s Hierarchy of Needs, when the psychological and security needs are not met,

learning becomes secondary. If teachers know about their students' home lives, teachers can provide supports and set realistic goals for learning.

NCLB, IDEA, and General Education Teachers

Korthagen (2010) said there is a “gap between theory and practice which has made teacher education a difficult enterprise” (p. 407). Many times the published research is conducted with variables which are different from the classrooms and communities where new teachers are assigned. For example, District 2 in New York was able to raise student achievement significantly during the mid 1990s. The superintendent was praised for his Balanced Literacy Approach and pushing teachers and administrators to display more rigors towards student learning (Ravitch, 2010). The fact that the socio-economic levels in the area had changed was not published in the initial report. The racial mix went from being predominantly Black and Hispanic to White and Asian. The median income went from in the mid sixties to over one hundred thousand dollars (Ravitch, 2010). Once NCLB was established in 2002, many school districts began to use District 2 as a model for student achievement. As a result, many new teachers who were given this research-based blue print for success often did not get the same results. For some reason, education researchers keep looking for the one-pill-fix-all method, system or philosophy that would provide academic success for all. If not for the economic, cultural, racial, and regional differences that exist in the nation, it might be a viable achievement.

IDEA first identified inclusion as a new placement model in the 1997 document. In fact, the document used the term *full inclusion*, which caused many general and special educators to panic. The process of getting special needs students into the general

education classrooms was slow because every IEP needed to be changed to reflect the change of placement according to IDEA (2004) IEP requirements. For general education teachers who had never been trained to work with special needs students, or had experience working with special needs students, the experience was very difficult (Darling-Hammond & Bransford, 2005). In addition, general education teachers were responsible for special needs students' state test scores, per the mandates in NCLB. Test scores were high stakes and many times jobs were on the line without consideration of out-side-school factors, disabilities, or teacher preparedness (NCLB, 2002). There was not much research on this dilemma general education teachers faced.

Pre-service Credentialing Institutions

As the search for studies involving inclusion began, this researcher found that studies prior to 2002 rarely did an in-depth study of the inclusion model. There was not very much data since IDEA introduced inclusion in 1997. The impact of the two mandates on teacher training was not evident. Korthagen (2010) explained, “during the late nineteenth and early twentieth century psychological and pedagogical knowledge grew, academics wanted to provide this knowledge to teachers in order to change education and to promote the use of scientific insight” (p. 108). There are three basic assumptions found in the theory-to-practice model (p. 108):

1. Theory helps teachers perform better in their practice.
2. These theories must be based on scientific research.
3. Teacher educators should make choices concerning the theories to be included in teacher education programs.

During this researcher's special education experience, there has often been a disconnection between the research and the classroom experience. It seems most of the research is done by researchers who are out of the classroom and rarely dialog with school district staff. Ure (2010) suggested, "The quality of teacher education would be strengthened if universities established closer partnerships with schools and increased the amount of time teacher candidates spent in schools" (p. 462). Research related to education should always be connected to the teacher, administrator, or student experience. Ure's (2010) article was based on an international study of the problems for beginning teachers and why so many leave the profession in the first three years.

In El Paso, Texas, the local school district and the University of Texas created an alliance to improve the quality of education for its low achieving schools (Haycock, 2001). The focus was on pre-service teacher preparation as a means to student success in low achieving schools. The results were "no more low performing schools, and increased achievement for all groups" (Haycock, p. 3). Creating a partnership between local school districts and teacher preparation institutions to increase student learning seems to be an effective practice. The Ure (2010) article cited the Darling-Hammond and Bransford (2005) book by listing the "priorities beginning teachers should know" (p. 462). The list included:

1. Knowledge of learning
2. Student development
3. Assessment
4. Classroom management

The list was created in 2005 seven years after the 1997 IDEA which stated the inclusion policy. It was not until Kosnik and Beck (2009) added three more elements that diverse learners were included. Their list included the Darling-Hammond and Bransford's four priorities and added three more:

5. Knowledge of inclusive education
6. Development of professional identity
7. A vision or philosophy of teaching

With just the first four elements listed, new teachers find themselves ill prepared to identify and meet the diverse learning needs in a student-centered classroom (Darling-Hammond & Bransford, 2005).

One thing generally agreed upon was teachers need more time working in classrooms with the guidance of master teachers. Ure (2010) noted "graduate teachers need to be more classroom ready and more able to address the learning needs of students" (p. 461). This could possibly be accomplished through cooperation between local school districts and universities while providing benefits to both through extra supports for diverse K-12 learners and guided practice for pre-service teachers. Hoban (2005) noted that what a teacher does in a classroom is influenced by the interaction of many elements such as the curriculum, context, and how students respond to instruction at one particular time.

During the late nineteenth and early twentieth centuries, students entered the classroom and were expected to adjust their learning to the teacher's teaching style (Bender, 2008). Now teachers are expected to differentiate their teaching styles to meet the diverse learning needs of their students. The increased number of special needs

students, second language learners, students from severe poverty, students from homes with counter cultures, and students who learn best through technology in general education classrooms has placed increased demands on teacher knowledge (Marzano, et al., 2005). Korthagan (2010), pointed out an international disconnect between teacher preparation and teacher practice. She also stated that schools have their own systems and patterns of behavior which cause teachers to have a “transition shock” (p. 408) when going from theory to practice. With so much diversity in student needs, experience can be the best teacher.

There were limited studies related to pre-service general education teacher preparation for special needs and diverse learners. Ford, Pugach, and Otis-Wilborn (2001) detailed a study conducted at the University of Wisconsin-Milwaukee. They redesigned their teacher preparation program to specifically prepare general education teachers to work with special needs students. They began by teaming general education faculty with special education faculty so that the pre-service students would get both perspectives as they worked through the pre-service curriculum. The school created *The Collaborative Teacher Education Program for Urban Communities*. The program listed seven goals:

1. Preparing graduates to work effectively with urban schools, and place issues of race, class, culture, and language at the forefront of their concerns.
2. Placing the developing learner at the center of the act of teaching and learning; teaching is child centered.
3. Teaching based upon solid content knowledge in all academic areas, forming the foundations of knowledge.

4. Teaching based on sound pedagogical content knowledge and sound knowledge about creating and sustaining effective learning communities in the classroom.
5. Advocating for and educating students with disabilities effectively in inclusive educational environments.
6. Working closely with families and community as partners in the education process.
7. Demonstrating professionalism in all collaboration with teachers, staff, administrators and family members in relationship to their own professional development and embracing the need for professional lifelong learning.

The authors went on to say, “it is crucial for faculty who identify with special education and whose professional situation is clearly situated within special education to participate actively in the preparation of general education teachers across the pre-service curriculum” (Ford, et al., p. 278). Unfortunately there has not been much written about the division of general education and special education departments at the university level.

In San Diego, Haycock (2001) chronicled what local school districts had done to meet diverse learning needs. Haycock listed four things schools could do nationwide to help close the achievement gap:

1. National standards: Many minority and low income schools have much lower levels of difficulty and less volume of work than their Anglo counterparts.

This happens due to low expectations that results in low performance. She

recommends clear and public national standards for teacher, parents, and students.

2. Curriculum must be challenging and align with the standards. Minority and low-income students get the watered-down curriculum.
3. Students need extra help. How is a teacher going to provide the more challenging literature and higher-level mathematics if the students do not have the basic skills of reading and computation?
4. Teachers matter a lot. Minority and low-income schools get the least experienced teachers.

This study was another example of how school districts could increase their efforts to bridge teacher preparedness with instructional expectations (Haycock, 2001). The University of Worcester in England teamed up with a special education school, according to Tickle (2009). The university decided their pre-service general education teachers needed more time working with special needs students in special education settings. The student teachers not only had to work with special needs students, they collaborated with special education teachers and learned the system (policies, procedures and pedagogy) of special education (Tickle, 2009).

Tan (2010), believed teacher preparation should be a collaborative effort across international borders and listed several key drivers for teacher preparation at a global level: “rapid pace of economic integration, technological advances, global competition for talent, the persistence of underachievement (especially among minorities and marginalized populations), increased diverse classrooms, and heightened expectations for schooling among key stakeholders” (p. 478). His article discussed the International

Alliance of Leading Educational Institutes (IA), a new international organization which has a shared view of common experiences and achievements in an effort to improve teacher preparation globally. In Tan's (2010) article, the IA contended that education is directly related to a country's economy, and "there is a need for a re-conceptualization of how knowledge is to be viewed, managed, taught, and learned in educational institutions" (p. 481). This raised the question about how teacher training is responding to the current economy with severe budget cuts in education, students who are dealing with family economic distress, and larger class sizes.

Looking at teacher preparation from a global perspective indicates that the current method of teacher preparation around the world needs restructuring. Ezer (2010) categorized four teacher models used in teacher preparation institutions:

The scholar professional- the cardinal goals of teacher education are acquisition of knowledge and the cultivation of intellect; the focal point of teaching is the translation of ideas rather than the transference of ideas.

The nurturer professional- a model that focuses on the relationship between teacher and student with the teacher perceived as nurturing; the moral aspect of the training is stressed and the school is perceived as a community propelled by relationships.

The clinician professional or the reflective adaptive model- the teacher is reflective and can adapt to any situation that arises, and is equipped with relative knowledge in order to make professional decisions with an understanding of the way children learn. The model emphasizes

professional identity, with no actual attention being paid to the individual.

Currently this is the most widespread model being used.

The moral agent professional- morality is primal and important, and personal moral values as well as cogitative values are stressed in order to foster quality of life (p. 393).

So where do we begin? In Wagner's (2008) *The Global Achievement Gap*, he began his research by questioning college and university deans, human resource specialists, and major company chief executive officers (CEO's) about what skills high school graduates should have upon graduation. Following this model, shouldn't universities discuss what pre-service teachers are lacking when they enter the profession with school districts or recent graduates? This study attempts to find out what employed general education teachers think about their training to meet the diverse learning needs they face in general education classes.

National Council for Accreditation of Teacher Education. The governing agencies which accredit teacher preparation institutions are Teachers Standards and Practices and the National Council for Accreditation of Teacher Education (NCATE). NCATE creates standards for teacher credentialing institutions to follow when structuring their teacher credentialing programs (NCATE, 2010). While some of the subsections contained in the standards may cover pedagogy related to special needs learners and diverse learners, for the purpose of this study the researcher examined the diversity section of NCATE teacher credentialing standards. The diversity section outlined those characteristics needed to fulfill the accreditation requirements related to diverse learners

and special needs students (NCATE, 2010). The following is taken from the diversity standard:

The unit designs, implements, and evaluates curriculum and provides experiences for candidates to acquire and demonstrate the knowledge, skills, and professional dispositions necessary to help all students learn. Assessments indicate that candidates can demonstrate and apply proficiencies related to diversity. Experiences provided for candidates include working with diverse populations, including higher education and P-12 school faculty, candidates, and students in P-12 schools. Curriculum and field experiences provide a well grounded framework for understanding diversity, including English language learners and students with exceptionalities. (NCATE Standard 4 Diversity, 2008).

The responses to NCATE's diversity standard by teacher credentialing institutions have been varied. For the purposes of this study, the researcher compared the Master of Arts programs by examining the courses listed on the three universities' websites. It was difficult to compare how three local universities have addressed NCATE's criteria. Each university has various programs with different course work.

Local universities. This study included universities in the Pacific Northwest. The courses related to teacher preparation to work with special needs and diverse learners were studied. Teacher and Counselor Education (TCE) requirements were examined and compared to the courses offered at three different universities. The first university offered ten courses that targeted teacher preparation for diverse learners and special needs students that were not related to counseling or special education training.

1. Multicultural Issues in Education
2. Racial and Cultural Harmony in the K-12 Classroom
3. Students with Special Needs
4. Teaching in a Different and Diverse Classroom
5. Appraisal of the Individual
6. Theoretical Foundations of Language Acquisition
7. Instructional approaches for English Language Learners
8. Language Policies and Issues in Bilingual Education
9. Technology for Teachers
10. Supportive Differentiated Environments

In contrast, the second university offered Master of Arts course work with four courses which were not for special educators or counselors:

1. Educational Technology
2. Exceptional Learner
3. Methods and Strategies for English Language Learners
4. Educating for Equity in a Diverse Society

And finally, the third university offered Master of Arts in Teaching with courses which were not for special educators or counselors:

1. Social Foundations in Education
2. Multicultural Education
3. Special Populations Seminar
4. Computer Science Education

Table 2.1 compares NCATE's criteria and the three universities Master of Arts course listings:

Table 2.1.

Comparison of University Courses focused on the NCATE Diversity Standard

NCATE	First	Second	Third
Implements, and evaluates curriculum provides experiences for candidates to acquire and demonstrate the knowledge, skills, and professional dispositions	*Teaching in a Different and Diverse Classroom	* Educating for Equity in a Diverse Society	*Social Foundations in Education
Demonstrate and apply proficiencies related to diversity	*Multicultural Issues in Education *Students with Special Needs * Language Policies and Issues in Bilingual Education	* Methods and Strategies for English Language Learners	*Multicultural Education
Working with diverse populations	*Racial and Cultural Harmony in the K-12 Classroom *Appraisal of the Individual * Theoretical Foundations of Language Acquisition *Supportive Differentiated Environments	* Exceptional Learner	*Special Populations Seminar
Field experiences for understanding diversity, and English language learners	1-16 Practicum Credits depending on Credential	Student Teaching Credits pending Endorsement	Student Teaching Credits pending Endorsement
Field experiences for understanding students with exceptionalities	1-16 Practicum Credits depending on Credential	Student Teaching Credits pending Endorsement	Student Teaching Credits pending Endorsement
Note: NCATE did not address technology as it relates to diverse learners.	* Technology for Teachers	*Educational Technology	*Computer Science Education

NCATE did not provide any guidelines related to teacher preparation and technology regarding diverse learners; however, it was a part of all three teacher

credentialing programs. Using only the catalog description did not provide enough information to determine how much overlap there was between categories. Another area which was not mentioned in the NCATE's diversity standard was collaboration. Teacher Standards and Practices did address collaboration and its impact on student learning (Oregon Teacher Standards and Practices, 2010).

Collaboration

A national survey conducted by Met Life (2010) found that, "67% percent of teachers and 78% of principals surveyed said more collaboration among teachers and school leaders would have a major impact on student achievement" (p. 5). Shindler (2004) did a study on promoting collaboration skills and dispositions in teacher credentialing institutions. The study involved collaborative exams for pre-service teachers in their teacher credentialing programs. He said, "Most teachers often default to the pedagogical practices to which they themselves were exposed to as students and teacher candidates" (p. 273). The study involved two major teacher credentialing programs. Students had to write collaborative essays. In the survey, participants rated the collaborative method higher than the traditional method.

Section three of the California Commission on Teacher Standards and Practice (CCTSP, 2010), states:

3a. Collaboration between unit and school partners

Field experiences & clinical practices are designed, delivered, & evaluated with school partners & others.

Together, units & school partners jointly determine placement of student teachers & interns.

Together, units & school partners share expertise to support candidates' learning. (p. 2)

The commission specifically outlined collaboration as part of the teacher credentialing process. If Shindler's (2010) conjecture is correct and teachers use pedagogical practices they themselves have been exposed to, then CCTSP has illuminated the need for collaborative training to begin during pre-service coursework. The Oregon Teacher Standards and Practices Commission (2010) section number 584-020-0030 entitled Human Relations and Communication addresses guidelines related to collaboration.

The list contained willingness to be flexible when working with others, and the need to be able to communicate effectively with others (Oregon Teacher Standards and Practices, 2010). Neither commission addresses the effectiveness of collaboration between teachers to ensure K-12 student success. Shindler (2010) said in relation to teacher preparation programs, "It seems clear that they must not only teach about the value of collaboration, but must model collaborative pedagogy within their programs and provide candidates meaningful opportunities to take part in collaborative practices" (p. 274). This study suggested that specific instruction in the area of collaboration at the K-12 school level should be included in the teacher preparation course work (Shindler, 2010). Later in this work, the importance of effective collaboration skills will be discussed in detail.

Highly Qualified

No Child Left Behind (NCLB) was the catalyst for *Highly Qualified Teachers* (HQT) in 2002, according to Fraser (2010). He went on to say, "Although some university programs were significantly redesigned during this period, many remained as

they had for decades” (p. 30). NCLB defines a HQT’s course work as having content knowledge and full certification (pedagogy training); and the United States Department of Education (USDOE) contended that “extensive training in pedagogy is counterproductive in producing HQTs” (Boe, Shin, and Cook, p. 159). The two governing bodies did not agree on the definition of what constituted a HQT. Therefore they have not provided sound guidance for credentialing institutions or teachers standards and practices commissions to structure their credentialing requirements.

In addition, IDEA has placed students on Individual Education Plans (IEP) in general education classes. Neither the criteria set forth by NCLB nor USDOE address coursework related to diverse learning needs. In fact Berliner (2009), suggested that NCLB ignores outside-school-factors (severe poverty, violence, drug use, teen pregnancy), and special needs, and places the success or failure of students squarely on teachers and administrators without regard to preparation (Berliner, 2009).

IDEA states that Special Educators will provide supports to general education teachers who are working with special needs students in general education settings (IDEA, 2004). Special educators are also required to become highly qualified. Becoming a highly qualified (HQ) special education teacher means extra course work, time, and money to obtain a credential (Oregon Teacher Standards and Practices, 2010). According to Schnorr (1995) many special education teachers want to leave special education and transfer to general education. Most of the reasons cited in the study were related to compliance demands and lack of support when working with high needs students (Schnorr, 1995).

Plash and Piotrowski (2006), conducted a study in Alabama to determine why special education teachers were leaving the field in higher rates than any other group of teachers. They found that job conditions, occupational stress, demands of IDEA compliance, and increased class sizes and caseloads were the primary factors for the high attrition. Billingsley (2004) identified three major relocation types for special educators: transfer to another teaching position, remaining in education outside of the classroom, and leaving the profession all together. This is alarming because special educators, according to the guidelines stated in 2004 IDEA, are supposed to provide guidance and supports to general education teachers who are providing instruction to special needs students (IDEA, 2004). Billings (2004) also found that teachers' lack of adequate pre-service training in special education was the biggest reason for high teacher attrition in special education. While the focus of this study is not special educators' training, special educators are suppose to provide supports to general educators who are working with special needs students. Therefore the researcher included the challenges special education teachers face in their teaching positions. For a thorough examination of the special educators' role in the inclusion process a subsequent study of special educators' training would be required. The problem of meeting special and diverse learners' needs is compounded with a shortage of HQ special education teachers, and high special education teacher attrition (Billings, 2004).

Sosu, Mtika, and Colucci-Gray (2010) developed a framework for teacher effectiveness which included "the importance of beginning teachers' beliefs about knowledge and learning, a commitment to an ethic of care and the notion of teaching as a

learning community where inclusion and diversity are valued” (p. 391). The study identified seven main characters of effective teaching (p. 391):

1. Critical Thinking
2. Emotional Intelligence
3. Epistemological Beliefs
4. General Teacher Efficacy
5. Pedagogic and Content Efficacy
6. Conceptions of Teaching
7. Attitudes Towards Inclusion

The article went further to say “Initial teacher education inputs on inclusion tend to increase teacher confidence, teacher attitude and implementation of inclusive pedagogy” (p. 391). Teacher practicum or student teaching experiences are usually not directed towards diverse learners or special needs students unless the certification is related to the group (Sosu, et al., 2010). Inclusion is a federal law and this author believes that general education teachers should have opportunities to work with special needs students individually or in small groups, prior to working with these students in a full class.

