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MOTIVATIONAL FACTORS LEADING TO EXCEPTIONAL STUDENT EDUCATION AS A CAREER CHOICE

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MOTIVATIONAL FACTORS LEADING TO EXCEPTIONAL STUDENT EDUCATION AS
A CAREER CHOICE

By

ANNISSA BROCKINGTON

A doctoral dissertation submitted to the
College of Education
in partial fulfillment of the requirements
for the degree Doctor of Education
in Curriculum and Instruction

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October 14, 2019

MOTIVATIONAL FACTORS LEADING TO EXCEPTIONAL STUDENT EDUCATION

AS A CAREER CHOICE

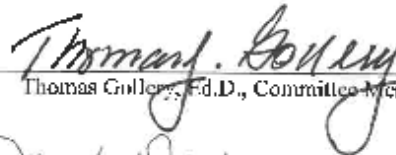
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ABSTRACT

Districts nationwide continue to face the challenge of recruiting and retaining quality teachers for the classroom. The teacher shortage issue is bleaker when seeking teachers to fill some of the most critical subject areas needed such as math, science, and exceptional student education. The purpose of this study was to understand the motivational factors that contribute to an ESE teacher's decision to remain in the teaching field. Over 600 ESE teachers were surveyed and asked to rate their satisfaction level over a range of multiple factors, and 247 teachers responded to the survey. Using quantitative methodology, a one-sample *t* test was used to determine the statistical significance of perceived teacher satisfaction. The study's survey items were reduced to dimensions using exploratory factor analysis. Conclusions indicated that the majority of surveyed ESE teachers were satisfied with their ESE teaching assignments and planned to return to their classroom. ESE teachers indicated that administrative support and parent support were key factors in maintaining motivation to remain in the ESE teaching field.

Key Words: special education; teacher retention; teacher motivation; exceptional student education; students with disabilities; critical teacher shortage; teacher recruitment; teacher preparation; alternative certification

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I. INTRODUCTION

Although numerous studies have been conducted on the topic of teacher recruitment, there is limited research regarding why teachers (specifically SPED teachers) elect to remain in the teaching profession. According to the National Center for Education Statistics, there are over 3.6 million public classroom teachers in the United States (Woodworth, 2018). Yet, public school districts nationwide continue to face the challenge of recruiting and retaining teachers for the classroom. In fact, the *Teacher Shortage Areas Nation-Wide List*, (Cross, 2017) indicated a teacher shortage in every state from 1990 through 2018. Additionally, specific content areas in all states such as English, math, science, and exceptional student education represent a higher need for teachers (Cross, 2017). This data is further substantiated by the additional research on teacher shortages which reported more than a third of new teachers leave the profession within their first three years (Billingsley, 2004; Brill & McCartney, 2008). Cooley-Nichols, Bicard, Bicard, and Casey (2008) asserted that minimal progress has been made in addressing teacher shortages since the 1983 *Nation at Risk Report* released by the United States Secretary of Education. Consistent with this research, Martin and Mulvihill (2016) stated that there has always been and will always be teacher shortages representing both number and content area. Analysis of research conducted on teacher shortages indicated several potential causes for teacher shortages.

Common reasons for the teacher shortage noted in the literature include teachers feeling overwhelmed and a lack of administrative support, classroom management, and professional development (Billingsley, 2004). While Berry and Shields (2017) equated the shortages to increased student enrollment, a decline in teachers entering the profession, restoration of cut positions, and an 8% attrition rate of teachers annually, McLeskey and Billingsley (2008) identified teacher quality and attrition as the primary culprits for the teacher shortages. Further studies were conducted, and researchers found employment issues, high-stakes testing, and extensive credential requirements to be reasons why teachers leave the profession (Berry & Shields, 2017; Boe, Cook, & Sunderland, 2008; Thornton, Peltier, & Medina, 2007). According to the *Teacher Shortage Area Nationwide Listing Report* (Cross, 2017), special education (SPED) teachers have been among the list of the most critical teacher types needed throughout the nation for more than two decades (Cross, 2017). Special education has been categorized as “a discipline that has been plagued by a persistent and significant shortage of appropriately trained teachers since its inception” (Watlington, Shockley, Guglielmino, & Felsher, 2010, p. 25). The Florida Department of Education (FLDOE, 2018b) identified the following certification areas as critical shortage areas: science (general and physical), English, English for Speakers of Other Languages (ESOL), mathematics, and reading (see Appendix A: Exhibit 1-Summary of Critical Teacher Shortage Rankings for 2018-19).

According to Exhibit 4: Number of Current and Projected Vacancies by Certification Area (FLDOE, 2018b), there were 1,629 unfilled positions and projected vacancies (defined as anticipated subject areas of teacher demand seen across all school districts) for the 2017-2018 school year.

Consistent with the national and statewide data, SPED vacancies were among the highest vacancy rates at 25.54%, while elementary education followed closely behind with 20.01% vacancies. Consequently, the number of SPED vacancies was approximately 416, and elementary education vacancies totaled 326. Comparatively, the rate by which university students completed a teacher preparation educational training program in either SPED or elementary education was at a much lower rate than the vacancies could be filled. The percentage of all students completing a teacher education program in 2015-2016 in ESE was 15.76%, while 45.38% of students completed a teacher education in elementary education (see Appendix A: Exhibit 5- Number of Students Completing Teacher Education Programs in 2015-16).

According to Thornton et al. (2007), the SPED teacher shortage was equated to a “lack of qualified applicants” (Thornton et al., 2007, p. 233). The data represented in Exhibit 3: Number of Courses Taught by Teachers Not Certified in the Appropriate Field, by Certification Areas During 2016-17 (FLDOE, 2018b) showed that the teacher supply is less than the teacher demand (see Appendix A). Therefore, “teacher preparation programs do not graduate enough special education teachers to fill the needs of the K-12 system” (Thornton et al., 2007, p. 233). Wynn, Carboni, and Patall (2007) asserted that the teacher shortage issue should be examined through a retention lens and not through a lens of recruitment. A study that examined teacher turnover in urban elementary schools revealed the potential economic impact on the district of teachers leaving the field ranged from 20-150% of those teachers’ salaries (Guin, 2004; Brill & McCartney, 2008). In a three-year study examining teacher retention, Wynn et al. (2007) found that new teachers’ decisions to remain in their schools or districts centered around the school climate or school leadership.

Improving the teachers' environment and enhancing professional development were both found to be cost effective and impactful in enticing teachers to stay (Brill & McCartney, 2008). Persuading teachers, (especially SPED teachers) to stay in the teaching profession should be among the list of immediate actions taken by districts to adequately serve the projected enrollment of 54 million students in the public-school system over the next several years (Hutchison, 2012). Identifying variables that impact a teacher's decision to remain in the classroom will assist school districts with retention efforts for SPED teachers as well as potentially decrease the annual costs associated with the onboarding and training of teachers in general.

Background

A shortage of SPED teachers exists throughout the United States (U.S.). According to the research conducted by McLeskey, Tyler, and Flippin (2004), the teacher shortage is not only chronic, but also geographically widespread. Thus, the teacher shortage is a long-term problem that is problematic throughout the U.S. Attracting, recruiting, and retaining fully qualified SPED teachers intensify as the population of students with disabilities increases, and the supply of exceptional education teachers decreases (Demik, 2008). Evidence in a study conducted by Boe, Cook, and Sunderland (2008) suggested that exceptional education teachers are more likely to depart from the profession or transfer to general education compared to any other teacher group. Regardless of the size of the state, most states within the U. S. Department of Education (USDOE) reported similar subject area needs for teachers (Cross, 2017).

While some state education administrations have made progress in addressing their personnel needs over the years, SPED has been on the list of critical teacher shortage areas in

Florida as far back as 1984 (FLDOE, 2010). Florida identifies its critical teacher shortage areas based on the following factors:

- the number and percentage of positions in each discipline filled by teachers not certified in the appropriate field;
- annual supply of graduates from state-approved Florida teacher education programs for each discipline;
- number and percentage of vacant positions in each teaching discipline; and,
- critical teacher shortage areas which may be identified and adopted by district school boards (FLDOE, 2018b, p. 1).

Data reported by the Florida Department of Education (FLDOE, 2017) showed there were 27,560 SPED teachers (approximately 14% of all teachers) employed throughout the state of Florida. Yet, Florida was still in need of an additional 416 SPED teachers for the 2017-2018 school year leading to an average of 6.2 SPED vacancies across all 67 districts throughout the state. As a result of SPED teacher vacancies, districts must not only have a full understanding of what motivates SPED teachers to stay in the field, but also employ strategies to ensure the retention of this critical teacher shortage group. In the study conducted by Sali (2013), intrinsic career value, loving the subject matter itself, making a social contribution, job security, and job transferability were among the top motivational reasons given by participants to remain in the field of teaching.

Additional motivational factors noted by Sali (2013) included prior learning experiences and the opportunity to work with youth. Similar studies supported these findings by identifying intrinsic motivation as a prominent factor influencing the career choice of teaching (Chong & Low, 2009). Mansfield and Beltman (2014) noted the nature of teaching (e.g., working

conditions, flexible work schedule) as a high extrinsic motivational factor influencing participants' decision to remain in the teaching field, while Yung-Chou and Chang (2017) asserted that teachers' motivation depends substantially on social support such as conditions and guidance that support teaching and learning. Additional research on this topic, such as the study conducted by Davis and Wilson (2000), found that teachers are more motivated when they feel involved in the decision-making process impacting their daily work lives. Teachers who believe they play an important role in an organization feel motivated to perform at higher levels — ultimately leading to a greater likelihood of teachers staying and engaging in more professional development opportunities.

Teachers leave the field of education for a variety of reasons (Adnot, Dee, Katz, and Wycoff, 2016; Battle & Looney, 2014; Billingsley, 2004). The results of the research conducted by Davis & Wilson (2000) aligned with the study carried out by Gokce (2010) which further revealed that teachers who are not motivated will have difficulty motivating their students to learn. High levels of teacher turnover impede a school's ability to build instructional capacity (Donaldson & Johnson, 2011). Yet, teachers leave the profession in droves annually. In fact, according to the *National Institute for Education Statistics* (Woodworth, 2018), over 50% of public-school teachers who left teaching in 2012–13 reported that the manageability of their workload and general work conditions were better in their current position than in teaching.

According to Buchanan (2010), workload played a significant role in why teachers leave the profession; and a lack of support was an additional contributor. Working conditions and classroom management were also among the top reasons why teachers leave the field of education. In the study conducted by Mäkelä, Hirvensalo, and Whipp (2014), “poor facilities, poor equipment, and isolation from peers” (p. 234) were found to be the most significant factors

influencing physical education teachers' decisions to leave the profession. Aside from working conditions and the workload, a further analysis on why teachers leave teaching uncovered that new teachers who participate in induction and mentoring programs are less likely to depart from the profession (Cha and Cohen-Vogel, 2011). In an effort to understand which factors impact special education (SPED) teachers' decisions to leave the profession, Kaff (2004) exposed the following viewpoints as influential factors: student issues, limited support by administration, and difficulty in balancing multiple priorities with limited resources.

Although the research is inundated with data about why teachers leave the profession, this research study will add to the body of knowledge related to factors that motivate or influence a SPED teacher's decision to remain in the teaching field. This study is beneficial to not only public-school districts interested in recruiting and retaining well-prepared and fully qualified SPED teachers to address instructional vacancy needs, but also postsecondary institutions interested in enhancing their exceptional student education teacher preparation programs and recruitment into those programs.

Purpose Statement

Although several studies have focused on teacher recruitment, few studies have been conducted on the motivational factors that impact a SPED teacher's decision to remain in the SPED classroom. The purpose of this study was to identify the motivational factors that contribute to special/exceptional education teachers' decisions to remain in the field of education.

Significance

Research gathered for this study focused primarily on addressing the SPED teacher shortage by examining the motivational factors that influence current teachers' decisions to

remain within the field of SPED, therefore, providing recommendations for implementing more targeted approaches to recruit. The results of this study may also prove beneficial to the post-secondary institutions that prepare teachers for the classroom and the public-school districts that employ teacher preparation program completers. The purpose of this study was to examine the factors contributing to teachers' reasons for remaining in SPED. Identifying the factors that contribute to the retention of SPED teachers may help decrease the annual number of teacher vacancies and the costs associated with recruiting and onboarding new teachers. Of most importance, understanding what contributes to a SPED teacher's decision to stay in the profession may help ensure that districts have an adequate supply of SPED teachers available to meet the unique and varied needs of their exceptional student populations.

Overview of Methodology

The study was designed to evaluate the factors that influence SPED teachers' decisions to remain in the field of education. The study was conducted in one public K-12 school district located in central Florida. The study was conducted in one public K-12 school district located in central Florida. The K-12 school district employed approximately 6,639 teachers with the following demographic composition: 72% White, 13% African American, 13% Hispanic, and 2% Other (Multi, Indian, Asian, and Pacific Islander). Female teachers accounted for 84% of the teacher population, and males accounted for 16% of the teacher population. Of the 6,639 teachers, 834 were assigned exceptional student education courses and were invited to be participants in the study. Of the 834 SPED teachers assigned exceptional education courses, all held or were deemed eligible to hold a valid Florida teaching certificate and, of the 834 SPED teachers in the district, 13% were considered out-of-field and were required to meet a set of

district and state requirements to become fully qualified and in compliance and were invited to participate in the study.

Of the 834 teachers invited to participate, 247 actually participated. Per Florida state statute (FLDOE, 2017), all teachers are required to be evaluated annually. The two ratings determining a teacher's successful overall performance in a classroom are highly effective (HE) or effective (E). Therefore, fully qualified SPED teachers with a performance evaluation rating of highly effective or effective were invited to participate in the study. Additionally, participants holding, or deemed eligible to hold, a teaching certificate in ESE from the Florida Department of Education (FLDOE) were invited to participate in the study. Eligible participants varied in gender, age, and experience; however, the data was not disaggregated. All participants indicated consent to participate in the study prior to participation.

Research Questions

This quantitative study answered the following questions:

1. What was the overall degree of study participant-perceived satisfaction with the current instructional assignment in SPED?
2. Which individual study element of participant-perceived satisfaction was manifested to the greatest degree?
3. Considering participant satisfaction level with administrative support, parental support and esteeming, support and collegiality of peers at school, adequacy of local community esteem and support, and valuing and esteeming that students express personally and professionally, which represented the most robust correlate and predictor of study participant-satisfaction with the current instructional assignment in SPED?

4. Considering study-participant access to resources, professional growth opportunities, adequacy of time to prepare and plan lessons, availability and access to viable mentoring opportunities, adequacy of access to social skills training, and access to professional development opportunities in the area of classroom management, which represented the most robust correlate and predictor of study-participant satisfaction with the current instructional assignment in SPED?
5. Which of the identified domains of study-participant satisfaction represented the most robust correlate and predictor of study-participant overall satisfaction with the current instructional assignment in SPED?
6. Which of the identified domains of study-participant satisfaction represented the most robust correlate and predictor of study-participant likelihood to continue as a teacher of SPED students the in the current position next year?

Research Hypotheses

H₀¹: There will be high levels of satisfaction with the current instructional assignment in SPED.

H₀²: There will be no element favored over the others indicating perceived satisfaction.

H₀³: Community esteem and support will manifest as the most robust correlate and predictor of study participant satisfaction with the current instructional assignment in SPED.

H₀⁴: Access to viable mentoring opportunities will emerge as the most robust correlate and predictor of study participant satisfaction with the current instructional assignment in SPED.

H₀⁵: Adequacy of local community esteem and support will represent the most robust correlate and predictor of study participant overall satisfaction with the current instructional assignment in SPED.

H₀⁶: Support and collegiality of peers at school will represent the most robust correlate and predictor of study participant likelihood to continue as a teacher of SPED students the in the current position next year.

Analyses

Preliminary Analysis

Prior to the analysis of the six proposed research questions posed in the study, preliminary analyses were conducted. Specifically, evaluations of missing data, internal consistency (reliability) of participant response, and essential demographic information were addressed analytically prior to the formal address of research questions posed in the proposed study. Missing data was analyzed using descriptive and inferential statistical techniques.

Specifically, frequency counts (n), percentages (%), means, and standard deviations (SD) were utilized for illustrative purposes. Exploratory factor analysis (EFA) was conducted in order to determine the factors or themes from the survey instrument that emerged as most important to teachers deciding to remain in the field of exceptional student education. Internal reliability of participant response to the survey instrument was assessed using Cronbach's Alpha (α). The statistical significance of α was evaluated through the application of an F test. F values of $p < .05$ were considered statistically significant.

Analysis by Research Question

The study's research questions were addressed using a variety of descriptive, associative, predictive, and inferential statistical techniques. Frequency counts (n), measures of central tendency (mean scores), and variability (standard deviation) represented the primary descriptive statistical techniques used in the six research questions. In research questions one and two, the single sample t test was used to assess the statistical significance of participant response.

Research questions three through six are associative and predictive in nature utilizing multiple independent predictor variables.

Therefore, the simple linear or the multiple linear regression test statistic were employed to assess predictive applicability of the respective independent variables in each question.

Predictive model fitness was assessed through the interpretation of the ANOVA Table F value. An F value of $p < .05$ was considered indicative of a viable predictive model. Variable slope (t) values represented the means by which the statistical significance of independent variables was interpreted.

Values of $p < .05$ were considered statistically significant. R^2 values were utilized as the basis for effect size measurement and comparative purposes then transformed into Cohen's d values for ease of interpretation. Assumptions of simple linear and multiple linear regression were assessed by either statistical means or visual inspection.

Limitations

There were three major limitations to the study. Only one school district participated in the study resulting in the researcher's inability to generalize the study's findings. Another limitation to the study was the fact that no demographic data was compiled as a part of the data collection process. Excluding the collection of demographic data for the study prevented the researcher from determining whether a SPED teacher's decision to remain in the field of teacher varied by race, gender, or age. A final limitation of the study was the fact that the data collected was based on the SPED teachers' perceptions. There are a number of uncontrollable variables which may influence a participant's perception. Factual data is more objective and may have yielded more provable evidence.

Definitions

Critical Shortage Areas

Critical shortage areas refers to the certification areas where substantial proportions of teachers who are not certified in the appropriate field are being hired to teach such courses where significant vacancies exist and where postsecondary institutions do not produce enough graduates to meet the needs of Florida’s K-12 student population (FLDOE, 2017).

Fully Qualified

Fully qualified refers to those teachers holding a valid teaching certificate in the subject area that they are qualified (through a demonstration of subject competency) to teach (FLDOE, 2019a).

Exceptional Student Education (ESE) and Special Education (SPED)

Exceptional student education (ESE) and special education (SPED) refer to programming specifically designed to assist learners with disabilities who need specially designed instruction and related services within the least restrictive environment. ESE services include specially designed instruction to meet the unique needs of the learner its primary purpose is to help each learner with a disability progress in school and prepare for life after school (FLDOE, 2019a).

The Effective Performance Rating

The effective performance rating describes teaching performance that meets professional standards and expectations. At the “effective” rating level, the primary focus is an assessment of the professional’s work with individual students and small groups of students as opposed to activities that have school-wide and districtwide impact. In addition, “effective” specialized ESE professionals demonstrate a willingness to learn and apply new skills (FLDOE, 2018c).

The Highly Effective Performance Rating

The highly effective performance rating describes teaching performance that is well above the “effective” rating and results from consistent engagement with professional practice or job duties of the classroom teacher. “Highly effective” specialized ESE professionals frequently serve as role models to others and their work has an impact at the school-or districtwide level (FLDOE, 2018c).

Alternative Certification Programs (ACPs)

Alternative certification programs (ACPs) describes teacher preparation by entering the profession through means other than a professional educationally based teacher preparation program, such as emergency certification, temporary certification, work-based programs, and structured university or private providers of alternatively labeled certification pathways. (Bowling & Ball, 2018).

Summary

Special education teachers continued to be among the most critical teacher groups needed within the 67 public school districts throughout the State of Florida (FLDOE, 2017). According to Exhibit 4: Number of Current and Projected Vacancies by Certification Area (FLDOE, 2018b), there were 416 Exceptional Student Education (ESE) vacancies reported throughout the state for the opening of the 2017-2018 school year. Data from previous years showed similar shortages in the teaching profession. In the ESE classroom during the 2016-2017, 364 vacancies were reported, 406 ESE vacancies were reported for the 2015-2016 school year, and 372 ESE vacancies were reported for the 2014-2015 school year (see Appendix A: Exhibit 4- Number of Current and Projected Vacancies by Certification Area).

The data reported on Exhibit 3: Number of Courses Taught by Teachers Not Certified in the Appropriate Field, by Certification Area During 2016-17 (FLDOE, 2018b) revealed additional challenges faced by districts such as not fully qualified personnel assigned to ESE courses. Specifically, of the 64,812 ESE courses reported statewide, 5,277 of the courses were taught by teachers not certified in the appropriate field (see Appendix A: Exhibit 3- Number of Courses Taught by Teachers Not Certified in the Appropriate Field, by Certification Area During 2016-17).

Given the ongoing need to recruit more fully qualified SPED teachers to the classroom, it is imperative that post-secondary institutions examine their program design and that districts increase their understanding of the factors that motivate, and ultimately contribute to the retention of, fully qualified educators within this critical teacher group.

II. REVIEW OF LITERATURE

Teacher shortages continue to be an issue faced by the majority of public school districts throughout the U.S. (Martin & Mulvihill, 2016). Shortages have been attributed to a variety of factors ranging from fewer college students majoring in education to inadequate compensation (Dupriez, Delvaux, & Lothaire, 2016; Kennedy, 2018; Martin & Mulvihill, 2016). Recent studies have pointed to a lack of strong social networking among teachers but, also, contend that teacher shortages will continue to be an issue until states improve their teacher preparation programs and working conditions (Berry & Shields, 2017). Yet, Dee and Goldhaber (2017) believe that shortages can be addressed by providing financial incentives, implementing improvements of district hiring practices, and providing labor market signals about district needs. Comparatively, Posey (2017) stated policy initiatives such as statewide recruitment systems, stipends for Nationally Board Certified teachers working in low-performing schools, and research-based induction programs were noted in the research as efforts to address the teacher shortage issue.

Shortages by Race and Gender

According to the 2016 U.S. Department of Education (USDOE) report (USDOE, 2016), students of color are expected to make up 56 percent of the student population by 2024, yet the *Characteristics of Public School Teachers* (Woodworth, 2019) showed that 82 percent of public school teachers self-identified as White.

According to the National Center for Education Statistics (as cited by Woodworth, 2018) further revealed the extent of the racial disproportion among teachers and students by reporting that in 2015-2016, 9% of teachers were Hispanic, 7% were Black, 2% were Asian, and 1% were of two or more races. Comparatively, 50% of students enrolled in a public school were White, 15% were Black, 26% Hispanic, and 3% were of two or more races.

While several studies have examined the teacher shortage through a more narrowed lens, additional research on this issue has examined the shortage from a broader perspective revealing that shortages also vary by subject and region (Berry & Shields, 2017; Dee & Goldhaber, 2017), and in many states, race, gender, and school performance (Howard, 2003; Ingersoll & May, 2011). While women were noted in the research conducted by Brown and Wynn (2009) to make up the majority of the teaching population, men were found more likely to remain in the profession longer than women. In a study conducted by Kennedy (2018), factors contributing to the shortages of bilingual teachers included the growth in the English as a second language (ESL) student population, need for a specialized bilingual skill-set (e.g., academic language proficiency in Spanish, knowledge of the Hispanic culture, and linguistics and second language acquisition theory), and bilingual teacher pathway challenges.

According to Kennedy (2018), certification testing requirements were listed among the obstacles that hindered the recruitment of bilingual teachers in Texas. Bilingual teachers were required to not only pass a content knowledge test, but also a five-hour online assessment, and the Bilingual Target Language Proficiency Test, which measured a teacher's ability to communicate orally and in writing on Spanish academic topics. An additional barrier included perceived test bias (Kennedy, 2018).

Other studies, such as the one conducted by Ingersoll and May (2011), identified the low achievement level among minority students to the lack of minority teacher role models and minority-focused programs. The minority teacher shortage has been depicted as a crisis throughout the research (Hicks Tafari, 2018), and disproportionately reflective of the student population throughout the U.S. While the numbers of Black teachers decline, the number of Black students continue to rise (Sue, Rivera, Watkins, Kim, Kim, & Williams, 2011). Efforts to increase educator diversity are further hampered by an inadequate pool of Black teachers from which to pull that could further explain why a disparity exists between minority teachers and minority students (USDOE, 2016).

According to the U.S. Department of Education (2016), 62% of all bachelor's degree students were White, yet 73% of students majoring in education were White. In an effort to address the male shortage problem and understand the extent to which teachers believe their gender impacts students with the same gender, Martino and Rezai-Rashti (2010) interviewed 65 elementary teachers in Ontario to examine the impact of male role models on student learning and school engagement. Both males and females participated in the study, which included a focus on minority perspectives. Upon further analysis the researchers concluded that the lack of access of minority teachers to the teaching profession may be attributed to systematic racism and economic marginalization (Martino & Rezai-Rashti, 2010).