Sosu, et al. (2010) stated, “inclusion is part of a broader human rights agenda that argues against all forms of segregation. Consequently, teachers are expected to make pedagogical choices that enable the participation of all children” (p. 392). Differentiation has been recognized as an instructional strategy to help teachers meet the learning needs of various ability levels (Bender, 2008; Marzano, 2001; Tomlinson, 1999). All three universities listed earlier included some coursework to prepare teachers to differentiate instruction. Differentiation is more than applying instructional strategies; it also involves

understanding the students' needs in order to apply the most effective strategy.

Differentiated instruction allows teachers to make those pedagogical choices to enable all students' access to the curriculum (Bender, 2008).

Darling-Hammond (1999) compared the alternative teacher certification programs to the traditional four year programs. The alternative teacher preparation programs were for students who held a bachelor's degree and wanted a credential. The study concluded that teachers who had more traditional certification felt more secure in the following categories: "abilities to promote student learning and ability to teach critical thinking and social development" (p. 288). She noted that alternative preparation programs allowed people who had a bachelor's degree to teach using an emergency credential while obtaining their teaching credential. "Nationally the under qualified teachers are disproportionately assigned to minority and low-income students" (Darling-Hammond, 1999, p. 287). Could the less qualified teachers be contributors to the overrepresentation of minority students enrolled in special education services? And if so, can pre-service credentialing institutions be the start of social justice in the educational process?

School Districts' Responses

School districts have been attempting to support teachers' knowledge and preparedness to work with special needs and diverse learners through coaching and professional development. Since the 1997 IDEA mandated inclusion, special needs students have been returning to general education classrooms. In addition, in 2002 NCLB mandated that all students take standardized state tests (NCLB, 2002). School districts were being held accountable for the test scores of students who traditionally did not pass standardized tests. As a result there were special needs students in general

education classes with teachers who had not had the training to work with the population, and who were being held accountable for the state test scores of these students. Districts responded by conducting regular professional developments and hiring instructional coaches to support teachers and student learning in hopes of meeting their Average Yearly Progress (AYP). NCLB provided funding to school districts for various teacher trainings (Overbaugh, and Lu, 2008).

Coaching. Instructional coaches were brought in to schools to support teachers' knowledge and instructional practices. Coaches did receive additional training above their teacher training from the school districts (Bess, 2008). As a former instructional coach, this researcher's coaching training consisted primarily of differentiation techniques. According to Bess (2008), Adam 12 School District in Thornton, Colorado showed a steady increase in test scores after creating the coaching position. Instructional coaches are in schools and in classrooms working directly with teachers (Bess, 2008). Many times coaches work directly with students as well. The coach becomes a part of the teachers' daily teaching experience. Adam 12 School District's coaching job description consists of the following:

- * Observing teachers and providing feedback
- * Co-teaching and co-planning with teachers
- * Facilitating professional development
- * Covering classes so one teacher can observe another for short periods of time
- * Helping teachers find ways to use data and to drive instruction (Bess p. 5)

The district also listed duties that were not part of coaching. One of the things listed that was not considered a part of coaching was *evaluating teachers*; however, when providing

feedback there is a fine line between appearing to evaluate and an observation (Bess, 2008).

Shidler (2008) also did a study and listed four coaching job duties as, “(1) instructing for specific content, (2) modeling techniques and instructional practices, (3) observing teacher practices and (4) consulting for reflection” (p. 453). The word “consulting” indicates that the coach needs some expertise in the area of consultation. Since the coaching staff comes from teachers, where do coaches develop consultation skills? L’Allier, Elish-Piper, and Bean (2010) synthesized a number of studies on coaching and developed seven principles to guide the coaching practice.

First, coaches should understand specialized knowledge about adult learning principles. The authors said that “successful classroom teaching experience” is the foundation for good coaching (L’Allier et al., 2010, p. 545). Successful classroom teaching experience begins with pre-service training. The article also suggested that those coaches who have a graduate degree towards advanced certification tend to make better coaches.

The second principle was related to the amount of time coaches spend coaching teachers. In this section the authors categorized coaching based on the amount of time the coaches spend doing various duties: “teacher-oriented, student-oriented, data-oriented, and managerial coaching” (p. 546) were the four categories. Their study found that student achievement was greater when coaches worked directly with teachers individually and or small groups. The article also said that coaches develop skills through ongoing professional developments just like teachers. There was no mention of

pre-service training and how it could impact future coaches. This is an area which needs further research because coaches are selected from classroom teachers.

Thirdly it said coaches need to be able to communicate effectively with adults; and this requires the ability to “establish trust, maintain confidentiality, and communicate effectively” (L’Allier et al., 2010, p. 546). Coaches should target student instructional needs and not teacher’s instructional weakness. This section also discussed the coach’s ability to “offer suggestions and not absolute solutions” (L’Allier et al., 2010, p. 548). Effective collaboration involves training and to some degree personality. Classroom teachers are expected to effectively collaborate with coaches, other teachers, parents, administrators, and often-times students. How much collaboration is a part of pre-service teacher training?

The fourth principle is a “focus on a set of core activities” (L’Allier et al., 2010, p. 548). In this section the authors discussed formative assessments (assessments used to drive instruction), and collaboration. Currently pre-service teacher preparation programs are teaching differentiation techniques which include how to use formative assessments (L’Allier et al., 2010). Also professional learning communities (PLCs) are common place in school districts around the country. Some school districts use other names for these groups; however the function is the same. Thessin and Starr (2011) listed the functions of the PLC as assessing student progress, reflecting on which strategies have already been applied, inquiring or soliciting suggestions from colleagues, analyzing data as a team, examining student work, and examining instructional practice. This process is ongoing and regularly scheduled throughout the school year. Their study explained the need for teachers to be trained to collaborate and problem solve. They also said “teachers

do not magically know how to work with colleagues” (p.48). Coaches are to help teachers with effective collaboration during the PLC meetings.

The fifth principle is conceptual and could involve training; however there is some degree of instinct involved. It describes coaching as “intentional and opportunistic” (L’Allier et al., 2010, p. 549). During this researcher’s pre-service special education teacher training, she received instruction called, *teachable moments*. Teachable moments are when the teacher reinforces prior learning in another subject area or activity other than when the topic had originally been introduced. For example, some of the terms used in math can also be used in science or some other authentic learning experience. This means that coaches should use every opportunity to work directly with teachers as much as possible. Coaches should also be intentional so the teacher understands the specific goal of the coaching activity.

The sixth principle said coaches should be literary leaders (L’Allier et al., 2010). They must understand the schools literary goals. There was no mention of how literary leaders are determined, or who determines if a teacher is a literary leader. Usually principals make the determination of who becomes a coach. The school’s test scores can be used to determine literary goals.

And finally, “coaching evolves over time” (L’Allier et al., 2010, p. 551). Like teachers, coaches become more effective the longer they coach. The research did not indicate that there was a program specifically designed to teach teachers how to be coaches. In fact the studies only said coaches tend to have better results when they have a graduate certification (L’Allier et al., 2010). The article used an example of a coach with a literacy endorsement; however literacy training would not assist coaches with the

consultation/collaboration portion of the job. Blamey, Meyer, and Walpole (2008) wrote, “Coaches must draw from an arsenal of personal attributes, including good communication skills, a sense of humor, and trustworthiness” (p. 311). There was no research found that addressed teaching for coaching in teacher credentialing programs, or a systematic coach training program outside of school districts’ coach training. And yet, studies indicating that effective coaching results in increased student achievement (Blamey, et al., 2008; L’Allier, et al., 2010). In the same study of middle and high school coaches, Blamey et al. (2008) also wrote

“the International Reading Association (IRA), the National Council of Teachers of English, the National Council of Teachers of Mathematics, the National Science Teachers Association, and the National Council for the Social Studies created standards for middle and high school literacy coaches.” (p. 310).

This unprecedented collaboration developed four qualities that secondary coaches should possess to be effective. First, coaches should be good collaborators. Next they should be part of the teachers’ daily experience as a “job-embedded” partner. Coaches should be able to evaluate the teacher/student needs and provide supports. And lastly, they should be well versed in instructional strategies related to language arts, mathematics, science and social studies (Blamey, et al., 2008).

There is still not a lot of empirical data to show how coaches develop their effective communication skills, or how they are trained to consult effectively. Bess (2008) also stated, “Coaches won’t be effective in schools that lack the organizational capacity to take advantage of them, such as a focus on achievement and a good principal”

(p. 6). Denton and Hasbrouck (2009) made the connection between coaching and professional development. They found as teachers receive new training through professional development, coaches help bridge the new learning into classroom implementation. Pre-service teacher training should involve effective collaboration practices because the data indicates that coaching is here to stay (Denton & Hasbrouck 2009).

Professional development (PD). Denton and Hasbrouck (2009) wrote, “The American Federation of Teachers has defined professional development as a continuous process of individual and collective examination and improvement of practice designed to empower educators” (p. 151). In their definition, they listed two necessary qualities for effective professional development. The first says professional developments should match the “needs, knowledge, and skills” (Denton, & Hasbrouck, 2009) of the adult learner. No research was found related to pre-service teacher training and understanding the adult learner unless the teacher training was specifically designed for adult learners. The second quality says the presenter needs to understand that the traditional “stand and deliver” (p. 152) model is not effective. Teacher training that involves differentiation and working with special needs or diverse learners includes instructional strategies which provide alternatives to the stand-and-deliver model. Researched based best practices (Bender 2008; Herrell 2008; Marzano, et al., 2001; Tomlinson 1999) focus on student engagement; and the stand-and-deliver model is not an effective method of keeping diverse learners engaged.

Desimone (2011) noted that professional development is one of the best methods for improving schools in the United States. In this article, the author says the

effectiveness of professional developments depends more on the subject matter rather than the structure. Desimone (2011) went on to say professional development is ongoing and “teachers can learn every time they teach a lesson, administer an assessment, review a curriculum, or read a professional journal” (p. 69). This sort of learning requires some degree of reflective practices which can and should be a part of pre-service training. The article also says professional development should allow for collaboration. When lining up the criteria for professional development and coaching, the interaction between teachers in a collaborative activity is paramount for both. Pre-service training should include collaboration and reflective practice training; because teachers will be expected to employ these strategies during their interaction with coaches, during PLCs, and as a function of professional developments (Desimone, 2011). Teachers are going to be expected to work together in ongoing interaction to increase student achievement. Yet, PLCs are not standardized and presenters are not equally knowledgeable.

Coaches and professional development fall short of the thorough preparation teachers need to meet the vast learning needs they face in general education classes (Bryant, Linan-Thompson, Ugel, Hamff, & Hougen, 2001). According to studies conducted by D’Aniello (2008), and Darling-Hammond, (2002), pre-service teaching graduates requested more training in classroom management, communicating with parents and other adults, and more experience working with special needs and diverse learners.

Training

In a study of the 2007-08 school year, the School and Staffing Survey (2008) found that only about 30.7 % of all school districts in the nation offer free training for

shortage areas (special education , second language learners). Without formal training at the pre-service level to meet the learning needs of special needs and diverse learners many teachers find themselves unprepared to handle the diversity in their classes. Boe, Shin and Cook (2007) surveyed general education teachers and found the more institutional training and field experience a pre-service teacher has, the more he or she felt prepared to meet the needs of diverse learners.

Special education. Avramidis and Burden (2000) surveyed teachers in England about their attitudes towards working with special needs students. While there was some variation based on the type of disability, the study revealed those teachers who had been formally trained in an external institution had a more positive attitude and better results than those who had more hours of internal professional development. Laprairie, Johnson, Rice, Adams, and Higgins (2010) did a survey of pre-service teachers and found they felt unprepared to work with students who have special needs. The article went further to say “the number of students who qualify for special education services has risen over 30% in the past ten years; three of four special needs students will spend part or all of their day in a general education classroom” (p. 24). Differentiation techniques were born out of the teaching shift from teacher-centered classrooms to student-centered classrooms (Ford, Pugach, & Otis-Wilborn, 2001). Through the standards based movement of the 90’s and the accountability movement of the turn of the century, the work of Bender (2008) and Marzano, et al. (2001) discussed a shift from good teaching to student learning. This has caused a shift in the cultural framework of education to a child-centered instructional model. This researcher personally observed how difficult the shift was for veteran teachers.

As a general education teacher told this researcher, “If he cannot access the lesson the way I am teaching it, he should return to special education classes” (personal communication, 2003). Her sentiment, especially for veteran teachers, is understandable, because until inclusion was spelled out in the 1997 IDEA document, special needs students were sent into special education classrooms if they could not learn in the general education setting (DeSimone, and Parmar, 2006). The teacher who expressed her frustration about a student did not understand why she was to change her teaching style to accommodate the learning needs of a special needs student. On the contrary, it seemed to her that the special educators were not doing their jobs. For many general educators, learning about special education laws and policies was not very relevant to their teaching until the late 1990s. Clearly, credentialing institutions should include laws and policies as they relate to all students in their course work.

Poverty. Cuthrell, Stapleton and Ledford (2010) referred to a survey of pre-service teachers and found that 66% of them felt that issues of poverty would not impact their teaching. Given the work of Payne (2005) and others, this is alarming and should indicate some degree of urgency for pre-service institutions to specifically teach how community, home attitudes and cultures impact student learning. Payne (2005) mentioned the hidden rules and codes of poverty in relation to students who want to move out of poverty. She suggested that without role models and supports students can feel isolated. She stated, “One must trade off some relationships for achievement at least for a period of time” (Payne, 2005, p. 65). Often when students display a buy-in to cultural and philosophical views of education as promoted in schools, they are ridiculed by their peers in poverty for being sellouts, wimps, nerds or some sort of label depending

on the group. Yet Berliner (2009) said that No Child Left Behind (NCLB, 2002) presumes that teachers and administrators can overcome the out-of-school-factors listed in the first chapter.

Culture. According to Van Gyn, Schuerholz-Lehr, Caws, and Preece (2009), not much has been done at universities in the way of preparing new teachers for dealing with students of diversity. Changing demographics has increased diversity in classrooms throughout the United States (Ford, Moore, Whiting, and Grantham, 2008). Van Gyn, et al. (2009), highlighted was the focus placed on publishing in most universities. They went further to say since education has moved from teaching-centered to learning-centered, “universities should develop the capacity to design and implement learning outcomes, instructional strategies and assessment methods that are congruent with learning-centered orientation” (p. 27). The focus should have been on what students were doing and if teachers were using engaging techniques to reach students. Herrell and Jordan (2008) described teacher-centered classrooms as those where the teacher gives the knowledge and the students show that they have consumed the knowledge by providing the correct answer on a test. They describe a student-centered classroom as one where the process of learning is collaborative between the teacher and the students within the content of the class. There is less emphasis on the correct answer and more focus on how the student derived the answer.

Van Gyn, et al. (2009), suggested that teachers need more preparation in using formative assessments and collaboration. They also said, “Not only is the effectiveness of a learning-centered curriculum supported by extensive cognitive, social and neural psychological research, it is the most appropriate approach for the inclusion of students

with diverse cultural and educational backgrounds” (p. 30). Ford, Moore, Whiting, and Grantham (2008) noted that during their graduate training to become teachers, there was no mention of institutional racism and its impact on students’ perspectives of education. Theoretically if individuals feel they will not be an equal member of a process, they might not see value in the process. If universities are not addressing social justice issues with pre-service teachers, when do teachers examine their perceptions of student ability and how these perceptions relate to the students’ backgrounds? The article went further to say researchers are often portrayed as neutral, objective and impartial because they are professionals (Ford, et al., 2008). These authors seemed to suggest that teachers may not be able to lose their perspectives and any biases they may have had before entering the classroom. It went on to make suggestions for researchers which provide a guide for teacher preparation curricula: “Be mindful of the need to consider their humanness, their beliefs, assumptions, attitudes, values, paradigms and the limitations of their humanness when working with diverse populations” (Ford et al., 2008, p. 83). These are difficult conversations to have because they challenge our belief systems. Pre-service teachers need to know if they have different expectations for students from different groups.

Emotional needs and consultation. Reis and Roth (2010) wrote, “It has been demonstrated that emotions mediate students’ school performance and their decision making more strongly than scientific and sound reasoning” (p. 71). However, with the current demands related to high stakes testing, teachers have less time to consider strategies to meet the emotional learning needs of their students. Understanding the difference between an emotional issues and a disability should be a part of classroom management training. Special education teachers are taught specifically to find the

function of student behaviors (IDEA, 2004). A student whose parents are going through a divorce may be unable to complete assignments because of episodic distress. It does not mean she has a disability. It means she may need accommodations to support her while going through the situation. According to Beal and Delaney (2005), themselves psychiatric clinical nurses, individuals need self-efficacy to have confidence that their skills and behavior will produce a certain result. Most of these strategies are used in clinical training, yet special educators receive some of this training because many special needs students have a clinical diagnosis (IDEA, 2004). Now that the 2004 Individuals with Disabilities Education Act (IDEA) has increased the number of special needs students in general education classrooms, general education teachers should also receive some of the same training.

As Katsarou (2009) explained, teachers need much more preparation than simply instruction in teaching content. NCLB has created a one-dimensional focus in education through high stakes testing. However, there is little attention given to the emotional needs of children. Zembylas (2007) examined Michele Foucault's work in *The Politics of Passion*. He suggested that oftentimes students and teachers are engaged in the "art of not being themselves" (p. 136). For teachers, this can be a part of how they maneuver through a culture and society that may contrast with their *home culture*. For students, who have had less time functioning in societal norms, the challenges are much more difficult. Zembylas (2007) referred to "a collective emotional control in education" (p. 135). This philosophy is counter to those cultures that express high emotions. It follows that those students from cultures with high emotional responses or passionate reactions will be thought to have some degree of inability to control those emotions or passion.

We see the effects of this by the overrepresentation of certain groups in special education, according to Zembylas.

The lack of reference to diverse learners indicates a lack of connection between the teacher's experience in schools today and pre-service preparation. For example, Butin (2005) conducted a study on *social foundations in education* (SFE) by examining to what extent if any educational policy documents addressed SFE. He analyzed a number of journals, The Chronicle of Higher Education, Education Weekly, The National Council of Teacher Quality, The Progressive Policy Institute, and American Association of Colleges for Teacher Education, for phrases related to:

*The disciplinary study of education (history or philosophy of education)

*Academic engagement with issues of multiculturalism (diversity, equity, social justice)

*Academic engagement with the socio-political content and context of contemporary educational issues (critical thinking about tracking, testing, or the school as a bureaucracy) (p. 290).

Butin (2005) studied ten documents from the five sources and found “Six of the policy documents make no mention of SFE, three give passing reference and just one explicitly and strongly discusses the role of SFE in teacher preparation” (p. 290). A few of the documents used the term “at-risk students” (p. 293) to skirt the meaning of SFE. Without addressing how teacher preparation can help teachers better understand the historical, sociological, political, or multicultural context about notions of what it means to be at-risk, the term is not completely being addressed in education. Instead, knowledge of content, pedagogy and testing are at the forefront of teacher preparation

based on the analysis from Butin (2005) and Zembylas (2007). How are teachers to connect with students whose historical, sociological, political and or cultural perspectives vastly differ from theirs? Payne's (2005) work provides distinctions between different socio-economic groups which could be used as a foundation for teacher trainings related to different cultures.

At-risk schools and students have been reduced to high stakes test scores and teacher accountability (USDOE, 2000). We are asking teachers who have not been adequately trained to work with diverse learners and be accountable for those scores. By doing so we are ignoring those factors that have historically hindered certain groups from achieving equal academic success as that of their culturally dominant counterparts (Butin 2005). By avoiding the racial, ethnic, class, gender, sexual orientation and immigration status of our students and how these impact teachers' attitudes about learning, we are not addressing the entire issue of diverse learners (Katsarou, 2009).

Often, children who are placed in special education are not *emotionally disturbed*; sometimes students are just going through a difficult situation. Emotional Disturbance is a special education eligibility that means the student has exhibited the behaviors for an extended amount of time and the behaviors impede the student's academic progress, according to 2004 IDEA. This is different from a family who is experiencing a hard time and the behaviors are directly related to whatever struggle the family is experiencing. Without training, many teachers find themselves struggling with identifying the difference. According to Dettmer and Thurston (2005), "School consultation probably originated in mental health and management fields" (p. 43). For classroom teachers, distraught students can appear to have some sort of disability (emotional disturbance or

autism) even when they do not. With training, teachers would know to collaborate with parents, counselors, special educators and the student to determine the cause of the struggle before seeking special education services.

Dettmer and Thurston (2005) wrote, “The first direct explication of a consulting-teacher service delivery model for students with mild disabilities was in the 1970s” (p. 42). These authors described a program for preparation of consulting teachers at the University of Vermont and a plan for implementing a consulting-teacher model in the state. Formal consultation training was not needed according to these authors; however they did suggest some training consultation for all classroom teachers. Many teachers have never had to work with students with special needs or diverse learners until they face these students in a full class.

According to Beal and Delany (2005), simple methods like *attention shifting* and *regulation* are useful strategies for working with students who struggle with emotions. The authors stated, “In this theory, a critical aspect of controlling emotions rests with how much one attends to or shifts attention away from external events and internal sensations that are generating distressing affects” (p. 115). In the mid 1980s, directors of special education in all 50 states were surveyed about their service delivery model and if it included consultation (Dettmer & Thurston, 2005). The study was exclusive to special education, and at the time it made sense, because special educators were the teachers working with students who had a clinical diagnosis. Special education was a school-within-a-school, separated and different. Now IDEA has placed special needs students back in general education classes.

Second language learners. Many of the instructional strategies discussed in this paper are interchangeable based on student need. Instructional strategies should not be considered exclusive to special needs, or second language learners; instead they should be tools for teachers to use interchangeably to meet individual student needs (Herrell, and Jordan, 2008). Unfortunately most schools of education have departmentalized pre-service teacher training so the various strategies seem specific to the labels students bear. All of the instructional strategies mentioned in this document were suitable for special needs and diverse learners. Most second language learners come from diverse cultures and may require supports beyond language acquisition. The following strategy provides an opportunity for language development and expressions of cultural identity.

Landis, et al. (2010) defined culture as “habits of using time, space, and language” (p. 580). Their article outlined the Language Experience Approach (LEA) which, despite having been a method used since the early 19th century, has been proven to incorporate language support and foster cultural acceptance. The authors said, “LEA provides opportunity for students from diverse backgrounds to build vocabulary and spelling proficiency, participate in phonics analysis, develop reading comprehension, foster creative writing, and make connections between reading and writing, along with other educational benefits” (p. 582). The approach provides an instructional resource to accommodate various languages and cultures. The authors used the LEA approach with special education students also. For special needs students, they provided accommodations for writing by having a staff member transcribe the students’ oral narratives (Landis et al., 2010).

One of the most common strategies used for introducing new vocabulary is the use of non-linguistic representation (Herrell and Jordan, 2008). Tomlinson (1999) who wrote about a differentiated classroom, Herrell and Jordan (2008) who wrote about strategies for second language learners, and Bender (2008) who wrote about instructional strategies for special needs students, all discussed non-linguistic representation as the best method to use when introducing new vocabulary. Non-linguistic representation involves pictures, realia, or events to support the learning of new vocabulary (Herrell & Jordan, 2008). All three authors also discuss the importance of authentic learning (Bender, 2008; Herrell & Jordan 2008; Tomlinson 1999). For example, a math teacher in Los Angeles who was having difficulty teaching percentages to his class used his students' interest in the Lakers to get the students interested in percentages. During the playoffs the teacher decided to use free-throws of various players to teach percentages. His approach utilized an authentic learning experience to teach percentages. These strategies are not exclusive to certain populations of students. They can be utilized to support all students' learning needs (Tomlinson 1999).

Lee and Oxelson (2006) examined the idea that teacher attitudes are more strongly influenced by training than by other factors. They conducted a survey of 69 teachers across California about their attitudes towards bilingual education. The results indicated that those teachers who had English Second Language, and Bilingual Cross-Cultural Language and Academic Development had more positive attitudes towards working with second language learner students (Lee & Oxelson, 2006).

Technology. Since 1992, the Ministry of Education in France has provided trainings for all teachers to utilize technology as a part of their every-day tools (Baron &

Bruillard, 1994). As in many cases with legislative acts, no instructions or guidelines were given (Baron & Bruillard, 1994). Each institution had to develop their own. The NCATE diversity section did not mention technology. Yet, this study mentioned a number of research studies which show that technology facilitates instruction through all learning modalities (Baron & Bruillard, 1994). Access to technology in classrooms is not always available. Koc (2005) added, “Technology impacts every aspect of modern life. Computers control telephones, engines in our car, and machines that wash our clothes” (p. 3). Teachers are preparing students to enter a society fueled by technology. There are few if any jobs that do not require some degree of technological savvy. Koc also noted, “Technology allows us to better serve the diverse learning styles of our students and educate them for a wider range of intelligence” (p. 3).

Just as special education and bilingual education could benefit from combining with general education, establishing a partnership between computer science departments and the schools of education would help support pre-service teacher knowledge.

Summary

This chapter highlighted some of the challenges for pre-service general education teachers when working with special needs and diverse learners. It also described the impact NCLB and IDEA has had on the roles general education teachers have when providing instruction for special needs and diverse learners, and reviewed NCATE’s guidelines for teacher credentialing institutions. The next chapter will describe the method of collecting data from general education teachers about their preparedness to meet the learning needs of the diverse learners.

Chapter 3 Research Method and Study Design

The process began with developing the research question: “What are teacher attitudes and understanding about their preparation to work with special needs and diverse learners?” There were six sub-questions which were used to answer the larger question:

Do teachers feel prepared to work with special needs and diverse learners?

Are teachers knowledgeable about researched-based instructional practices?

Is age a factor when it comes to teacher preparedness?

Is there a difference between teacher preparedness in a large urban school district and a small rural school district?

What are some of the constraints teachers face when working with these groups of learners?

What can teacher credentialing institutions do to better prepare teachers to work with these two groups?

The study was a mixed methods design structured to collect both quantitative and qualitative data. The research protocol was developed and submitted to Oregon State University’s Institutional Review Board (IRB) office along with the informed consent document, the survey questions with the link to the online survey, and the individual interview questions. There was a training phase of the study which provided qualitative data; however the study had to be incrementally approved by IRB because, the agenda for the trainings was developed from the survey responses. The IRB office could not approve the trainings prior to reviewing the agenda which also had to be approved by the district.

Time Frame

The original time frame was scheduled to begin collecting data from teachers starting in September through November 2010. The researcher planned to spend the next six months analyzing data and writing. Documents were submitted to IRB for approval in August, 2010. However since there were three phases of data collection, the survey, the trainings and the individual interviews, and each phase after the survey was contingent upon the findings in the survey, the study had to be approved incrementally. The initial approval to conduct the survey did not come until December 2010. Therefore survey data collection did not begin until January 2011.

Trainings were held in the rural school district in February 2011 and in March 2011. There were 201 participants. Field and observation notes were taken during the trainings. In April 2011, the participants who indicated that they would be interested in being a part of the individual interviews were contacted. The individual interviews were limited to those participants from the rural school district because IRB approval to include the urban school district came later. In April 2011 documents were submitted to IRB for approval for the survey for the urban school district survey. By June 2011 all data had been collected.

Participants

The two school districts who participated in the study collaborated with the researcher to determine how participants were selected. The rural school district decided to invite all of their teaching staff to take the survey. They included the trainings as part of their district wide professional development. The teachers were able to indicate if they were interested in participating in the individual interviews by checking a box on the

survey, and there was an area for the teachers to provide their contact information. All teachers who indicated they were interested in being a part of the interviews were contacted. There were 14 teachers who provided contact information. Scheduling conflicts limited the participation in the interviews to six.

The urban school district had the researcher send an invitation to take the survey using the researcher's server. The district did not want to use their server to ensure that their teaching staff did not think taking the survey was mandatory. The emails were sent to their non-special education and non-counseling teachers. There were about 30 survey participants who indicated that they would be interested in participating in individual interviews. However due to time constraints, only participants from the rural school district participated in the individual interviews.

The Survey

The survey questions were influenced by the work of Bender (2008), Marzano, et al. (2001), Payne (2005), and Tomlinson (1999), and their research on best instructional practices for the diverse classroom. Their work provided the foundation for drafting the questions in each section. There were seven sections: Respondent Information, Special Education, Second Language Learners, Poverty/Culture, Emotional Needs, Technology, and Data/Student Strengths. The sections were selected based on the research question about general educators' pre-service training to work with special needs students and diverse learners. Special needs students are those students on active Individual Education Plans (IEPs) who have been placed in general education classes. Second language learners, students from severe poverty, and students from different cultures are all identified in section 1001 in the Statement of Purpose of the Title 1 (at-risk) students

(USDOE, 2000). These groups are considered diverse learners for the purposes of this study.

The Emotional Needs, Technology, and Data/Student Strengths sections were selected due to the researcher's familiarity in working with students who had been referred for special education assessment, as in her experience, the general education teachers did not seem to understand how these factors impact learning. For example there is a special education eligibility called *emotional disturbance*. However students can go through an experience which may cause them to display inappropriate behavior, or prevents them from learning. For example, if parents were in the process of getting divorced, it could impact the students' performance, but the poor performance should not be considered a disability. The questions on the survey were designed to examine if teachers had techniques to distinguish between episodic and ongoing emotional distress.

Technology was included because as the literature stated in Chapter II, some students have digital minds which can appear to be Attention Deficit Hyper Activity Disorder (ADHD). The survey questions were designed to gain the teachers' perspectives about using technology and understanding how it impacts learning. And finally, the Data/Student Strengths section was selected because the researcher had observed that many general education teachers did not know how to collect data and use data to determine their students' strengths and learning needs. The research discussing the importance of using assessment data to drive instruction and understand students' needs was addressed in Chapter I. The survey questioned teachers use and understanding of data and how it can be used to determine students' strengths.

The Likert type scale design was chosen because the responses were balanced with equal number of positive and negative responses. Each question had four possible responses and this is considered a *forced method* because there was no middle ground answer (Creswell, 2009). The responses had two choices in the affirmative and two in the negative. Constructing the responses this way gave the researcher a clearer distinction between responses to analyze strengths and weaknesses.

The survey was constructed in such a way as to collect both quantitative and qualitative data and was divided into the seven sections. At the end of each section (except Respondent Information), there was an area for comments asking participants, what questions arose as they responded to the survey. This information provided qualitative data for the study. Each section except Poverty/Culture had two categories, knowledge and instruction. The Poverty/Culture section only had questions related to knowledge because the research-based instructional practices are the same for special education and second language learner instructional practices. Numeric values were assigned to each response in each question; this information provided quantitative data.

The questions were designed to ask respondents about their knowledge and preparedness to implement research-based instructional practices. The knowledge questions asked respondents about their knowledge related to the section; and the instruction questions asked respondents about their perceptions of their ability to employ specific instructional practices. The survey was designed so respondents could not distinguish between the knowledge and instruction category as they took the survey. Only the sections were distinguishable to respondents.

The survey began with this brief description of the purpose: The survey questions were designed to assess your feelings about your knowledge and preparedness to meet the various learning needs you will face in a general education setting. The first section that contained data was the Respondent Information section. This section had three questions related to personal information about the respondents:

1. Do you have any experience, personally or professionally working with special needs children?
2. Have you ever tried to learn a second language?
3. What is your age group?

Asking teachers about their age group was relevant because some of the veteran teachers received their training before the 1997 and 2004 IDEA inclusion mandates. So for many teachers who were trained prior to 2004 there was very little instruction on how to work with special needs students; because special education students were sent out of general education classes to special education settings. A better question would have been; In what year did you receive your training, with a range of years for response choices or how long they had been teaching. Age was not always a good indicator of when teachers received their training. For some of the participants, education was a second career. The two questions about special needs and second language learners were to get an overall picture of the participants' experiences.

The following are examples of some questions from the second section of the survey titled, *Special Education*. There were six questions and one comments area in this section. A full list of questions for each section can be found in the appendix.

Do you understand how Least Restrictive Environment impacts the general education class? *Knowledge*

Do you understand and feel prepared to use Present Levels of Performance when developing a lesson? *Instruction*

These questions were directly related to the roles general education teachers have when working with special needs students. The knowledge questions asked about the teachers' understanding of laws and policies which impact student placement and the IEP team meeting. The instruction questions asked about the teachers' preparedness to implement the instructional strategies that support the instructional needs listed on the IEP.

The third section examined preparedness to meet the learning needs of Second Language Learners. There were five questions and one comments area. The following are some of the questions asked:

Do you understand Basic Interpersonal Communication Skills (BICS) and instructional practices to address student needs at this level? *Knowledge*

Do you feel prepared to develop a lesson building on your students' prior knowledge? *Instruction*

The knowledge questions were based on the teachers' understanding of language acquisition levels. The instruction questions asked about research-based instructional practices that support language acquisition.

The fourth section, Poverty/Culture, examined teachers' preparedness to meet the learning needs of impoverished students and culturally diverse students. Poverty and culture were combined together because poverty has its own culture according to Payne

(2005). Also, as discussed in Chapters I and II, some of the same understandings about motivation, parent-teacher connection, and community outreach apply to both groups.

This section had three questions and one comment area. In this section, only knowledge questions were included on the survey, because the same instructional practices used for special education and second language learners are effective strategies for these groups.

An example of a question from Poverty/Culture section is:

Do you feel it is important for teachers to be trained to work with various cultures? *Knowledge*

The issues poverty and culture play in student achievement have been discussed in the section of this work related to factors-outside-school. The survey was designed to determine if teachers understood how poverty and cultural differences can impact student achievement. A question related to Maslow's Hierarchy of Needs and how it relates to poverty should have been added. If worded correctly, it could have provided information about the teachers understanding of basic needs and how they impact learning.

Technology was the fifth section. This section examined teachers' knowledge of how to use technology, and also their understanding of how technology impacts learning. In this section questions about *knowledge* and *instruction* were included. There were four questions and one comments area in this section. The following is examples of the questions:

Do you understand how technology has changed the way many students receive and retain information? *Knowledge*

The Technology section of Chapter 1 goes into detail about how technology has changed the way students learn and retain information. Therefore the knowledge

questions were related to the teachers' understandings about the changes technology has had on learning. The instruction questions were focused on teachers' ability to employ technology in their teaching.

The sixth section, Emotional Needs, examined the participants' understanding and preparedness to address students' emotional needs. This section contained six questions and one comments area. There were both *knowledge* and *instruction* questions in the section. Some of the questions were:

Do you feel prepared to employ Conflict Resolution strategies? *Knowledge*

Are you prepared to develop reinforcement strategies to support behavior needs?

Instruction

The knowledge questions examined the teachers' ability to distinguish between an episodic emotional need and an ongoing emotional disorder. The instruction questions asked about the teachers' preparedness to provide classroom supports for students in emotional distress.

The seventh and final section was Data/Student Strengths. As discussed in previous chapters, data provides teachers with information about students' strengths and needs. There were four questions in this section and one comments area. Some of the questions were:

Are you familiar with how data can assist with differentiation? *Knowledge*

Are you prepared to determine a students' strength and build a lesson

accordingly? *Instruction*

The instruction questions asked about teachers' preparedness to use data to drive instruction. The knowledge questions asked about the teachers' understanding of how data can provide information related to students' learning needs.

Two school districts agreed to participate in the study, a small rural school district in the Pacific Northwest (RPN) and an urban school district also in the Pacific Northwest (UPN). The RPN district sent their general education credentialed staff an IRB-approved invitation to take the survey along with the survey link. Their participation in the survey was part of their district-wide in-service training. The teachers were able to opt out of allowing their responses to be used as part of the study in the informed consent included in the online survey. The UPN school district asked the researcher to send the approved invitation through her university server so that their staff would not think participation was mandatory. The same survey was used for both school districts.

The Trainings

The UPN school district opted out of the trainings because they had already scheduled similar trainings for the year. Once the RPN school district staff completed the survey, training agendas were developed based on the responses from the survey. The agenda outlined the topics that were covered during the trainings. Training agendas were submitted to RPN district administrator for approval. Upon approval from RPN, the agenda along with a project revision was sent to the IRB office for approval. Once IRB approved the training, the first training was held at a location within the school district.

The trainings were structured using a PowerPoint presentation. There were group activities included at various points during the presentation. There was also a 15 to 20 minute questions and answer exchange after the presentation. During the first training

more qualitative data was collected via an approved observer who attended the training and took notes. There were feedback forms left on the table so participants would have another opportunity to provide comments which were added to the observational qualitative data. The feedback forms and discussion notes also helped the researcher select those areas from the first training which needed more in-depth focus in the second training.

The comments from the first feedback form and the observer notes were used to develop the presentation for the second training. The second training provided participants with more in-depth information in those areas of need indicated through the feedback forms and observer notes. The second presentation was also structured using a PowerPoint presentation. There were more small-group activities where teachers had opportunities to apply some of the strategies presented during the trainings. There was a short question and answer exchange after the presentation which provided more qualitative data collected through the observer notes and the feedback forms.

The notes from the observer and the information from the feedback forms were entered into a table. The table was organized into categories that paralleled the survey sections described above. This was the beginning of coding the qualitative data which will be described later in this work. The researcher was looking for emerging phrases and themes throughout the table (See Appendices B and C).

The Interviews

The researcher needed more in-depth information about the general education teachers' experience when working with special needs and diverse learners. To get at this information, individual interviews were held with interested participants from the

RPN school district at the time and location of their choice. Within the informed consent document in the online survey, there was a section for participants to indicate if they were willing to participate in individual interviews. Six participants from RPN district were selected to participate as individual interviewees. All participants were asked if they were comfortable allowing the use of an audio recorder at the beginning of the interviews. An audio recording device was used to record the participants' responses, and field notes were taken in conjunction with the audio recordings. Participants were told the interviews would not exceed an hour in duration. A beverage (coffee, soda or juice) was offered during the interviews, and the interviewees were in no other way compensated. The interview was designed to probe deeper into those categories identified in the survey and trainings. The individual interview questions were semi-structured with open-ended questions to allow the participants to express thoughts and perspectives the researcher may not have considered. Driscoll (2010) explained qualitative and quantitative interview as a method of collecting data about a subject directly from the real world. This meant it was important to get the teachers' experience in their own words so they were able to elaborate on those nuances which may not have been asked in the survey or during the trainings.

Once the interview was completed and the audio responses were transcribed verbatim, then transcriptions were sent to the interviewees for *member checking*. Once the interviewees had a chance to review and make any changes they felt were needed, the researcher began coding the reoccurring phrases and words into a table similar to the table created for the survey comments with categories that paralleled the survey sections (See Appendix E). Creswell (2009) calls this method *open coding*.