Rice and Goessling (2005) postulated that there is no greater need within the teaching profession than the need for more African American male teachers given the fact that a little over 2% of the teachers hired annually are male and African American. Regardless of race, males appear to be less prevalent within the teaching profession.

In fact, McGrath and Van Bergen (2017) documented the disproportion of male teachers at the high school level at an overwhelmingly greater rate than in primary schools. Such disparities were addressed by programs such as Call Me Mister (CMM) which was founded at Clemson University in 2000 in collaboration with three private historically Black colleges and universities (HBCUs): Claflin University, Benedict College, and Morris College (Smiles, 2002).

In order to be accepted into Call Me Mister (CMM) Program, applicants were required to be students in one of the 24 participating colleges or universities, present a written statement certifying they are from a disadvantaged background or area, earned a high school diploma or General Equivalency Diploma (GED), submit two recommendation letters, and submit two essays – one explaining why they want to teacher and another outlining how they believe CMM will help them (Jones, Holton, & Joseph, 2019). After the application documents are submitted, applicants had to pass an oral interview. CMM was developed to address the significant shortage of black males teaching at the kindergarten through eighth grade level (Jones et al., 2019). Since its inception, five CMM graduates were awarded Teacher of the Year at their schools (Jones et al., 2019). Another program implemented to address the minority teacher shortage was the Marygrove College's Griot 2-year graduate program. According to Okezie (2018), Marygrove College's Griot 2-year graduate program, founded in 1998, was established to assist a group of private, Christian-based institutions in strengthening their urban mission by partnering with Detroit Public Schools to recruit African American male career changers who held degrees in areas outside of teaching. Although the Griot program is no longer in full operation, it was reported that the Griot program enrolled and certified 229 African American men between the years 1998-2000 (Okezie, 2018).

The USDOE (2016) contends that diversity diminishes as it progresses through key points along the educator pipeline. See Figure 1 representing the key points of the educator pipeline with diminishing stages of diversity.

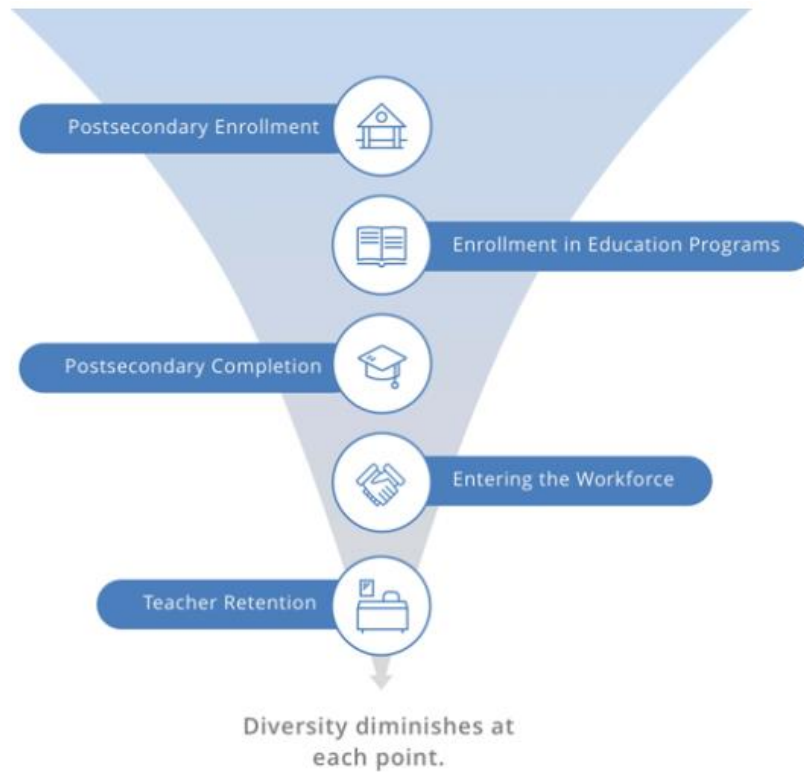


Figure 1. The diminishing educator pipeline (USDOE, 2016)

In a study examining the experiences of Hispanic faculty involved in physical education teacher education programs, Columna, Hodge, Samalot-Rivera, Vigo-Valentin, and Cervantes (2018) concluded that increasing staff diversity and underrepresented groups is not enough; instead, strategies must be implemented to experience change.

Shortages by School Performance and School Demographics

Goldhaber and Hansen (2010) determined that one of the most significant factors influencing student learning is the role of the teacher within the educational process. Having an effective teacher can dramatically impact a student's educational and socioeconomic outcomes

(Heck, 2009; Stronge, Ward, & Grant, 2011). Yet Adnot, Dee, Katz, and Wycoff (2016) uncovered substantial differences in the quality of public school teachers and insisted that there was increasing evidence that in some urban areas less effective teachers are often concentrated in lower-performing schools serving disadvantaged students. The differentiated accountability (DA) model describes schools in need of improvement (SINI) as those that require an immediate and invasive intervention system to support and monitor non-charter schools due to their school-grade history. More specifically, schools that earned a school grade of D or F must have a set of structured strategies in place to improve the overall performance of the school and student achievement. Schools were provided a specified timeline and structure to institute a turnaround plan to address school performance issues (K-20 Education Code, 2019).

According to the U.S. Department of Human Health and Services (Cochran, 2017), persons or households of three with an annual income of \$20,420, four with an annual income of \$25,600, or five with an annual income of \$28,780, were considered impoverished. Such poverty guidelines are used for determining eligibility for federally funded programs such as Head Start (a program that promotes school readiness), National School Lunch Program (a program that provides low-cost or free school lunches to students), and the Home Energy Assistance Program (a program that assists low income families with energy costs) (Cochran, 2017). Moreover, Garrett-Peters, Mokrova, Vernon-Feagans, Willoughby, Pan, and the Family Life Project Investigators (2016) revealed that family poverty serves as more of a predictor of school failure and achievement than family structure or neglect.

Additionally, evidence of a decrease in sensitivity by parents plagued by poverty was noted in the study as an influential variable in researching the relationship between poverty and student achievement (Garrett-Peters et al., 2016). Thus, parents of impoverished students placed

more emphasis on the basic necessities such as food and shelter rather than on the nurturing of their child's emotions. According to Horgan (2009), poverty impacts every aspect of a child's experience of school and therefore "policy interventions" (p. 360) to improve educational outcomes are "unlikely to be effective" (p. 360) without examining concepts of inequality. In research conducted by Balfanz, Mac Iver, and Byrnes (2006), 12 teachers were studied in order to better understand the challenges required to overcome, develop, and sustain an effective math program within high poverty middle schools. In addition to the issue of poverty, the majority of teachers within these sites lacked the appropriate certification for the subject taught. All but one teacher held teaching certificates in elementary education instead of middle or high school math (Balfanz et al., 2006).

These challenges were compounded by the fact that students were one to two grade levels behind in math, and 80% of the students served were eligible for free or reduced lunch (Balfanz et al., 2006). Although there is a general shortage of qualified teachers throughout the U.S., low performing schools experience some of the biggest challenges in attracting, recruiting, and retaining teachers. Steele, Murnane, and Willett (2010) noted the efforts documented through legislation to institute financial incentives such as loan forgiveness programs for teachers who accepted a position or taught in a low performing school. Further, the study conducted by Clotfelter, Glennie, Ladd, and Vigdor (2008) found that financial incentives decreased turnover rates by 17% within several targeted North Carolina low performing locations.

Dee and Goldhaber (2017) concluded that there is an inequitable distribution of quality teachers among high and low performing schools; with the problem of staffing hard-to-fill schools being longstanding and ignored by policy makers. Consistent with the research conducted by Dee and Goldhaber (2017), Howard (2003) reported urban schools in low income

areas tend to have higher teacher turnover rates and shortages compared to suburban or rural high-performing locations. The Call Me Mister program (Jones, Holton, & Joseph, 2019), is one among various programs implemented to address the nationwide shortages of African American male teachers at the elementary level. The Call Me Mister Program, birthed in 2000 at the Clemson University, was established to increase the number of African American teachers by providing a pipeline of male mentors who reflected the demographic make-up of the students served (Jones et al., 2019).

Aligned with the intents of the various programs and initiatives to address the racial gap in the field of education, Ocasio (2014) insisted that classrooms must be equipped with teachers who can relate to diverse students and serve as role models. Similar programs such as Teach for America recruit graduates from elite colleges and universities to teach in high poverty schools (Sass, 2015); and the U.S. Department of Education Title V funded Academy for Teacher Excellence (ATE) focused on the recruitment, preparation, and retention of Hispanic and other low-income students into a variety of critical teaching shortage areas such as bilingual-education, mathematics, science, and special education (Flores & Claeys, 2011).

Consequently, Dupriez et al. (2016) reported that although a high success rate has a positive effect on the teacher's stability, teachers are more likely to leave the profession when there is a large proportion of students from ethnic or minority backgrounds.

According to Hughes (2012), mathematics and science teachers are less likely to remain in the field compared to other subjects, and such teachers were found to not hold graduate degrees and scored lower on standardized tests.

Shortages by Discipline

Based on the National Commission on Mathematics and Science Teaching in the twenty-first century (2000), close to 10% of new teachers are not retained after their first year, 30% abandon the profession within the first three years, and 50% leave teaching within five years. Teacher shortage statistics are reinforced when examining these rates by discipline. Math, science, English, ESOL, and ESE ranked among the top 10 critical subject areas needed in the State of Florida (see Appendix A: Exhibit 1- Summary of Critical Teacher Shortage Rankings for 2018-19). Additionally, shortages in math and the sciences were noted among the highest teacher shortages throughout the U.S. and nationwide (Boone, Abell, Volkmann, Arbaugh, & Lannin, 2011). Among the top 10 vacancies listed by frequency (not percentages), elementary education ranked first, ESE ranked second, English third, math fifth, and science seventh (see Appendix A: Exhibit 4- Number of Current and Projected Vacancies by Certification Area); however, based on job vacancies by percentage, ESE ranks first and elementary education ranks second. Thus, the critical shortage area needing the most attention is in the field of SPED.

Substantiated by the research, Brownwell, Hirsch, and Seo (2004) revealed that the U.S. Department of Education, Office of Special Education Programs, spends approximately \$90 million to increase the numbers of special education teachers — noting that these funds are in addition to any incentive programs states have to increase the number of teachers in critical shortage areas.

These subjects present additional and unique challenges because, in spite of the increase in graduation requirements in these subjects, and because of student course work and math and science teacher retirements, the supply of math and science teachers has not kept a similar pace with the demand (Ingersol & Perda, 2010). These challenges were further substantiated in the

study conducted by Newton, Jang, Nunes, and Stone (2010) which found that recruiting candidates with strong subject area knowledge faced the following obstacles, which further contributed to the shortage:

- 1) Science and math (STEM) majors had a variety of higher paying options.
- 2) Many non-teaching careers extend immediate financial benefits to STEM majors graduating from a 4-year college or university.
- 3) Additional expenses may be accrued as a result of the candidate being required to participate in additional training or take additional exams needed to obtain teacher certification.

Over 90% of the nation's school districts reported teacher shortages in special education (McLeskey et al., 2004). The research equated the shortages of SPED teachers to a number of factors. These shortages may be attributed to the number of students or candidates who choose SPED as a career choice. While non-education majors' account for over 60% of the new teachers hired throughout the U.S., less than 10% of those who transition into the teaching field pursued ESE as their chosen specialization subject (Floyd & Arnauld, 2007). According to Fish and Stephens (2010), few students chose to identify special education (SPED) as their area of concentration, and the national need for more quality teachers has necessitated the urgency for implementing new policies and practices regarding alternative routes to certification (Demir & Abell, 2010).

Alternative Certification Programs (ACPs) have been established worldwide in an effort to address the teacher shortage problem plaguing our nation (Boone et al., 2011; Bowling & Ball, 2018; Martin & Mulvihill, 2016). These programs, although questionably controversial, were created to mitigate shortages by eliminating the gap created by the lack of teachers being

produced within traditional education programs. Bowling and Ball (2018) theorized that if the number of traditionally prepared teacher candidates remained constant, 50,000 openings would have been left vacant or filled by alternatively certified individuals.

Alternative Certification Programs (ACPs) are intended to attract people who might not otherwise choose education as a profession (Boone et al., 2011) and Uriegas, Kupzynski, and Mundy (2014), reported only 54% of teachers who completed an initial certification obtained it through a traditional certification route while 46% of teachers participated in an ACP in order to secure certification credentials needed to become a teacher. Researchers have drawn attention to a variety of benefits from participation in ACPs, including assisting in closing the pool gap since traditional education programs fail to produce the quantity needed to address the demand and attracting more minority teachers, specifically Hispanics and African Americans, into the field (Rosenberg, Boyer, Sindelar, & Misra, 2007).

ESE Certification Requirements

Acquiring teacher licensure (although required by most states) has presented a challenge for some people wishing to enter or remain in the education profession. All but three states have testing requirements associated with acquiring teacher licensure, yet little empirical evidence represents a correlation between teachers who pass these exams and overall effectiveness within the classroom (Goldhaber & Hansen, 2010).

Florida is among the majority of states that require teachers to take and pass a battery of exams in order to hold a state teaching certificate. According to FLDOE (2019), the state of Florida requires educators to take and pass a minimum of three exams for initial certification. Each educator must pass a basic skills exam, professional educator's test, and a competency, or subject area, exam (FLDOE, 2019a). Testing requirements associated with teacher certification

are noted throughout Kennedy's (2018) research as one of the many challenges faced by those who wish to remain in the field of education.

Although the requirements vary from state to state, mandated testing has been noted to hinder some from being retained in a teaching position and deter others from considering education as a career. Rigorous testing requirements were among the pathway challenges identified and noted as costly, biased, and time-consuming (Kennedy, 2018). Challenges related to certification tests are evident through the percentage of passing rates on several of the State of Florida's exams (more specifically, the General Knowledge Exam). The General Knowledge (GK) exam is a basic skills exam consisting of four subtests: writing, English language skills, math, and reading. Twelve other states use a similar exam, and 41 states require the passing of a licensure exam for teacher preparation program entrance (Petchauer, 2012). The GK exam subtests are timed and comprised of both multiple questions and an essay component. The test is administered under the authority of the State Board of Education rule 6.A.4.0021 and provides a basic assessment of language arts and mathematics knowledge for teachers at all levels (Pearson Education, 2019). The competencies and skills tested are aligned by law to the Florida state-approved standards and represent a minimum level of what is expected of a sophomore in college (FLDOE, 2019a).

In the tracking of longitudinal pass rates of Florida Teacher Certification Exams (FTCE) and subtests, the Florida Department of Education's Division of Accountability, Research, and Measurement disclosed the passing results of first attempt test takers (FLDOE, 2019a), and the results reflected the pass rates of first time test takers of all FTCE exams between the years 2015-2018. Based on the results, less than 75% of first-time test takers successfully passed Subtest 1: Writing (essay) of the GK exam, less than 70% passed Subtest 2: English Language

Skills, less than 60% passed Subtest 3: Reading, and less than 60% passed Subtest 4: Mathematics (FLDOE, 2019a).

Documented as being more detrimental to the goal of recruiting more minority teachers to the field, Petchauer (2012) reported fewer than half of aspiring black teachers pass the basic skills exam on the first attempt; and, Goldhaber and Hansen (2010) questioned the exams' levels of predictive validity around teacher effectiveness for different racial groups. Consistent with this research, Nettles, Scatton, Steinberg, and Tyler (2011) uncovered that the passing rate for White first-time test takers was approximately double that for Black first-time test takers: reading (81.5%), writing (79.5%), and mathematics (78.2%). Gitomer, Brown, Bonett (2011); posited there is a good reason to be concerned with any assessment that appears to have a disparate impact on a people group. The researchers contend that the growth rate by which our teacher population diversifies is at a much lower rate than the growth of the student population served (Gitomer et al., 2011). In addition to the GK, educators must also pass the Professional Educator's Test (PEd) (FLDOE, 2019a). According to the FLDOE (2019), the PEd assesses educational pedagogy, is timed, and consists of 120 multiple choice questions measuring the following eight competencies and skills:

- Competency 1: Knowledge of Instructional Design and Planning;
- Competency 2: Knowledge of appropriate student-centered learning environments;
- Competency 3: Knowledge of instructional delivery and facilitation through a comprehensive understanding of subject matter;
- Competency 4: Knowledge of various types of assessment strategies for determining impact on student learning;
- Competency 5: Knowledge of relevant continuous professional improvement;

- Competency 6: Knowledge of the Principles of Professional Conduct of the Education Profession in Florida;
- Competency 7: Knowledge of research-based practices appropriate for teaching English Language Learners (ELLs);
- Competency 8: Knowledge of effective literacy strategies that can be applied across the curriculum to impact student learning.

The Florida Department of Education (2019a) reported 80% of those who took the PEd between 2015 and 2018 received a passing score on their first attempt. Lastly, the State of Florida offers over 70 content areas for which an educator may take a subject area exam (SAE) to demonstrate evidence of competency (FLDOE, 2019a). Similar to the other 69 subject area exams, the timed Exceptional Student Education (ESE) K-12 SAE costs \$150 and consists of 120 multiple choice questions (Pearson, 2019). The ESE SAE assesses the educator's competencies and skills across six areas:

- Competency 1—Knowledge of foundations of exceptional student education;
- Competency 2—Knowledge of assessment and evaluation;
- Competency 3—Knowledge of instructional practices in exceptional student education;
- Competency 4—Knowledge of the positive behavioral support process;
- Competency 5—Knowledge of multiple literacies and communication skills; and
- Competency 6—Knowledge of the transition process (Pearson, 2019).

Unlike the GK and PEd, first time test takers passed the ESE subject area exam at a higher pass rate compared to the GK and PEd. Between the years 2015-2018, 80% of those taking the ESE subject area exam passed the test on their first attempt (FLDOE, 2019a). Based

on the results presented, the rate at which test takers passed the SAE was consistent with most exams offered by the Florida Department of Education with the exception of the following subject areas: all Sciences, Engineering & Technology 6-12, Health 6-12, English 5-9, Math 5-9, Math 6-12, ESOL K-12, Elementary K-6, and PreK-Primary.

The State of Florida offers two types of educator certificates: the temporary certificate and the professional teaching certificate. The temporary certificate is valid for three years and non-renewable. An applicant can obtain the temporary certificate (FLDOE, 2019a) in one of the following ways:

- earn a bachelor's degree and pass a subject area exam;
- earn a bachelor's degree with a major in the content area; or
- earn a bachelor's degree with required courses and 2.5 GPA in the content area.

The five-year professional teaching certificate is the highest certificate offered by the state of Florida and may be renewed every five years (FLDOE, 2019a).

An applicant can obtain professional teaching certificate pending demonstration of mastery of content area knowledge for a requested subject, mastery of general knowledge, mastery of professional preparation and education competence, and completion of all requirements of the application process (FLDOE, 2019a). Aside from the state requirements that must be met in order to obtain a teaching certificate, applicants were also required to be highly qualified under the No Child Left Behind Act (NCLB) of 2001. Highly qualified status was acquired through a state competency exam or demonstrated through a series of content-specific courses completed within a regionally accredited college or university (FLDOE, 2019a).

Although the 2015 Every Student Succeeds Act (ESSA) replaced NCLB, all teachers must still

adhere to meeting specific competency requirements in order to be deemed fully qualified and eligible to teach within each state (FLDOE, 2019a).

Unlike most content areas which only require a teacher to demonstrate competency in an isolated discipline, SPED teachers (who are responsible for the delivery of instruction to students with varying exceptionalities between kindergarten through grade 12) must demonstrate competency in all subject areas delivered (FLDOE, 2019a).

For example, according to the FLDOE's certification requirements and Florida Course Directory, if the SPED teacher is assigned to teach math to seventh grade SPED students, the teacher must not only be certified to teach exceptional student education, but must also be certified to teach middle grades math (grades 5-9) to be considered fully qualified for the teaching assignment (FLDOE, 2019b).

SPED candidates are required to take additional subject area exams or complete additional teacher preparation coursework to be considered fully qualified. As a result of these additional certification requirements, many districts struggle with recruiting and retaining fully qualified ESE teachers.

To address the gap between qualified and non-qualified individuals occupying teaching positions, some state departments of education permit teachers to teach out of field (in subject areas that they are not certified to teach) for a limited amount of time. According to the FLDOE 2017 report outlining teachers in out of field placements, 13.56% of ESE courses in Florida were taught by teachers not certified in the appropriate field (FLDOE, 2017).

Once a teaching certificate in the state of Florida is obtained, a teacher must renew the professional certificate every five years. Renewal requirements involve teachers completing the equivalent six semester hours of college credit (undergraduate or graduate), 120 professional

development hours, or 120 in-service points (FLDOE, 2019a). In 2014, Senate Bill 1108 passed, requiring all teachers to complete 20 of the 120 professional development hours (or the equivalent of one semester hour of college credit) related to teaching students with disabilities (FLDOE, 2019a). Alternative routes to professional educator certification (such as American Board for the Certification of Teacher Excellence and Teach for America) have been implemented throughout the U.S. in an effort to address the teacher shortage challenges faced by school districts (FLDOE, 2019a).

According to the National Center for Education Statistics (Woodworth, 2018), 18% of the 3.8 million individuals teaching entered the profession through an alternative route. Bowling and Ball (2018) described alternative certification programs as a means to address macro-level factors contributing to the teacher shortage. Factors documented include “growing student populations, immigration, policies, certification programs, incentives tied to merit, and individuals leaving education” (Bowling & Ball, 2018, p. 109). Bowling and Ball (2018) further stressed that the number of teacher vacancies justifies a clear need for alternative pathways to teacher certification.

Why Teachers Leave the Field of Education

In spite of innovative recruitment approaches, districts continue to be challenged nationally with retaining teachers. Research by Berry and Shields (2017) uncovered the fact that fewer teachers are entering the profession and documented that enrollment in teacher preparation programs dropped by 35 percent nationwide between 2009 and 2014. In an effort to explain the state of the teaching profession shortage, Berry and Shields (2017) examined the recruitment and retention efforts employed by the States of California and North Carolina. Although each state differed in size, these states shared common policy strategies. A thorough analysis of their

recruitment and retention strategies revealed reformed teacher education systems, increased teacher beginning salaries, loan forgiveness initiatives, and innovative ways to entice teachers to work with their neediest student populations. Berry and Shields (2017) concluded that although still faced with teacher shortage issues, these states recognized the need for immediate change. An additional conclusion drawn was that although the teacher shortage issue was considered to be a political one it was dependent on effective advocacy.

Likewise, Posey (2017) shared concerns with the teacher shortage issue stating that “there should be concentrated efforts” to address the enrollment drop of education students both politically and professionally, to encourage change in the current climate of teaching that is driving professionals out of the field they once loved” (p. 31).

Albright et al. (2017) examined how novice teachers within urban school districts perceived their induction program and preservice experiences and the support extended by administration and district. The purpose of the study was to provide school leaders with information about what is missing from new teacher induction programs and leadership support. Fourteen educators and five school-based administrators participated in the study. The study results revealed that teachers did not feel adequately prepared for the urban setting, while principals identified being overwhelmed with their own work as the primary causes for not providing adequately support to novice teachers. Teachers’ need for being involved, feeling supported, and feeling adequately prepared to deal with challenging students are some of the reasons why teachers leave education (Albright et al., 2017). Additionally, an examination by Wilhelm, Dewhurst-Savellis, and Parker (2000) outlined the reasons for attrition from full-time teachers who identified student and financial incentives as reasons for leaving, compared to part-time teachers who communicated stress-related factors as their reasons for abandoning

education. The longitudinal study examined reasons why a cohort of teachers remained or left the field of teaching. One hundred and fifty-six teachers participated in the study. Cohort groups were divided into two groups, those who stayed in the field of teaching and those who left the field of teaching and a screening measure was used to survey participants. The results of the study indicated that 74% of the not teaching group left within five years due to student behavior and inadequate feedback, conflict with a colleague, or pay (Wilhelm et al., 2000). Nance and Calabrese (2009) supported these sentiments regarding ESE teachers stating,

Tenured special education teachers have experience and need to be heard regarding their many duties; and, especially in this time of chronic special education teacher shortage, organizations that employ them must consider ways to include them in understanding the decision-making that affects them (p. 435).

Both support and paperwork overload were identified by Buchanan (2010) as top reasons teachers decided to leave the teaching profession, and classroom management surfaced as a significant issue for several teachers.

The job retention rate after one year was significantly lower for special education teachers than it was for general education teachers (Stempien and Loeb, 2002), and various research outline reasons for teachers' exits from the profession. In a study conducted Donaldson and Johnson (2011) over 2000 Teach for America (TFA) teachers were surveyed to understand the reasons they left the field of education. The qualitative study results indicated that around 35% of TFA teachers left to pursue a career other than teaching, about 12% left to enroll in coursework to enhance their career in education, and around 10% left in order to improve their career opportunities (Donaldson & Johnson, 2011). Additionally, several exiting teachers cited working conditions and student discipline issues as reasons for leaving the profession

(Donaldson & Johnson, 2011, p. 51).) The researchers' findings suggested two primary reasons that Teach or America teachers remain in their placement sites and within the field of teaching. TFA's teachers' prior experience within education and intentions for entering was noted as one of the reasons, while working conditions within their sites was listed as the other reason TFA teachers remain in their placement sites (Donaldson & Johnson, 2011).

Further, Donaldson and Johnson (2011) suggested that additional investigation be conducted to explore the benefits of more preservice training as opposed to fast track programming. In a study conducted by Buchanan (2010), benefits and lack of preparedness were not among the list of reasons why teachers are leaving the field of education; instead, top reasons included salary, working conditions, classroom management, and a lack of support. These reasons further supported the findings from other studies which reflect higher rates of staff turnover within schools with a large proportion of students coming from disadvantaged backgrounds or having learning difficulties (Dupriez et al., 2016). Other research findings outlined the impact of resiliency on teachers' decisions to leave the profession and explored the significance of teachers' emotions when confronted with difficult situations (Hong, 2012). The study explored differences in terms of resiliency, between those teachers who stayed in the field of teaching compared to those who decided to leave. Fourteen participants with less than five years of teaching experience participated in the study. Semi-structured interviews were used to capture participants' responses. The results of the study reflected that leavers tended to place more stress on themselves and showed "weaker self-efficacy beliefs" compared to the stayers (Hong, 2012, p. 417). Establishing a rapport with students was noted as a strategy used by the stayers to remain in the field of teaching. The study suggested that resiliency be explored more

intently in order to gain a better understanding of its role in teachers' decision-making and long-term career planning (Hong, 2012).

Banville and Rikard (2009) stressed that many schools do not recognize the emotional distress that new teachers may have endured and stressed the influence of distress on a teacher's decision to remain or leave the education field.

Furthermore, Richardson, Alexander, and Casselberry (2008) contended that there is a correlation between a teacher's intention to remain in the teaching field and the level of communication that they desire from their administrator; consequently, "as communication symmetry increases (which is defined as the willingness of an organization to listen and respond to employees concerns), teachers intent to leave decreases" (p. 11).

Not all attrition matters can be credited to a teacher's personal decision to leave the teaching field. The No Child Left Behind (NCLB) Act has also been noted to contribute to the exodus of teachers who, by no choice of their own, no longer work within the field of education (Hill & Barth, 2004). NCLB was signed into law in 2002 and sought to address the achievement gaps between White and non-White students, students with disabilities, and disadvantaged students, as well as increase the number of highly qualified classroom teachers (Hill & Barth, 2004; Smith & Kovacs, 2011). According to Smith and Kovacs (2011), "in addition to instituting punitive sanctions for schools that did not show improved student test scores" (p. 202), NCLB also required all teachers to be certified (hold a certificate in the subject area taught), qualified (possess a bachelor's degree or higher), and highly qualified (demonstrate competence by passing a subject area exam in the assigned subject taught) (Smith et al., 2011).

Nicholas and Berlin (2008) faulted NCLB for the demoralization of teachers due to tainted curriculum which further pointed to NCLB as the culprit responsible for the

dissatisfaction of teachers and turnover (Smith & Kovacs, 2011). In an examination to determine whether accountability systems impacted the recruitment and retention of highly qualified teachers, Clotfelter, Ladd, Vigdor, and Diaz (2004) reported that schools labeled as low performing experienced lower teacher retention following the implementation of NCLB.

These findings were further substantiated by the results of the study conducted by Smith and Kovacs (2011) which reported that more than 50% of teachers surveyed considered quitting and were unwilling to commit long term to the profession. Ng and Peter (2010) concluded that “alternatively licensed teachers are as likely as their traditionally prepared counterparts to quit teaching” (p. 123). Aligned with these findings, Hill and Barth (2004) cited that almost one third of new teachers leave after three years and 50% after five years. Similar studies exposed NCLB’s impact on SPED teachers’ decisions to remain in the field of education and reported a heightened level of dissatisfaction by SPED teachers since the implementation of NCLB (Nance & Calabrese., 2009), ultimately resulting in those teachers leaving the profession altogether.

Rigorous testing and teacher qualification status were also discussed as areas of concern throughout the research investigating reasons for SPED teacher attrition. Ng and Peter (2010) reported fewer than 50 percent of black teachers who take the basics skills test required to acquire teacher certification passed on their first attempt which suggested that the passing rate may indicate why only 7% of teachers in the U.S. are Black. Thus, Gitomer et al. (2011) suggested the exam unfairly “restricts minorities from entering the field from the onset due to the disproportionate number of Blacks who cannot pass it” (p. 431).

In an effort to determine where the 8,852 teachers who started teaching in Florida were working after exiting the classroom, the Florida Department of Education’s (2016) report on teacher retention found that only 33 percent of teachers were still teaching at the same school,

while 32 percent were either not teaching or an administrator within a school, 25 percent were teaching within the same district, 10 percent were teaching within another district, and 35 percent of those who entered the profession with a temporary certificate never obtained their professional certificate—essentially exiting before or at the end of the lifespan of their certificate.

Further, of the total number of courses taught in the state of Florida (2,175,929), over 8 percent (191,035) were taught by an out-of-field or not highly qualified teacher. In summation, the *2014 National Center for Education Statistics (NCES) Teacher Attrition & Mobility* report (as cited in NCES, 2016) documented that 7.7% of teachers (259,400) left the teaching field between 2012 and 2013. The report reflected that the percentage rate by which Black and Hispanic teachers left exceeded that of White teachers. Specifically, 10% of Black teachers were reported to leave between 2012 and 2013, 8% of Hispanic teachers exited, and 7.5% of White teachers left teaching. Ultimately, Hagaman and Casey (2018) concluded that high teacher attrition rates negatively influence several school variables, including those specifically targeting the educational outcomes of students with disabilities.

Why Teachers Remain in Special Education

Limited research has been conducted on the reasons why Special Education (SPED) teachers choose to enter, depart, or remain in the teaching field (Brownell et al., 2004). SPED teacher retention was linked to effective induction programs as an influential factor influencing general and special education teachers' decisions to stay within the field (Brownell et al., 2004). In a study focused on the differences in job satisfaction between general education and special education teachers, Stempien and Loeb (2002) found challenges on the job and the fostering of creativity as factors that contribute to the retention of special education teachers. Hagaman and Casey (2018) contend that it is possible that there is a mismatch between expectations and

perceptions among administrators and special education teachers that can inform teacher preparation, professional development, or new teacher supports.

In the study conducted by Dupriez et al., (2016) the issue of attrition of French-speaking Belgium teachers was explored. Four cohorts of teachers (totally 19,196 teachers) were included in the study over a five-year time span. A series of multivariate analysis techniques were employed. The study revealed that primary teachers were more stable and exit rates of secondary teachers were higher than that of elementary. Additionally, what emerged in the research was the relationship between a teacher's decision to stay in the profession, and qualifications held or the schools where they were employed. These factors had a direct influence on the exit rates experienced during a teacher's first few years of employment. In an effort to understand whether distinct characteristics may be linked to a SPED teacher's decision to remain in the field of education, resilience was noted to be among those highlighted throughout the cannon of research. The characteristic of resilience has been noted as a quality held by many SPED teachers who choose to stay within the profession (Day & Gu, 2007). Hong (2012) stated that teachers with a strong sense of efficacy "perceive difficulties as challenges, rather than threats" (p. 420). In fact, Gu (2014) referred to teacher resilience as a "dynamic quality that enabled teachers to maintain a sense of moral purpose and commitment to help children learn and achieve in their everyday world of teaching" (Gu, 2014, p. 503).

Fall and Billingsley (2011) examined data from a prior study of teacher needs within SPED and compared it to the work conditions, qualifications and the induction of new SPED within high and low poverty districts. Nine hundred thirty-five early SPED teachers with five or less years of experience participated in the study. Data was analyzed using a variety of statistical

techniques including; descriptive statistics, factor and reliability analyses, and logistic regression. Teachers from both high poverty and low poverty districts participated in the study.

The researchers concluded that SPED teachers were more prone to stay when they are able collaborate, plan, and instruct students alongside their general education peers. The study's findings suggested a severe shortage of SPED teachers within high poverty districts to address the diverse needs of SPED students. Comparatively, Smethem (2007) found positive early experience such as encouragement and positive feedback as factors which contributed to a SPED teacher's decision to remain in the field of teaching, while Richardson, Alexander, and Casselberry (2008) point to professional tenure as an influential factor. Another predictor of teacher retention is a SPED teacher's commitment to their school. Commitment was found to be closely linked to their overall school experiences which ultimately played a significant role in their decision to remain in the profession (Jones, Youngs, & Frank, 2013).

As districts and post-secondary institutions continue to search for the remedy to the retention issue, Strogilos, Nikolarazi, and Tragoulia (2012) determined that the solution lies in teacher preparation programs and the need to find effective ways to present collaborative opportunities between SPED and mainstream teachers. Yet, Martin and Mulvihill (2016) summarized the solution to the shortage in SPED teacher positions being filled as an easy fix due to teaching being a desirable occupation. Further, the teacher shortage can be fixed as long as people pay taxes and governors allow unionization and tenure, provide reasonable pensions, and offer higher starting salaries (Martin & Mulvihill, 2016). The research conducted by Martin and Mulvihill (2016) however, does not account for the lack of collegians pursuing education as a major. Given the national teacher shortage and lack of teachers in "critical shortage areas"

(FLDOE, 2017, p. 2), administrators of post-secondary institutions should modify recruiting and teacher preparation programs in order to increase the pool of fully qualified teachers.

This chapter examined literature identifying variables which contribute to a SPED's teacher's decision to remain in the teaching profession. The size of a school, school population, student wealth, student composition, and school type all play a role in both teacher recruitment and retention (Brown & Wynn, 2009). Although there is much debate over whether teachers are compensated adequately, this factor has not served as the leading variable impacting whether a teacher decides to remain in or exit from the field of education. Factors such as high-stakes testing, student behavior and discipline, administrator support, and general workload have been identified as the leading reasons that teachers leave the profession prematurely (Brill & McCartney, 2008). According to Jones, Youngs, and Frank (2013), general education and special education teachers' success is dependent upon a number of factors, such as acquiring effective classroom management skills, knowing the curriculum, and adhering to school norms. Yet, in the quantitative study examining the relationship between teacher training and student outcomes, Feng and Sass (2018) found teachers who possessed the necessary qualifications and experience to be extrinsically motivated and SPED teachers were found to rely heavily on the support of their colleagues. Individual-level longitudinal data from the Florida PK-20 Education Data Warehouse (as cited by Feng and Sass, 2018) was used to link specific students to teachers at all grade levels. The findings within the study concluded that the only area where there was evidence of consistent positive academic effects was in reading (Feng & Sass, 2018). Teachers who possessed the necessary credentials to adequately deliver instruction to students were found to have a more positive effect on student outcomes—ultimately influencing their career

decisions. Intrinsic and altruistic motivation were also found to be influencing factors aside from the extrinsic sources which contributed to the decision-making process (Heinz, 2015).

Roegman, Pratt, Sanchez, & Crystal (2018) concluded that the dominating factor influencing the retention of special education certified teachers revolved around understanding how the teachers developed their teaching identities. Given the limited research on the topic of motivators keeping teachers in the SPED classroom, the results of those factors influencing SPED teachers' decision to remain in the field of education must be further explored and expanded.

III. METHODOLOGY

Introduction

The study was designed to evaluate the factors that influence SPED teachers' decisions to remain in the field of education. The study was conducted in one public K-12 school district centrally located in the state of Florida. The K-12 school district representing the study's sample source employed approximately 6,639 teachers with the following demographic composition: 72% White, 13% African American, 13% Hispanic, and 2% Other (Multi-racial, Indian, Asian, and Pacific Islander).

In the school district of the study, female teachers accounted for 84% of the teacher population, with males accounting for the remaining 16% of the teacher population. Of the 6,639 teachers employed in the district, 834 were considered exceptional student education (ESE) teachers and were invited to be participants in the study. Of the 834 SPED teachers assigned exceptional education students or courses, all held or were deemed eligible to hold a valid Florida professional teaching certificate. Moreover, of the 834 SPED teachers in the district, 13% were considered out-of-field and were required to meet a set of district and state requirements to become fully qualified and in compliance and were still invited to participate in the study. Thus, all teachers in the district who were assigned ESE courses were eligible to participate in this study if the next criteria were met.

Per Florida state statute (FLDOE, 2018c), all teachers are required to be evaluated annually. The two ratings determining a teacher's successful overall performance in a classroom

are highly effective (HE) or effective (E). Therefore, fully qualified ESE teachers with a performance evaluation rating of highly effective or effective were invited to participate in the study, a major delimitation of the study. Eligible participants varied in gender, age, and experience; however, the data were not specifically disaggregated for study intent and purposes. Therefore, demographic information was not collected through any means during the study. All participants indicated consent to participate in the study prior to participation by clicking a consent box on the informed consent document. Clicking the consent box allowed the participant access to the survey; whereas, not clicking the consent box halted progress disallowing participation in the study. Eight hundred thirty-four SPED teachers were eligible and invited to participate in the study. Two hundred forty-seven SPED teachers' gave informed consent and responded to the survey.

Research Design

The study was broadly described as non-experimental and quantitative. The specific research methodology used to address the study's research problem was survey research. The study was designed to identify the degree of relationship between ESE teachers' job satisfaction and ESE teachers' decision to remain in the field of special education. Participants were not compensated for participating in the study, and personal identifying information was protected. No minors participated in the study. All electronic data collected were password protected and stored on a secured file.

Data Collection

The study's research instrument, a survey (see Appendix B: Special Education Teacher Survey), was administered electronically. Participants were not able to complete the survey without first indicating their consent. Once the participants indicated their consent, they had

access to the survey. Participants were emailed a link to the 20-item Likert-type survey utilizing a five-point scale along with specific instructions outlining the purpose of the study, deadline for completion, and anonymity factors. There was no compensation or costs associated with participating in the study. Instructions included how long the survey would take the participant to complete, how long the data would be stored, where the data would be stored, and how the data would be analyzed.

Instrumentation

An electronic invitation was sent to study participants, and participants were asked to provide consent to participate electronically. Upon consent, the participants were redirected to the survey instrument. The instrument included 20 Likert-scale items developed to assist the researcher in addressing the six formally posed research questions that guided the study's data collection, analytics, and reporting of finding. The study's research instrument was researcher-designed, and as such was validated through formal a priori content validity analysis and a posteriori reliability analysis (Cronbach's alpha) once study data were collected.

Validity

A response rate of at least 50% was desired at the outset of the study. The a priori judgment phase of the establishment of the survey instrument's content validity was executed through a panel review of employment themes associated with teachers of ESE students, specifically focusing on work environmental factors and activities such as "hygiene" and "motivators" as noted in the seminal work, *Motivation to Work* by Fredrick Herzberg (1959). Hertzberg (1959) described hygiene issues such as organizational policies, salary, and supervision as those factors that do not motivate employees but may decrease overall employee dissatisfaction; and, motivators were defined as elements that enriched a person's job and strong

determiners of overall job satisfaction. The agreed upon themes based upon Herzberg's theory by the subject matter experts (SMEs) formed the basis of item development for the study's research instrument.

Reliability

The panel that had been tasked with evaluating the themes for inclusion in the study's research instrument was comprised of three SMEs. All SMEs possessed graduate degrees (two SMEs held doctoral degrees). Moreover, the SMEs are currently serving or have served ESE students within the public school, private school, or higher education environments in teaching and administrative capacities. The study's research instrument is a 20-item Likert-type survey utilizing a five-point scale (see Appendix B) in electronic format.

Procedures

Participants were asked to complete an electronic survey as a part of this study. The survey was conducted in one Florida public school district located within the central part of the state. The researcher submitted a data request to the Human Resource Services (HRS) division of the local public school district requesting the following elements: names of employees who held or had been deemed eligible to hold a Florida teaching certificate with ESE coverage, and all ESE teachers' overall performance evaluation ratings for the 2017-2018 school-year. ESE teachers who did not earn a performance rating of highly effective or effective were not eligible for participation in the study. Thus, the final group of eligible participants included those employees—ESE teachers—possessing or deemed eligible to possess a valid ESE teaching certificate, and who earned an overall performance rating of highly effective or effective. The invitation to participate in the study and survey link was emailed to study participants along with a cover letter outlining the purpose of the study. Participants were notified of confidentiality

practices. Participants were asked to confirm their consent to participate in the study by clicking on the consent box within the invitation and notification letter. Once consent was secured, participants were directed to the survey. Detailed instructions on how to complete the survey were outlined prior to participants answering survey questions. The survey consisted of 20 items, and participants rated each item on a Likert scale of 1-5 with 1 representing a response of (*very unsatisfied*) and 5 representing a response of (*very satisfied*). Participants were provided two weeks to complete the survey and submit their responses to the survey.

Survey responses were returned electronically and analyzed for common themes. Survey responses were available to the researcher through a password protected, web-based portal. Data were secured in Excel Spreadsheet format in confidence in a password-protected file. Only the researcher, methodologist, and principal investigator possessed access to the study data.

Data Analysis

Prior to the analysis of the six research questions posed in the study, preliminary analyses were conducted. Specifically, evaluations of missing data, internal consistency (reliability) of participant response, and essential demographic information were addressed analytically prior to the formal address of research questions posed in the study. Missing data were analyzed using descriptive and inferential statistical techniques. Specifically, frequency counts (n), percentages (%), means, and standard deviations (*SD*) were utilized for illustrative purposes. Dimension reduction using exploratory factor analysis (EFA) was conducted in order to determine the factors or dimensions from the survey instrument that emerged as most important to teachers deciding to remain in the field of Exceptional Student Education. EFA is a common technique used within the realm of statistical analysis to examine the relationships between two variables. EFA was selected in order to evaluate whether groups of data were strongly correlated.

Additionally, EFA assisted in assessing whether there was an actual versus theoretical correlation between items (Sass & Schmitt, 2010). The specific technique used to reduce research instrument items into factors or dimensions was principal components analysis (PCA). PCA enabled the researcher to simplify the complexity of high dimensional data by transforming the data into fewer dimensions and retaining the patterns and trends (Lever, Kryzwinsky, & Altman, 2017). A Keiser Meyer Olin (KMO) value exceeding .40 indicated sufficiency of sample size for factoring purposes.

KMO measures sampling adequacy and indicates whether or not there is a degree of common variance within the items measured. KMO indicates if the data collected is worthy of factor analysis. The Bartlett's test of sphericity confirms that linear combinations exist by proving that the observed correlation is statistically different from a singular matrix; thus, checking for redundancy between variables (Beavers, Lounsbury, Richards, Huck, Skolits, & Esquivol, 2013). The Bartlett's test of sphericity value of $p < .05$ was indicative of sufficiently high levels of correlations amongst variables for factoring purposes. The percentage of explained variance within factors meeting the eigenvalue of 1.0 was calculated on each of the identified factors as well as for the composite of identified factors (total). Internal reliability of participant response to the survey instrument was assessed using the Cronbach's alpha (α) statistical technique. Cronbach's alpha statistical technique was used to assess the reliability of the multiple Likert-scale survey (Bonett & Wright, 2015). The statistical significance of alpha was evaluated through the application of an F test. F values of $p < .05$ were considered statistically significant.

Analysis by Research Question

The study's research questions were addressed using a variety of descriptive, associative, predictive, and inferential statistical techniques. Frequency counts (n), measures of central tendency (mean scores), and variability (standard deviation) represented the primary descriptive statistical techniques used in the six research questions.

In research questions one and two, the one-sample t test was used to assess the statistical significance of participant response. The one-sample t test compares the mean of a single sample with the standard (Hess and Hess, 2017). The alpha level of $p < .05$ represented the threshold for statistical significance of finding. Cohen's d was used to assess the magnitude of effect (effect size). Cohen's parameters of interpretation of effect sizes were employed for comparative purposes.

Research questions three through six were associative and predictive in nature utilizing multiple independent predictor variables in the predictive modeling process. Therefore, the multiple linear regression test statistic was utilized to assess the predictive abilities of the respective independent variables in each research question. This test was used because multiple linear regression tests predict the value of a variable based upon the value of two or more other variables (Wittekind, Raeder, and Grote, 2010). Predictive model fitness was assessed through the interpretation of the ANOVA table F value. An F value of $p < .05$ was considered indicative of a viable predictive model. An ANOVA test was used to test the general differences between two or more independent means and to determine whether these differences were statistically significant (Keselman et al., 1998).

Variable slope (t) values represented the means by which the statistical significance of independent variables was interpreted. Values of $p < .05$ were considered statistically

significant. R^2 values represented the basis for effect size measurement and comparative purposes then transformed into Cohen's d values for ease of interpretation. Assumptions of multiple linear regression were assessed by either statistical means or visual inspection.

The study's analytics were addressed uniformly using IBM's 25th version of the Statistical Package for the Social Sciences (SPSS). Interpretation and reporting of findings were solely based upon the resultant output of analytics executed within the SPSS platform.

IV. RESULTS

Introduction

There is a teacher shortage. Although several studies have focused on teacher recruitment, fewer studies have been conducted on the motivational factors that impact a SPED teacher's decision to remain in the SPED classroom. The purpose of this study was to identify the motivational factors that contribute to exceptional education teachers' decision to remain in the field of education.

Participant Response Rate

A participant response rate of 31% ($n = 247$) to the items included in the study's research instrument was achieved in the study. The response rate realized in the current study was well-within the customary response rate of 30% to 40% generally achieved for internal surveying methods. Regarding the second critical element of the surveying process, its completion rate, the mean completion rate for surveying is generally 78%. The current study fulfilled the response rate parameters for internal surveying and far exceeded the completion rate expected for survey research by achieving a 100% completion rate of response by study participants.

Missing Data

The study's data set was found to be 100% intact. As a result, no consideration was afforded for the use of formal imputation techniques (expectancy maximization; multiple imputation). Moreover, in light of the complete intactness of the study's data set, the anticipated use of Little's MCAR statistic was not considered relevant.

Internal Reliability

The internal consistency of participant response (internal reliability) to survey items on the study's research instrument was manifested at an exceptionally high level ($\alpha = .92$; $p < .001$). Additionally, the internal reliability measures associated with identified study *dimensions* ranged from alpha values of .73 (Compensation) to .93 (Administrative).

Table 1 contains a summary of information regarding study participant internal consistency of response to survey items associated with the study's four identified dimensions.

Table 1

Internal Reliability by Dimensions/Factors

Dimension/Factor	α
Administrative	.93***
Professional Development/Growth	.86***
Parent/Student Influence	.80***
Compensation	.73***

*** $p < .001$

Dimension Reduction of Survey Items

The study's survey items were reduced to dimensions using exploratory factor analysis (EFA) via principal components analysis (PCA). The factoring model's sampling adequacy was found to be to a very high degree (KMO = .90) with sufficiently high correlations (Bartlett's sphericity ($\chi^2_{(153)} = 2755.30$; $p < .001$) for successful factoring and dimension reduction. A varimax orthogonal rotation was employed for interpretability purposes. As a result, four distinct dimensions (eigenvalues > 1.0) accounted for 68.48% of the variance of data in the factoring model.

Table 2 contains a summary of explained variance by dimension in the study's factoring model.

Table 2

Variance By Dimension

Dimension/Factor	% Variance
Administration	21.31%
Professional Development/Growth	17.97%
Parent/Student Influence	16.34%
Compensation	12.85%

Analyses/Findings by Research Question

Research question #1. What was the overall degree of study participant perceived satisfaction with the current instructional assignment in ESE?

Using the one-sample *t* test to determine the statistical significance of the perceived degree of satisfaction expressed by study participants with regard to their current instructional assignments in ESE, the overall mean score of 3.74 (*SD* = 1.23) of participant response was manifested at a statistically significant level ($t_{(246)} = 9.50; p < .001$). Moreover, the magnitude of effect of study participant response with regard to overall satisfaction with the current instructional assignment in ESE was considered medium ($d = .60$).

Research question #2. What was the overall degree of study participant perceived desire to return to the current instructional assignment in ESE?

Using the one-sample *t* test to determine the statistical significance of the perceived degree of desire and intent to return to their current instructional assignments in ESE, the overall mean score of 4.05 (*SD* = 1.28) of participant response was manifested at a statistically significant level ($t_{(246)} = 12.90; p < .001$). Moreover, the magnitude of effect of study participant

response with regard to overall desire to return to their current instructional assignment in ESE was considered large ($d = .82$).

Research question #3. Which survey item on the study's research instrument was most associated with and predictive of study participant overall satisfaction the current instructional assignment in ESE?

The multiple linear regression statistical technique was utilized to address research question three. The predictive modeling associated with research question three was conducted in two distinct phases. In the first phase of the modeling process, all survey items were used as independent predictor variables in an un-biased, forced-entry multiple linear regression model. As a result, five survey items represented statistically significant correlates and predictors of study participant overall satisfaction with respective current instructional assignment within ESE.

The second phase of the predictive modeling process involved the use of the five statistically significant predictor variables from the first phase in an un-biased, forced-entry predictive model. As a result, the independent variable of *Esteeming and Valuing by Administration* represented the most prominent correlate and predictor of participant overall satisfaction with respective current ESE assignment ($p < .001$; $d = .52$).