Data Collecting Strategies

The data from the survey was collected through the online system. The data was aggregated onto a spreadsheet then downloaded from Survey Monkey. The training data was collected using observer notes, and feedback forms. The individual interviews were recorded using a digital audio recorder.

Quantitative Data Analysis

The online survey system did most of the calculations for the quantitative portion of the study. The data was pulled from the online survey system into a spreadsheet. Next the mean was determined using Microsoft Excel program. One-Way Chi Square formula was used to calculate a relationship between two nominal variables for the rural and urban school districts data. This was used to determine if there was a statistically significant difference between two sets of data, age of respondents and school districts. And finally Graphpad Software was used to determine the P-Value. There were 37 participants from the rural district and 164 participants from the urban district, with a total of 201 participants who completed the survey on SurveyMonkey.

Qualitative Data Analysis

The comments from the survey, the notes from the training observer, the feedback forms from the trainings, and the transcribed individual interviews were all coded into separate tables to align key terms and phrases. First, the researcher used open coding by selecting the categories from the survey: special education, second language learners, poverty/culture, technology, emotional needs, and data & student strength for each table. Creswell (2009) defined open coding as “generating categories of information” (p. 184). Open coding was selected because the sections in the survey were easily transferred into

the categories in the table. The sections in the survey also created a good framework for gathering information related to answering the study question about teachers' preparedness and knowledge to meet the learning needs of diverse learners and special needs students. The first table of qualitative data came from the comments section of the survey. The second table's data source came from the observer notes and feedback forms from the trainings. After the interviews were complete and transcribed, the transcriptions were charted onto a table with the same categories (See Appendices B and C).

Creswell (2009) described *phenomenological* research as “the analysis of significant statements, the generation of meaning units, and the development of essence description” (p. 184). The coded qualitative data from the three tables were reviewed and organized into chunks or as Creswell described meaning units. The units became smaller as the information was sorted through and data was filtered. For example one table may have had *needs more training understanding the difference between accommodations and modifications*, and another may have had *not sure how to use the IEP for accommodations or modifications*. The two would have been combined because they addressed the same knowledge and instructional concerns.

Throughout this process notes were taken, and information was moved around to make connections and meaning of the data and how it related to the study question. This process involved a *selective coding* method. Creswell (2009) defined selective coding as “the explicating a story from the interconnection of these categories” (p. 184). In the example above, the first statement referred to teachers' knowledge as it related to differentiation. The second statement relates to instructional preparedness as it relates to

special education. The blending of the two showed the interconnectedness of the categories as they relate to the study question.

Finally all three tables were synthesized into one table by using the selective coding method described above. Once the qualitative data had been coded and each source of data had been synthesized, percentages were assigned to each category in a semi-quantitative code. Johnson, Dunlap, and Benoit (2010) described semi-quantitative coding as adding numeric quantity to qualitative coded data. For example, the need for more training with accommodations and modifications received 20% more comments than the need for more consultation training. Percentages were determined when comparing each category within the table.

Validity

The data were triangulated by examining data from the four sources: survey quantitative data, survey qualitative data, training qualitative data, and interview qualitative data. The coded data from the synthesized table which contained the comments area from the survey, the training observer notes and feedback forms, and the individual interviews, were compared to the quantitative data from the survey questions. Triangulation is the combining of different data sources and using them to build “coherent justifications” according to Creswell (2009, p. 191). Comparing the tables of qualitative data to the quantitative data provided a better picture of teacher attitudes, knowledge, and preparedness to meet the diverse learning needs in general education classrooms.

The process of analyzing the qualitative data was the most time consuming. When sorting through the qualitative data the various wording and phrasing of the same concept

made it difficult to match and categorize. Only through several reviews of the tables were similarities between comments made evident. There were a couple of subcategories which emerged through the analysis. The next chapters discuss the analysis where the sub-categories will be addressed.

Chapter 4 Survey Findings

The chapter begins with a discussion of the two school districts and their demographic populations. Then the data was analyzed to determine if there was a statistical significance between the ages of the respondents and the larger urban school district versus the smaller rural school districts. And finally there was an examination of the responses to determine the levels of teacher knowledge and instructional practices.

Rural and Urban School Districts' Survey Results

A Rural Pacific Northwest school district (RPN) invited their certified non-special education teachers to take the survey as part of a professional development, though teachers were able to opt out of allowing their responses to be used in the study. There were 37 participants who agreed to participate in the study. The Urban Pacific Northwest School District (UPN) asked the researcher to send the approved invitation to take the survey through her server, so teachers would not think their participation was mandatory. Originally there were 217 participants who logged on to the survey system from the UPN school district. When examining the data, the researcher found that not all respondents completed the survey. A total of one hundred 164 participant responses were used from the UPN school district. Ultimately the total numbers of respondents used from both school districts were 201.

RPN participant demographic information included the following: nine participants were ages 26-35, ten were 36-45, and nineteen were 46 years of age or older. In contrast UPN had six 18-25, forty-three ages 26-35, forty-eight ages 36-45, and sixty-seven age 46 or older. Both school districts had a larger population of teachers who were over 46 years of age. At the time of the development of the survey, the age question was

included to glean some idea of when the teachers received their training; however as stated earlier, age did not always correlate to the year of training. RPN school district teachers and students were predominantly White and rural; while the UPN school district's student population had 55% White, 12.9% Black, 15.8% Hispanic, 9.1% Asian/Pacific Islander according to the school districts statistics web page. There were factors which impacted the data related to the differences between the demographic make-ups of the two districts. For example the rural school district only had two second language learners. Consequently, there were fewer professional developments related to teaching second language learners.

Survey Analysis

The data was collected through Survey Monkey's online survey system. The Survey Monkey system was chosen because it was easy for participants to access the survey through the link. It was also simple for the researcher to collect aggregated data through the system. The Special Education section had six questions, Second Language Learner section had five questions, Poverty/Culture had three questions, Technology had four questions, Emotional Needs had six questions, and Data/Student Strength section had four questions. In the six sections, each question had four possible response choices. Rutkas (2010) discussed assigning numeric value to survey response choices by considering what you are measuring and the relationship between the responses.

Each response (variable) was assigned a value of one, two, three, or four (not always consecutively). A scoring guide was created which gave numeric value to each response in each question (see Appendix D). A score of one indicated the least amount of general knowledge or instructional preparedness. A score of four indicated the highest

amount of knowledge or instructional preparedness. The data was collected from the online system onto a spread sheet. Next it was entered into a Microsoft Office Excel spreadsheet, and the mean was calculated using the excel function. Once the means had been determined the data was entered onto the Minitab Software where the median and standard deviations were calculated. The One-Way Chi Squared formula was used for each of the groups of data. One-Way Chi Square was used to determine if there was a statistical significant difference between the age of the respondents and between the school districts. According to Georgetown University Department of Psychology (2011) the One-Way Chi Square examines whether people are distributed across categories as would be expected by chance” (para, 2). Finally, the Graphpad Software was used to determine the P-Value. The P-Value was used to determine if there were statistically significant differences between the groups compared. The comparisons were between the respondents’ choices and their age, and the rural versus urban respondents’ choices.

The One Way Chi Squared formula used was observed frequency minus expected frequency squared, over the expected frequency. The expected frequency was determined by looking at the frequency of all respondents. The equation used was the following:

$$X^2 = \sum \frac{(O - E)^2}{E}$$

This formula was used for each section of the survey to determine if age was a factor in the types of responses respondents made. Once the X^2 was determined for each section the Graphpad online system was used to determine the P-Values. The X^2 and the Degrees of Freedom for each section were entered into the Graphpad system. The results were as follows for the age comparison:

Table 4.1
Age and Survey Responses

CATEGORY	X²	P- VALUE
TECHNOLOGY	.219	.994
SPECIAL EDUCATION	.140	.998
SECOND LANGUAGE	.113	.999
EMOTIONAL	.068	.999
POVERTY/CULTURE	.022	.099
DATA	.005	1

There were no statistically significant differences within the P-Values. The pre-set threshold value or alpha was set at .05. This data indicated that there were no significant differences between the age groups responses. In other words, age was of little consequence when it came to levels of knowledge and instructional practices according to the survey data.

The next sets of data tested were the Rural School District responses compared to the Urban School District responses. The same statistical analysis used to compare the age groups was used to compare the school districts. The results were as follows:

Table 4.2
Comparing Responses by School Districts

CATEGORY	X²	P-VALUE
SECOND LANGUAGE	.450	.799
DATA/STUDENT STRENGTH	.029	.986
POVERTY/CULTURE	.019	.991
EMOTIONAL	.003	.999
SPECIAL EDUCATION	.002	.999
TECHNOLOGY	.0002	1

The data indicated that there were no statistically significant differences between the two school districts responses. By examining the means for each section and comparing those

by school districts, there was one area of difference which could be accounted for because of the student demographics. The results are as follows:

Table 4.3
The Mean for Both School Districts

CATEGORY	URBAN	RURAL	WHOLE GROUP
SPECIAL EDUCATION	20.741	20.959	20.781
SECOND LANGUAGE	16.076	12.919	15.495
POVERTY/CULTURE	10.478	9.946	10.379
TECHNOLOGY	12.851	12.917	12.863
EMOTIONAL	20.683	21.000	20.742
DATA/STUDENT STRENGTH	14.948	14.171	14.804

As stated earlier, the largest difference was found in the Second Language section. The rural district's student population had less than 2% second language learners. Therefore there were fewer professional developments related to language acquisition.

An even number of choices were chosen to provide the researcher with a clearer distinction between strengths and weaknesses. For example, a question about preparedness to provide instruction had two responses which indicated that the respondent was prepared at varying degrees, and two responses that indicated the respondent was not prepared in varying degrees. The researcher was looking for a clear affirmative or negative response. However three respondents suggested that a middle choice would have been more appropriate for their responses.

There were some design flaws in the survey; yet overall the survey design was adequate in providing a picture of the teachers' knowledge and preparedness to work with special needs and diverse learners. There were questions and response choices which could have been worded more clearly. For example there was a question; do you feel prepared to employ the teaching strategies scaffolding or gradual release? Scaffolds

are supports teachers provide to assist all students with instruction and completing assignments (Bender, 2008). Gradual Release Model is an instructional method of teaching which provides supports for struggling learners (Herrell and Jordan, 2008). They are both instructional methods which provide extra supports for all learners. However, a couple of comments indicated that the question was not clear. One participant said she knew one and did not know the other. The question could have been worded better by indicating that both were instructional supports or it could have been separated into two questions.

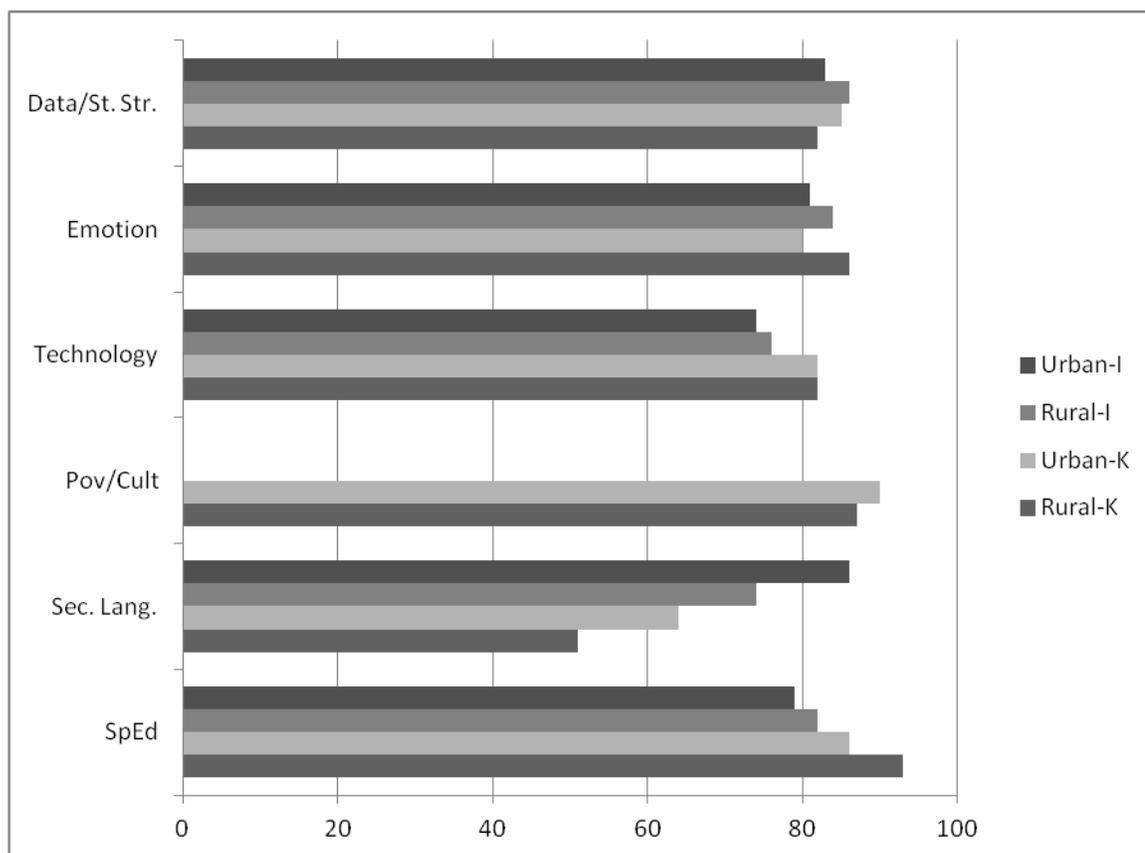
Comparing Knowledge and Instruction between School Districts

The survey sections each had two categories *knowledge* and *instruction* to determine if teachers had the knowledge and or preparedness to implement research-based instructional practices. The Poverty/Culture section only had knowledge questions because as stated earlier, the same instructional practices used in special education and language acquisition are used to address learning needs related to poverty and culture. The questions totals were categorized on a Microsoft Excel Spreadsheet according to whether they were knowledge or instruction questions. Next the raw score for each question was determined by using the scoring guide (see Appendix D). The raw score was divided by the highest possible value for each question. The highest possible value was determined by multiplying the number of participants by 4 the highest value for each question response. This provided a percentage for knowledge and instructional preparedness for each section of the survey by school district.

At the time when the study was conducted RPN had two students of limited English proficiency out of approximately 1,100 students (.18%). The culture of poverty

was relevant given RPN's free-and-reduced lunch count hovering around 52%. The impact of poverty will be discussed in the interview analysis. The UPN school district provided a more diverse student population in an urban setting. The following graph provides a comparison of the two school districts percentage scores for knowledge and instruction:

Figure 4.1. Rural and Urban Percentages of Knowledge and Instructional Preparedness



The teachers in the rural school district scored highest in the special education knowledge section. They have a small school district and there are fewer placement options for special needs students than the larger districts are able to provide. Because of this, most of the general education teachers had worked with special needs students in their general education classes. During the interviews the teachers commented on the

good job the district does with providing informative professional developments. This will be discussed in Chapter 5 in the qualitative analysis. In the instruction category of the special education section, the rural teachers scored slightly lower. Teachers who received their training before 2004 may not have been exposed to some of the newer instructional strategies and terms or the shift from teacher-centered classrooms to student-centered instructional practices. The teachers from the urban school district scored relatively high in the knowledge category of the special education section. Instruction was slightly lower, which could be attributed to more placement options and less direct contact with special needs students in the larger urban school.

The RPN's second language learner knowledge section was the lowest. As discussed earlier in this chapter, the RPN school district had fewer than 2% of second language learners. The instruction category of this section was interesting because it was higher than the knowledge category. One reason could be because instructional practices are not confined to a specific learning need or student label. Research-based instructional practices are universal and are just good teaching practices.

The urban school district scored higher in both knowledge and instruction in the second language section. Student demographics seemed to have the biggest impact on these scores.

Poverty was the second highest knowledge category for the rural school district. This section only had a knowledge section because best instructional practices had been examined in other sections. The school district is located in a small rural town with high unemployment rates. The teachers have had experience with the impact poverty has on education. The urban school district's highest score was in the Poverty section. In

February 2011, the employment rate was 10.2% and 15.7% of the population under age 18 lived below the poverty level in that city according to Economagic.com (2011). This statistic indicates that the urban school teachers are likely to understand the impact poverty can have on students' academic growth.

The rural school district's knowledge in the Technology section was higher than their instruction score. During the interviews and in the comments section the teachers indicated that accessibility to technology is limited. This could account for the lower score in the instruction category. The Technology section for the urban school district was relatively high in the knowledge category. The instruction was a bit lower. However like the rural school district, the comments made by the respondents indicated that the lack of availability of technology could have been the reason for the lowered instruction score.

The Emotional Needs section was relatively high in both knowledge and instruction for the rural school district. In the earlier chapters there was discussion of the correlation between some of the symptoms of poverty and how they contribute to emotional distress. The teachers in the rural school district are very familiar with the needs of impoverished students which can be similar to the needs of students who experience episodic emotional distress. This would account for the higher scores in this section. The scores in the emotional disturbance section were very close for knowledge and instruction for the urban school district. The teachers' knowledge almost matched their instructional practices.

The Data/Student Strength section for the rural school district was interesting because usually teachers have the knowledge and apply that knowledge to the instruction.

However in this case the knowledge score was lower than the instruction score. The interviews revealed that the rural district analyzed data regularly as teams. In the urban school district the Data/Student Strengths section scores for knowledge and instruction were also very close. The comments revealed that the urban teachers engaged in professional teams that review data and develop instructional plans regularly.

Summary

There were no statistically significant differences between the ages of the respondents and the choices they made. There were no statistically significant differences between the rural and urban school districts. While the rural school district's second language learner mean was 13 and the urban school districts mean was 16.1, their student demographic differences provided an explanation why the rural school district was lower. The next chapter discusses the qualitative data collected through the comments section of the survey and the individual interviews.

Chapter 5 Qualitative Data

This chapter discusses the qualitative data collected in the comments area of the survey, the qualitative data collected during the two teacher trainings at the rural Pacific Northwest school district, and the data collected during the individual interviews. Once each source of data had been examined independently, the results were synthesized together and analyzed.

Survey Qualitative Data

The comments area of the survey sections provided an opportunity for the respondents to give more information about each section. A few sub-categories: *time*, *behavior* and *survey design* emerged from these areas. Behavior strategies and understanding the causes of behavior were included in the discussion of emotional needs in Chapter 1. However, behavior was not an exclusive category for this study, yet it was mentioned quite often in both school districts comments and during the individual interviews. Time was also mentioned often in both districts. Teachers expressed the need for more time to differentiate and collaborate. Both time and behavior will be discussed later in this chapter.

The comments about the survey design were varied. When the survey was developed, the researcher decided to only use four choices, two affirmative and two negative. A number of respondents said they would have liked a “middle ground” choice. Also, some of the comments suggested that a couple of questions were not clearly worded. Terms change regularly in education especially in special education. This could have contributed to the lack of clarity with some questions. One respondent asked “Why are all of the best choices D?” She was correct; most of the best choices

were D. When designing the survey, the researcher considered how the survey would be scored; yet little consideration was given to the order of the strongest answer sense it was not a test.

There were logs created for each school district survey comments. First the comments were logged. When another participant made the same comment a tally mark was added to the line of the comment. Once all comments were logged, another log was created, and the comments were categorized. The tally marks were converted into numbers on the second log. Some comments were synthesized into one if the comments were related to the same topic.