The predictive model was viable ($F_{(5, 241)} = 45.62$; $p < .001$), with the confluence of the five independent predictor variables accounting for 48.6% of the variance in the dependent variable of *Overall Satisfaction with Current Assignment in ESE*. The predictive effect of the model was considered very large at $d = 1.96$. All major assumptions of multiple linear regression were satisfied either visually or by statistical means.

Table 3 contains a summary of information associated with the predictive model employed to address research question three.

Table 3

Predicting Overall Study Participant Satisfaction with Current ESE Assignment by Survey Item

Model	β	SE	Standardized β
Intercept	-0.02	0.28	
Adequacy of Prep Time	0.21	0.05	.20***
Esteem of Students	0.19	0.07	.19**
Student Progress	0.25	0.07	.19**
Esteem/Valuing by Administration	0.23	0.05	.25***
Support/Collegiality of Peers	0.19	0.06	.19**

** $p < .01$ *** $p < .001$

Research question #4. Which survey item on the study’s research instrument was most associated with and predictive of study participant overall desire to remain in the current instructional assignment in ESE?

The multiple linear regression statistical technique was utilized to address research question four. The predictive modeling associated with research question four was conducted in two phases to address the research question. In the first phase of the predictive modeling process, all survey items were used as independent predictor variables in an un-biased, forced entry multiple linear regression model. As a result, three survey items represented statistically significant correlates and predictors of study participant overall satisfaction with respective current instructional assignment within ESE.

The second phase of the predictive modeling process involved the use of the three statistically significant predictor variables from the first phase in an un-biased, forced-entry

predictive model. As a result, the independent variable of *Administrative Availability/Approachability* represented the most prominent correlate and predictor of study participant overall satisfaction with respective current ESE assignment ($p < .001$; $d = .52$) closely followed by the survey item *Support/Collegiality of Peers* ($p < .001$; $d = .52$). There was virtually no magnitude of effect and a non-statistically significant finding in the comparisons (Cohen's $q = .02$; $p = .41$) of the two leading survey items.

The predictive model was viable ($F_{(3,243)} = 25.06$; $p < .001$), with the confluence of the three independent predictor variables accounting for 23.6% of the variance in the dependent variable of *Overall Desire to Remain in Current Placement*. The predictive effect of the model is considered large at $d = 1.11$. All major assumptions of multiple linear regression were satisfied either visually or by statistical means.

Table 4 contains a summary of information associated with the predictive model employed to address research question four.

Table 4

Predicting Study Participant Overall Desire to Remain in the Current Instructional Assignment in ESE by Survey Item

Model	β	SE	Standardized β
Intercept	1.28	0.35	
Student Progress	0.24	0.08	.18**
Administrative Availability/Approachability	0.24	0.06	.25***
Support/Collegiality of Peers	0.25	0.07	.23***

** $p < .01$ *** $p < .001$

Research question #5. Which of the identified dimensions or factors of study participant satisfaction represented the most prominent correlate and predictor of study participant overall satisfaction with the current instructional assignment in ESE?

Using the multiple linear regression statistical technique to assess the predictive abilities of the four independent variables (dimensions) in the predictive model, the dimension of *Administrative* exerted the greatest degree of predictive ability with regard to overall study participant satisfaction with the current instructional assignment in ESE, closely followed by the dimension of *Parent/Student Influence*. The dimensions of *Administrative* ($d = .65$) and *Parent/Student Influence* ($d = .63$) were equivocal in their associative and predictive effect upon study participant overall satisfaction with their current ESE placement, with virtually no magnitude of effect and a non-statistically significant finding in the comparisons (Cohen's $q = .01$; $p = .45$).

The predictive model was viable ($F_{(4, 242)} = 48.35$; $p < .001$), with the confluence of the four independent predictor variables accounting for 44.4% of the variance in the dependent variable of *Overall Satisfaction*. The predictive effect of the model is considered very large at $d = 1.81$. All major assumptions of multiple linear regression were satisfied either visually or by statistical means.

Table 5 contains a summary of information associated with the predictive model employed to address research question five.

Table 5

Predicting Study Participant Overall Satisfaction with Current ESE Position by Dimension

Model	β	SE	Standardized β
Intercept	0.39	0.26	
Administrative	0.32	0.06	.31***
Professional Growth	0.08	0.08	.07
Parent/Student Influence	0.40	0.08	.30***
Compensation	0.22	0.07	.18**

** $p < .01$ *** $p < .001$

Research question #6. Which of the identified dimensions of study participant satisfaction represented the most prominent correlate and predictor of study participant overall desire or intent to remain in the current instructional assignment in ESE?

Using the multiple linear regression statistical technique to assess the predictive abilities of the four independent variables (dimensions) in the predictive model, the dimension of Parent/Student Influence exerted the greatest degree of predictive ability with regard to study participant desire or intent to remain in the current instructional assignment in ESE, closely followed by the dimension of Administrative. The dimensions of Administrative ($d = .39$) and Parent/Student Influence ($d = .45$) were fairly equivocal in their associative and predictive effect upon overall study participant desire to remain in the current ESE placement of study participants, with virtually no magnitude of effect and a non-statistically significant finding in the comparisons (Cohen's $q = .03$; $p = .37$).

The predictive model was viable ($F_{(4, 242)} = 17.76$; $p < .001$), with the confluence of the four independent predictor variables accounting for 22.7% of the variance in the dependent

variable of *Desire or Intent to Remain in the Current ESE Instructional Placement*. The predictive effect of the model was considered large at $d = 1.09$. All major assumptions of multiple linear regression were satisfied either visually or by statistical means.

Table 6 contains a summary of information associated with the predictive model employed to address research question six.

Table 6

Predicting Study Participant Desire to Remain in Current ESE Position by Dimension

Model	β	SE	Standardized β
Intercept	1.52	0.32	
Administrative	0.21	0.08	.19**
Professional Growth	0.15	0.09	.12
Parent/Student Influence	0.31	0.09	.22***
Compensation	0.10	0.09	.08

** $p < .01$ *** $p < .001$

V. DISCUSSION

Introduction

School districts nation-wide continue to face the challenge of attracting, recruiting, and retaining a quality teacher workforce. Year after year, newly recruited teachers enter the profession eager to apply what they have learned from their post-secondary training, hopeful about the positive impact they will have on their students. Unfortunately, several novice teachers find themselves leaving the profession within the first three years of teaching. Teachers enter and depart the field of education for a variety of reasons ranging from pure frustration due to the demands of the profession (such as high stakes standardized testing, differentiated lesson planning, and data-driven record keeping) to feeling a lack of respect from students in the classroom and for the teaching profession as a whole from society. Local district recruiters have witnessed the gradual decline of the teacher education pool and the rapid depletion of those choosing to teach in a critical subject area (such as math, science, and exceptional student education) as their targeted area of specialization. These dismal declines have forced school districts, as well as post-secondary institutions, to identify more creative recruitment approaches to attract new teachers and utilize more research-based strategies to retain teachers. To ensure the success of any retention effort, districts must first understand those things that impact a teacher's decision to remain within the profession.

A review of the literature and the results of the analyses of data collected for this study confirmed that administrative support plays a significant role in whether a teacher stays or leaves

the educational field. Furthermore, student progress and support/collegiality of peers were revealed as additional predictors of participants' overall desire to remain in their current instructional assignment in ESE.

Discussion of Preliminary Findings

Participant response rate exceeded what would have been expected from an internal survey. Survey completion rate in this study was 100%; and, the study's data was found to be 100% intact. This is an extremely high level of completion and supports confidence in analytics and the interpretation of findings. The internal reliability was considered very high, beyond $\alpha = .80$. Additionally, the internal reliability associated with the identified dimension was also considered high to very high. The Cronbach alpha validated the features of the study and provided additional trustworthiness in the interpretation of findings.

Dimension Reduction of Survey Items

Another layer of the instrument validation was manifested in the reduction of survey items using EFA. The factoring model used in dimension reduction was viable, producing four distinct dimensions that accounted for nearly 70% of data variability in the factoring model. This finding is important, not only for instrument validation purposes, but also for the purpose of identifying distinct underlying themes within the study's broader data set.

Discussion by Research Question

To address the overall problem-focus of this study, the following research questions were posed, and the data was evaluated.

Research Question #1

What was the overall degree of study participant perceived satisfaction with the current instructional assignment in ESE?

At issue in research question one was the determination of study participants' perceptions of satisfaction with their current teaching assignment. As a result, the findings for research question one were reflected at a statistically significant level and at a magnitude effect considered to be medium. It appears from the findings in the current study related to research question one that study participants are generally satisfied with their current placement. Nearly seven out of 10 (65.2%) study participants expressed a perceived satisfaction with their current instructional placement. This result appears to align with the research related to the reasons teachers remain in the teaching profession that was previously conducted; according to Hughes (2012), 83.50% of participants planned to teach until retirement. Comparatively, three out of the 10 study participants indicated a dissatisfaction with their assignment, and therefore, may be a contributing factor associated with the shortage of ESE teachers and vacancies across the state. Given the extreme need for ESE teachers across the state and nation (specifically, 35 of the 50 states throughout the U.S. reporting their strongest needs in math, exceptional student education, science, and English), there is an urgency to acquire 100% satisfaction of all ESE teachers (USDOE, 2016). The null hypothesis is, therefore, rejected.

Based on the study data, 65.2% of respondents are satisfied with their current instructional assignment. Though 65.2% of respondents are satisfied, there still exists a disconnect between job satisfaction and employment numbers; there are over 400 ESE teaching positions vacant across the country. School district recruiting departments must determine how to fill vacant jobs with teachers who are motivated to teach ESE classes.

Research Question 2

What was the overall degree of study participant perceived desire to return to the current instructional assignment in ESE?

The findings for research question two reflected at a statistically significant level at a magnitude effect considered large. Specifically, three out of the four participants (75.3%) agreed with the assertion that they would return to their current teaching assignment. Wherein the factor of Administrative reflected a variance of 21.31%, and Professional Development/Growth reflected a variance of 17.97%. Findings in research question two appeared to be contradictory with the findings in question one in that a higher percentage of study participants expressed a desire to return than did the expected satisfaction with the job. The null hypothesis is, therefore, rejected.

Therefore, the study data reflect that ESE teachers will return to their ESE instructional assignments despite their levels of dissatisfaction with the field. Teachers returning to work in a mindset of dissatisfaction could lead to lower quality of teaching in the ESE classroom. Lower quality work output from teachers will lead to a learning gap from ESE students because the classroom teacher must be highly effective in order to increase student achievement; thus, low quality teaching could expand the learning gap.

Research Question 3

Which survey item of the study's research instrument was most associated with and predictive of study participant overall satisfaction with the current instructional assignment in ESE?

Research question three was predictive in nature, employing several independent predictor variables. As a result, multiple regression was used to assess the predictive abilities of survey items with regard to participants' overall satisfaction with their current job placement. The modeling process was conducted in two distinct phases. In phase one, items were used for predictive purpose; and, in phase two, only items that were found to have statistically significant

predictive ability were used in the model. The independent variable Esteeming/Valuing by Administration represented the most viable correlative and predictor of study participant satisfaction with current assignment. In the study conducted by Skaalvic and Skaalvic (2017), learning structure and teachers' perceived value within their school environment were found to be predictors of motivation to remain in the teaching profession. Further, Nance and Calabrese (2009) reported that teachers leave their positions if they perceive their administrative support to be lacking, especially when considering administration's role related to evaluations or professional development opportunities. Although the factors of Esteem/Valuing by Administration, Student Progress, Adequacy of Prep Time, Esteem of Students, and Support/Collegiality of Peers were all significant predictors and play an important role in the employee's satisfaction process, it is not surprising that the Esteem/Valuing Administration variable was most significant when compared to the Skaalvic and Skaalvik (2017) study. The null hypothesis is, therefore, rejected.

To maintain a teaching workforce satisfied with the ESE field, administrators must create a climate conducive to productivity and job satisfaction. This is important to school administrators in order to close the learning gap in ESE classrooms because ESE teachers will demonstrate effective teaching when they feel supported by their administration. Administrators, therefore, must be aware of their leadership skills or their need for professional development for the leadership skills to foster a supportive environment for their ESE teachers who want to remain in the field.

Research Question 4

Which survey item on the study's research instrument was most associated with and predictive of study participant overall desire to remain in the current instructional assignment in ESE?

A two-phase regression process was employed for research question four. Three predictors emerged: Student Progress, Administrative Availability/Approachability, and Support/Collegiality of Peers. Although Student Progress, Administrative Availability/Approachability, and Support/Collegiality of Peers are important factors contributing to a teacher's willingness to stay in the ESE teaching field, the most viable component in contributing to their willingness to return was Administrative Availability/Approachability. Furthermore, "because administrative support is strongly related to attrition among teachers, we need to know more about what supportive administrators do and how they promote positive school climates and working conditions in special education" (Billingsley, 2004, p. 53). The null hypothesis is, therefore, rejected.

The predictive factor determining retention rates aligns with the conclusions from research question three in that teachers reported a need for administrative support. Conclusions for research question four indicate that not only do administrators need to value teachers, but they also need to be approachable.

Based on this conclusion, if administrators were supportive and approachable, there could be a positive impact on the statistic indicating that almost half of the number of classroom teachers leave the profession in the first five years (The National Commission on Mathematics and Science Teaching in the 21st Century, 2000). Thus, supportive and approachable administrators could positively impact ESE teacher retention rates.

Research Question 5

Which of the identified dimensions of factors of study participant satisfaction represented the most prominent correlate and predictor of study participant satisfaction with the current instructional assignment in ESE?

The four identified dimensions were used to predict study participants' overall satisfaction with their current ESE teaching placement. As a result, three out of the four independent predictor factors represented statistically significant predictors of study participant overall satisfaction. Of the three statistically significant variable predictors, two dimensions were equally prominent in predicting study participant overall satisfaction; both the Administrative dimension and Parent/Student Influence dimension exerted the greatest predictive effect within the model used in research question five. The findings in research question five appear to corroborate findings outlined in the professional literature regarding ESE teacher retention (Billingsley, 2004). The null hypothesis is, therefore, rejected.

Teachers who stay in the educational field are almost four times more likely to perceive administrators' behavior as supportive and encouraging than those who choose to leave the profession (Billingsley, 2004). Ultimately, if administrators are perceived as supportive, the likelihood of ESE teachers staying in the profession is much greater. With more ESE teachers remaining in the field, there will be fewer vacancies and greater student achievement.

Additionally, school districts with higher teacher retention rates will be more effective in filling job vacancies because higher teacher retention rates entice new teachers to join the workforce.

Research Question 6

Which of the identified dimensions of study participant satisfaction represented the most prominent correlate and predictor of study participant overall desire or intent to remain in the current instructional assignment in ESE?

The four identified dimensions were used to predict study participants' overall satisfaction with current ESE placement, and two of the four dimensions were found to be statistically significant. Of the two dimensions, the factor of Parent/Student Influence exerted a slightly more robust predictive effect considering the four factors. The findings in research question six appear to be important in that there is limited research available supporting the impact Parent/Student Influence has on an ESE teacher's decision to remain in the current assignment or the teaching profession. The null hypothesis is, therefore, rejected.

Conclusions from this research question indicate that teachers must feel not only valued by their administration and that the administration is approachable, but also supported by parents and students. This conclusion implies that teachers must feel part of a team—parents, students, teachers, and administrators—in order to effectively teach. The team approach includes open communication among team members, common achievement goals for students, empowering students to learn and take ownership for their learning, and success among team members. Ultimately, creating an environment of success and collaboration will lead to higher retention rates of ESE teachers in the educational setting.

Study Limitations

There were three major limitations to the study. A non-probability convenience sample was used to collect data. The population in the study is limited from a generalization perspective since the study was conducted in only one school district within the state of Florida. Secondly, the study was delimited at the onset with regards to the identification of a variety of demographic variables which may have helped stratify findings and provide greater clarity of findings with the study. For instance, variables such as gender, race, years of experience, and degree earned were not compiled as a part of the data collection process. Compiling such demographic data may have enabled the researcher to uncover whether years of experience or participants of a particular race or gender were more likely to remain or exit the field of education. An additional limitation to the study was the research design itself. The current investigation was non-experimental. Moreover, survey research provided and focused upon self-reported perceptual triangulated data. Although perception is critical in understanding a topic or situation, it is still perceptual data as opposed to factual data.

Implications for Future Practice

The current study provides insight into the reasons why exceptional student education (ESE) teachers remain in the field of teaching. In this study, administrative support emerged as a major variable contributing to a teacher's decision to remain within the teaching field. Whereas most professional development focuses on technical skills, this study revealed that there is a greater need for school districts and institutions of higher learning to invest in more social/emotional skill-building so teachers are better prepared to interact with and develop meaningful relationships with students and their parents. Based on the findings, it is evident that

a social/personal paradigm is influential in job assignment satisfaction and desire to return to the job assignment.

As such, professional development opportunities related to social/emotional preparedness will further assist teachers in their facilitation of teacher-parent conferences, as well as, provide a more direct training of skills rather than the assumption of understanding. However, Berry & Shields (2017) stated the challenge will not be in the design and implementation of programs but the sustainability of such professional development programs over time.

Recommendations for Future Research

This study will assist districts in determining the need to develop more targeted leadership professional development opportunities that focus on ensuring that novice and experienced teachers feel supported and valued by administration. Additionally, data from the study suggest that more teachers may consider staying within the teaching field if, upon entering, they perceive the environment to be supportive and conducive to optimizing student growth and achievement. Districts investing in restructuring or customizing their administrative curriculum to align with the study's findings would potentially be placed in a more competitive position within the recruitment reigns. Much is yet to be uncovered about why teachers choose to stay within the field of teaching despite their perceived dissatisfaction on the job; thus, additional investigation on this issue is worthy of further investigation.

Another recommendation for a future study would be to broaden the scope of the current study to include additional school districts. Also, a mixed-methods study might prove most effective in increasing the understanding of the specific reasons why teachers choose to remain within the teaching field. A mixed-methods approach would allow the researcher to gather open-ended responses that could be transcribed and categorized into multiple emerging themes. The

collection of demographic data might further differentiate how particular groups perceive their work environment, conditions, and overall support.

The initiation of a focus group for future research on this topic could also be useful in evaluating the reasons for the experienced dissatisfaction from those teachers who reported that they will not return. This additional insight will be helpful in implementing more proactive strategies to help avoid those issues contributing to teachers' decisions to depart the field. .

Conclusion

Districts worldwide continue to compete for a high-quality instructional pool. Although the demand for more teachers remains on the up rise, there is an even greater need for teachers within the specific disciplines of math, science, and exceptional student education (SPED). In order to address the unique and varying needs of the projected SPED student population, districts and post-secondary institutions must determine those prominent factors that attract, recruit, and retain teachers within these diminished discipline pools. Districts that invest in initiatives that focus on administrative leadership and development will most likely have fewer vacancies to fill on an annual basis and will maintain a competitive advantage over their counterparts. Given the results of this study, which revealed the extent to which administration impacts a SPED teacher's decision to remain in education, it is critical that all teachers (especially SPED teachers) have the advantage of a supportive administrative team that demonstrates their sincere concern for their continued growth and development.

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APPENDICES

Appendix A



Identification of Critical Teacher Shortage Areas

Recommended Critical Teacher Shortage Areas

This report identifies which certification areas represent the greatest need among teachers statewide. Using the information provided below, the recommended critical teacher shortage areas for the 2018-19 school year are as follows:

- Science-General
- English
- English for Speakers of Other Languages (ESOL)
- Exceptional Student Education (ESE)
- Mathematics
- Reading
- Science-Physical

The shortage areas above represent certification areas where substantial proportions of teachers who are not certified in the appropriate field are being hired to teach such courses, where significant vacancies exist and where postsecondary institutions do not produce enough graduates to meet the needs of Florida's K-12 student population. This information can be used to determine the current and projected needs of classroom teachers for specific subject areas in the upcoming school year. The process used to determine these critical teacher shortage areas is presented below.

Background

Section 1012.07, Florida Statutes (F.S.), requires the State Board of Education to annually identify critical teacher shortage areas based on the recommendations of the Commissioner of Education. This section of statute is accompanied by SBE Rule 6A-20.0131, Florida Administrative Code (F.A.C.), which specifies that the list of shortage areas identify high-need content areas and high-priority location areas using the following information:

The number and percentage of positions in each discipline filled by teachers not certified in the appropriate field;

1. The annual supply of graduates of state-approved Florida teacher education programs for each discipline;
2. The number and percentage of vacant positions in each teaching discipline; and
3. Critical teacher shortage areas which may be identified pursuant to rules adopted by district school boards. These areas shall be identified based on consideration of at least the information specified in items 1 through 3 above and submitted to the Department no later than June 1 of each year.

Additionally, sections 1012.22(1)(c)4.b., F.S., and 1012.22(1)(c)5.c.(I), F.S., include provisions requiring local school districts to incorporate critical teacher shortage areas into both their grandfathered and performance salary schedules.

Determining Shortage Areas

The critical teacher shortage areas for 2018-19 were determined using information provided in Exhibits 3 through 5. The Department used the information in each of the exhibits to create rankings for each measure in Exhibit 1.¹ Rankings were then averaged across all measures to produce the final rankings. In Exhibit 1 below, the shaded and bolded subject fields indicate the recommended 2018-19 Critical Teacher Shortage areas. The final column in Exhibit 1, “Final Rank,” shows that Science-General was ranked first place with an average rank of 8.67. English was ranked second and followed by English for Speakers of Other Languages (ESOL), Exceptional Student Education (ESE), Mathematics, Reading, and Science-Physical as critical teacher shortage areas.

¹ The rankings order the data with 1 being the subject area that shows the most need for additional teachers. For example, when looking at Exhibit 5, the subject area with the fewest program completers would be ranked as number 1, but for Exhibit 4 the subject area with the most vacancies would be ranked as number 1. In the case of a tie, all subject areas are assigned the lowest rank. For example, if three subject areas tie for third place (i.e. there is no way to distinguish between third, fourth, and fifth place), they would all be assigned fifth place.

Exhibit 1 – Summary of Critical Teacher Shortage Rankings for 2018-19

Certification Areas	Rank Based on % of Courses Taught by Teachers Not Certified in the Appropriate Field for the Course (as reported by school districts)	Rank Based on Projected Vacancies (as reported by school districts)	Rank Based on % of Completers (as reported by teacher preparation programs)	Average Rank	Rank	Final Rank
Science-General*	5	7	14	8.67	1	1
English	1	4	22	9.00	2	2
ESOL*	4	9	16	9.67	3	3
ESE*	3	2	25	10.00	4	4
Mathematics	6	5	20	10.33	7	7
Reading*	2	6	23	10.33	7	7
Science-Physical*	8	10	13	10.33	7	7
Science-Earth and Space	8	15	9	10.67	8	
Business Education	11	18	7	12.00	9	
Tech Education	13	17	7	12.33	10	
Physical Education	9	12	17	12.67	11	
Computer Science	14	20	7	13.67	13	
Family & Consumer Sciences	10	24	7	13.67	13	
Health	12	23	7	14.00	14	
Educational Media Specialist	16	19	11	15.33	16	

Pre-K/Primary Education	19	3	24	15.33	16	
Science-Biology	18	11	18	15.67	17	
Agriculture	15	23	10	16.00	18	
Drama	21	21	7	16.33	20	
Foreign Languages-Spanish	23	14	12	16.33	20	
Foreign Languages-Other	17	26	7	16.67	21	
Social Sciences	22	8	21	17.00	22	
Elementary Education	26	1	26	17.67	24	
Foreign Languages-French	20	25	8	17.67	24	
Art	24	16	15	18.33	25	
Music	25	13	19	19.00	26	

Notes: Certification areas that were missing data in one or more of the measures examined were not ranked and excluded from the exhibit. Bolded subject fields indicate 2018-19 Critical Teacher Shortages.

* Science-General includes Science and General Science; Science-Physical includes Chemistry and Physics; ESE includes Exceptional Student Education, Speech Correction, Emotionally Handicapped, Hearing Impaired, Mentally Handicapped, Physically Impaired, Specific Learning Disabilities, Speech-Language Impaired, Varying Exceptionalities, Visually Impaired, Autism Spectrum Disorders endorsement, Adaptive Physical Education, and Orientation and Mobility endorsement; Reading and ESOL include both the certification and the endorsement.

Information on Critical Teacher Shortage Areas

Data on teachers currently in the workforce and their areas of certification are presented below to provide context for the recommended critical teacher shortage areas. This information covers the following: certification areas in which the majority of teachers are currently certified; the number of courses taught by teachers who were not appropriately certified for the courses they were teaching; the projected number of teacher vacancies as reported by school districts; and the number of recent completers of state-approved teacher preparation programs in Florida. Additional information is provided on the number of courses being taught by teachers who were not certified in the appropriate field for the courses they

were teaching in high-priority locations.² The following exhibits provide information on teacher supply and demand:

- Exhibit 2 – Number of Teacher Certifications Held by Certification Area during 2016-17
- Exhibit 3 – Number of Courses Taught by Teachers Not Certified in the Appropriate Field, by Certification Area during 2016-17
- Exhibit 4 – Number of Current and Projected Vacancies by Certification Area for 2016-17
- Exhibit 5 – Number of Students Completing Teacher Education Programs during 2015-16
- Exhibit 6 – High-Priority School Locations and Courses Taught by Appropriately Certified Teachers in 2016-17

It is important to note and emphasize that all data are as reported by school districts or teacher preparation programs.