Rural school district survey comments. The comments from each school district survey data were logged onto tables. The number increased to indicate how many participants made the same comment. There was one individual table for each district (See Appendices B and C). Table 5.1 represents the numbers for the RPN school district.

Table 5.1.
Open-Coding of RPN Qualitative Survey Data

Special Education	
Accommodations & Modifications	6
Implementing IEP goals	6
Understanding Differentiation	3
Time vs. Differentiation	2
Present Levels of Performance	2
Mixed Instructional levels	1
Second Language Learners	
ESL Training	4
Moving students from BICS to CALPs	1
Poverty/Culture	
Cultural Training	3
Motivation Techniques	3

Table 5.1.
Open-Coding of RPN Qualitative Survey Data Continued

Technology	
Availability of technology	3
Using technology to support learning	2
Emotional Needs	
Managing Behaviors	4
Training for de-escalation techniques	2
Other Staff who can help	1

Behavior and behavior management were noted as a challenge for many teachers. It was not clear if the behavior issues were exclusively special needs students and diverse learners, or if they were behaviors in general. While this study was not specifically on behavior, there were elements of behavior management throughout the study for emotional needs, special needs students and diverse learners.

Urban school district survey comments. The same process that was used to code the comments from the RPN was used for the UPN school district. All comments were logged onto a table using an open-coding system by categorizing the comments into the same sections used in the survey (see Appendix C). For the first log tallies were used to indicate more than one participant remarked on the topic. Next the comments were filtered into a second table creating units of meaning. Numbers replaced the tallies and were assigned to the comments based on how many respondents remarked on that topic.

The results are as follows:

Table 5.2.
Open-Coding of UPN Qualitative Survey Data

Special Education	
No time to plan	10

Table 5.2.
Open-Coding of UPN Qualitative Survey Data Continued

How to work with extremely different levels	10
Need more support	8
More training using IEP to build lessons	5
More training with Differentiation	5
Need more training working w/ SpEd students	5
Accommodations vs. Modifications	3
Need Inclusion Training	1
Second Language Learners	
Not enough time to plan	6
Do not understand BICS & CALPs	2
Most Training in PDs	2
Not enough materials/ can't always implement instruction strategies	2
Difficult to work with varying abilities	2
Poverty/Culture	
Not enough time to meet students needs beyond academics	2
Culture & Socio Economics are often related	1
School hours make it hard for poor parents to participate	1
Technology	
Not Available	20
Not enough time NCLB demands	3
Need more training	1
Emotional Needs	
No time to collaborate	4
Need more training	3
Lack of personnel and resources	3
Training came from PDs	2
Don't know some of the terms	2
Need motivation techniques	2
What to do for parents who won't collaborate	1
Behaviors impact all students by taking away from instruction	1
Data/Student Strengths	
Need more training on how to use data for instruction	6
Not enough time to collaborate	6
Test score are not always good indicators of ability	4
PDs have helped	1
Survey Design	
Need more middle ground choices	5
PowerPoint was not a good example of the use of technology	3
Questions were not clearly worded	2
Questions are theoretical. They ask if teachers feel prepared, not if they are using the strategies	1

Table 5.2.
Open-Coding of UPN Qualitative Survey Data Continued

Must “D” always be the strongest answer	1
Culture & Poverty should NOT be lumped together	1

There were over four times the number of participants in the UPN survey than there were in the RPN survey. The new sub category that emerged from the UPN comments section was the survey design. Most of the criticism was related to the choices. There was no middle ground choice. While the researcher was considering the analysis of the data when she constructed the choices, she thought that giving two levels of affirmative and negative responses would be suitable for the respondents’ choices. Some of the other comments were noted; however they were not considered to impact the data results.

Both school districts made more comments in the Special Education section of the comments area. It could have been because the Special Education section was the first section of the survey, and by the time respondents got to the Data/Student Strengths section, they had made the comments they wanted to make, or they were tired of commenting. One respondent did say there should have been a *progress bar* so participants would know how much more time the survey would take. The comment indicated that some participants thought the survey was long.

Teacher Trainings

The Rural school district opted to take part in the training phase of the study as part of one of their professional development activities. The urban school district opted out of the training because they had already scheduled trainings with similar subject matter. Oregon State University’s Institutional Review Board approved the agenda

which was used during trainings. The agenda was developed based on the responses provided in the survey. Behavior was not originally a part of the study. However because behavior was addressed often in the survey, a behavior section was added to the training agenda. The second training went deeper into those areas where teachers indicated they wanted to know more. There was a question and answer portion of the trainings where participants could ask clarifying questions and express their concerns. During the trainings, there was a pre-approved observer taking notes which were also used to collect data. There were also pre-approved feedback forms which were left on the tables where participants were sitting. Participants were asked to write comments and questions on the feedback forms at the end of the training sessions.

The qualitative data collected through the observer notes and feedback forms was used for the study. The first training agenda topics were:

Laws and Policies

Least Restrictive Environment

Inclusion

Moving From a Teacher-Centered Classroom to a Student-Centered Classroom

Evaluating Learning

Motivational Tools

Understanding Behaviors

Function of Behavior

Choosing Battles

Teacher Teaming/Collaboration

The second training agenda expanded on those areas where teachers indicated they would like more information. Teachers filled out a feedback forms during the first training and their remarks helped structure the second training agenda. There were also some new topics introduced during the second training. The agenda topics for the second training were:

General Instruction Strategies for Diverse Learners

Differentiation lessons

Knowing Students' Strengths

Non-linguistic Representation of Vocabulary

Morphology Strategies

Interventions

Collaboration

Function of Behavior

Emotional Intelligence

Conflict Resolution

Accommodations/Modifications

Working with Parents

Student Assistant Team

Technology and How it Impacts Learning

The Digital Mind and Learning

Utilizing Technology in the Classroom

The participants included all teachers, counselors, administrators, and other out-of-class staff. The trainings were an interactive presentation where staff could ask

questions or make comments throughout. A PowerPoint was used to provide visuals during the presentation. There were interactive activities where the participants were asked to work in small groups.

The observer notes and the feedback forms were more difficult to categorize when being logged into the table. The sections they related to were not always clear. For example, when teachers referred to motivation they often did not specify if they were referring to special needs students, impoverished students, or students in general. As discussed in Chapters 3 and 4, research-based instructional strategies are fluid among students' learning needs. As a result, the data was not always distinguishable between sections when comments were being logged into the tables' categories.

The two trainings produced four sets of qualitative data, the two observer notes, and the two feedback forms. After the four tables were created, the two observer notes tables were combined by filtering the data onto one table; and the two feedback form tables were combined by filtering the data onto one table. The results are as follows:

Table 5.3

Observer Notes from the Two Trainings

Accommodations vs. Modifications	<i>Teacher wanted to know the difference and when to use the two supports</i>
How do we get parents involved?	<i>Teachers liked using statistics to motivate parents</i>
Motivating students who do not buy-in to education	<i>Teachers liked using statistics to motivate students</i>
How do we meet so many different learning levels in one class?	<i>Teachers wanted more differentiation strategies</i>
How do we group students?	<i>Teachers wanted more differentiation especially for secondary students</i>
Difficult to make time for collaboration	<i>TIME is always a commodity in demand</i>

Table 5.4.
Feedback Form Comments from the Two Trainings

No TIME to collaborate, team teach or complete in-depth planning	<i>Collaboration was discussed as a means to improve instruction and manage behaviors. TIME was mentioned in the survey comments from each school and several times throughout collecting the qualitative data</i>
Need more motivation strategies	<i>Teachers seemed very concerned about motivating the unmotivated learner, especially secondary students</i>
More information about accommodations and modifications	<i>Teachers wanted to know more about the difference between accommodations and modifications, and how the two impact a student's ability to receive a diploma. They also wanted to know the legal issues of modifications</i>
Behavior, and behavior interventions	<i>Teachers wanted to know more about behavior interventions. Behaviors were mentioned often throughout the qualitative data.</i>
More inclusion strategies	<i>Teachers wanted more strategies for inclusion.</i>
More differentiation strategies	<i>Teachers wanted more differentiation strategies, including grouping, especially for the secondary students.</i>
Technology is not accessible enough to use regularly for instruction	<i>Teachers from both school districts indicated that technology is not accessible enough to use regularly in the classroom.</i>

The training revealed the group's major concerns when working with diverse learners, understanding accommodations and modifications, needing more time, and motivating students. The teachers were interested in knowing the difference between an accommodation and a modification. They wanted information about the legal aspect and how the two impact grading and a student's ability to receive a diploma. Time was mentioned often by both school districts. Teachers seemed to feel like they did not have enough time to plan and collaborate. The teachers indicated their frustration when trying to motivate the unmotivated learner.

Overall the teachers wanted more strategies they could take back to the classroom. They made very few comments about theoretical concepts, and asked for more strategies to use directly with their students. Secondary teachers commented that there were not enough strategies to motivate and provide interventions for the older students. Collaboration was also difficult for secondary teachers because there is only one teacher per grade level, per subject in the middle and high school. This makes it difficult for teachers to team teach. The participants did seem to concur that their school district Professional Developments trainings were their primary way to obtain skills and knowledge about students with special needs and diverse learners. The participants for the individual interviews were selected from the group of RPN teachers. Their data is discussed in the next section.

Individual Interviews

There were six participants from the RPN school district who agreed to meet in or around the town to hold the individual interviews. Fourteen individuals indicated an interest in participating in the individual interviews on the online survey informed consent section. The researcher sent emails to all of the fourteen respondents with an open schedule for the Saturday and Sunday that she had planned to stay in the town. One and a half hour time slots were created so the participants could choose a time. Participants were able to choose the location. A total of seven respondents agreed to take part in the individual interviews. However one person had to drop out because of an unexpected emergency. There were a total of six participants in the individual interviews.

Five of the participants chose to meet at coffee shops or restaurants, and one chose her church's social center. A beverage was purchased for each participant who met in the coffee shop or restaurants. Nothing was purchased for the person who met at the church. All participants were asked if they were comfortable allowing the researcher to use an audio recording device and all agreed to using the device. The researcher took field notes along with the audio recording.

The questions had been submitted to Oregon State University's Institutional Review Board (IRB) for approval. They were open-ended questions that allowed the participants to elaborate on concepts the researcher may not have considered. A copy of the approved interview questions can be found in Appendix F. Often the participants would answer two or more questions while responding to one. During the interviews the participants seemed comfortable and candid about their feelings and perspectives.

The participants were from elementary and secondary grade levels. Some had their training within the last eight years, while others received their training over 25 years ago. As the interviews went on there were glaring differences between those teachers who had their training more recently than those who had their training before IDEA and NCLB. A few things should be noted at the onset of discussing the findings. First, the RPN is a small rural school district. There were not a significant percentage of second language learners, and the area is racially homogeneous. Because it is a small district there are fewer placement options, so inclusion has been part of the special education placement by necessity. And finally all participants indicated that RPN provided in-services and professional developments that support teacher knowledge.

Participant #1. The first interviewee will be referred to as participant #1, a female who had been teaching for over 38 years. She was teaching at the high school level during the time of the interview. She was very candid about the challenges she felt when working with special needs students in a general education setting. She expressed the difficulty of having special needs students who require so much time, and the time it takes away from the general education students who also need help. Time was a huge factor. She indicated that the quality of education for both special needs students and general education students was lowered because there was not enough time to meet the broad range of needs.

Participant #1 shared that students with attention deficit hyper-activity disorder (ADHD) present the biggest challenge for her because of their poor impulse control. She said it was difficult to determine if their behaviors were due to the disability or poor choices. She said that sometimes the behavior of special needs students causes some of the general education students to join in. She also noted that often special needs students and sometimes their parents were not held accountable. She referred to the modified diploma, and said that it causes some students not to try. She said special education teachers do not come into her class. They give her cards and seating ideas to help with behaviors, but they do not come in to plan or team teach. She had had some experience working with second language learners and noted the different programs available for second language learners and students of poverty.

Behavior was a big concern for participant #1. She said special needs students had not been held to the same standard and they know they could get away with inappropriate behavior. She mentioned that she has not had enough training to address

the impulsive behaviors. We discussed poverty and how it impacts students' learning. She explained that education is a lesser priority when families are concerned about food and shelter. "Too many don't see education as a way out." She also indicated that there are several misplaced values in the impoverished community because many of these students have come to school with expensive cell phones. She touched on how some see the welfare system as a way of life, and it is hard to get them to buy into the educational system.

Overall she said time to plan and differentiate or rare. Behavior problems are taking away from learning, and there is not enough parent support. Essentially she is being asked to educate students for whom she has not had the training to educate. The district has tried to support teacher knowledge by providing professional developments. She indicated that having the training about the difference between a modification and an accommodation was helpful; but the time it takes to utilize these strategies was minimal.

Participant # 2. Participant #2 chose to meet at a local restaurant in the city. She was a former counselor who had received her training over 25 years ago. She was teaching in an elementary position during the time of the interview. She also felt that students with ADHD were the most challenging due to poor impulse control. Participant #2 prefers a push-in model over a pull-out model of special education supports.

According to the Oregon Department of Education the Learning Resource Center (LRC) placement is when students may be in a general education setting for part or all of their instructional day. For those students who need the small group and slower pace than provided in the general education setting, often students are pulled-out of the general education class and taught in a small group in the LRC room.

Participant #2 said when her students are pulled-out they miss key instructional information, thereby causing students who were already behind to become further behind. So, she asked the special education teachers if someone could come into her room to provide the specifically designed instruction as opposed to pulling the students out. This was an example of a general education teacher facilitating an inclusion model. Participant #2 also indicated that she felt comfortable participating during IEP meetings. She said she has asked that information be changed when it did not suit the instructional model. She also indicated that more time to plan with the special education support person that comes in would be beneficial. She said the person has to learn as they go because there is no planning time.

She had had some special education training because she considered becoming a special-education teacher. She did complete her counselor training and served as a counselor for a number of years. During her time as a counselor she had opportunities to collaborate with special education teachers on how to provide supports for special needs students. She was also one of the people who drafted the *Positive Behavioral Instructional System (PBIS)*. This system is a school-wide system which was designed to support appropriate behaviors throughout the school. She said her counseling background helps her tremendously. She mentioned that more teachers training should include stress management and some counseling training.

Maybe it was her time spent out of the classroom that made her seem very comfortable knowing whom to go to for assistance, and comfortable enough asking for assistance. She mentioned that teachers need to understand that they are not alone. She felt that teachers could use more information about how to problem solve. She said, “I

don't just teach content I am teaching, I also think about the children I teach." The research literature refers to this as looking at the *whole child*, a concept developed in the field of counseling. She discussed her efforts to build a classroom community, which helps with behavior management and learning in general.

Participant #2 discussed the stress teachers feel being asked to have all students pass standardized tests. She said testing has taken the joy and fun out of the teaching experience for both teachers and students. She noted that special needs students are often overwhelmed and do not understand the questions being asked. She said the district provided adult staff to read aloud those sections of the tests which are permitted. And yet for many students they are told they fail three times a year.

"RPN has done a good job training staff about impoverished students," she said. She did not receive any pre-service training related to the issues of poverty and how they impact learning. However she understood that "My priorities are not their priorities." She said kids are very loyal to their families and their family's secrets. She wanted them to go home and do homework; however they may have been dealing with basic survival needs.

She felt that technology could be used to engage students; however she did not feel it was better to learn through technology. She said "I don't want to become a sound bite teacher". She stated that she would prefer students learn to focus and communicate effectively and technology does not facilitate focus or effective communication skills. She also noted very limited access to technology because OAKS testing takes the entire computer laboratory three times a year. Students need computers for writing and research, but some classrooms do not have computers.

Overall, her background in counseling has been beneficial to her working with diverse learners and special needs students. She seemed comfortable going to out-of-the-classroom staff for supports. She also seemed familiar with general-educators roles in the IEP process.

Participant #3. Participant #3 chose to meet at a local restaurant. She received her training about five years ago. She had been teaching at the elementary level for the past five years. When asked which disability she found the most challenging, she replied “students with autism.” She understood that autism is a spectrum and the students’ needs are not always apparent. She said she likes working with students who are obviously low because it is easier to determine their needs. Her comment, “I am a booster for my students,” displayed enthusiasm towards working with special needs learners.

She referred to professional developments held by RPN which provided training for working with students with autism. She also remembered her pre-service training and the two special education classes she took. She seemed to have a clear understanding about the laws and rationale for general education teachers to work with special needs students. She pointed out that the teaching strategies she learned as effective scaffolds for struggling learners could be adjusted for all students. For example, she described her method of maintaining focus, “I try to make sure my lessons are not too long, and they include something interactive.” She described how she reads a story to her class and stops at key points and asks “clarifying questions,” which is a researched-based comprehension strategy according to Marzano, et al. (2001) and Tomlinson (1999).

Participant #3 talked about how she planned with the three learning modalities in mind as she prepares lessons. She said she received this training in her pre-service

training. She differentiates every day and students had opportunities to also be teachers at any given time. She also said it is important for every student to share what they know; and every child in the classroom knows their response is important. “We make sure the answer is valid even if it is not correct.” Participant #3 said she is strategic when asking questions and tries to ask questions based on ability levels. She used a leveled reading workshop program which helps with differentiating the instruction. Her class had monthly reading goals and the students monitor their own progress.

“I try to make sure every student is involved.” She felt it was important that every student felt confident. She understood that there were out of class personnel who could help, and often collaborated with the counselor, school psychologist and other administrative staff about helping students. She shared that she did not know about the impact poverty has on education because she grew up in a middle class working family. So having the out-of-class personnel available has helped her support her students’ needs.

Participant #3 felt comfortable using technology for instruction and student work; however, availability makes using technology difficult to use regularly. She seemed to understand how technology helps address all learning modalities and student engagement. She was eager to incorporate more technology as it becomes available.

Participant #4. Participant #4 was a special education teacher who received her training about five years ago as well. The study was designed to get feedback from the general education teachers who were teaching special needs and diverse learners in a general education setting. However the researcher felt collecting data from a special educator who supports general education teachers would give a better perspective of the challenges from a special education point of view. She teaches at the elementary school

level. She provided data about the system of referral for students who are at risk of being placed in a special education setting.

One thing she noted was that the district has one person who does all of the initial referrals. As discussed in Chapter 1, school districts must have an intervention system established and show evidence that the student being assessed has been provided interventions before the assessment. Having one person complete all initial referrals helped standardize the intervention and assessment process. Another concern she noted was that some students had been referred repeatedly. She understood that the students were not making progress, but she struggled with getting the teachers to understand why. “Teachers do not understand how students qualify for special education services.”

In Chapter 1 *Factors Outside of School*, a number of factors were discussed which can cause a student to do poorly in class. She said oftentimes general education teachers want to have a student qualify for special education services when all interventions have failed. However some of the students did not have disabilities. Their struggles in school were related to factors outside of the school. Special education is not a placement for a dysfunctional home life.

Participant #4 said some teachers have asked her for help and ideas. For example she provided long rubber-bands to tie at the foot of the chairs so students with ADHD could fidget with as they sit. She also noted that some teachers are not willing to provide accommodations or differentiate their teaching style. She explained the system of getting special needs student information to the general education teachers, noting, “At the beginning of the school year we provide teachers with a list of their special needs

students, the students' disability, and instructional supports." She mentioned that there are also staff meetings where general education teachers are given up-dated lists.

Behavior was a huge issue for general educators when working with special needs students according to her. "General education teachers need more training working with special needs students." She said she would like to see the two schools, general education and special education training combined. "Teaching special needs children with all of the acronyms without the training is horrible. We say in schools, They are all our kids, yet we train separately." She said it seems to be hardest for those general education teachers who will not change their teaching style. She said those teachers do not welcome her help.

She shared that she came from an impoverished environment, and her parents were determine that she complete her degree. She understood that many of the students she works with do not have the same family motivators. "They have a separate set of values." She noted that many of her students will tell her that they will get a job at a fast-food restaurant. She had not worked with second language learners; however students who grow up in extreme poverty can also be dealing with language acquisition. Many times these students have a very limited vocabulary. She said she is comfortable using basic technology, but there is little access.

Participant #5. Participant #5 had both general education teacher training and she had been trained as a counselor about fourteen years ago. During the interview, she was working as a counselor. She has worked with special needs students and parents help with emotional struggles. She has seen the correlation between student achievement and parent involvement. She noted that the special needs students tend to present the

most challenging behaviors in class. She also noted that some teachers ask for help and some do not. She also discussed the importance of trust. She said some teachers need to trust the individual they are asking for help and trust that the individual can provide the help. Relationship building was an important factor for teacher-student and teacher-teacher success, according to participant #5.

Time was a huge factor when trying to meet so many students' needs. She has gone to IEP meetings and participated as a team member. IEP meetings provide a time for teachers and out-of-classroom staff to collaborate. She said she would like to see special education teachers be more consultative and provide more help to general educators with accommodations. "A lot of general education teachers do not know what to do." They do not understand "specifically designed instruction". Most general education teachers are so overwhelmed, they don't try RTI.

She noted that we try to group the special needs students into one class and provide an aide to support the students and the teachers; but the general education teachers do not know how to use the aides. Some become class behavior intervention staff, others become secretaries. General education teachers need training on how to utilize their instructional aides for instruction. She felt that their lack of training with differentiation was contributing to their poor use of the instructional aides. She noted that when students have been in a sheltered special education class and their placement changes to a general education setting, they struggle with the independence. "Kids became dependent and did not learn self-help skills."

Participant #5 knew about funding for special education services and said many students go without service because the funding is stretched so thin. This keeps high

needs kids in general education classes without supports for the teacher or the student. She noted that it is particularly bad for those veteran teachers who received their pre-service training prior to when general education teachers were being trained to work with special needs students. She noted that it is very difficult for teachers to distinguish between who has a disability and who does not. As a natural strategy, teachers teach to the middle which leaves those students on either end without the right instructional supports. She noted that talented and gifted (TAG) students are often just given extra work and they should be included as diverse learners as well.

Poverty was a big issue in the RPN community. Participant # 5 noted that many parents have given up on education and do not take advantage of some of the community supports provided at the school. She said the community is small and people have pride and don't want others to know they are struggling. The RPN school district had a Health Center on the school campus and a number of students who could use the service did not because of gossip in the community. Parents had to sign-off for the student to receive the health care services. Often the signatures were not returned. Parents and students have been secretive and sometimes the issues causing poor academic success had to be pieced together. There have been times when we did not know who had parental rights because so many different people were in and out of the students' lives.

"We serve the same amount of food to all grade levels." For many of our kids the food they eat at school is their stable meal. We do give away food but it is announced on the loud speaker and many kids are embarrassed to go and get the food to take home. "I worry because when we have school closures, some kids don't eat." Many students come to school for safety also. "Some homes are so chaotic the students do not have any

organizational skills.” They can’t get homework from school to home and back to school.

Those students who are on medication have to go without it sometimes when parents cannot afford to refill the prescription. Technology is less important because so many of our students are dealing with basic needs. It is also hard to use because there is testing in the computer laboratory throughout the year.

Participant #6. Participant #6 was trained 18 years ago and said most of her special education training came from professional developments. She said that students with behavior issues were the most challenging for her, because they take a lot of instructional time. She also noted that there was never enough time to plan or collaborate. She indicated she would like to know more about the difference between accommodations and modifications. She said she does participate during IEP meetings but rarely makes suggestions. However she felt guilty asking special education teachers for help because they had so much paperwork. She also stated that “some kids learn to be helpless when they are in special education.”

She noted that many special needs students would benefit from counseling services. She said she was not sure how to help disabled students. It is difficult and sometimes impossible to help these students pass standardized tests. “I often do not know what to do.” General education teachers could use more training with how to use the instructional assistant. When parents are involved it helps too.

When it came to poverty she said, some parents do not buy into education as a way to get out of poverty; and as a result their children also do not value education. This makes it very difficult to get the kids to be motivated to learn. Many are more concerned

with food and shelter, so learning is low on the list. “Students who come from a higher socio-economic levels seem to do better on standardized tests.” She said the school district had done a good job providing teachers with information about poverty and its effects on learning.

One of the biggest challenges for her was keeping students focused or engaged to complete a task. She indicated that she does not use technology often because she does not want to give a lot of mini lessons and it was not readily available. She said, “I do not want to take away from teaching by using technology.” She did not have experience working with second language learners.

Summary

This chapter contained the findings collected from the qualitative data portion of the study. The survey comments area, the observer notes from the trainings, the feedback forms from the trainings and the individual interviews all provided data which was tabled. In the next chapter the data will be analyzed through triangulation of the qualitative data in this chapter and the quantitative data collected through the survey

Chapter 6 Discussion

This study began with the broad question, “What are teacher attitudes and understanding about their preparation to work with special needs and diverse learners?” As discussed earlier, federal mandates have not only placed these groups of students in general education classes, but also made general education teachers responsible for these students passing high stakes tests. There were six sub-questions which emerged as the study developed.

Do teachers feel prepared to work with special needs and diverse learners?

Are teachers knowledgeable about researched-based instructional practices?

Is age a factor when it comes to teacher preparedness?

Is there a difference between teacher preparedness in a large urban school district and a small rural school district?

What are some of the constraints teachers face when working with these groups of learners?

What can teacher credentialing institutions do to better prepare teachers to work with these two groups?

Originally the focus was on the pre-service training. As the study progressed the data revealed that many general education teachers have relied on professional developments (PD), collaboration, and instructional coaches as a means of preparation to meet diverse learning needs. The survey results were higher than anticipated, and they indicate that the school districts, more so than teacher preparation programs, are doing a good job preparing teachers to meet diverse learning needs.

Question #1. *Do teachers feel prepared to work with special needs and diverse learners?*

The study revealed that there are many factors which contributed to a teacher's feelings of preparedness. Survey, interview and training data were used to answer this question. While the survey, trainings, and interviews showed that teachers who received their training after 2004 seemed to have more instructional strategies for differentiating instruction, other factors like professional developments and student population also impacted teacher preparedness. School districts provided trainings targeted at their student population needs.

When examining the survey scores for teachers, about 85% of the teachers surveyed indicated they felt prepared to provide instruction for special needs students. This score was higher than expected when considering the body of literature suggesting that general education teachers do not feel prepared to meet the learning needs of special needs students. The qualitative data allowed teachers to expand on some of the questions and topics from the survey. The interaction with teachers during the trainings and the individual interviews revealed teachers experienced "frustration about being responsible for standardized test scores for students who by definition do not pass standardized tests." The teacher who made this remark was referring to students with special needs during the individual interviews. She seemed to understand differentiation and how it should look; however she said she did not have time to plan and focus on individual needs while covering the materials students need to pass state tests. Her remarks, and the remarks of many teachers who attended the trainings, indicated that time was a major factor when trying to differentiate instruction.

Teachers in both school districts wanted to know more about the difference between accommodations and modifications. General education teachers must make

accommodations for all students' learning needs. According to Oregon Department of Education, modifications impact a student's ability to receive a diploma. Students who receive modified instruction receive modified grades, and this is usually documented in Individual Education Plans (IEP), a 504 Plan, or the students English Language Development documents. There needs to be some documentation for students to receive modifications. Parents also need to be aware that their children are receiving modified grades and the impact to the students' ability to receive a diploma. The comments from teachers during the trainings, and interviews showed that many general education teachers did not understand the difference between an accommodation and a modification.

By comparison, 69% of the respondents indicated that they were prepared to provide instruction to second language learners. Both of these groups receive federal funding: special education receives funding through IDEA (2004), and second language learners' funds come from Title One funding. Both funds can provide training and resources to support instruction. According to the Commission on Hispanic Affairs 2009 Annual Report, second language learners are the fastest growing group in schools. It is also the area where teachers scored the lowest in terms of feeling prepared to meet students' instructional needs. For this section, instructional practice scores were higher than the knowledge scores. As stated earlier in this study, Herrell and Jordan (2008), who wrote about strategies for second language learners, and Marzano, et al. (2001), who wrote about strategies for differentiation, overlap in their research-based best practices. This information indicates that teachers in this study know how to support learning needs without those needs necessarily being linked to a label.

In the comments section of the survey, teachers expressed problems with time and behavior. One respondent wrote, “It is very difficult to plan differentiated instruction with so many ability levels and so many behavior issues.” Bender (2008) suggested that establishing a structured system for differentiating instruction gives teachers more time to focus on specific learning needs. Differentiated instruction is a tool to help teachers target various abilities and create more time as Bender’s work describes.

A participant from the urban Pacific Northwest district (UPN) indicated that most of her training to work with second language learners had come from professional developments. During the interviews, four teachers commented on how their school district presented useful PDs to support teacher knowledge. Therefore the school district provided more professional developments targeting this group’s instructional needs. The comments from the survey and the individual interviews made by the rural Pacific Northwest school district (RPN) teachers indicated that the teachers had some knowledge about instructional strategies for second language learners. However with less than 2% of the student population needing English Language Learner instruction, there were fewer trainings and opportunities to work with this group.

In the Poverty/Culture section of the survey, 89% of the teachers surveyed responded that they knew the instructional practices needed to support students from severe poverty. In the comments section of the survey and during the individual interviews, the teachers expressed time as a factor in meeting the needs of this group. One teacher from the RPN said that “School hours do not consider the poor working parent. Many times parents are working during school hours and cannot come in.” Parent involvement was mentioned often in the comments area of this section of the survey and

in interviews. The consensus seemed to be that parent involvement is crucial in supporting these students' instructional needs. The RPN school district had done a book study of Ruby Payne's (2005). *A Framework for Understanding Poverty*, which provided insight to the different cultural norms related to socio economics. Both school district teachers discussed motivation as a huge factor with this group.

During an interview, a teacher mentioned that children see their parents getting by without education, and it makes it hard to get students to want more than a "fast food job." Another said, "When students are dealing with survival issues like, food and shelter, it is almost impossible to get them to focus on reading and writing." Some teachers seemed to understand that they could not change their students' home lives, but they could provide some supports while the students are in school. One of the interview participants said she worried about some students when they are not in school because school is a safe place for many students. She clearly understood the importance of providing support for students beyond the academic ones. This section is an area where challenges may increase due to the nation's current economic cuts for social services. Teachers can have an impact; however when dealing with those out-of-school factors, teachers are limited.

In the technology section, 79% of the teachers indicated that they were prepared to use technology to support learning. However the availability of technology was not consistent for either school district. Thus teachers had the knowledge, but they did not have the equipment to use technology as an instructional tool. One teacher stated that, "there is no time with the demands of No Child Left Behind (NCLB)." Both school districts scored higher in the knowledge section than they did in the instruction section.

This indicates that more teachers are prepared to implement technology; however resources were not sufficient.

Teachers' responses regarding episodic emotional needs indicated that 83% of the teachers surveyed had the knowledge and instructional practices to support these students. These students do not have on-going emotional needs. They are usually experiencing something at home or school which is causing behavior changes or lack of academic progress. Like the Poverty/Culture section, teachers indicated that it is hard to motivate students when they are struggling with emotional issues. A number of teachers indicated that time to collaborate and or get help from out-of-class staff would be beneficial. During the interviews, the teachers all said they knew they should involve counselors. One participant said, "It depends on how approachable the counselors are." Three teachers who responded in the comments section stated that they needed more training to work with students who are struggling with emotional needs.

The Data/Student Strength section of the survey revealed that 84% of the teachers surveyed were prepared to use student data to support students' learning needs. One reason for this could be because both school districts engage in regularly scheduled grade level and/or department meetings where they review scores and plan to increase student achievement. According to Thessin and Starr (2011), Professional Learning Communities (PLC) was one of the useful elements that came from NCLB. Teachers review data as a team and develop instructional strategies to address students' needs. However PLCs were as good as the person facilitating the meetings. Ideally this is the time when teachers can collaborate about behavior and academic strategies to support

students as noted in Desimone's (2011) study. The quantitative and qualitative data indicate that these districts' teachers do understand how to use data to drive instruction.

Question # 2. *Are teachers knowledgeable about researched-based instructional practices?*

As described in Question # 1, Teachers scored higher in the knowledge area than they did in the instruction in Special Education, Poverty/Culture, Technology, and Emotional Needs. NCLB has been a major factor in school districts providing more professional developments to increase teacher knowledge. High stakes testing has posed a threat to the autonomy of schools. "The district can turn the operation of the school over to the State educational agency, if permitted under State law and agreed to by the State" according to Steiner (2005, p 4). In response school districts have placed more emphasis on teacher training. The high percentages scored for teacher knowledge and instructional practices indicate that the school districts' efforts are working in these two school districts.

Ideally the percentages would be in the high nineties, yet the scores were not discouraging. Emotional Needs and Data/Student Strengths areas of knowledge were pretty evenly matched with their instructional practices. Second Language knowledge was lower because of the low ELL student population in the RPN district. During the interviews, the participants indicated that school districts are providing training to increase teacher knowledge. Based on the survey responses and the comments from teachers school districts were preparing teachers by training them to use research-based instructional practices through professional developments. And those teachers who received their training after 2004 were receiving more preparation to work with diverse

learners in their pre-service training, according to interview data. The issues that seem to interfere with teacher practices were more related to resources (time, personnel, and equipment) and student behavior problems.

Question # 3. *Is age a factor when it comes to teacher preparedness?*

The survey question related to respondents' age in the survey should have been worded "What year did you receive your pre-service training?" Asking teachers about their age was not consistent with when they had their training. The survey comments and the individual interviews disclosed that a number of participants began teaching as a second career. Therefore they may have been older when they received their training. However, the literature and the interview data suggests that general education teachers who received their training before 2004 did not receive as much training to work with special needs students, second language learners, and use of technology.

The data from the survey did not show a statistically significant difference between the responses and the age of the respondents. However the individual interviews did provide differences related to when the teacher received training. For example one of the interview participants who received her training over 38 years ago expressed her frustration with having special needs students in her class. She had not received training on how to work with special needs students during her pre-service training. She said the training she did receive came from professional developments provided by the school district.

Similar perspectives were shared by another interview participant who received her training 25 years ago. She expressed serious apprehensions about using technology and including activities during lessons. She said she did not want to reduce her teaching

to “short sound bites.” She said technology is contributing to students’ lack of focus. In contrast, the participants who received their training later had different perspectives.

Participant #3 had her pre-service training five years ago. She was ready with strategies she used to work with varying ability levels. She described in detail her methods of including activities during instruction. She stated that some students need to move occasionally, and the activities helps keep students engaged. When she talked about technology she became excited, but she wished she had more access to technological equipment. She also expressed an understanding about how technology has impacted the way students receive and retain information. She said she uses it whenever she can.

When asked about behavior she said “when students are engaged I have less behavior issues.” She also said she understood that “good teaching strategies apply to all students.” She understood that good instructional strategies should be used based on student need and not the student’s label. She noted that when she plans a lesson she considers the learning modalities of her students. When asked about her pre-service training, she said she felt her training prepared her to work in a diverse ability classroom. She said her training reinforced the importance of establishing a relationship with her students.

The quantitative data did not show a statistically significant different between responses and age of respondents. However the individual interviews did provide a difference between the knowledge and instructional practices. Those teachers who received their training later seemed more confident and knowledgeable about supporting special needs and diverse learners. If the question on the survey had been worded to ask

about when teachers had their training and not about their age, there might have been a statistical difference in the quantitative data results.

Question # 4. *Is there a difference between teacher preparedness in a large urban school district and a small rural school district?*

Once again the analysis did not provide any statistically significant differences between the urban versus the rural school districts. The most glaring difference in the quantitative data was in the Second Language section. The RPN district scored lower in the knowledge section due to their student population's needs. As discussed before, the instruction section was disproportionately higher because of the universality of instructional practices.

The interviews and the comments from the survey indicate that teachers from the UPN and RPN felt school districts are doing a good job at providing training. The comments from the survey, and the interviews did not suggest a significant difference between the two school districts. The challenges and supports that teachers expressed were consistent between the two districts.

Question # 5. *What are some of the constraints teachers face when working with these groups of learners?*

Time and resources were the biggest constraints according to the qualitative data. Teachers often commented on the lack of time to plan and address the varying ability levels in the classrooms. Many teachers expressed frustration in the comments section of the survey about the lack of time to do all of the things they have been trained to do. School districts are providing regularly scheduled trainings and as one participant said, "The trainings take time away from planning."

NCLB promotes the philosophy that all students can achieve the same standards of education. While this is an admirable perspective, there is no one-pill-fix-all in education. What works for one group of students may not work for another. Students come to schools with various needs. The tone of the comments from the survey, the comments from teachers at the trainings, and interviews suggested that teachers are made to feel that if a student does not perform well on a standardized test, it is the teacher's fault. This study has pointed out several factors which could contribute to low test scores and teacher frustration. The qualitative and quantitative data suggests that teachers have the knowledge and understand instructional practices; however, they lack time, and resources, as well as contending with disruptive behaviors, which tend to interfere with implementing research-based practices.

Question # 6. *What can teacher credentialing institutions do to better prepare teachers to work with these two groups?*

This question's responses came from the individual interviews wherein questions about pre-service training could be fully explained. One participant received her training in another state. When commenting about her comprehensive training, she had opportunities to work with diverse learners as part of her credentialing experience. Those interviewees who received their training after to 2004 said they felt their preparation helped them meet diverse learning needs. Those who received their training prior to 2004 did not recall pre-service training related to diverse learning needs other than a course which provided information about identifying exceptional learners.

General education teachers are being made responsible for the diverse learning needs of these student groups. And yet unless they are seeking a specialized credential to

work specifically with students with special needs, the respondents indicated they had very little pre-service experience with diverse learners. The next chapter will elaborate on this expansion of the partnership between credentialing institutions and local school districts. It will also discuss the implications for practice and future research.

Chapter 7 Conclusion and Implications

Margaret J. Wheatley (2006) wrote, “Our zeitgeist is a new (and ancient) awareness that we participate in a world of exquisite interconnectedness. We are learning to see systems rather than isolated parts and players” (p. 158). As this study began to take shape, it became clear that many of the struggles general education teachers are experiencing when trying to meet the diverse learning needs in their classrooms are not solely a result of lack of knowledge or pre-service training. Teachers made it clear in their responses that time and resources are two factors which also prohibit them from implementing research-based instructional practices. In addition, behavior problems limited their ability to address learning for Special Education and diverse learners. This study was limited to one larger urban school district and one small rural school district in the Pacific Northwest. It was not a broad enough sample to be generalized, but may help in determining what training is needed for these populations.

Conclusions

Here are the eight most important findings from the study:

1. Teacher knowledge and preparedness to work with special needs and diverse learners was much higher than originally anticipated according to the survey results based on what was suggested in the research literature.
2. The high scores might have been because the survey instrument was not as well developed as it might have been.
3. The two school districts in the study were keeping teachers updated with the most recent research through professional development.