Exhibit 2 provides the total number of certifications held by teachers in 2016-17 by certification area. If a teacher held multiple certifications, each certification was included. The most common teacher certification area for the 2016-17 school year was Elementary Education, making up 22.48% of all certifications. This was closely followed by ESOL at 20.70%. Shortage areas for 2018-19 are shaded and bolded in the exhibit below. Following Elementary Education and ESOL, the numbers drop off with ESE making up 10.85% of certifications and Reading and Pre-K/Primary Education making up 6.70% and 4.86% of certifications, respectively. The seven recommended critical teacher shortage areas account for about 49.56% of all certifications (n=211,624). The complete crosswalk of Certification Subject Codes to Certification Areas can be found in Appendix C.

Exhibit 2 – Number of Teacher Certifications Held by Certification Area - Top Areas for 2016-17

Certification Areas	Total Number of Certifications	Percentage of Certifications
Elementary Education	96,007	22.48%
ESOL*	88,391	20.70%
ESE*	46,314	10.85%
Reading*	28,621	6.70%

² Section 1012.07, F.S., defines high-priority locations as high-density, low-economic urban schools; low-density, low-economic urban schools; low-density, low-economic rural schools; and schools that earned a grade of “F” or three consecutive grades of “D” pursuant to s. 1008.34, F.S.

Pre-K/Primary Education	20,760	4.86%
English	20,400	4.78%
Social Sciences	19,570	4.58%
Mathematics	18,116	4.24%
Gifted	13,322	3.12%
Physical Education	10,773	2.52%
Science-Biology	6,735	1.58%
Science-General*	6,526	1.53%
Guidance	6,452	1.51%
Foreign Languages-Spanish	5,442	1.27%
Business Education	4,802	1.12%
Music	4,704	1.10%
Art	4,450	1.04%
Early Childhood/Preschool	3,796	0.89%
Educational Media Specialist	3,695	0.87%
Health	3,268	0.77%
Science-Physical*	3,256	0.76%
Science-Earth and Space	1,812	0.42%
School Social Worker	1,492	0.35%
School Psychologist	1,452	0.34%
Family and Consumer Sciences	1,291	0.30%
Tech Education	1,006	0.24%

Driver Education	954	0.22%
Drama	909	0.21%
Foreign Languages-French	888	0.21%
Computer Science	652	0.15%
Agriculture	612	0.14%
Foreign Languages-Other	560	0.13%
Statewide Total	427,028	100.00%

Note: Bolded subject fields indicate 2018-19 Critical Teacher Shortages.

* Science-General includes Science and General Science; Science-Physical includes Chemistry and Physics; ESE includes Exceptional Student Education, Speech Correction, Emotionally Handicapped, Hearing Impaired, Mentally Handicapped, Physically Impaired, Specific Learning Disabilities, Speech-Language Impaired, Varying Exceptionalities, Visually Impaired, Autism Spectrum Disorders endorsement, Adaptive Physical Education, and Orientation and Mobility endorsement; Reading and ESOL include both the certification and the endorsement.

Districts prefer to hire teachers certified in the appropriate field(s) for the courses they teach when possible to ensure children are taught the Florida Standards at the level of rigor required. Exhibit 3 provides the total number and percentage of courses taught in each certification area statewide, as well as the total number and percentage of courses taught in each certification area by teachers who were not certified in the appropriate field, as reported by school districts for the 2016-17 school year. The difference between the percentage of total courses that require a certification in the particular certification area and the percentage of courses being taught by teachers not certified in the appropriate certification area is computed. When this number is negative, it indicates the certification area is over-represented among courses taught by teachers not certified in the appropriate field when compared to the proportion of courses requiring the certification area represented overall. This information provides detail on the certification areas that are currently in demand across all school districts based on how frequently courses are being taught by teachers without the required certification relative to those courses' prevalence among course offerings in Florida. English had the highest percentage of courses taught by teachers without the required certification relative to its prevalence among course offerings in Florida.

Exhibit 3 – Number of Courses Taught by Teachers Not Certified in the Appropriate Field, by Certification Area during 2016-17

Certification Areas	Total Number of Courses Reported Statewide	Percentage of Total Courses Reported Statewide	Total Number of Courses Taught by Teachers Not Certified in Appropriate Field Reported Statewide	Percentage of Total Courses Taught by Teachers Not Certified in Appropriate Field Reported Statewide	Difference	Rank Based on Difference
English	35,181	6.17%	4,498	11.56%	-5.39%	1
Reading*	9,610	1.68%	1,753	4.50%	-2.82%	2
ESE*	64,812	11.36%	5,277	13.56%	-2.20%	3
ESOL*	8,523	1.49%	1,006	2.58%	-1.09%	4
Science-General*	9,804	1.72%	923	2.37%	-0.65%	5
Mathematics	36,066	6.32%	2,626	6.75%	-0.42%	6
Science-Earth and Space	3,611	0.63%	404	1.04%	-0.40%	8
Science-Physical*	6,519	1.14%	601	1.54%	-0.40%	8
Physical Education	5,957	1.04%	499	1.28%	-0.24%	9
Family & Consumer Sciences	797	0.14%	144	0.37%	-0.23%	10
Business Education	1,099	0.19%	112	0.29%	-0.10%	11
Health	696	0.12%	84	0.22%	-0.09%	12
Tech Education	315	0.06%	42	0.11%	-0.05%	13
Computer Science	380	0.07%	42	0.11%	-0.04%	14

Agriculture	447	0.08%	38	0.10%	-0.02%	15
Educational Media Specialist	930	0.16%	66	0.17%	-0.01%	16
Foreign Languages-Other	1,005	0.18%	68	0.17%	0.00%	17
Driver Education	311	0.05%	13	0.03%	0.02%	N/A
Science-Biology	7,685	1.35%	515	1.32%	0.02%	18
Pre-K/Primary Education	1,679	0.29%	90	0.23%	0.06%	19
Foreign Languages-French	1,464	0.26%	28	0.07%	0.18%	20
Drama	3,334	0.58%	140	0.36%	0.22%	21
Social Sciences	28,240	4.95%	1,732	4.45%	0.50%	22
Foreign Languages Spanish	7,645	1.34%	255	0.66%	0.69%	23
Art	16,931	2.97%	623	1.60%	1.37%	24
Music	25,238	4.42%	644	1.65%	2.77%	25
Elementary Education	292,121	51.21%	16,696	42.90%	8.31%	26
Statewide Total	570,400	100.00%	38,919	100.00%		

Note: Certification areas that were missing data in one or more of the measures examined were not ranked and excluded from final critical teacher shortage rankings in Exhibit 1. Bolded subject fields indicate 2018-19 Critical Teacher Shortages.

* Science-General includes Science and General Science; Science-Physical includes Chemistry and Physics; ESE includes Exceptional Student Education, Speech Correction, Emotionally Handicapped, Hearing Impaired, Mentally Handicapped, Physically Impaired, Specific Learning Disabilities, Speech-Language Impaired, Varying Exceptionalities, Visually Impaired, Autism Spectrum Disorders endorsement, Adaptive Physical Education, and Orientation and Mobility endorsement; Reading and ESOL include both the certification and the endorsement.

Most of the recommended critical teacher shortage areas for 2018-19 are among those with the highest projected vacancies and the highest number of current vacancies for 2017-18 (all are within the top 10 vacancies). Exhibit 4 provides the total number of current vacancies for the 2017-18 school year and the total number of projected vacancies by certification area. This information is typically used to plan recruitment efforts, including “The Great Florida Teach-In” held annually. This highlights the anticipated subject areas of teacher demand seen across all school districts.

Exhibit 4 – Number of Current and Projected Vacancies by Certification Area

Certification Area	Current Number of Vacancies for 2017-18	Percentage of Current Vacancies for 2017-18	Projected Number of Vacancies for 2017-18	Percentage of Projected Vacancies for 2017-18	Rank Based on Projected Vacancies
Elementary Education	326	20.01%	1,614	23.75%	1
ESE*	416	25.54%	1,208	17.78%	2
Pre-K/Primary Education	66	4.05%	550	8.09%	3
English	90	5.52%	454	6.68%	4
Math	105	6.45%	444	6.53%	5
Reading*	74	4.54%	271	3.99%	6
Science-General*	60	3.68%	269	3.96%	7
Social Sciences	36	2.21%	249	3.66%	8
ESOL*	101	6.20%	248	3.65%	9
Science-Physical*	11	0.68%	184	2.71%	10
Science-Biology	19	1.17%	140	2.06%	11

Speech-Language Pathologist	67	4.11%	137	2.02%	N/A
Guidance	62	3.81%	127	1.87%	N/A
Physical Education	30	1.84%	122	1.80%	12
Music	29	1.78%	102	1.50%	13
Foreign Languages-Spanish	18	1.10%	93	1.37%	14
Science-Earth and Space	3	0.18%	74	1.09%	15
Art	18	1.10%	67	0.99%	16
Tech Education	23	1.41%	64	0.94%	17
Business Education	10	0.61%	56	0.82%	18
Early Childhood/Preschool	3	0.18%	52	0.77%	N/A
School Psychologist	12	0.74%	47	0.69%	N/A
Educational Media Specialist	13	0.80%	46	0.68%	19
Computer Science	3	0.18%	38	0.56%	20
School Social Worker	9	0.55%	28	0.41%	N/A
Drama	3	0.18%	27	0.40%	21
Agriculture	5	0.31%	20	0.29%	23
Health	6	0.37%	20	0.29%	23
Family and Consumer Sciences	5	0.31%	18	0.26%	24

Foreign Languages-French	1	0.06%	17	0.25%	25
Foreign Languages-Other	5	0.31%	9	0.13%	26
State Total	1,629	100.00%	6,795	100.00%	

Note: Certification areas that were missing data in one or more of the measures examined were not ranked and excluded from final critical teacher shortage rankings in Exhibit 1. Bolded subject fields indicate 2018-19 Critical Teacher Shortages.

* Science-General includes Science and General Science; Science-Physical includes Chemistry and Physics; ESE includes Exceptional Student Education, Speech Correction, Emotionally Handicapped, Hearing Impaired, Mentally Handicapped, Physically Impaired, Specific Learning Disabilities, Speech-Language Impaired, Varying Exceptionalities, Visually Impaired, Autism Spectrum Disorders endorsement, Adaptive Physical Education, and Orientation and Mobility endorsement; Reading and ESOL include both the certification and the endorsement.

The number of students earning a certification in a particular content area in Florida gives an estimate of the number of new teachers available to fill vacancies in the state. Exhibit 5 presents the most recent information on new completers reported by teacher education programs across Florida. Certification areas with zero completers reported in 2015-16 represent teacher preparation program areas that either were not offered in a Florida College or University in 2015-16 or where there were no program completers that year.

Exhibit 5 – Number of Students Completing Teacher Education Programs in 2015-16

Certification Areas	Number and Percentage of Completers Reported		Rank Based on Percentage of Completers Reported
Business Education	0	0.00%	7
Computer Science	0	0.00%	7
Drama	0	0.00%	7
Family & Consumer Sciences	0	0.00%	7
Foreign Languages-Other	0	0.00%	7

Health	0	0.00%	7
School Social Worker	0	0.00%	N/A
Speech-Language Pathologist	0	0.00%	N/A
Tech Education	0	0.00%	7
Foreign Languages-French	1	0.02%	8
Science-Earth and Space	3	0.07%	9
Agriculture	7	0.16%	10
Educational Media Specialist	9	0.21%	11
Foreign Languages-Spanish	9	0.21%	12
Science-Physical*	15	0.34%	13
Science-General*	26	0.59%	14
Art	37	0.85%	15
Early Childhood/Preschool	42	0.96%	N/A
ESOL*	43	0.98%	16
Physical Education	45	1.03%	17
School Psychologist	63	1.44%	N/A
Science-Biology	72	1.65%	18
Guidance	108	2.47%	N/A
Music	150	3.43%	19
Math	165	3.77%	20
Social Sciences	175	4.00%	21
English	207	4.73%	22

Reading*	214	4.89%	23
Pre-K/Primary Education	308	7.04%	24
ESE*	689	15.76%	25
Elementary Education	1,984	45.38%	26
Total	4,372	100.00%	

Note: Certification areas that were missing data in one or more of the measures examined were not ranked and excluded from final critical teacher shortage rankings in Exhibit 1. Bolded subject fields indicate 2018-19 Critical Teacher Shortages.

* Science-General includes Science and General Science; Science-Physical includes Chemistry and Physics; ESE includes Exceptional Student Education, Speech Correction, Emotionally Handicapped, Hearing Impaired, Mentally Handicapped, Physically Impaired, Specific Learning Disabilities, Speech-Language Impaired, Varying Exceptionalities, Visually Impaired, Autism Spectrum Disorders endorsement, Adaptive Physical Education, and Orientation and Mobility endorsement; Reading and ESOL here only include the certification and not the endorsement.

Schools considered persistently low performing and schools serving a high proportion of students who receive free or reduced priced lunch have a higher proportion of courses taught by teachers that districts report as not being certified in the appropriate field for the courses they are teaching. Schools receiving a school grade of “F” in 2016-17 experience the largest proportion of teachers not certified in the appropriate field for the courses they teach. This information provides the context of high-need schools experiencing higher numbers of courses being taught by teachers that are not certified to teach the subject. The complete list of high-priority school locations can be found in Appendix A and Appendix B.

A larger percentage of courses are being taught by teachers not certified in the appropriate field for the courses they teach in the high-priority school locations compared to the statewide total. Exhibit 6 provides information on the number of high priority school locations and the proportion of courses at those locations being taught by teachers who were not certified in the appropriate field for the courses they teach (out-of-field) and teachers who were certified in the appropriate field for the courses they teach (in-field). The statewide percentage of courses taught by out-of-field teachers for all schools that received a school grade in 2016-17 is 5.65%. Schools that received a school grade of “F” had the largest percentage of courses being taught out-of-field at 11.61%. Schools that had received a combination of “D” ratings in the past three years have 11.07% of courses being taught out-of-field, while 8.19% of courses at urban/low-

economic schools and 5.40% of courses at rural/low economic schools are being taught out-of-field. Consistent with Florida Statutes, we have identified high-priority locations as high-density, low-economic urban schools, low-density, low-economic rural schools, and schools that earned a school grade of “F” or three consecutive grades of “D” or below. Low-economic schools are those that have 75% or more students who qualify for free or reduced-price lunch. Urban and rural school distinctions are based on the National Center for Education Statistics (NCES) locale codes which are a measure of geographic status on an urban continuum that ranges from “large city” to “rural” based on the standards used by the Census.

Exhibit 6 – High-Priority School Locations and Courses Taught by Appropriately Certified Teachers among Schools that Received a School Grade

High-Priority School Locations ¹	Number of Schools	Total Number of Courses	Number and Percentage of Courses In-Field		Number and Percentage of Courses Out-of-Field	
			Number	Percentage	Number	Percentage
F	43	4,420	3,907	88.39%	513	11.61%
D	91	15,201	13,518	88.93%	1,683	11.07%
Urban	473	80,991	74,357	91.81%	6,634	8.19%
Rural	178	30,545	28,895	94.60%	1,650	5.40%
Statewide Totals- All Schools	3,290	627,853	592,365	94.35%	35,488	5.65%

¹The list of high-priority school locations can be found in Appendix A and Appendix B attached.

²Per section 1012.07, F.S., in order to be a high-priority location area, a school must have earned three consecutive “D” ratings. For the purposes of this analysis, we have also included schools that earned a “D” for the current year and either a “D” or an “F” for both of the prior two years, considering this situation to be functionally equivalent with the intent of the statute.

Appendix A – Low-Performing Schools

District Number	District Name	School Number	School Name	School Grade 2017
1	ALACHUA	201	HAWTHORNE MIDDLE/HIGH SCHOOL	D
3	BAY	231	SPRINGFIELD ELEMENTARY SCHOOL	D
3	BAY	291	OSCAR PATTERSON ELEMENTARY MAGNET	F
4	BRADFORD	201	BRADFORD INTERVENTION CENTER	F
5	BREVARD	1051	ENDEAVOUR ELEMENTARY SCHOOL	D
6	BROWARD	41	NORTH SIDE ELEMENTARY SCHOOL	D
6	BROWARD	271	DILLARD ELEMENTARY SCHOOL	D
6	BROWARD	321	WALKER ELEMENTARY SCHOOL (MAGNET)	D
6	BROWARD	621	LARKDALE ELEMENTARY SCHOOL	F
6	BROWARD	1611	DR. MARTIN LUTHER KING MONTESSORI ACADEMY	F
6	BROWARD	1671	ROBERT C. MARKHAM ELEMENTARY	D
6	BROWARD	5052	WEST BROWARD ACADEMY	F
6	BROWARD	5109	PARAMOUNT CHARTER SCHOOL	F
6	BROWARD	5322	PIVOT CHARTER SCHOOL	D
6	BROWARD	5409	KIDZ CHOICE CHARTER SCHOOL	F
7	CALHOUN	7023	CALHOUN VIRTUAL INSTRUCTION PROGRAM (DISTRICT PROVIDED)	F
10	CLAY	662	ORANGE PARK PERFORMING ARTS ACADEMY (OPPAA)	F
11	COLLIER	341	VILLAGE OAKS ELEMENTARY SCHOOL	D
13	DADE	102	MIAMI COMMUNITY CHARTER SCHOOL	F

13	DADE	2060	THEODORE R. AND THELMA A. GIBSON CHARTER SCHOOL	F
13	DADE	3041	LORAH PARK ELEMENTARY SCHOOL	D
13	DADE	3051	TOUSSAINT L'OUVERTURE ELEMENTARY	D
13	DADE	5791	WEST HOMESTEAD K-8 CENTER	D
13	DADE	6020	ASPIRA RAUL ARNALDO MARTINEZ CHARTER SCHOOL	D
13	DADE	6031	BROWNSVILLE MIDDLE SCHOOL	D
13	DADE	6251	HOMESTEAD MIDDLE SCHOOL	D
13	DADE	7050	KEYS GATE CHARTER HIGH SCHOOL	D
14	DESOTO	181	NOCATEE ELEMENTARY SCHOOL	D
16	DUVAL	741	LAKE FOREST ELEMENTARY SCHOOL	D
16	DUVAL	791	RAMONA BOULEVARD ELEMENTARY SCHOOL	F
16	DUVAL	1461	MATTHEW W. GILBERT MIDDLE SCHOOL	D
16	DUVAL	1551	NORTHWESTERN MIDDLE SCHOOL	D
16	DUVAL	1581	GEORGE WASHINGTON CARVER ELEMENTARY	D
16	DUVAL	2131	ARLINGTON MIDDLE SCHOOL	D
16	DUVAL	2401	ARLINGTON HEIGHTS ELEMENTARY SCHOOL	D
16	DUVAL	2431	GREGORY DRIVE ELEMENTARY SCHOOL	D
16	DUVAL	5501	SOMERSET PREPARATORY ACADEMY	D
17	ESCAMBIA	271	ENSLEY ELEMENTARY SCHOOL	D
17	ESCAMBIA	361	MONTCLAIR ELEMENTARY SCHOOL	D
17	ESCAMBIA	371	MYRTLE GROVE ELEMENTARY SCHOOL	F
17	ESCAMBIA	551	WARRINGTON ELEMENTARY SCHOOL	F

17	ESCAMBIA	561	WARRINGTON MIDDLE SCHOOL	D
17	ESCAMBIA	602	REINHARDT HOLM ELEMENTARY SCHOOL	D
17	ESCAMBIA	852	WOODHAM MIDDLE SCHOOL	D
20	GADSDEN	41	GEORGE W. MUNROE ELEMENTARY SCHOOL	F
20	GADSDEN	51	WEST GADSDEN HIGH SCHOOL	D
20	GADSDEN	71	EAST GADSDEN HIGH SCHOOL	D
20	GADSDEN	9050	GALLOWAY ACADEMY	F
24	HAMILTON	31	CENTRAL HAMILTON ELEMENTARY SCHOOL	F
24	HAMILTON	32	HAMILTON COUNTY HIGH SCHOOL	D
24	HAMILTON	41	NORTH HAMILTON ELEMENTARY SCHOOL	D
29	HILLSBOROUGH	42	FOREST HILLS ELEMENTARY SCHOOL	D
29	HILLSBOROUGH	51	SHEEHY ELEMENTARY SCHOOL	D
29	HILLSBOROUGH	55	SHIELDS MIDDLE SCHOOL	D
29	HILLSBOROUGH	120	KIMBELL ELEMENTARY SCHOOL	D
29	HILLSBOROUGH	123	PATRICIA SULLIVAN METROPOLITAN MINISTRIES PARTNERSHIP SCHOOL	F
29	HILLSBOROUGH	125	THOMPSON ELEMENTARY	D
29	HILLSBOROUGH	881	CLEVELAND ELEMENTARY SCHOOL	D
29	HILLSBOROUGH	1201	DOVER ELEMENTARY SCHOOL	D
29	HILLSBOROUGH	1361	EDISON ELEMENTARY SCHOOL	D
29	HILLSBOROUGH	1471	FOLSOM ELEMENTARY SCHOOL	D
29	HILLSBOROUGH	1481	FOSTER ELEMENTARY SCHOOL	D
29	HILLSBOROUGH	2721	MANGO ELEMENTARY SCHOOL	D

29	HILLSBOROUGH	2882	MEMORIAL MIDDLE SCHOOL	D
29	HILLSBOROUGH	3121	MORT ELEMENTARY SCHOOL	D
29	HILLSBOROUGH	3201	OAK PARK ELEMENTARY SCHOOL	D
29	HILLSBOROUGH	3281	PALM RIVER ELEMENTARY SCHOOL	D
29	HILLSBOROUGH	3521	POTTER ELEMENTARY SCHOOL	F
29	HILLSBOROUGH	3761	ROBLES ELEMENTARY SCHOOL	D
29	HILLSBOROUGH	4201	SULPHUR SPRINGS K-8 SCHOOL	D
29	HILLSBOROUGH	4601	WASHINGTON ELEMENTARY SCHOOL	F
29	HILLSBOROUGH	4747	JAMES ELEMENTARY SCHOOL	D
29	HILLSBOROUGH	6653	WOODMONT CHARTER SCHOOL	D
29	HILLSBOROUGH	6666	KINGS KIDS ACADEMY OF HEALTH SCIENCES	F
33	JEFFERSON	21	JEFFERSON COUNTY MIDDLE/HIGH SCHOOL	D
33	JEFFERSON	111	JEFFERSON COUNTY ELEMENTARY SCHOOL	D
36	LEE	745	EAST LEE COUNTY HIGH SCHOOL	D
36	LEE	763	MANATEE ELEMENTARY SCHOOL	D
36	LEE	4211	PIVOT CHARTER SCHOOL	D
36	LEE	4241	UNITY CHARTER SCHOOL OF FORT MYERS	D
37	LEON	171	OAK RIDGE ELEMENTARY SCHOOL	D
39	LIBERTY	71	LIBERTY LEARNING CENTER	F
40	MADISON	41	MADISON COUNTY CENTRAL SCHOOL	D
41	MANATEE	261	ONECO ELEMENTARY SCHOOL	D
41	MANATEE	271	G D ROGERS GARDEN- BULLOCK ELEMENTARY	D
41	MANATEE	411	BLANCHE H. DAUGHTREY ELEMENTARY	D

41	MANATEE	581	W. D. SUGG MIDDLE SCHOOL	D
41	MANATEE	2121	MANATEE CHARTER SCHOOL	D
42	MARION	341	OAKCREST ELEMENTARY SCHOOL	D
42	MARION	431	WYOMINA PARK ELEMENTARY SCHOOL	F
42	MARION	581	EVERGREEN ELEMENTARY SCHOOL	D
42	MARION	9690	FRANCIS MARION MILITARY ACADEMY	D
42	MARION	9695	OCALI CHARTER MIDDLE SCHOOL	F
48	ORANGE	65	UCP ORANGE CHARTER	F
48	ORANGE	68	UCP WEST ORANGE CHARTER	F
48	ORANGE	70	UCP PINE HILLS CHARTER	F
48	ORANGE	151	MEMORIAL MIDDLE	D
48	ORANGE	192	OASIS PREPARATORY ACADEMY CHARTER	F
48	ORANGE	651	LAKE WESTON ELEMENTARY	D
48	ORANGE	811	TANGELO PARK ELEMENTARY	D
48	ORANGE	1271	ROSEMONT ELEMENTARY	D
50	PALM BEACH	842	TURNING POINTS ACADEMY	F
50	PALM BEACH	1241	GOVE ELEMENTARY SCHOOL	D
50	PALM BEACH	1401	WEST RIVIERA ELEMENTARY SCHOOL	D
50	PALM BEACH	1641	GOLD COAST COMMUNITY SCHOOL	F
50	PALM BEACH	3044	NORTH AREA ELEMENTARY TRANSITION SCHOOL	F
50	PALM BEACH	3101	CROSSROADS ACADEMY	F
50	PALM BEACH	3355	RIVIERA BEACH PREPARATORY & ACHIEVEMENT ACADEMY	F