4. Teachers got more training to meet special needs and diverse learners' needs from professional developments provided by the school than in their pre-service training, especially if they received their teacher training before 2004. This may not be the case in other districts.
5. Teacher credentialing institutions in the Pacific Northwest are making efforts to include some training to prepare teachers to work with special needs and diverse learners.
6. The degree to which teachers are prepared to provide classroom interventions was not adequately measured in this study to be conclusive. Teachers lack the time, resources, and in some cases, the skills to identify student's learning challenges. They struggled with student behavior that made addressing needs of special education and diverse learners difficult.
7. No statistically significant difference was found between the ages of the respondents and their levels of knowledge or instructional practices which might have been a reflection of a poorly worded question.
8. The trainings and the interviews revealed that general education teachers wanted to know the difference between accommodations and modifications.

Initially the study focused on the pre-service training given to general education teachers. As the researcher interacted with teachers, the data began to reveal levels of knowledge and preparedness which were much higher than anticipated. In the Introduction Chapter, there was a statement saying general education teachers are being asked to do a task they are ill equipped to carry out. This perspective was shaped by the literature, based on studies by Bryant, et al. (2002), D'Aniello (2008), and Darling-

Hammond (2002), who all did studies that noted that pre-service teachers required more training to meet special learning needs. The data from this study shows that this is not necessarily true. Those teachers who were trained after 2004 perceived that they received more preparation to meet diverse learning needs. The preparation varied depending on where the teachers received their training. Those who received their training prior to 2004 were provided research-based updates through professional developments by their districts.

It was clear that these two school districts have been successful in keeping teacher knowledge current through ongoing professional developments, coaching, and professional learning communities. There was a statement in Chapter 1 that said, “This researcher contends that better instructional practices begin at the pre-service teacher level.” After analyzing the data the researcher has reconsidered that position. School districts are doing a good job keeping teachers current with the latest research. However, schools are facing budget cuts. According to Oregon Live.com (2011), the second largest school district in Oregon will cut 46 teaching positions in 2011. It is not clear how budget cuts will impact school districts ability to provide professional developments. However, it might be more efficient and cost effective if universally, pre-service programs took on more of this preparation to work with special needs students and diverse learners, so teachers start in classrooms with the tools they need to differentiate instruction.

No Child Left Behind was a catalyst for school districts to provide more teacher trainings in an effort to help schools meet their Average Yearly Progress (AYP). The American Federation of Teachers supports professional developments according to

Denton and Hasbrouck (2009). And since doing this study, the researcher has a greater respect for the impact professional developments can have on teacher knowledge and preparedness.

Teachers were relatively knowledgeable about differentiated instructional strategies and policies related to special education. The study also focused on how general education teachers felt about participating in the IEP process. The high percentages of teachers who responded in the affirmative on the survey and the comments from the interviewees indicate that most general education teachers were knowledgeable and have had experience participating in the IEP process. The interviews indicated that general education teacher participation in the IEP process varies between teachers and their relationship with the case manager.

This researcher's experience in special education prompted the study. Many students who were not disabled were referred for assessment because general education teachers did not completely understand the students' learning challenges. As Freedman and Freedman (1994) pointed out, students who are in the BICS phase of language acquisition may seem like they have mastered the language when the academic language is still developing. Jones, Harmon, and O'Grady-Jones (2001) noted students who have gained information through the interactions of technology can struggle with traditional classroom lessons making them appear to be ADHD. This to some degree held true for the study, because as participants clearly expressed that they lack the time, and in some cases the skills to determine why students do not make adequate progress.

The study did not sufficiently examine teachers' knowledge and preparedness to provide interventions in the survey or the interview questions. What might have been

concluded was that according to the intervention model in Chapter 1, teachers are supposed to provide classroom interventions to 80% of all struggling learners, and teachers use assessment data to target students' learning needs. In the survey results, teachers scored in the mid 80 percent in the section related to Data/Student Strengths. Thus teachers are involved in using assessment data to determine learning needs which could translate into intervention instructional practices. However this is not conclusive.

Implications for Practice

Keeping in mind the theme of interconnectedness from the quote that started this chapter, this study showed that participating school districts were on the right track with the professional learning communities, which may be the case with other districts as well. The shift in the culture of education from teacher-centered classroom to student-centered classrooms has facilitated more collaboration between teachers. The professional learning communities, coaches, and professional developments have fostered a sense of collaboration among teachers. Now teachers have a systematic method of collaboration that allows them to tap into their colleagues' expertise and a system of ongoing learning.

Korthagan (2010) discussed an international disconnect between teacher preparation and the teaching experience. Ure (2010) suggested that there needs to be a partnership between teacher credentialing institutions and school districts. By creating a systematic working partnership between local schools and teacher credentialing institutions, interconnectedness can be created between credentialing institutions and the classroom experience.

So where do teacher credentialing institutions fit into this collaborative structure? One way, discussed in Chapter 2, described a number of studies where pre-service

credentialing institutions teamed with local school districts to improve teacher training quality. Since teachers from both school districts said professional developments have provided them with valuable training, it seems like a natural partnership. Who better to provide professional developments than those experts in the field of education at universities? For example Haycock (2001) found that an alliance between University of Texas and the local school district to be beneficial for both the credentialing institution and the school district. In the Haycock 2001 study, the university and the school district placed pre-service teachers in low achieving schools. The schools raised their scores as a result of the partnership. Tickle (2009) discussed how the University of Worcester teamed with a local special education school to help prepare their pre-service general education teachers to work with special needs students.

There are numerous benefits to be had from such a partnership. For the credentialing institutions, pre-service teachers could be provided an opportunity to work with individuals or small groups of struggling learners. This would give new teachers an opportunity to work with research-based instructional practices with these students before entering a full classroom. They would also have the guidance of the credentialing institution's instructors. The partnership would provide a tier-two intervention model for students who are at risk of being assessed for special education services at no cost to the school districts.

Inclusion is here to stay. Sosu, et al. (2010) linked inclusion to human rights and argued that special education settings are a form of segregation. Special education students are and will continue to be placed in general education classes. When examining the three universities located in the Pacific Northwest, there was no evidence

of a course specifically designed to prepare general education teachers for inclusion. Institutions should consider a course specifically directed at preparing general education teachers to use inclusion strategies. When reviewing the course catalogs it seemed that many university schools of education are compartmentalized with specific departments. Why not have instructors from bilingual education and special education team with the math professors to develop courses for pre-service teachers, for example? The Ford, et al. (2001) study at University of Wisconsin-Milwaukee teamed special education instructors with their general education instructors to provide an inclusion approach across content areas. They created The Collaborative Teacher Education Program for Urban Communities which could be replicated and adapted to suit regional needs, noting a global alliance to improve teacher preparation.

There were also two resounding themes that emerged as a result of the comment section of the survey and the individual interviews: lack of time/resources and behavior issues that impeded implementation in classrooms. Teachers made it clear that lack of time to plan differentiated instruction, lack of technology and other supports, and behavior of students had often interfered with their ability to engage in research-based instructional practices. Chapter 2 highlighted Ruby Payne's (2005) work which examined the hidden rules for poverty. These rules also extend between cultures as Landis, et al. (2010) described. As Butin (2005) discussed in his study of social foundations in education, many times behavior issues are related to home values that differ from school values. Credentialing institutions can provide teachers with more behavior management experiences embedded in cultural and socio-economic characteristics.

Finally credentialing institutions should regularly survey their graduates a year or two after the teachers have been in the classroom and ask, “How could your preparation to work with students with special needs and diverse learners have been improved?” Going to the source is always the most efficient method of collecting data.

Implications for Future Research

Ravitch (2010) discusses the lack research that has been done about teachers’ impact on student achievement when considering out-of-school factors (OSF). Her position is that teachers do make a difference in the academic success of students. However, teacher rigor cannot compensate for many of the challenges students face at home and in their communities. When considering the goal of NCLB to have all students achieve at or near the same level without regard to OSFs, budgets, and levels of teacher training, the notion seems impracticable.

The area of the study where the data was not sufficient to be conclusive was related to tier 2 and 3 interventions as discussed in Chapter 1. Interventions are linked to differentiated instructional strategies for classrooms. However to address tiers 2 and 3 interventions adequately, the study would need to be done on a school-by-school basis. Schools determine how their tier 2 and 3 interventions are structured. The credentialing institution and local school district partnership could provide a research-based tier 2 intervention for the schools.

One aspect of what school districts are doing to keep teachers current that the research did not examine is the impact of coaching. The coaching position was discussed because it is part of a number of things school districts are doing to support teachers. However a more in depth study of how coaches are selected, trained, and the impact they

have on instruction or student achievement should be considered. Coaches have a benefit because they are on-the-job trainers. The experience is authentic for teachers, and teachers have an opportunity to apply their learning daily. There was nothing in the literature this researcher could find about teacher preparation institutions having classes to specifically train coaches. L'Allier, et al. (2010) examined a number of coaching studies and there was not one formal method for training coaches in higher education.

In the area of technology, the participants' responses indicate that many are ready to integrate technology into their instructional practices. In fact one of the interviewees wrote a grant and got I-Pads for each student in her class. Small's (2008) research on how technology impacts the brain is fascinating. More research is needed to examine the relationship between brain activity and learning. However the looming problem is technology is not readily available in classrooms.

Another follow-up study would be to examine the role of the special educator in the inclusion process. The roles vary between schools. In IDEA (2004) Sec. 662 (a)(7) (D), the statute addresses better collaboration between general and special education teachers. However there are no specific guidelines about the roles for special education teachers in the inclusion process. Additional research on how special educators are being prepared to participate in the inclusion process is also needed.

The survey instrument needs to be reconstructed to target when teachers received their training. There should have been more inquiry about knowledge and preparedness to employ classroom interventions. The special education section and the second language section of the survey provided adequate data related to knowledge and preparedness of teachers to meet these two student groups' learning needs. However the responses should

be rearranged so that the best answer is not usually D. The Data/Student Strength section would have been a good section to include questions about interventions since interventions are based on assessment data.

The survey also did not adequately address if general education teachers knew which out-of-class staff to go to for help. The Emotional Needs section would have been good question section for this question. Since collaboration and professional learning communities are being utilized in schools, knowing who has the expertise to help, and feeling comfortable enough to ask for help support teacher knowledge.

A future study should include a larger scale with random teacher selection. It would also be useful to survey pre-service teachers prior to instruction and upon graduation and follow up with a subsequent survey a year after they have been in the classroom. The individual interviews provided more in depth information about teachers' knowledge and instructional practices. For future studies, interviewees should be selected from both the urban and the rural school districts. Also the questions were open ended to allow respondents to elaborate on topics the researcher had not considered. In a subsequent study the questions may need to be a bit more structured. There was not enough information about their pre-service training. Of course for those participants who had been trained more than twenty years ago, the information may be limited to recollection.

Lastly, teachers should be involved in more research. Teachers know their student needs, the challenges students face in their communities, and their school systems. As part of the credentialing institutions and local school districts partnership, teachers could

be provided opportunities to engage in action research related to special needs and diverse learners.

As Wheatley (2006) pointed out, “When we look at organizations as machines, we are blind to the power of self-organized networks” (p. 183). Professional learning communities and the collaborative model of instruction are steps towards self-organized networks. With the budget cuts and policies that make all teachers responsible for all students, we are facing an exciting time. These changes are forcing us to look for new approaches to education. Schools and districts might examine how to restructure schedules and resources to provide teachers with more collaboration and planning time.

The structure of our educational system has not changed since the industrial revolution when we went from one room school houses to school with grade level classrooms. Technology and demographics are two important changes in our educational system which may force us to restructure the way we educate students. It is this researcher’s hope that more classroom teachers will become involved in the study of best practices. This study was an attempt to determine if teachers felt prepared to meet the learning needs of special needs and diverse learners. A structured partnership between teacher preparation institutions and local school districts could be the beginning of a systematic method of restructuring education.

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Appendix

Appendix A: Survey Questions

The purpose of this survey is to gather information from pre-service teachers about their feelings towards their preparation to work with special needs students, second language learners, and diverse learners.

PURPOSE OF SURVEY

The purpose of this study is to examine the general education teacher training to work specifically with special needs and diverse learners. The survey questions are designed to assess your feelings about your knowledge and preparedness to meet the various learning needs you will face in a general education setting.

RESPONDANT INFORMATION

1. First and Last Names

2. Do you have any experience, personally or professionally working with special needs children?

- a. Not at all
- b. 1-3 years
- c. 4-7 years
- d. 8 or more years

3. Have you ever tried to learn a second language?

- a. I have never tried to learn a second language
- b. I know some words in a second language; but I have never tried to learn a second language
- c. In my life I have learned a second language; but I am not very good at it
- d. I am bi-lingual and bi-literate

4. What is your age group?

- a. 18-25
- b. 26-35
- c. 36-45
- d. 46-older

SPECIAL EDUCATION

1. Are you familiar with the role a general education teacher has on an IEP team?

- a. Not at all
- b. I have heard about the role of general education teachers on an IEP team; but I

need more training

- c. I have learned about the role of general education teachers on an IEP team; but I do not fully understand
- d. I am ready to participate as part of an IEP team

2. Do you understand how Least Restrictive Environment impacts the general education class?

- a. I do not know the term
- b. I have heard the term; but I am not sure of the impact it has on the general education setting
- c. I understand the concept; but I do not fully understand how it impacts general education
- d. I understand the concept means general education teachers will be working with disabled students and why

3. Do you understand and feel prepared to use Present Levels of Performance when developing a lesson?

- a. I do not know this term
- b. I have heard of the term; but I do not understand the concept
- c. I understand present levels; but I would need help using them to plan
- d. I understand present levels of performance; and I am prepared to utilize them when planning lessons

4. Do you understand how to accommodate or modify a lesson using an IEP?

- a. I do not know how to accommodate or modify a lesson using an IEP
- b. I have heard the terms; but I am not prepared to modify or accommodate a lesson
- c. I do understand, and could possibly use IEP accommodations and or modifications with guidance
- d. I understand and am able to use IEP accommodations and or modifications to develop lessons

5. Do you feel prepared to differentiate a lesson utilizing IEP goals?

- a. I do not feel prepared to utilize IEP goals to differentiate a lesson
- b. I have heard of differentiation but not in relation to IEP goals
- c. I am able to differentiate; and I could use the goals with guidance
- d. I feel prepared to differentiate based on IEP goals

6. Do you understand what inclusion means for the general education classroom?

- a. I do not feel prepared
- b. I do not feel prepared to teach general education grade level materials to students who are not on grade level.
- c. I feel prepared to develop a lesson and give the special needs student extra help
- d. I understand inclusion and feel prepared to develop lessons that include special learning needs.

7. What concerns were raised as a result of taking this section of the survey?

SECOND LANGUAGE LEARNERS

This section examines your preparedness to meet the learning needs of second language learners.

1. Do you understand Basic Interpersonal Communication Skills (BICS) and instructional practices to address student needs at this level?

- a. I do not understand BICS
- b. I have heard of the term BICS; however I do not understand how it impacts instruction
- c. I understand what BICS are; however I would need guidance planning instruction
- d. I understand and feel prepared to develop lessons for students at this level

2. Do you understand Cognitive Academic Language Proficiency (CALP's) and how this level of language acquisition impacts learning?

- a. I do not understand CALP's
- b. I have heard of the term CALP's; however I do not how this impacts learning
- c. I understand what CALP's are, but not how to fully develop lessons to address student learning needs
- d. I understand CALP's; and I am prepared to create lessons to meet student learning needs

3. Do you feel prepared to employ the teaching strategies scaffolding or gradual release?

- a. I do not know about scaffolding or gradual release
- b. I have heard of scaffolding and/or gradual release but; I am not sure why or how to use them
- c. I am familiar with one or both techniques and would need assistance to utilize the instructional strategies
- d. I am prepared to employ one or both strategies to teach second language learners

4. Do you feel prepared to develop a lesson building on your student's prior knowledge?
- a. I do not know the term
 - b. I have heard the term; but I am not sure how to implement this strategy
 - c. I am familiar with building lessons on student's prior knowledge; and I think I can employ strategy with guidance
 - d. I understand prior knowledge and I feel prepared to build lessons using this strategy
5. Are you prepared to build vocabulary lessons specifically for second language learners?
- a. I do not understand why vocabulary is different for second language learners
 - b. I would use the same techniques that I would for all students
 - c. I understand the need for language support but I am not sure how to build the lessons
 - d. I feel prepared to meet the vocabulary needs of second language learners
6. What concerns were raised as a result of completing this section of the survey?
-
-

POVERTY/CULTURE

1. Do you understand the impact poverty can have on education?
- a. Poverty does not impact education
 - b. Poverty has a small impact on education
 - c. Poverty can create inherent difficulties in education; however classroom teachers can overcome the challenges with hard work
 - d. Poverty can prevent some students from appropriate academic progress
2. Do you feel it is important for teachers to be trained to work with various cultures?
- a. Yes culture can impact student learning
 - b. No students should be prepared to become a part of the school culture
 - c. Some cultural norms are socially unacceptable; and teachers need to be trained to change those norms which prevent academic progress
 - d. Yes students tend to buy into the school culture more when their culture is included in the academic setting

3. Do you feel it is important to be trained to communicate effectively with parents of different cultures, or poverty?

- a. It is not important to be trained to work with parents from different backgrounds; we have a common goal
- b. Some training with effective practices when working with parents from various backgrounds would probably help
- c. It depends on the community because some communities are homogeneous
- d. Always because most communities have a mixture of cultural and economic backgrounds

What concerns were raised as a result of completing this section of the survey?

TECHNOLOGY

This page examines your preparedness and understanding to use technology as a teaching tool.

1. I feel prepared to employ technology _____ well in the classroom?

- a. Extremely
- b. Very
- c. Somewhat
- d. Not Very

2. Do you understand the impact technology has on utilizing the three learning modalities (auditory, visual, and kinesthetic) for all students?

- a. I do not understand how technology accesses all learning modality needs
- b. I have read some information about the application of technology and how it impacts learning
- c. I understand how technology can help students' access information by accessing all learning modalities
- d. I understand how technology provides visual, auditory, and interactive learning when combined with instruction

3. Do you understand how technology has changed the way many students receive and retain information?

- a. I am not familiar with how technology impacts the way students receive and retain

information

- b. I have read about how technology is changing the way kids receive and retain information; however I do not fully understand
- c. I have some understanding of how technology has changed the way many students receive and retain information; and I could possibly employ technology a teaching tool
- d. I understand and feel prepared to utilize technology in the class room to target specific learning needs

4. Do you feel prepared to design a lesson using Power Point?

- a. No
- b. I am familiar with Power Point but not how to use it to teach content
- c. I feel prepared to use Power Point during instruction with some guidance
- d. Yes I feel prepared to utilize Power Point to support student learning needs

What concerns were raised as a result of completing this section of the survey

EMOTIONAL NEEDS

Not all emotional needs are disabilities. Sometimes families have trauma or short term problems which can cause a student to display inappropriate behaviors. This section examines your understanding and preparedness to address emotional needs.

1. Do you feel prepared to employ Conflict Resolution strategies?

- a. What is conflict resolution
- b. I understand the term but not how to implement the strategies
- c. I know the term, and I could possibly use a strategy
- d. I feel prepared to use the strategies as needed

2. Are you familiar with de-escalation techniques?

- a. What is de-escalation
- b. I understand the term but not the technique
- c. I understand the concept and would need guidance to fully employ the technique
- d. I understand it and I feel prepared to use the technique

3. Are you prepared to develop reinforcement strategies to support behavior needs?

- a. I do not understand this concept
- b. I have heard about this but I am not familiar with these strategies

- c. I am familiar with the purpose of reinforcement systems but I would need assistance establishing a system.
- d. I understand both positive and negative reinforcement and I feel prepared to implement these strategies
4. Do you feel prepared to collaborate with school counselors and or behavior specialist?
- a. I am not sure why this is needed
- b. I assume teachers address student needs as they arise
- c. I have learned how to collaborate with related services personnel
- d. I understand that teachers can team with related services personnel to meet the learning needs of all students
5. Do you feel prepared to collaborate with parents to establish a home-school support system?
- a. Why is this needed
- b. I understand the importance of involving parents in the educational process but I do not feel prepared to collaborate with parents regarding home supports
- c. I feel somewhat prepared to communicate effectively with parents; but I would need guidance with suggesting strategies
- d. I feel prepared to plan and or collaborate with parents to achieve student success
6. Do you feel prepared to employ student motivation techniques?
- a. Some students cannot be motivated
- b. I am not sure how to motivate students
- c. I feel prepared to employ some motivational techniques but I would like more information
- d. I feel prepared to use several motivational techniques

What concerns were raised as a result of completing this section of the survey?

DATA/STUDENT STRENGTHS

This section examines your knowledge and preparedness to use data to determine a students' strengths, and instructional needs.

1. Are you prepared to determine a students' strength and build a lesson accordingly?
- a. I am not prepared to determine student strengths
- b. I know the importance of determining student strengths; but I am not prepared to

do so

- c. I am prepared to determine student strengths; but I would need more support preparing lessons
- d. I feel prepared to find student strengths and build lessons accordingly

2. Do you feel prepared to use data to build lessons?

- a. I do not understand how to gather data and use it to teach
- b. I understand how to gather the data but not how to build lessons based on the data
- c. I do not know how to gather the data; but once I have it I can build lessons
- d. I feel prepared to gather data and build lessons accordingly

3. Are you prepared to group students according to learning and ability needs?

- a. There is no fixed method of grouping students
- b. Students should be grouped based on functioning levels
- c. I have studied some methods of building groups
- d. I feel prepared to group students based on their educational needs

4. Are you familiar with how data can assist with differentiation?

- a. I have never heard of differentiation
- b. I have heard about it; but I do not understand it
- c. I understand differentiation; but I am uncertain how to use data when differentiating
- d. I understand differentiation and feel prepared to use data when differentiating

5. What concerns were raised as a result of completing this section of the survey?

Appendix B: Rural Pacific Northwest School Districts Survey Qualitative Data

CODE	RURAL SCHOOL DISTRICT
Accommodations & Modifications	//
Other Staff who can help	/
Moving students from BICS to CALPs	//
Technology as a special needs support	/
Motivation Techniques	//
Time vs. Differentiation	//
Understanding Differentiation	//
Mixed levels of instruction	/
Present Levels of Performance	/
ESL Training	////
Cultural Training	///
Availability of technology	///
Time to use Technology	/
RPN School District Coded Survey Comments Implementing IEP Learning Goals	//
More Training De-escalation Techniques	/
Managing Behavior	///

Appendix C: Urban School Districts Survey Qualitative Data

URBAN SCHOOL DISTRICT		
COMMENT	TALLY	REMARKS
SPECIAL EDUCATION		
Limited time	IIII IIII	<i>not enough time to meet the vast learning needs</i>
Limited supports/need more supports	IIII II	
Great mentors make a difference	I	
What's difference between accommodation/modification & differentiation	1	
Developing lessons including sped students needs	1	
SpEd staff has no time to support gen ed teachers	1	
Need more training using IEP to build lessons	III	
More accommodation and modification training	IIII	
More training with differentiation	IIII	
Concerned about extremely low sped students in gen ed	IIII	<i>no training to work with severe disabilities</i>
Understanding how to instruct sped students is more important than understanding policy	1	
I was not trained to work with sped students and yet I do	III	
What is Present Levels of Performance	IIII I	
Differentiation vs. NCLB (no time)	1	
Learned terms through PDs not Pre-service	1	
Need sped guidelines for gen ed teachers	II	
SpEd terminology difficult and changes regularly	II	<i>different states/school districts</i>
I do not understand IEP process	1	
Student needs are so diverse too difficult to meet al.l	IIII	
Expected to do a job I have not been trained for	II	
30-50 students and NO AIDE		
Not enough communication between gen ed and sped	III	<i>exchange of student information</i>
Special-needs is not exclusive to students on IEPs	1	
SpEd students hold back gen ed	1	

Appendix C: Urban School Districts Survey Qualitative Data Continued

Accommodating low students vs. grade level standards	II	
More inclusion training	III	
SpEd funding is not being used to support them in gen ed classes	I	
More training on IEP process	I	
SECOND LANGUAGE LEARNERS		
PDs have prepared me for Sheltered English class	II	<i>Professional developments have helped</i>
Do not know BICS & CALPs	II	
Need more training	IIII I	
Time to plan	II	<i>Time</i>
I know instruction not the terms	IIII	
Need more instructional materials/ make my own	I	
I have my ESOL endorsement	II	
I understand instructional strategies, just can't always implement	II	
I have had training and experience	IIII	
These questions suggest all teachers need this training/ will this eliminate endorsements?		
Don't work with many ELLs	III	
Varying abilities make it difficult	II	
ELL needs impact gen ed learners	I	
These strategies are good for all learners when used appropriately	I	<i>Strategies are universal</i>
POVERTY CULTURE		
Culture & economic background are often related	I	<i>Culture and poverty not the same</i>
Culture & poverty should not be lumped together	I	
Not enough time/ must prepare for the test	II	<i>Time</i>
I would be more comfortable working with parents of poverty than different cultures	I	
School hours do not allow all parents to participate	I	<i>Time</i>
It is not up to teachers to change all aspects of a student's life. We have not control of their home life. We seek to give them an equitable experience at school	I	<i>Factors Out-side-of-school</i>

Appendix C: Urban School Districts Survey Qualitative Data Continued

Technology		
I need more training to use technology	II	
Not available	IIII IIII IIII IIII I	
Not enough time	III	<i>Time</i>
Technology is a broad term and the question was not specific	I	
I don't think PowerPoint is a good example students need to literate in using technology	IIII	
Emotional Needs		
I would like more training	I	
I don't know conflict resolution. I do have management skills to help students	I	
Lack of resources	I	
This is my biggest weakness	I	
My training came from PDs	I	<i>Professional Development</i>
Not enough personnel to help teachers	II	
Parents are not always willing to collaborate	I	<i>Factors out-side-of-school</i>
I worked in a behavior class for 6 years	I	
I am comfortable w/pre-schoolers not older students	I	
What about the kids who are losing instruction because of the one or two behavior problems	I	<i>What about the kids regular learner</i>
There is no time for teachers to collaborate	III	<i>Collaborate/Time</i>
Not sure how I feel about rewards and punishments	I	
Motivation is key	I	
Data & Student Strengths		
I need more training	IIII	
I understand how to make determinations when looking at data. I do not know how to teach using the data	II	<i>Knowledge not instruction</i>
Test scores show a limited view of student ability and should not be used solely	II	<i>Standardized test do not address the whole child</i>
Not enough time	IIII I	<i>Time</i>
Data can be subjective	I	
I teach music and I do not have time to review data	I	

Appendix C: Urban School Districts Survey Qualitative Data Continued

The district should have a tool to measure math progress	I	
I have conflicted feelings about using data	I	
Our PDs have helped	I	<i>Professional Development</i>
We do not look at data in an organized manner	I	
SURVEY DESIGN		
So response choices used different terminology in the question	1	
Needed more middle ground answers	1	
Questions were not worded clearly	11	
Choices needed to be broader	1	
Question #6 did not relate to the answers	11	
Poor response choices	1	
My problem was not addressed in the questions		
The choices in this section do not allow me to give my opinion	1	
Must the best answer always be "D"	1	
These questions are theoretical. They don't ask if teachers are using, they ask if teachers understand or feel prepared		
The survey should have had a progress bar some participants would know how long it takes		
The survey form does not provide enough answers	1	
Again, your language is insulting. The suggestion that challenges can be overcome with a teacher's "hard work" implies that because teachers cannot always help a student overcome his/her economic disadvantage, they are inherently lazy and uncaring. This is another very popular view of teachers today.	1	<i>Survey could have been worded better/clearer</i>

Appendix D: Survey Scoring Guide

Survey Scoring Guide

Each response has been assigned a quantity based on the degree of preparedness, or knowledge of the question. Each question has four possible response choices. The survey responses will be tallied along with the response quantity.

SPECIAL EDUCATION:

Q1	Q2	Q3	Q4	Q5	Q6
a. 1 1	a. 1	a. 1	a. 1	a. 1	a.
b. 2 2	b. 2	b. 2	b. 2	b. 2	b.
c. 3 3	c. 3	c. 3	c. 3	c. 3	c.
d. 4 4	d. 4	d. 4	d. 4	d. 4	d.

SECOND LANGUAGE LEARNERS:

Q1	Q2	Q3	Q4	Q5
a. 1				
b. 2				
c. 3				
d. 4				

POVERTY/CULTURE:

Q1	Q2	Q3
a. 1	a. 3	a. 1
b. 2	b. 2	b. 2
c. 3	c. 1	c. 3
d. 4	d. 4	d. 4

TECHNOLOGY:

Q1	Q2	Q3	Q4
----	----	----	----

a.	4	a.	1	a.	1	a.	1
b.	3	b.	2	b.	2	b.	2
c.	2	c.	3	c.	3	c.	3
d.	1	d.	4	d.	4	d.	4

EMOTIONAL NEEDS:

Q1	Q2	Q3	Q4	Q5	Q6
a. 1 1	a. 1	a. 1	a. 1	a. 1	a.
b. 2 2	b. 2	b. 2	b. 2	b. 2	b.
c. 3 3	c. 3	c. 3	c. 3	c. 3	c.
d. 4 4	d. 4	d. 4	d. 4	d. 4	d.

DATA/STUDENT STRENGTHS:

Q1	Q2	Q3	Q4
a. 1	a. 1	a. 1	a. 1
b. 2	b. 2	b. 2	b. 2
c. 3	c. 3	c. 3	c. 3
d. 4	d. 4	d. 4	d. 4

Appendix E: Interviews Coded

INTERVIEWS CODED

CODE KEY:

SP= special education; SL= second language learners; PV= poverty;

CT= culture; EN= emotional needs; TC= technology;

SUBSECTIONS

DF= differentiation; CL= collaboration; IC= inclusion; TT= teacher training; BH=
behavior; PD= professional development; PC= parent community

SPECIAL EDUCATION	#1	#2	#3	#4	#5	#6
Years Teaching/Year Trained	38 years	30 years counsel	3 years	5 years	14 years counsel	18 years
SP Autism most difficult			/			
SP Behavior Disabilities most difficult						/
SP ADHD most difficult/ Impulsivity	/	/				
Behaviors	/				/	
So many learning needs in one class	/					
Behavior issues vs. Instructional time	//					/
SP No pre-service training (SpEd or diverse)	/					
Most training (SpEd or diverse) during staff development	/					/
Disempowerment of teachers	/					
Lax Discipline school-wide	/					
Modified diploma causes students to stop trying	/					
Parents who will not collaborate	/					/
SP Special needs students lower quality in gen ed. classes	/					
Lack of administration understanding the impact of SpEd students in gen ed.	/					
Conflicts between SpEd & gen ed. students, result in less sanction for SpEd	/					
Time management	/	/			//	/
SP Modification vs. Accommodation	/	/	//		//	/
SP SpEd teachers no time to help	/					

Appendix E: Interviews Coded Continued

SP IEPs not clear/uncertain how to plan instruction for SpEd students	/					
Huge numbers in Gen Ed classes	/					
SpEd teachers do not come to my class	/					
Kids struggle with sustained focus		//	/		/	/
Video games impact ability to focus		/				
I ask SpEd teachers for help & they come in and help		/	/		/	/
Rather inclusion/ students lose instruction when pulled out		/				
SP I participate in IEP meetings		/	/	/	/	/
SP IEP meetings help me understand student		/	/	/	/	
Some university training/ considered SpEd teaching		/			/	
Many students need counseling					/	/
Little RTI					/	
Positive Behavior Instructional System is a school-wide system		/				
SpEd do not do well on test		/				/
SP Provide accommodations during testing		/		/		
Too much focus on test scored		/				/
More pre-service instruction on stress management and counseling techniques		/			/	
PV Don't just consider content/ consider whole child		/		/		
How to build a community in classroom		/				
Where to go for help		//				
Better training for mentors		/			/	
How to effectively use IA		/				/
SP Difficult to work with disabilities which are not obvious			//			
SP Easier to work with profound disabilities			//			
Some PD working w/Autism was helpful			/			
Parent involvement makes a big difference			/		/	/

Appendix E: Interviews Coded Continued

SP Pre-service training in SpEd & ELL			/	/		
I am enthusiastic about working with disabled kids			/		/	
Create short stimulating lessons to compensate for lack of focus			//			
As many interactive lessons as possible			/			
Address all learning modalities learned in pre-service			/			
Differentiate everyday based on ability			/	/		
Peer teaching			/			
Problem solving discussions			/			
Gives value to all student's contributions			/			
Provide rewards for achievement			/			/
Uses metacognitive self monitoring system for literacy			/			
Create a team spirit students supporting students			/			
SP Same kids referred over and over				/		
SP We have a great person who does our initial referrals				/		
SP We have a system to get SpEd student information to gen ed. teachers				/		
SP Need more pre-service training				//	/	
Universities still teach gen ed. & SpEd separately				/		
Instructional Assistants are available				/	/	
Inclusion students do poorly even w/assistant					/	
Use teachable moments				/		
I like working with special needs students					/	
Grouping SpEd students in one gen ed. class with an aide					/	
One teacher per grade level in secondary					/	

Appendix E: Interviews Coded Continued

SpEd teachers should be in the gen ed. classes					/	
Want kids to advocate for themselves					/	
Need a collaboration between the local college and the high school					/	
How to provide scaffolds					/	/
We need help with TAG					/	
Not enough admin supports						/

SECOND LANGUAGE LEARNERS	#1	#2	#3	#4	#5	#6
None in current position	/					
Formal training over 15 years ago	/					
	#1	#2	#3	#4	#5	#6
POVERTY						
Education has less importance	/					/
Students dealing w/ basic needs	/	//		//		/
Welfare becomes a way of life	/	/		//	/	
Generations of school failure	//				/	
Entitlement mentality	/					
Nothing in place for poor White kids	/					
Huge achievement gap	/					/
Our school system does not consider diversity	/					
Hard to get parent buy-in	//			/	/	/
No technology in the home		/				
No pre-service training related to poverty		/				/
Professional development training has been good		/			/	/
Loyal to family codes		/		/	/	
Some pre-service training for impoverished students		/	/			
Know who to ask for help/keep asking			/			

Appendix E: Interviews Coded Continued

Not sure how to help students from dysfunctional homes			/			
Psychologist support to help support a student's home needs			/			
Some pre-service training on collaboration			/		/	
I feel like our school provides supports			/		/	
Kids of poverty also struggle with language acquisition				/		/
Poverty sometimes looks like apathy, and it is not				/		
I grew-up in generational poverty				/		
Some parents are very involved				/	/	/
Establish relationships with students					/	
Teachers need to trust whomever they ask help					/	
Issues of poverty spill into the school						
Parents are proud and don't always accept services					/	
We have onsite health center					/	
Sometimes we are not sure who has parental rights					/	
High unemployment					/	/
Small community that gossips					/	/
We provide meals for families					/	
School is a safe place for many					/	
SP Learned helplessness						/
Some kids eat better at school						/

TECHNOLOGY	#1	#2	#3	#4	#5	#6
Multi-taskers who struggle with one task		/				
Needed more technology during training		/			/	
Rarely uses more than an overhead	/					
Not available/Limited access	/	//	//		/	/
Students need in-depth learning not sound bites		/				/
Losing the ability to converse		/				
Computer lab is for OAKS testing	/	/				/

Appendix E: Interviews Coded Continued

Attempting home connection using Study Island		/				
Love technology/ would like to use more			/			
We have Itouch from a grant in my class/ very engaging			/			
SmartBoard that is not set up/want to use			//			
Willing to learn			/			
Accelerated Reader/not always available			/			
I have ADHD				/		
Provide objects for fidget				/		
Not available to all students at home					/	

Double slashes (//) mean the teacher restated the topic

Appendix F: Interview Questions

GENERAL EDUCATION TEACHER INTERVIEW QUESTIONS

1. Which learning disability do you feel the least prepared to address when preparing a lesson and why?
2. What do you think your teacher training could have offered to better prepare you to work with special needs students?
3. Which learning disability do you feel most prepared to address when preparing a lesson and why?
4. Do you feel prepared to teach second language learners and why?
5. What do you think would have helped in your preparation as a teacher of second language learner students?
6. What are your thoughts about your teacher preparation to work with students from different cultures?
7. Can you tell me how poverty impacts student learning, or if it does and why/how?
8. Would you tell me three things that you felt would have better prepared you to work with diverse learners, and or special education students during your teacher preparation?
9. Would you tell me three things you felt were useful in your teacher preparation to work with special needs and diverse learners?

The questions may change due to the responses given during the new teacher survey, and the question answer during the training. A "project revision" will be submitted if changes occur.

GLOSSARY

Accommodations: *accommodations are supports teachers can provide to all students with or without documentation*

Analog Technology: *2 dimensional technology used before digital technology*

Average Yearly Progress (AYP): *expected percentage of growth schools are to make on their standardized test scores*

Building on Prior Knowledge: *using the knowledge students come to class with to build new knowledge*

Basic Interpersonal Communication Skills (BICS): *conversational language acquisition*

Cognitive Academic Language Proficiency (CALP): *academic language proficiency*

Digital Minds: *refers to those individuals born in the digital era*

Disproportionate Overrepresentation: *groups who are identified as special needs more than other groups*

English Language Proficiency Assessment: *a test given to English language learners to measure their language acquisition*

Inclusion: *special needs students receiving instruction in a general education setting*

Individual Education Plan (IEP): *an annual educational plan for students with disabilities*

Individuals with Disabilities Educational Act (IDEA): *federal legislation that governs education for disabled individuals*

Instructional Coaches: *out of class staff who works with teachers to improve practices*

Language Acquisition: *levels of acquiring a new language*

Least Restrictive Environment: *a placement for special needs individuals that is the least different from their non-disabled peers*

Likert Type Scale: *respondents choose their level of affirmative or negative from a selection of possible choices*

Modifications: *are supports a teacher makes for a student because the student requires some sort of deviation from grade level standards*

Out of School Factors: *things which occur out of school that impact student learning*

One Way Chi Square: *used to determine whether there is a relationship between two nominal variables*

P-Value: *tests statistical significance*

Phenomenological Research: *a qualitative analysis of narrative data*

Present Levels of Performance: *is the assessment and observed information about a student's functioning levels on an IEP*

Professional Learning Communities: *teachers spend time together analyzing data and planning*

Student-Centered-Classroom: *teachers adjust their teaching style to meet the learning needs of students*

Socio-Economic: *social status linked to economics*

Teacher-Centered-Classroom: *students adjust their learning to the teachers teaching style*

Triangulation: *indicates that more than two methods are used in a study*

Whole Child: *considering the student's academic progress, emotional state, socialization, family supports, and any other factors which impact the student*