50	PALM BEACH	4010	BELLE GLADE EXCEL CHARTER SCHOOL	F
50	PALM BEACH	4037	LEARNING PATH ACADEMY	F
50	PALM BEACH	4080	UNIVERSITY PREPARATORY ACADEMY PALM BEACH	F
52	PINELLAS	121	AZALEA MIDDLE SCHOOL	F
52	PINELLAS	1211	FAIRMOUNT PARK ELEMENTARY SCHOOL	F
52	PINELLAS	2021	LAKEWOOD ELEMENTARY SCHOOL	D
52	PINELLAS	4561	MIDTOWN ACADEMY	F
53	POLK	101	CRYSTAL LAKE ELEMENTARY SCHOOL	D
53	POLK	601	FRED G. GARNER ELEMENTARY SCHOOL	F
53	POLK	851	AUBURNDALE CENTRAL ELEMENTARY SCHOOL	D
53	POLK	861	WALTER CALDWELL ELEMENTARY SCHOOL	D
53	POLK	931	BARTOW MIDDLE SCHOOL	D
53	POLK	981	GIBBONS STREET ELEMENTARY SCHOOL	D
53	POLK	1191	KATHLEEN MIDDLE SCHOOL	D
53	POLK	1231	GRIFFIN ELEMENTARY SCHOOL	F
53	POLK	1341	MCLAUGHLIN MIDDLE SCHOOL AND FINE ARTS ACADEMY	F
53	POLK	1401	JANIE HOWARD WILSON SCHOOL	D
53	POLK	1662	LAKE ALFRED-ADDAIR MIDDLE SCHOOL	D
53	POLK	1831	LAKE MARION CREEK MIDDLE SCHOOL	D
54	PUTNAM	71	PUTNAM EDGE HIGH SCHOOL	D
54	PUTNAM	91	MELLON ELEMENTARY SCHOOL	D
54	PUTNAM	171	ROBERT H. JENKINS, JUNIOR MIDDLE	D

54	PUTNAM	231	GEORGE C. MILLER JR. MIDDLE SCHOOL	D
54	PUTNAM	351	WILLIAM D. MOSELEY ELEMENTARY SCHOOL	F
56	ST. LUCIE	71	ST. LUCIE ELEMENTARY SCHOOL	D
59	SEMINOLE	141	PINE CREST ELEMENTARY SCHOOL	D

Appendix B – Urban or Rural Low-Economic Schools

District Number	District Name	School Number	School Name	Locale
1	ALACHUA	41	STEPHEN FOSTER ELEMENTARY SCHL	Urban
1	ALACHUA	91	LITTLEWOOD ELEMENTARY SCHOOL	Urban
1	ALACHUA	101	W. A. METCALFE ELEMENTARY SCHOOL	Urban
1	ALACHUA	111	JOSEPH WILLIAMS ELEM. SCHOOL	Urban
1	ALACHUA	112	ABRAHAM LINCOLN MIDDLE SCHOOL	Urban
1	ALACHUA	121	HOWARD W. BISHOP MIDDLE SCHOOL	Urban
1	ALACHUA	171	ARCHER ELEMENTARY	Rural
1	ALACHUA	201	HAWTHORNE MIDDLE/HIGH SCHOOL	Rural
1	ALACHUA	281	CHESTER SHELL ELEMENTARY SCHL	Rural
1	ALACHUA	311	MYRA TERWILLIGER ELEM. SCHOOL	Urban
1	ALACHUA	341	MARJORIE KINNAN RAWLINGS ELEM	Urban
1	ALACHUA	531	NEWBERRY ELEMENTARY SCHOOL	Rural
1	ALACHUA	541	C. W. NORTON ELEMENTARY SCHOOL	Urban
1	ALACHUA	950	THE ONE ROOM SCHOOL HOUSE PROJECT	Rural
1	ALACHUA	953	CARING & SHARING LEARNING SCHOOL	Urban
1	ALACHUA	958	GENESIS PREPARATORY SCHOOL	Urban
1	ALACHUA	1012	BOULWARE SPRINGS CHARTER	Urban
3	BAY	111	MERRIAM CHERRY STREET ELEM.	Urban
3	BAY	131	LUCILLE MOORE ELEMENTARY SCHL	Urban
3	BAY	161	JINKS MIDDLE SCHOOL	Urban
3	BAY	191	OAKLAND TERRACE SCHL FOR VIS	Urban

3	BAY	251	WALLER ELEMENTARY SCHOOL	Rural
3	BAY	291	OSCAR PATTERSON ELEM MAGNET	Urban
3	BAY	471	NORTHSIDE ELEMENTARY SCHOOL	Urban
4	BRADFORD	131	LAWTEY ELEMENTARY SCHOOL	Rural
4	BRADFORD	161	BROOKER ELEMENTARY SCHOOL	Rural
4	BRADFORD	181	HAMPTON ELEMENTARY SCHOOL	Rural
5	BREVARD	91	COQUINA ELEMENTARY SCHOOL	Urban
5	BREVARD	2051	UNIVERSITY PARK ELEMENTARY SCHOOL	Urban
5	BREVARD	2081	PALM BAY ELEMENTARY SCHOOL	Urban
5	BREVARD	2121	JOHN F. TURNER, SENIOR ELEMENTARY SCHOOL	Urban
5	BREVARD	2131	COLUMBIA ELEMENTARY SCHOOL	Urban
5	BREVARD	2151	DISCOVERY ELEMENTARY SCHOOL	Urban
5	BREVARD	2161	CHRISTA MCAULIFFE ELEM. SCHOOL	Urban
5	BREVARD	2171	RIVIERA ELEMENTARY SCHOOL	Urban
5	BREVARD	2191	JUPITER ELEMENTARY SCHOOL	Urban
5	BREVARD	3061	HARBOR CITY ELEMENTARY SCHOOL	Urban
5	BREVARD	6501	PALM BAY ACADEMY CHARTER SCHOOL	Urban
5	BREVARD	6541	ODYSSEY PREPARATORY CHARTER ACADEMY	Urban
6	BROWARD	11	DEERFIELD BEACH ELEMENTARY SCHOOL	Urban
6	BROWARD	21	POMPANO BEACH MIDDLE SCHOOL	Urban
6	BROWARD	41	NORTH SIDE ELEMENTARY SCHOOL	Urban
6	BROWARD	151	RIVERLAND ELEMENTARY SCHOOL	Urban
6	BROWARD	201	BENNETT ELEMENTARY SCHOOL	Urban

6	BROWARD	211	STRANAHAN HIGH SCHOOL	Urban
6	BROWARD	221	CROISSANT PARK ELEMENTARY SCHOOL	Urban
6	BROWARD	271	DILLARD ELEMENTARY SCHOOL	Urban
6	BROWARD	321	WALKER ELEMENTARY (MAGNET)	Urban
6	BROWARD	361	BLANCHE ELY HIGH SCHOOL	Urban
6	BROWARD	371	DILLARD 6-12	Urban
6	BROWARD	391	DEERFIELD PARK ELEMENTARY SCHL	Urban
6	BROWARD	561	NORCREST ELEMENTARY SCHOOL	Urban
6	BROWARD	571	TEDDER ELEMENTARY SCHOOL	Urban
6	BROWARD	611	SUNLAND PARK ACADEMY	Urban
6	BROWARD	631	WESTWOOD HEIGHTS ELEMENTARY	Urban
6	BROWARD	751	POMPANO BEACH ELEMENTARY SCHOOL	Urban
6	BROWARD	881	NEW RIVER MIDDLE SCHOOL	Urban
6	BROWARD	891	SANDERS PARK ELEMENTARY SCHOOL	Urban
6	BROWARD	901	CRESTHAVEN ELEMENTARY SCHOOL	Urban
6	BROWARD	911	DEERFIELD BEACH MIDDLE SCHOOL	Urban
6	BROWARD	921	STEPHEN FOSTER ELEMENTARY SCHL	Urban
6	BROWARD	1071	WILLIAM DANDY MIDDLE SCHOOL	Urban
6	BROWARD	1131	PALMVIEW ELEMENTARY SCHOOL	Urban
6	BROWARD	1191	NORTH FORK ELEMENTARY SCHOOL	Urban
6	BROWARD	1671	ROBERT C. MARKHAM ELEMENTARY	Urban
6	BROWARD	1781	CYPRESS ELEMENTARY SCHOOL	Urban
6	BROWARD	1871	CRYSTAL LAKE MIDDLE SCHOOL	Urban

6	BROWARD	1951	PARK RIDGE ELEMENTARY SCHOOL	Urban
6	BROWARD	3221	CHARLES DREW ELEMENTARY SCHOOL	Urban
6	BROWARD	3291	THURGOOD MARSHALL ELEM. SCHOOL	Urban
6	BROWARD	3701	ROCK ISLAND ELEMENTARY SCHOOL	Urban
6	BROWARD	5030	SOMERSET PINES ACADEMY	Urban
6	BROWARD	5031	CHARTER SCHOOL OF EXCELLENCE	Urban
6	BROWARD	5177	INNOVATION CHARTER SCHOOL	Urban
6	BROWARD	5388	SOMERSET ACADEMY POMPANO (K-5)	Urban
6	BROWARD	5397	CHARTER SCHOOLS OF EXCELLENCE RIVERLAND	Urban
6	BROWARD	5413	SOMERSET ACADEMY KEY MIDDLE SCHOOL	Urban
7	CALHOUN	21	BLOUNTSTOWN HIGH SCHOOL	Rural
7	CALHOUN	91	CARR ELEMENTARY & MIDDLE SCHOOL	Rural
7	CALHOUN	101	ALTHA PUBLIC SCHOOL	Rural
7	CALHOUN	131	BLOUNTSTOWN ELEMENTARY SCHOOL	Rural
8	CHARLOTTE	21	SALLIE JONES ELEMENTARY SCHOOL	Urban
9	CITRUS	71	HOMOSASSA ELEMENTARY SCHOOL	Rural
10	CLAY	411	CLAY HILL ELEMENTARY SCHOOL	Rural
10	CLAY	491	J.L. WILKINSON ELEMENTARY SCHL	Rural
11	COLLIER	201	AVALON ELEMENTARY SCHOOL	Rural
11	COLLIER	341	VILLAGE OAKS ELEMENTARY SCHOOL	Rural
11	COLLIER	511	ESTATES ELEMENTARY SCHOOL	Rural
11	COLLIER	541	PALMETTO ELEMENTARY SCHOOL	Rural
11	COLLIER	631	EDEN PARK ELEMENTARY SCHOOL	Rural

12	COLUMBIA	121	FORT WHITE ELEMENTARY SCHOOL	Rural
12	COLUMBIA	123	FORT WHITE HIGH SCHOOL	Rural
12	COLUMBIA	261	COLUMBIA CITY ELEMENTARY SCHOOL	Rural
12	COLUMBIA	291	PINEMOUNT ELEMENTARY SCHOOL	Rural
13	DADE	81	LENORA BRAYNON SMITH ELEMENTARY	Urban
13	DADE	111	MAYA ANGELOU ELEMENTARY SCHOOL	Urban
13	DADE	121	AUBURNDALE ELEMENTARY SCHOOL	Urban
13	DADE	321	BISCAYNE ELEMENTARY SCHOOL	Urban
13	DADE	761	FIENBERG/FISHER K-8 CENTER	Urban
13	DADE	801	CITRUS GROVE ELEMENTARY SCHOOL	Urban
13	DADE	881	COMSTOCK ELEMENTARY SCHOOL	Urban
13	DADE	1017	MATER ACADEMY OF INTERNATIONAL STUDIES	Urban
13	DADE	1121	CORAL WAY K-8 CENTER	Urban
13	DADE	1361	FREDERICK R. DOUGLASS ELEM.	Urban
13	DADE	1441	PAUL LAURENCE DUNBAR K-8 CENTER	Urban
13	DADE	1601	EDISON PARK K-8 CENTER	Urban
13	DADE	1801	FAIRLAWN ELEMENTARY SCHOOL	Urban
13	DADE	1881	HENRY M. FLAGLER ELEM. SCHOOL	Urban
13	DADE	2002	ACADEMIR PREPARATORY ACADEMY	Urban
13	DADE	2060	THEODORE R. AND THELMA A. GIBSON CHARTER	Urban
13	DADE	2351	ENEIDA M. HARTNER ELEM. SCHOOL	Urban
13	DADE	2661	KENSINGTON PARK ELEM. SCHOOL	Urban
13	DADE	2781	KINLOCH PARK ELEMENTARY SCHOOL	Urban

13	DADE	3021	JESSE J. MCCRARY, JR. ELEMENTARY SCHOOL	Urban
13	DADE	3051	TOUSSAINT L'OUVERTURE ELEM.	Urban
13	DADE	3100	MATER ACADEMY EAST CHARTER	Urban
13	DADE	3431	PHYLLIS R. MILLER ELEM. SCHOOL	Urban
13	DADE	3501	MORNINGSIDE K-8 ACADEMY	Urban
13	DADE	3600	DOWNTOWN MIAMI CHARTER SCHOOL	Urban
13	DADE	4171	ORCHARD VILLA ELEMENTARY SCHL	Urban
13	DADE	4581	REDLAND ELEMENTARY SCHOOL	Rural
13	DADE	4681	RIVERSIDE ELEM.COMMUN.SCHL.	Urban
13	DADE	4841	SANTA CLARA ELEMENTARY SCHOOL	Urban
13	DADE	4961	SHADOWLAWN ELEMENTARY SCHOOL	Urban
13	DADE	5001	SHENANDOAH ELEMENTARY SCHOOL	Urban
13	DADE	5003	SOUTH DADE MIDDLE SCHOOL	Rural
13	DADE	5025	LINCOLN-MARTI CHARTER SCHOOL LITTLE HAVANA	Urban
13	DADE	5041	SILVER BLUFF ELEMENTARY SCHOOL	Urban
13	DADE	5410	ALPHA CHARTER OF EXCELLENCE	Urban
13	DADE	5421	SUNSET PARK ELEMENTARY SCHOOL	Urban
13	DADE	5561	FRANCES S. TUCKER ELEM. SCHOOL	Urban
13	DADE	5931	PHYLLIS WHEATLEY ELEM. SCHOOL	Urban
13	DADE	6009	MATER EAST ACADEMY MIDDLE SCHOOL	Urban
13	DADE	6011	GEORGIA JONES AYERS MIDDLE SCHOOL	Urban
13	DADE	6015	SLAM CHARTER MIDDLE SCHOOL	Urban
13	DADE	6047	MATER ACAD MIDDLE SCHOOL INTERNAT STUDIES	Urban

13	DADE	6070	ASPIRA ARTS DECO CHARTER	Urban
13	DADE	6091	CITRUS GROVE MIDDLE SCHOOL	Urban
13	DADE	6331	KINLOCH PARK MIDDLE SCHOOL	Urban
13	DADE	6361	JOSE DE DIEGO MIDDLE SCHOOL	Urban
13	DADE	6761	REDLAND MIDDLE SCHOOL	Rural
13	DADE	6841	SHENANDOAH MIDDLE SCHOOL	Urban
13	DADE	7005	ITECH@THOMAS A EDISON EDUCATIONAL CENTER	Urban
13	DADE	7016	SPORTS LEADERSHIP OF MIAMI CHARTER HIGH	Urban
13	DADE	7024	MATER ACADEMY HIGH OF INTERNATIONAL STUDIES	Urban
13	DADE	7033	LAW ENFORCEMENT OFFICERS MEMORIAL HIGH SCHOOL	Urban
13	DADE	7037	MATER ACADEMY EAST CHARTER HIGH SCHOOL	Urban
13	DADE	7056	YOUNG MEN'S PREPARATORY ACADEMY	Urban
13	DADE	7066	LBA CONSTRUCTION AND BUSINESS MANAGEMENT ACAD	Rural
13	DADE	7080	CHARTER HIGH SCHOOL OF THE AMERICAS	Urban
13	DADE	7301	MIAMI EDISON SENIOR HIGH SCHL	Urban
13	DADE	7341	MIAMI JACKSON SENIOR HIGH SCHL	Urban
13	DADE	7411	MIAMI NORTHWESTERN SENIOR HIGH	Urban
13	DADE	7461	MIAMI SENIOR HIGH SCHOOL	Urban
15	DIXIE	41	OLD TOWN ELEMENTARY SCHOOL	Rural
15	DIXIE	111	RUTH RAINS MIDDLE SCHOOL	Rural
16	DUVAL	121	WEST RIVERSIDE ELEMENTARY SCHOOL	Urban

16	DUVAL	151	BRENTWOOD ELEMENTARY SCHOOL	Urban
16	DUVAL	161	ORTEGA ELEMENTARY SCHOOL	Urban
16	DUVAL	181	CENTRAL RIVERSIDE ELEM. SCHOOL	Urban
16	DUVAL	191	RUTH N. UPSON ELEMENTARY SCHL	Urban
16	DUVAL	211	ANNIE R. MORGAN ELEMENTARY SCHOOL	Urban
16	DUVAL	331	ROBERT E. LEE HIGH SCHOOL	Urban
16	DUVAL	351	ANDREW JACKSON HIGH SCHOOL	Urban
16	DUVAL	371	HENRY F. KITE ELEMENTARY SCHOOL	Urban
16	DUVAL	451	DINSMORE ELEMENTARY SCHOOL	Urban
16	DUVAL	461	ARLINGTON ELEMENTARY SCHOOL	Urban
16	DUVAL	481	THOMAS JEFFERSON ELEMENTARY	Urban
16	DUVAL	511	WHITEHOUSE ELEMENTARY SCHOOL	Urban
16	DUVAL	591	GARDEN CITY ELEMENTARY SCHOOL	Urban
16	DUVAL	641	HOGAN-SPRING GLEN ELEMENTARY SCHOOL	Urban
16	DUVAL	661	ALFRED I. DUPONT MIDDLE SCHOOL	Urban
16	DUVAL	681	VENETIA ELEMENTARY SCHOOL	Urban
16	DUVAL	691	LAKE SHORE MIDDLE SCHOOL	Urban
16	DUVAL	701	NORTH SHORE ELEMENTARY	Urban
16	DUVAL	721	SPRING PARK ELEMENTARY SCHOOL	Urban
16	DUVAL	741	LAKE FOREST ELEMENTARY SCHOOL	Urban
16	DUVAL	761	SOUTHSIDE ESTATES ELEM. SCHOOL	Urban
16	DUVAL	771	HYDE PARK ELEMENTARY SCHOOL	Urban
16	DUVAL	781	BILTMORE ELEMENTARY SCHOOL	Urban

16	DUVAL	791	RAMONA BOULEVARD ELEMENTARY SCHOOL	Urban
16	DUVAL	821	LOVE GROVE ELEMENTARY SCHOOL	Urban
16	DUVAL	831	SAN JOSE ELEMENTARY SCHOOL	Urban
16	DUVAL	841	BAYVIEW ELEMENTARY SCHOOL	Urban
16	DUVAL	851	LAKE LUCINA ELEMENTARY SCHOOL	Urban
16	DUVAL	861	TERRY PARKER HIGH SCHOOL	Urban
16	DUVAL	871	ENGLEWOOD ELEMENTARY SCHOOL	Urban
16	DUVAL	891	WOODLAND ACRES ELEMENTARY SCHL	Urban
16	DUVAL	901	ENGLEWOOD HIGH SCHOOL	Urban
16	DUVAL	911	SALLYE B. MATHIS ELEMENTARY SCHOOL	Urban
16	DUVAL	931	PINEDALE ELEMENTARY SCHOOL	Urban
16	DUVAL	941	WINDY HILL ELEMENTARY SCHOOL	Urban
16	DUVAL	951	RUTLEDGE H. PEARSON ELEMENTARY SCHOOL	Urban
16	DUVAL	961	JEAN RIBAUTL HIGH SCHOOL	Urban
16	DUVAL	971	CEDAR HILLS ELEMENTARY SCHOOL	Urban
16	DUVAL	981	TIMUCUAN ELEMENTARY SCHOOL	Urban
16	DUVAL	991	HIGHLANDS ELEMENTARY SCHOOL	Urban
16	DUVAL	1061	LONG BRANCH ELEMENTARY SCHOOL	Urban
16	DUVAL	1161	SADIE T. TILLIS ELEMENTARY SCHOOL	Urban
16	DUVAL	1231	DUVAL CHARTER SCHOLARS ACADEMY	Urban
16	DUVAL	1241	SAINT CLAIR EVANS ACADEMY	Urban
16	DUVAL	1281	SUSIE E. TOLBERT ELEMENTARY SCHOOL	Urban
16	DUVAL	1421	CHAFFEE TRAIL ELEMENTARY	Urban

16	DUVAL	1461	MATTHEW W. GILBERT MIDDLE SCHOOL	Urban
16	DUVAL	1542	JOHN E. FORD K-8 SCHOOL	Urban
16	DUVAL	1551	NORTHWESTERN MIDDLE SCHOOL	Urban
16	DUVAL	1561	YWLA/YMLA	Urban
16	DUVAL	1581	GEORGE WASHINGTON CARVER ELEM.	Urban
16	DUVAL	1621	R. V. DANIELS ELEMENTARY SCHL	Urban
16	DUVAL	1631	RUFUS E. PAYNE ELEMENTARY SCHOOL	Urban
16	DUVAL	1651	WILLIAM M. RAINES HIGH SCHOOL	Urban
16	DUVAL	1661	CARTER G. WOODSON ELEM. SCHOOL	Urban
16	DUVAL	1691	S. A. HULL ELEMENTARY SCHOOL	Urban
16	DUVAL	2021	REYNOLDS LANE ELEMENTARY SCHL	Urban
16	DUVAL	2031	KINGS TRAIL ELEMENTARY SCHOOL	Urban
16	DUVAL	2051	PICKETT ELEMENTARY SCHOOL	Rural
16	DUVAL	2061	BROOKVIEW ELEMENTARY SCHOOL	Urban
16	DUVAL	2072	J. E. B. STUART MIDDLE SCHOOL	Urban
16	DUVAL	2081	PARKWOOD HEIGHTS ELEMENTARY SCHOOL	Urban
16	DUVAL	2091	HOLIDAY HILL ELEMENTARY SCHOOL	Urban
16	DUVAL	2111	SOUTHSIDE MIDDLE SCHOOL	Urban
16	DUVAL	2121	JEAN RIBAUTL MIDDLE SCHOOL	Urban
16	DUVAL	2131	ARLINGTON MIDDLE SCHOOL	Urban
16	DUVAL	2161	JEFFERSON DAVIS MIDDLE SCHOOL	Urban
16	DUVAL	2171	DON BREWER ELEMENTARY SCHOOL	Urban
16	DUVAL	2191	JOSEPH STILWELL MIDDLE SCHOOL	Urban

16	DUVAL	2201	MARTIN LUTHER KING, JR ELEMENTARY SCHOOL	Urban
16	DUVAL	2211	NORMANDY VILLAGE ELEMENTARY SCHOOL	Urban
16	DUVAL	2221	GREENFIELD ELEMENTARY SCHOOL	Urban
16	DUVAL	2241	SAMUEL W. WOLFSON HIGH SCHOOL	Urban
16	DUVAL	2261	CRYSTAL SPRINGS ELEM. SCHOOL	Urban
16	DUVAL	2271	MAYPORT ELEMENTARY SCHOOL	Urban
16	DUVAL	2291	JACKSONVILLE HEIGHTS ELEMENTARY SCHOOL	Urban
16	DUVAL	2301	BEAUCLERC ELEMENTARY SCHOOL	Urban
16	DUVAL	2311	KERNAN TRAIL ELEMENTARY SCHOOL	Urban
16	DUVAL	2321	CHIMNEY LAKES ELEMENTARY SCHL	Urban
16	DUVAL	2331	LONE STAR ELEMENTARY SCHOOL	Urban
16	DUVAL	2341	STONEWALL JACKSON ELEM. SCHOOL	Urban
16	DUVAL	2351	FORT CAROLINE ELEMENTARY SCHL	Urban
16	DUVAL	2361	MAMIE AGNES JONES ELEMENTARY SCHOOL	Rural
16	DUVAL	2381	FORT CAROLINE MIDDLE SCHOOL	Urban
16	DUVAL	2401	ARLINGTON HEIGHTS ELEMENTARY SCHOOL	Urban
16	DUVAL	2411	WESTSIDE HIGH SCHOOL	Urban
16	DUVAL	2431	GREGORY DRIVE ELEMENTARY SCHOOL	Urban
16	DUVAL	2441	HIGHLANDS MIDDLE SCHOOL	Urban
16	DUVAL	2451	CROWN POINT ELEMENTARY SCHOOL	Urban
16	DUVAL	2481	EDWARD H. WHITE HIGH SCHOOL	Urban
16	DUVAL	2501	PINE ESTATES ELEMENTARY SCHOOL	Urban
16	DUVAL	2551	ENTERPRISE LEARNING ACADEMY	Urban

16	DUVAL	2561	LANDMARK MIDDLE SCHOOL	Urban
16	DUVAL	2621	ANDREW A. ROBINSON ELEMENTARY SCHOOL	Urban
16	DUVAL	2691	BISCAYNE ELEMENTARY SCHOOL	Urban
16	DUVAL	2701	OCEANWAY ELEMENTARY SCHOOL	Urban
16	DUVAL	2741	WESTVIEW K-8	Urban
16	DUVAL	2851	A. PHILIP RANDOLPH ACADEMIES	Urban
17	ESCAMBIA	111	BRENTWOOD ELEMENTARY SCHOOL	Urban
17	ESCAMBIA	291	FERRY PASS ELEMENTARY SCHOOL	Urban
17	ESCAMBIA	361	MONTCLAIR ELEMENTARY SCHOOL	Urban
17	ESCAMBIA	471	O. J. SEMMES ELEMENTARY SCHOOL	Urban
17	ESCAMBIA	601	J. H. WORKMAN MIDDLE SCHOOL	Urban
17	ESCAMBIA	602	REINHARDT HOLM ELEMENTARY SCHOOL	Urban
17	ESCAMBIA	852	WOODHAM MIDDLE SCHOOL	Urban
17	ESCAMBIA	1281	GLOBAL LEARNING ACADEMY	Urban
19	FRANKLIN	91	FRANKLIN COUNTY SCHOOL	Rural
20	GADSDEN	41	GEORGE W. MUNROE ELEM. SCHOOL	Rural
20	GADSDEN	51	WEST GADSDEN HIGH SCHOOL	Rural
20	GADSDEN	71	EAST GADSDEN HIGH SCHOOL	Rural
20	GADSDEN	91	HAVANA MAGNET SCHOOL	Rural
20	GADSDEN	141	GREENSBORO ELEMENTARY SCHOOL	Rural
20	GADSDEN	151	CHATTAHOOCHEE ELEMENTARY SCHL	Rural
20	GADSDEN	171	GRETNA ELEMENTARY SCHOOL	Rural
20	GADSDEN	191	ST. JOHNS ELEMENTARY SCHOOL	Rural

20	GADSDEN	211	JAMES A. SHANKS MIDDLE SCHOOL	Rural
20	GADSDEN	9104	CROSSROAD ACADEMY	Rural
21	GILCHRIST	21	TRENTON HIGH SCHOOL	Rural
21	GILCHRIST	31	BELL HIGH SCHOOL	Rural
21	GILCHRIST	32	BELL ELEMENTARY SCHOOL	Rural
21	GILCHRIST	41	TRENTON ELEMENTARY SCHOOL	Rural
22	GLADES	55	WEST GLADES SCHOOL	Rural
24	HAMILTON	32	HAMILTON COUNTY HIGH SCHOOL	Rural
24	HAMILTON	41	NORTH HAMILTON ELEMENTARY SCHOOL	Rural
24	HAMILTON	51	SOUTH HAMILTON ELEMENTARY SCHOOL	Rural
25	HARDEE	21	HARDEE SENIOR HIGH SCHOOL	Rural
26	HENDRY	20	LABELLE MIDDLE SCHOOL	Rural
26	HENDRY	161	WESTSIDE ELEMENTARY SCHOOL	Rural
26	HENDRY	191	COUNTRY OAKS ELEMENTARY SCHOOL	Rural
27	HERNANDO	171	EASTSIDE ELEMENTARY SCHOOL	Rural
27	HERNANDO	241	D. S. PARROTT MIDDLE SCHOOL	Rural
27	HERNANDO	252	PINE GROVE ELEMENTARY SCHOOL	Rural
27	HERNANDO	253	WEST HERNANDO MIDDLE SCHOOL	Rural
27	HERNANDO	271	MOTON ELEMENTARY SCHOOL	Rural
28	HIGHLANDS	15	MEMORIAL ELEMENTARY SCHOOL	Rural
28	HIGHLANDS	31	LAKE COUNTRY ELEMENTARY SCHOOL	Rural
28	HIGHLANDS	51	WOODLAWN ELEMENTARY SCHOOL	Urban
29	HILLSBOROUGH	41	ADAMS MIDDLE SCHOOL	Urban

29	HILLSBOROUGH	42	FOREST HILLS ELEMENTARY SCHOOL	Urban
29	HILLSBOROUGH	51	SHEEHY ELEMENTARY SCHOOL	Urban
29	HILLSBOROUGH	55	SHIELDS MIDDLE SCHOOL	Rural
29	HILLSBOROUGH	81	ALEXANDER ELEMENTARY SCHOOL	Urban
29	HILLSBOROUGH	110	REDDICK ELEMENTARY SCHOOL	Rural
29	HILLSBOROUGH	119	MOSI PARTNERSHIP ELEMENTARY SCHOOL	Urban
29	HILLSBOROUGH	120	KIMBELL ELEMENTARY SCHOOL	Urban
29	HILLSBOROUGH	123	PATRICIA SULLIVAN METROPOLITAN MINISTRIES	Urban
29	HILLSBOROUGH	261	BING ELEMENTARY SCHOOL	Rural
29	HILLSBOROUGH	282	JUST ELEMENTARY SCHOOL	Urban
29	HILLSBOROUGH	441	BROWARD ELEMENTARY SCHOOL	Urban
29	HILLSBOROUGH	681	CAHOON ELEMENTARY MAGNET SCHOOL	Urban
29	HILLSBOROUGH	682	VAN BUREN MIDDLE SCHOOL	Urban
29	HILLSBOROUGH	761	CHAMBERLAIN HIGH SCHOOL	Urban
29	HILLSBOROUGH	771	CHIARAMONTE ELEMENTARY SCHOOL	Urban
29	HILLSBOROUGH	881	CLEVELAND ELEMENTARY SCHOOL	Urban
29	HILLSBOROUGH	962	LOCKHART ELEMENTARY MAGNET SCHOOL	Urban
29	HILLSBOROUGH	1051	CYPRESS CREEK ELEMENTARY SCHL	Rural
29	HILLSBOROUGH	1081	DESOTO ELEMENTARY SCHOOL	Urban
29	HILLSBOROUGH	1281	DUNBAR ELEMENTARY MAGNET SCHOOL	Urban
29	HILLSBOROUGH	1361	EDISON ELEMENTARY SCHOOL	Urban
29	HILLSBOROUGH	1481	FOSTER ELEMENTARY SCHOOL	Urban
29	HILLSBOROUGH	1482	SLIGH MIDDLE SCHOOL	Urban

29	HILLSBOROUGH	1761	GRAHAM ELEMENTARY SCHOOL	Urban
29	HILLSBOROUGH	2291	KNIGHTS ELEMENTARY SCHOOL	Rural
29	HILLSBOROUGH	2361	LANIER ELEMENTARY SCHOOL	Urban
29	HILLSBOROUGH	2362	MONROE MIDDLE SCHOOL	Urban
29	HILLSBOROUGH	2401	LEE ELEMENTARY MAGNET SCHOOL	Urban
29	HILLSBOROUGH	2651	MADISON MIDDLE SCHOOL	Urban
29	HILLSBOROUGH	2871	MCDONALD ELEMENTARY SCHOOL	Rural
29	HILLSBOROUGH	2882	MEMORIAL MIDDLE SCHOOL	Urban
29	HILLSBOROUGH	2961	MENDENHALL ELEMENTARY SCHOOL	Urban
29	HILLSBOROUGH	3001	FERRELL MIDDLE MAGNET SCHOOL	Urban
29	HILLSBOROUGH	3161	OAK GROVE ELEMENTARY SCHL	Urban
29	HILLSBOROUGH	3201	OAK PARK ELEMENTARY SCHOOL	Urban
29	HILLSBOROUGH	3362	PINECREST ELEMENTARY SCHOOL	Rural
29	HILLSBOROUGH	3381	PIZZO ELEMENTARY SCHOOL	Urban
29	HILLSBOROUGH	3521	POTTER ELEMENTARY SCHOOL	Urban
29	HILLSBOROUGH	3784	JEFFERSON HIGH SCHOOL	Urban
29	HILLSBOROUGH	3921	SEMINOLE ELEMENTARY SCHOOL	Urban
29	HILLSBOROUGH	3951	SHAW ELEMENTARY SCHOOL	Urban
29	HILLSBOROUGH	3961	SHORE ELEMENTARY MAGNET SCHOOL	Urban
29	HILLSBOROUGH	4161	SPRINGHEAD ELEMENTARY SCHOOL	Rural
29	HILLSBOROUGH	4201	SULPHUR SPRINGS K-8 SCHOOL	Urban
29	HILLSBOROUGH	4241	TAMPA BAY BOULEVARD ELEM. SCHL	Urban
29	HILLSBOROUGH	4601	WASHINGTON ELEMENTARY SCHOOL	Urban

29	HILLSBOROUGH	4681	WEST SHORE ELEMENTARY SCHOOL	Urban
29	HILLSBOROUGH	4722	WEST TAMPA ELEMENTARY SCHOOL	Urban
29	HILLSBOROUGH	4747	JAMES ELEMENTARY SCHOOL	Urban
29	HILLSBOROUGH	4921	WITTER ELEMENTARY SCHOOL	Urban
29	HILLSBOROUGH	5041	YOUNG MIDDLE MAGNET SCHOOL	Urban
29	HILLSBOROUGH	6608	VILLAGE OF EXCEL. ACAD.	Urban
29	HILLSBOROUGH	6621	LEGACY PREPARATORY ACADEMY	Urban
29	HILLSBOROUGH	6623	WALTON ACADEMY	Urban
29	HILLSBOROUGH	6643	COMMUNITY CHARTER SCHOOL OF EXCELLENCE	Urban
29	HILLSBOROUGH	6657	NEW SPRINGS SCHOOLS	Urban
29	HILLSBOROUGH	6666	KINGS KIDS ACADEMY OF HEALTH SCIENCES	Urban
29	HILLSBOROUGH	7680	VILLAGE OF EXCELLENCE ACADEMY MIDDLE SCHOOL	Urban
30	HOLMES	61	PONCE DE LEON HIGH SCHOOL	Rural
30	HOLMES	111	PONCE DE LEON ELEM. SCHOOL	Rural
30	HOLMES	121	BONIFAY ELEMENTARY SCHOOL	Rural
31	INDIAN RIVER	121	PELICAN ISLAND ELEMENTARY SCHOOL	Urban
31	INDIAN RIVER	191	SEBASTIAN ELEMENTARY SCHOOL	Urban
32	JACKSON	181	GRAND RIDGE SCHOOL	Rural
32	JACKSON	271	COTTONDALE ELEMENTARY SCHOOL	Rural
33	JEFFERSON	21	JEFFERSON COUNTY MIDDLE/HIGH SCHOOL	Rural
33	JEFFERSON	111	JEFFERSON COUNTY ELEM. SCHOOL	Rural
34	LAFAYETTE	21	LAFAYETTE HIGH SCHOOL	Rural

34	LAFAYETTE	22	LAFAYETTE ELEMENTARY SCHOOL	Rural
35	LAKE	67	SAWGRASS BAY ELEMENTARY SCHOOL	Rural
35	LAKE	251	OAK PARK MIDDLE SCHOOL	Rural
35	LAKE	291	LEESBURG ELEMENTARY SCHOOL	Rural
35	LAKE	631	SPRING CREEK CHARTER SCHOOL	Rural
36	LEE	81	ALLEN PARK ELEMENTARY SCHOOL	Urban
36	LEE	91	THE ALVA SCHOOL	Rural
36	LEE	93	RIVER HALL ELEMENTARY SCHOOL	Rural
36	LEE	161	PAUL LAURENCE DUNBAR MIDDLE SCHOOL	Urban
36	LEE	162	RAY V. POTTORF ELEMENTARY SCHOOL	Urban
36	LEE	181	EDGEWOOD ACADEMY	Urban
36	LEE	191	EDISON PARK CREATIVE AND EXPRESSIVE ARTS	Urban
36	LEE	211	FORT MYERS MIDDLE ACADEMY	Urban
36	LEE	231	HARNS MARSH ELEMENTARY SCHOOL	Rural
36	LEE	251	FRANKLIN PARK ELEMENTARY SCHOOL	Urban
36	LEE	331	ORANGEWOOD ELEMENTARY SCHOOL	Urban
36	LEE	341	PINE ISLAND ELEMENTARY SCHOOL	Rural
36	LEE	461	PATRIOT ELEMENTARY SCHOOL	Urban
36	LEE	471	TREELINE ELEMENTARY SCHOOL	Urban
36	LEE	491	ISLAND COAST HIGH SCHOOL	Urban
36	LEE	571	CALOOSA ELEMENTARY SCHOOL	Urban
36	LEE	572	CALOOSA MIDDLE SCHOOL	Urban
36	LEE	582	HARNS MARSH MIDDLE SCHOOL	Rural

36	LEE	592	JAMES STEPHENS INTERNATIONAL ACADEMY	Urban
36	LEE	641	PELICAN ELEMENTARY SCHOOL	Urban
36	LEE	712	HECTOR A. CAFFERATA JR ELEMENTARY SCHOOL	Urban
36	LEE	722	MARINER MIDDLE SCHOOL	Urban
36	LEE	751	SKYLINE ELEMENTARY SCHOOL	Urban
36	LEE	771	DIPLOMAT ELEMENTARY SCHOOL	Urban
36	LEE	772	DIPLOMAT MIDDLE SCHOOL	Urban
36	LEE	781	COLONIAL ELEMENTARY SCHOOL	Urban
36	LEE	831	DUNBAR HIGH SCHOOL	Urban
36	LEE	4231	UNITY CHARTER SCHOOL OF CAPE CORAL	Urban
36	LEE	4241	UNITY CHARTER SCHOOL OF FORT MYERS	Urban
37	LEON	41	FRANK HARTSFIELD ELEM. SCHOOL	Urban
37	LEON	51	JAMES RICKARDS HIGH SCHOOL	Urban
37	LEON	71	SABAL PALM ELEMENTARY SCHOOL	Urban
37	LEON	91	RUEDIGER ELEMENTARY SCHOOL	Urban
37	LEON	161	AMOS P. GODBY HIGH SCHOOL	Urban
37	LEON	171	OAK RIDGE ELEMENTARY SCHOOL	Urban
37	LEON	222	GRIFFIN MIDDLE SCHOOL	Urban
37	LEON	231	JOHN G RILEY ELEMENTARY SCHOOL	Urban
37	LEON	291	R. FRANK NIMS MIDDLE SCHOOL	Urban
37	LEON	311	PINEVIEW ELEMENTARY SCHOOL	Urban
37	LEON	401	ASTORIA PARK ELEMENTARY SCHOOL	Urban
37	LEON	431	SEALEY ELEMENTARY SCHOOL	Urban

37	LEON	441	APALACHEE ELEMENTARY SCHOOL	Urban
37	LEON	491	CHAIRES ELEMENTARY SCHOOL	Rural
37	LEON	501	SPRINGWOOD ELEMENTARY SCHOOL	Urban
37	LEON	561	FORT BRADEN SCHOOL	Rural
37	LEON	1181	BOND ELEMENTARY SCHOOL	Urban
38	LEVY	21	BRONSON MIDDLE/HIGH SCHOOL	Rural
38	LEVY	41	CEDAR KEY HIGH SCHOOL	Rural
38	LEVY	51	CHIEFLAND MIDDLE HIGH SCHOOL	Rural
38	LEVY	60	WHISPERING WINDS CHARTER SCHOOL	Rural
38	LEVY	62	NATURE COAST MIDDLE SCHOOL	Rural
38	LEVY	111	YANKEETOWN SCHOOL	Rural
38	LEVY	231	WILLISTON ELEMENTARY SCHOOL	Rural
38	LEVY	241	CHIEFLAND ELEMENTARY SCHOOL	Rural
38	LEVY	1011	BRONSON ELEMENTARY SCHOOL	Rural
39	LIBERTY	31	W. R. TOLAR K-8 SCHOOL	Rural
39	LIBERTY	41	HOSFORD ELEM. JR. HIGH SCHOOL	Rural
40	MADISON	11	MADISON COUNTY HIGH SCHOOL	Rural
40	MADISON	41	MADISON COUNTY CENTRAL SCHOOL	Rural
40	MADISON	91	GREENVILLE ELEMENTARY SCHOOL	Rural
40	MADISON	101	LEE ELEMENTARY SCHOOL	Rural
40	MADISON	111	PINETTA ELEMENTARY SCHOOL	Rural
41	MANATEE	51	BALLARD ELEMENTARY SCHOOL	Urban
41	MANATEE	151	MANATEE ELEMENTARY SCHOOL	Urban

41	MANATEE	541	BLACKBURN ELEMENTARY SCHOOL	Rural
41	MANATEE	581	W. D. SUGG MIDDLE SCHOOL	Urban
41	MANATEE	601	H. S. MOODY ELEMENTARY SCHOOL	Urban
41	MANATEE	671	SEA BREEZE ELEMENTARY SCHOOL	Urban
42	MARION	162	REDDICK-COLLIER ELEM. SCHOOL	Rural
42	MARION	181	EAST MARION ELEMENTARY SCHOOL	Rural
42	MARION	211	FESSENDEN ELEMENTARY SCHOOL	Rural
42	MARION	221	FT. KING MIDDLE SCHOOL	Urban
42	MARION	251	WARD-HIGHLANDS ELEMENTARY SCHL	Urban
42	MARION	341	OAKCREST ELEMENTARY SCHOOL	Urban
42	MARION	381	SPARR ELEMENTARY SCHOOL	Rural
42	MARION	391	SOUTH OCALA ELEMENTARY SCHOOL	Urban
42	MARION	401	STANTON-WEIRSDALE ELEMENTARY	Rural
42	MARION	431	WYOMINA PARK ELEMENTARY SCHOOL	Urban
42	MARION	491	NORTH MARION MIDDLE SCHOOL	Rural
42	MARION	501	LAKE WEIR HIGH SCHOOL	Rural
42	MARION	541	OCALA SPRINGS ELEMENTARY SCHOOL	Rural
42	MARION	551	SHADY HILL ELEMENTARY SCHOOL	Rural
42	MARION	591	HARBOUR VIEW ELEMENTARY SCHOOL	Rural
42	MARION	621	ROMEO ELEMENTARY SCHOOL	Rural
42	MARION	641	DUNNELLON ELEMENTARY SCHOOL	Rural
42	MARION	651	COLLEGE PARK ELEMENTARY SCHOOL	Urban
42	MARION	681	SADDLEWOOD ELEMENTARY SCHOOL	Urban

42	MARION	711	HAMMETT BOWEN JR. ELEMENTARY SCHOOL	Rural
42	MARION	741	LEGACY ELEMENTARY SCHOOL	Rural
42	MARION	9680	MCINTOSH AREA SCHOOL	Rural
42	MARION	9690	FRANCIS MARION MILITARY ACADEMY	Urban
42	MARION	9695	OCALI CHARTER MIDDLE SCHOOL	Urban
43	MARTIN	221	INDIANTOWN MIDDLE SCHOOL	Rural
46	OKALOOSA	31	ANNETTE P. EDWINS ELEM. SCHOOL	Urban
48	ORANGE	33	RENAISSANCE CHARTER SCHOOL AT GOLDENROD	Urban
48	ORANGE	53	PASSPORT CHARTER	Urban
48	ORANGE	62	NAP FORD COMMUNITY CHARTER	Urban
48	ORANGE	65	UCP ORANGE CHARTER	Urban
48	ORANGE	80	LEGENDS ACADEMY CHARTER	Urban
48	ORANGE	151	MEMORIAL MIDDLE	Urban
48	ORANGE	155	PINECREST PREPARATORY CHARTER	Urban
48	ORANGE	181	FERN CREEK ELEMENTARY	Urban
48	ORANGE	221	KALEY LAKE COMO ELEMENTARY	Urban
48	ORANGE	236	EAGLES NEST ELEMENTARY	Urban
48	ORANGE	461	ZELLWOOD ELEMENTARY	Rural
48	ORANGE	581	COLLEGE PARK MIDDLE	Urban
48	ORANGE	611	AZALEA PARK ELEMENTARY	Urban
48	ORANGE	641	ROCK LAKE ELEMENTARY	Urban
48	ORANGE	681	ENGELWOOD ELEMENTARY	Urban
48	ORANGE	701	CATALINA ELEMENTARY	Urban

48	ORANGE	781	DOVER SHORES ELEMENTARY	Urban
48	ORANGE	891	MCCOY ELEMENTARY	Urban
48	ORANGE	971	VENTURA ELEMENTARY	Urban
48	ORANGE	1111	JACKSON MIDDLE	Urban
48	ORANGE	1271	ROSEMONT ELEMENTARY	Urban
48	ORANGE	1331	ORANGE CENTER ELEMENTARY	Urban
48	ORANGE	1421	IVEY LANE ELEMENTARY	Urban
48	ORANGE	1492	MILLENNIA GARDENS ELEMENTARY	Urban
48	ORANGE	1553	MILLENNIA ELEMENTARY	Urban
48	ORANGE	1621	SHINGLE CREEK ELEMENTARY	Urban
48	ORANGE	1703	SOUTH CREEK MIDDLE	Rural
48	ORANGE	5711	JONES HIGH	Urban
48	ORANGE	5841	ECCLESTON ELEMENTARY	Urban
48	ORANGE	5861	WASHINGTON SHORES ELEMENTARY	Urban
48	ORANGE	5871	CARVER MIDDLE	Urban
49	OSCEOLA	41	DISCOVERY INTERMEDIATE SCHOOL	Rural
49	OSCEOLA	42	KISSIMMEE ELEMENTARY SCHOOL	Urban
49	OSCEOLA	61	CENTRAL AVENUE ELEMENTARY SCHL	Urban
49	OSCEOLA	71	HIGHLANDS ELEMENTARY SCHOOL	Urban
49	OSCEOLA	81	OSCEOLA HIGH SCHOOL	Urban
49	OSCEOLA	91	DENN JOHN MIDDLE SCHOOL	Urban
49	OSCEOLA	101	THACKER AVENUE ELEM FOR INTERNATIONAL STUDIES	Urban

49	OSCEOLA	149	RENAISSANCE CHARTER SCHOOL AT POINCIANA	Rural
49	OSCEOLA	171	RENAISSANCE CHARTER SCHOOL AT TAPESTRY	Urban
49	OSCEOLA	251	KISSIMMEE MIDDLE SCHOOL	Urban
49	OSCEOLA	300	KOA ELEMENTARY SCHOOL	Rural
49	OSCEOLA	302	WESTSIDE K-8 SCHOOL	Rural
49	OSCEOLA	501	HICKORY TREE ELEMENTARY SCHOOL	Rural
49	OSCEOLA	701	MILL CREEK ELEMENTARY SCHOOL	Urban
49	OSCEOLA	842	LIBERTY HIGH SCHOOL	Rural
49	OSCEOLA	851	CYPRESS ELEMENTARY SCHOOL	Urban
49	OSCEOLA	866	KISSIMMEE CHARTER ACADEMY	Urban
49	OSCEOLA	901	POINCIANA ACADEMY OF FINE ARTS	Rural
49	OSCEOLA	933	NEPTUNE ELEMENTARY SCHOOL	Rural
49	OSCEOLA	957	CHESTNUT ELEM SCHOOL SCIENCE AND ENGINEERING	Rural
50	PALM BEACH	71	JUPITER ELEMENTARY SCHOOL	Urban
50	PALM BEACH	271	NORTHMORE ELEMENTARY SCHOOL	Urban
50	PALM BEACH	291	NORTHBORO ELEMENTARY SCHOOL	Urban
50	PALM BEACH	311	ROOSEVELT MIDDLE SCHOOL	Urban
50	PALM BEACH	341	ROOSEVELT ELEMENTARY SCHOOL	Urban
50	PALM BEACH	351	WESTWARD ELEMENTARY SCHOOL	Urban
50	PALM BEACH	361	U. B. KINSEY/PALMVIEW ELEM.	Urban
50	PALM BEACH	531	BELVEDERE ELEMENTARY SCHOOL	Urban
50	PALM BEACH	541	CONNISTON MIDDLE SCHOOL	Urban

50	PALM BEACH	561	PALMETTO ELEMENTARY SCHOOL	Urban
50	PALM BEACH	581	FOREST HILL COMMUNITY HIGH SCH	Urban
50	PALM BEACH	842	TURNING POINTS ACADEMY	Urban
50	PALM BEACH	871	PLUMOSA SCHOOL OF THE ARTS	Urban
50	PALM BEACH	911	PINE GROVE ELEMENTARY SCHOOL	Urban
50	PALM BEACH	1241	GOVE ELEMENTARY SCHOOL	Rural
50	PALM BEACH	1831	K. E. CUNNINGHAM/CANAL POINT ELEMENTARY	Rural
50	PALM BEACH	1851	PALM BEACH LAKES HIGH SCHOOL	Urban
50	PALM BEACH	1981	BEAR LAKES MIDDLE SCHOOL	Urban
50	PALM BEACH	2041	CARVER MIDDLE SCHOOL	Urban
50	PALM BEACH	2101	EGRET LAKE ELEMENTARY SCHOOL	Urban
50	PALM BEACH	2351	ORCHARD VIEW ELEMENTARY SCHOOL	Urban
50	PALM BEACH	2591	PLEASANT CITY ELEMENTARY SCHOOL	Urban
50	PALM BEACH	2701	JEAGA MIDDLE SCHOOL	Urban
50	PALM BEACH	2801	PALM BEACH MARITIME ACADEMY	Urban
50	PALM BEACH	2811	VILLAGE ACADEMY ON THE ART & SARA JO KOBACKER	Urban
50	PALM BEACH	3382	GLADES ACADEMY, INC	Rural
50	PALM BEACH	4037	LEARNING PATH ACADEMY	Urban
50	PALM BEACH	4080	UNIVERSITY PREPARATORY ACADEMY PALM BEACH	Urban
51	PASCO	451	DR. MARY GIELLA ELEMENTARY SCHOOL	Rural
52	PINELLAS	121	AZALEA MIDDLE SCHOOL	Urban
52	PINELLAS	141	LARGO MIDDLE SCHOOL	Urban

52	PINELLAS	161	BAY POINT ELEMENTARY SCHOOL	Urban
52	PINELLAS	171	BAY POINT MIDDLE SCHOOL	Urban
52	PINELLAS	271	BEAR CREEK ELEMENTARY SCHOOL	Urban
52	PINELLAS	371	BELLEAIR ELEMENTARY SCHOOL	Urban
52	PINELLAS	481	CAMPBELL PARK ELEMENTARY SCHOOL	Urban
52	PINELLAS	1131	EISENHOWER ELEMENTARY SCHOOL	Urban
52	PINELLAS	1211	FAIRMOUNT PARK ELEMENTARY SCHL	Urban
52	PINELLAS	1261	JOHN M. SEXTON ELEMENTARY SCHL	Urban
52	PINELLAS	1341	FRONTIER ELEMENTARY SCHOOL	Urban
52	PINELLAS	1361	FUGUITT ELEMENTARY SCHOOL	Urban
52	PINELLAS	1421	LYNCH ELEMENTARY SCHOOL	Urban
52	PINELLAS	2021	LAKWOOD ELEMENTARY SCHOOL	Urban
52	PINELLAS	2281	MAXIMO ELEMENTARY SCHOOL	Urban
52	PINELLAS	2321	MEADOWLAWN MIDDLE SCHOOL	Urban
52	PINELLAS	2371	MELROSE ELEMENTARY SCHOOL	Urban
52	PINELLAS	2431	MILDRED HELMS ELEM. SCHOOL	Urban
52	PINELLAS	2531	MOUNT VERNON ELEMENTARY SCHOOL	Urban
52	PINELLAS	2791	NORTHWEST ELEMENTARY SCHOOL	Urban
52	PINELLAS	2861	OAK GROVE MIDDLE SCHOOL	Urban
52	PINELLAS	3461	PONCE DE LEON ELEMENTARY SCHOOL	Urban
52	PINELLAS	3871	SANDY LANE ELEMENTARY SCHOOL	Urban
52	PINELLAS	3961	SEVENTY-FOURTH ST. ELEMENTARY	Urban
52	PINELLAS	4061	JOHN HOPKINS MIDDLE SCHOOL	Urban

52	PINELLAS	4121	SKYCREST ELEMENTARY SCHOOL	Urban
52	PINELLAS	4591	NEW HEIGHTS ELEMENTARY SCHOOL	Urban
52	PINELLAS	4611	TYRONE MIDDLE SCHOOL	Urban
52	PINELLAS	4771	WESTGATE ELEMENTARY SCHOOL	Urban
52	PINELLAS	4931	WOODLAWN ELEMENTARY SCHOOL	Urban
52	PINELLAS	6361	KINGS HIGHWAY ELEMENTARY MAGNET SCHOOL	Urban
53	POLK	51	SOUTHWEST MIDDLE SCHOOL	Urban
53	POLK	61	CARLTON PALMORE ELEM. SCHOOL	Urban
53	POLK	131	DIXIELAND ELEMENTARY SCHOOL	Urban
53	POLK	151	PHILIP O'BRIEN ELEMENTARY SCHOOL	Urban
53	POLK	201	NORTH LAKELAND ELEMENTARY SCHOOL OF CHOICE	Urban
53	POLK	231	SOUTHWEST ELEMENTARY SCHOOL	Urban
53	POLK	341	SANDHILL ELEMENTARY SCHOOL	Rural
53	POLK	491	DENISON MIDDLE SCHOOL	Urban
53	POLK	591	ELBERT ELEMENTARY SCHOOL	Urban
53	POLK	601	FRED G. GARNER ELEMENTARY SCHL	Urban
53	POLK	611	INWOOD ELEMENTARY SCHOOL	Urban
53	POLK	1041	ALTURAS ELEMENTARY SCHOOL	Rural
53	POLK	1151	KINGSFORD ELEMENTARY SCHOOL	Rural
53	POLK	1271	SLEEPY HILL ELEMENTARY SCHOOL	Urban
53	POLK	1611	LAUREL ELEMENTARY SCHOOL	Rural
53	POLK	1662	LAKE ALFRED-ADDAIR MIDDLE SCHOOL	Rural

53	POLK	1801	FROSTPROOF MIDDLE/SENIOR HIGH	Rural
53	POLK	1861	ROSABELLE W. BLAKE ACADEMY	Urban
53	POLK	1901	SOCRUM ELEMENTARY SCHOOL	Rural
53	POLK	1921	BEN HILL GRIFFIN JR ELEMENTARY SCHOOL	Rural
53	POLK	1941	LOUGHMAN OAKS ELEMENTARY SCHL	Rural
53	POLK	1961	DISCOVERY ACADEMY OF LAKE ALFRED	Rural
53	POLK	1971	SLEEPY HILL MIDDLE SCHOOL	Urban
54	PUTNAM	51	THE CHILDREN'S READING CENTER	Rural
54	PUTNAM	121	MELROSE ELEMENTARY SCHOOL	Rural
54	PUTNAM	201	INTERLACHEN ELEMENTARY SCHOOL	Rural
54	PUTNAM	261	CRESCENT CITY HIGH SCHOOL	Rural
54	PUTNAM	341	OCHWILLA ELEMENTARY SCHOOL	Rural
55	ST. JOHNS	461	SOUTH WOODS ELEMENTARY SCHOOL	Rural
56	ST. LUCIE	151	ALLAPATTAH FLATS K-8	Rural
56	ST. LUCIE	201	FORT PIERCE WESTWOOD HIGH SCHL	Rural
56	ST. LUCIE	231	LAKWOOD PARK ELEM. SCHOOL	Rural
56	ST. LUCIE	241	FLORESTA ELEMENTARY SCHOOL	Urban
56	ST. LUCIE	261	NORTHPORT K-8 SCHOOL	Urban
56	ST. LUCIE	271	WINDMILL POINT ELEM SCHOOL	Urban
56	ST. LUCIE	281	VILLAGE GREEN ENVIRONMENTAL STUDIES SCHOOL	Urban
56	ST. LUCIE	311	PARKWAY ELEMENTARY SCHOOL	Urban
56	ST. LUCIE	341	MARIPOSA ELEMENTARY SCHOOL	Urban

57	SANTA ROSA	71	EAST MILTON ELEMENTARY SCHOOL	Rural
58	SARASOTA	12	ALTA VISTA ELEMENTARY SCHOOL	Urban
58	SARASOTA	81	SUNCOAST SCHOOL FOR INN.STUD.	Urban
58	SARASOTA	201	TUTTLE ELEMENTARY SCHOOL	Urban
58	SARASOTA	461	GLENALLEN ELEMENTARY SCHOOL	Urban
59	SEMINOLE	21	HAMILTON ELEMENTARY SCHOOL	Urban
59	SEMINOLE	141	PINE CREST ELEMENTARY SCHOOL	Urban
59	SEMINOLE	811	WICKLOW ELEMENTARY SCHOOL	Urban
60	SUMTER	51	WEBSTER ELEMENTARY SCHOOL	Rural
60	SUMTER	161	WILDWOOD MIDDLE/HIGH SCHOOL	Rural
61	SUWANNEE	89	BRANFORD ELEMENTARY SCHOOL	Rural
61	SUWANNEE	91	BRANFORD HIGH SCHOOL	Rural
62	TAYLOR	31	TAYLOR COUNTY MIDDLE SCHOOL	Rural
62	TAYLOR	41	TAYLOR COUNTY ELEMENTARY SCHL	Rural
62	TAYLOR	111	STEINHATCHEE SCHOOL	Rural
64	VOLUSIA	745	CAMPBELL MIDDLE SCHOOL	Urban
64	VOLUSIA	1114	ORMOND BEACH ELEMENTARY SCHOOL	Urban
64	VOLUSIA	1702	DELTONA MIDDLE SCHOOL	Urban
64	VOLUSIA	1811	DELTONA LAKES ELEMENTARY SCHL	Urban
64	VOLUSIA	2451	PALM TERRACE ELEMENTARY SCHOOL	Urban
64	VOLUSIA	2734	CHAMPION ELEMENTARY SCHOOL	Rural
64	VOLUSIA	3251	WESTSIDE ELEMENTARY SCHOOL	Rural
64	VOLUSIA	4334	ORTONA ELEMENTARY SCHOOL	Urban

64	VOLUSIA	4831	PIERSON ELEMENTARY SCHOOL	Rural
64	VOLUSIA	6144	TURIE T. SMALL ELEMENTARY SCHL	Urban
64	VOLUSIA	6633	T. DEWITT TAYLOR MIDDLE-HIGH	Rural
64	VOLUSIA	6751	DISCOVERY ELEMENTARY SCHOOL	Urban
64	VOLUSIA	6791	GALAXY MIDDLE SCHOOL	Urban
64	VOLUSIA	6841	SUNRISE ELEMENTARY SCHOOL	Urban
64	VOLUSIA	6851	FRIENDSHIP ELEMENTARY SCHOOL	Urban
64	VOLUSIA	6871	VOLUSIA PINES ELEMENTARY SCHOOL	Rural
64	VOLUSIA	7871	SPIRIT ELEMENTARY SCHOOL	Urban
64	VOLUSIA	7931	PRIDE ELEMENTARY SCHOOL	Rural
65	WAKULLA	5	WAKULLA COAST CHARTER SCHOOL OF ARTS SCIENCE	Rural
65	WAKULLA	11	MEDART ELEMENTARY SCHOOL	Rural
66	WALTON	261	MOSSY HEAD SCHOOL	Rural
66	WALTON	281	MAUDE SAUNDERS ELEMENTARY SCHOOL	Rural
67	WASHINGTON	52	VERNON MIDDLE SCHOOL	Rural
67	WASHINGTON	151	VERNON ELEMENTARY SCHOOL	Rural
74	FAMU LAB SCH	351	FLORIDA A & M UNIV DEVELOP RESEARCH SCHOOL	Urban

Appendix C – Certification Codes to Certification Area Crosswalk

Certification Subject Codes	Certification Subject Code Names	Certification Area	Number of Certifications
001	ADMINISTRATION/SUPERVISION	Other Certification Area	250
004	ART EDUCATION	Art	4
005	BIBLE	Other Certification Area	39
009	BOOKKEEPING	Business Education	65
010	STENOGRAPHY	Business Education	2
012	EARLY CHILDHOOD EDUCATION	Early Childhood/Preschool	2,639
018	SPEECH CORRECTION	ESE	348
021	ENGLISH	English	2
023	HEALTH EDUCATION	Health	279
028	WOODWORK	Other Certification Area	1
030	GRAPHIC ARTS	Other Certification Area	3
031	ELECTRICAL	Other Certification Area	3
035	FRENCH	Foreign Languages-French	102
036	SPANISH	Foreign Languages-Spanish	223
037	LATIN	Foreign Languages-Other	8
038	GERMAN	Foreign Languages-Other	27
041	ITALIAN	Foreign Languages-Other	12
044	MATHEMATICS	Math	6
045	MUSIC EDUCATION	Music	1
049	SCIENCE	Science-General	5

056	SOCIAL STUDIES	Social Sciences	1
075	INSTRUMENTAL MUSIC	Music	2
094	PRINTING	Other Certification Area	2
108	LAW	Other Certification Area	1
112	OCCUPATIONAL THERAPY	Other Certification Area	2
113	SUPERVISION	Other Certification Area	7
114	ADMINISTRATION	Other Certification Area	29
121	RUSSIAN	Foreign Languages-Other	2
147	VOCAL MUSIC	Music	2
173	BILINGUAL EDUCATION	Other Certification Area	5
412	TECHNICAL X RAY	Other Certification Area	1
413	JUNIOR ROTC	Other Certification Area	1
414	BUSINESS DATA PROCESSING	Other Certification Area	1
415	AC HEAT MECHANICS	Other Certification Area	2
417	DENTAL ASSISTANT	Other Certification Area	6
421	AGRICULTURE PRODUCTS	Other Certification Area	1
423	AGRICULTURE MECHANICS	Agriculture	1
501	COORDINATOR DCT	Other Certification Area	14
504	COSMETOLOGY	Other Certification Area	2
505	PRACTICAL NURSING	Other Certification Area	13
506	AUTOMOTIVE MECHANICS	Other Certification Area	18
507	AIRCRAFT MECHANICS	Other Certification Area	3
508	CABINET AND WOODWORKING	Other Certification Area	1

509	DIESEL MECHANICS	Other Certification Area	4
510	MACHINE SHOP	Other Certification Area	1
511	SHEET METAL	Other Certification Area	1
521	DRAFTING	Other Certification Area	2
522	LAW ENFORCEMENT	Other Certification Area	1
525	WELDING	Other Certification Area	2
527	PHOTOGRAPHY	Other Certification Area	1
535	ELECTRONICS	Other Certification Area	5
540	CARPENTRY	Other Certification Area	4
541	HORTICULTURE	Other Certification Area	2
546	COMMERCIAL DRIVING	Other Certification Area	2
564	TV PRODUCTION TECHNOLOGY	Educational Media Specialist	3
569	BUILDING MAINTENANCE	Other Certification Area	1
583	LABORATORY TECHNICIAN	Other Certification Area	1
586	GASOLINE ENGINE REPAIR	Other Certification Area	1
601	COMMERCIAL ART	Other Certification Area	1
616	RETAILING	Other Certification Area	3
640	VOCATIONAL OFFICE EDUCATION	Other Certification Area	58
655	PERSONAL SERVICES	Other Certification Area	2
657	QUANTITY FOODS	Other Certification Area	3
670	COORDINATOR OF WORK EXPERIENCE PROGRAMS	Other Certification Area	1
672	LABORATORY ASSISTANT	Other Certification Area	1

679	RESPIRATORY TECHNICIAN	Other Certification Area	1
683	CUSTODIAL	Other Certification Area	1
691	PARAMEDIC	Other Certification Area	1
695	AUTOMOTIVE BODY REPAIR	Other Certification Area	1
713	ELECTRONICS DATA PROCESSING	Other Certification Area	2
802	HOME ECONOMICS OCCUPATIONS	Other Certification Area	1
1000	ADMINISTRATION OF ADULT EDUCATION	Other Certification Area	31
1001	ART	Art	4,446
1002	ATHLETIC COACHING	Other Certification Area	1,789
1003	BIOLOGY	Science-Biology	6,735
1004	CHEMISTRY	Science-Physical	2,364
1005	WORLD LANGUAGE - CHINESE	Foreign Languages-Other	69
1006	COMPUTER SCIENCE	Computer Science	652
1007	DANCE	Other Certification Area	197
1008	DRAMA	Drama	909
1009	EARTH-SPACE SCIENCE	Science-Earth and Space	1,812
1010	ECONOMICS	Social Sciences	91
1011	EDUCATIONAL LEADERSHIP	Other Certification Area	11,245
1012	EDUCATIONAL MEDIA SPECIALIST	Educational Media Specialist	3,692
1013	ELEMENTARY EDUCATION	Elementary Education	96,007
1014	EMOTIONALLY HANDICAPPED	ESE	2,256
1015	ENGLISH	English	19,478

1016	ENGLISH FOR SPEAKERS OF OTHER LANGUAGES (ESOL)	ESOL	88,391
1017	WORLD LANGUAGE - FRENCH	Foreign Languages-French	786
1018	GEOGRAPHY	Social Sciences	62
1019	WORLD LANGUAGE - GERMAN	Foreign Languages-Other	103
1020	WORLD LANGUAGE - GREEK	Foreign Languages-Other	8
1021	GUIDANCE AND COUNSELING	Guidance	6,452
1022	HEALTH	Health	2,989
1023	HEARING IMPAIRED	ESE	754
1024	WORLD LANGUAGE - HEBREW	Foreign Languages-Other	6
1025	HISTORY	Social Sciences	697
1026	HUMANITIES	Social Sciences	157
1027	WORLD LANGUAGE - ITALIAN	Foreign Languages-Other	70
1028	WORLD LANGUAGE - JAPANESE	Foreign Languages-Other	15
1029	JOURNALISM	English	624
1030	WORLD LANGUAGE - LATIN	Foreign Languages-Other	102
1031	MATHEMATICS	Mathematics	18,110
1032	MENTALLY HANDICAPPED	ESE	2,113
1033	GENERAL SCIENCE	Science-General	6,521
1034	MIDDLE GRADES INTEGRATED CURRICULUM	Other Certification Area	7,994
1035	MUSIC	Music	4,699
1036	PHYSICAL EDUCATION	Physical Education	10,773
1037	PHYSICALLY IMPAIRED	ESE	80

1038	PHYSICS	Science-Physical	892
1039	POLITICAL SCIENCE	Social Sciences	226
1040	WORLD LANGUAGE - PORTUGUESE	Foreign Languages-Other	18
1041	PREKINDERGARTEN/PRIMARY EDUCATION	Pre-K/Primary Education	15,912
1042	PRESCHOOL EDUCATION	Early Childhood/Preschool	1,157
1043	PRIMARY EDUCATION	Pre-K/Primary Education	4,848
1045	PSYCHOLOGY	Social Sciences	714
1046	READING	Reading	28,621
1047	WORLD LANGUAGE - RUSSIAN	Foreign Languages-Other	22
1048	SCHOOL FOOD SERVICE	Other Certification Area	1
1049	SCHOOL PRINCIPAL	Other Certification Area	494
1050	SCHOOL PSYCHOLOGIST	School Psychologist	1,452
1051	SCHOOL SOCIAL WORKER	School Social Worker	1,492
1052	SOCIAL SCIENCE	Social Sciences	17,330
1053	SOCIOLOGY	Social Sciences	292
1054	WORLD LANGUAGE - SPANISH	Foreign Languages-Spanish	5,219
1055	SPECIFIC LEARNING DISABILITIES	ESE	3,889
1056	SPEECH	English	296
1057	SPEECH LANGUAGE IMPAIRED	ESE	1,323
1058	VARYING EXCEPTIONALITIES	ESE	2,802
1059	VISUALLY IMPAIRED	ESE	347
1060	ADAPTIVE PHYSICAL EDUCATION	ESE	204
1061	DRIVER EDUCATION	Driver Education	954

1062	GIFTED	Gifted	13,322
1063	MIDDLE GRADES	Other Certification Area	2,127
1064	ORIENTATION AND MOBILITY	ESE	82
1065	PREKINDERGARTEN DISABILITIES	Other Certification Area	1,157
1066	SEVERE OR PROFOUND DISABILITIES	Other Certification Area	213
1067	AGRICULTURE	Agriculture	611
1068	BUSINESS EDUCATION	Business Education	4,735
1069	FAMILY AND CONSUMER SCIENCE	Family and Consumer Sciences	1,291
1070	ENGINEERING AND TECHNOLOGY EDUCATION	Tech Education	1,006
1071	LOCAL DIRECTOR OF CAREER AND TECHNICAL EDUCATION	Other Certification Area	46
1072	MARKETING	Other Certification Area	496
1073	OCCUPATIONAL SPECIALIST	Other Certification Area	71
1074	TEACHER COORDINATOR OF COOPERATIVE EDUCATION	Other Certification Area	177
1075	TEACHER COORDINATOR OF WORK EXPERIENCE PROGRAMS	Other Certification Area	110
1076	SPEECH-LANGUAGE IMPAIRED ASSOCIATE	Other Certification Area	8
1077	EXCEPTIONAL STUDENT EDUCATION	ESE	30,177
1078	AUTISM SPECTRUM DISORDERS	ESE	1,939
1079	AMERICAN SIGN LANGUAGE	Foreign Languages-Other	83
1080	WORLD LANGUAGE - ARABIC	Foreign Languages-Other	5
1081	WORLD LANGUAGE - FARSI	Foreign Languages-Other	1
1082	WORLD LANGUAGE - HAITIAN CREOLE	Foreign Languages-Other	2

1084	WORLD LANGUAGE - TURKISH	Foreign Languages-Other	7
1999	EXCHANGE TEACHER	Other Certification Area	67

Appendix B

Voluntary Consent for Online Survey

This survey is designed to gather dissertation research conducted by Annissa Brockington for her doctoral studies. The Responsible Principal Investigator for this study at SEU is Dr. Amy Bratten, Associate Provost.

The purpose of this research study is to examine the motivational factors that contribute to a Special Education (SPED) teacher’s certificate holder’s decision to remain within the field of education.

This survey should take only about 10-15 minutes of your time and will serve to further understand which factors play a prominent role in influencing a SPED’s decision to stay in the SPED field. Please respond truthfully to all the items. The results of individual responses will remain anonymous and will be used only for reporting grouped results. There is no compensation or cost associated with participating in this survey. Participation is solely voluntary. The survey will close on March 31, 2019.

If you have any questions related to this survey, please feel free to contact Annissa Brockington at abrockington@seu.edu. You will be routed to the survey immediately following confirmation of your participation consent.

By taking this survey, you certify that you are:

	18 years of age or older
	consent to participate

Thank you in advance for your assistance in compiling data for this critical dissertation topic.

Sincerely,

Annissa Brockington, Doctoral Researcher and Dr. Amy Bratten, Principal Investigator

Appendix C

Survey Questions

Directions: *Please indicate your level of satisfaction with the following factors that influence your desire to continue in your position as a teacher/support staff member of exceptional students:*

5- Very Satisfied 4- Satisfied 3- Uncertain 2- Unsatisfied 1- Very Unsatisfied

1. Access to resources that enhance my ability to adequately serve ESE students.

5- Very Satisfied 4- Satisfied 3- Uncertain 2- Unsatisfied 1- Very Unsatisfied

2. Access to professional development opportunities in the area of classroom management.

5- Very Satisfied 4- Satisfied 3- Uncertain 2- Unsatisfied 1- Very Unsatisfied

3. The adequacy of access to social skills training.

5- Very Satisfied 4- Satisfied 3- Uncertain 2- Unsatisfied 1- Very Unsatisfied

4. My school's ability to provide opportunities for me to grow professionally.

5- Very Satisfied 4- Satisfied 3- Uncertain 2- Unsatisfied 1- Very Unsatisfied

5. The adequacy of time to prepare and plan for my lessons.

5- Very Satisfied 4- Satisfied 3- Uncertain 2- Unsatisfied 1- Very Unsatisfied

6. The level of financial compensation for the work I perform within my work location.

5- Very Satisfied 4- Satisfied 3- Uncertain 2- Unsatisfied 1- Very Unsatisfied

7. The adequacy of my current benefits package.

5- Very Satisfied 4- Satisfied 3- Uncertain 2- Unsatisfied 1- Very Unsatisfied

8. The valuing and esteeming that students express toward me personally and professionally

5- Very Satisfied 4- Satisfied 3- Uncertain 2- Unsatisfied 1- Very Unsatisfied

9. The progress my students are making in the classroom.

5- Very Satisfied 4- Satisfied 3- Uncertain 2- Unsatisfied 1- Very Unsatisfied

10. The availability and access to viable mentoring opportunities.

5- Very Satisfied 4- Satisfied 3- Uncertain 2- Unsatisfied 1- Very Unsatisfied

11. The adequacy of local community esteem and support

5- Very Satisfied 4- Satisfied 3- Uncertain 2- Unsatisfied 1- Very Unsatisfied

12. The accuracy and timeliness of evaluative feedback provided by school administration.

5- Very Satisfied 4- Satisfied 3- Uncertain 2- Unsatisfied 1- Very Unsatisfied

13. The adequacy of administration support.

5- Very Satisfied 4- Satisfied 3- Uncertain 2- Unsatisfied 1- Very Unsatisfied

14. The availability and approachability of school administrative personnel.

5- Very Satisfied 4- Satisfied 3- Uncertain 2- Unsatisfied 1- Very Unsatisfied

15. Administrative valuing and esteeming of my efforts in the classroom and school as a whole.

5- Very Satisfied 4- Satisfied 3- Uncertain 2- Unsatisfied 1- Very Unsatisfied

16. Parental support and esteeming of my efforts to provide educational services.

5- Very Satisfied 4- Satisfied 3- Uncertain 2- Unsatisfied 1- Very Unsatisfied

17. Parental level of appropriate, positive involvement in the educational process.

5- Very Satisfied 4- Satisfied 3- Uncertain 2- Unsatisfied 1- Very Unsatisfied

18. Support and collegiality of peers at school.

5- Very Satisfied 4- Satisfied 3- Uncertain 2- Unsatisfied 1- Very Unsatisfied

19. Overall, I am satisfied with my current instructional assignment in ESE.

5- Strongly Agree 4- Agree 3- Uncertain 2- Disagree 1- Strongly Disagree

20. Do you plan to continue as a teacher of ESE students in my current position next year?

1. Yes 2. No