

The Development and Field Test of Employment Interview Questions Designed to Predict
Special Education Teachers' Retention

By

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Abstract

The attrition of special education teachers greatly affects the quality of special education services districts can provide for students with disabilities and creates an ongoing challenge for educational leaders. It is essential to understand the factors influencing special education teachers' decisions to leave or remain in the field. If educational leaders could be assured that newly hired special education teachers had the necessary qualities to successfully persevere in special education, the services districts provide to students could be greatly improved. The quality of education that students with disabilities receive may be negatively affected if districts are forced to hire inexperienced or uncertified teachers. This study involved field testing employment interview questions involving work related variables that could then be included within the special education version of the Interactive Computer Interview System (ICIS) structured interview to add a predictive measure of potential teacher retention. Participants in this study were former and current special education teachers selected from school districts located in Northeast Kansas. Using questions developed from the extant literature, current and former special education teachers were interviewed and also asked to rank seven factors related to teacher retention. Reliability of the instrument was analyzed using Cronbach's alpha to determine if retention could be predicted through interview questions. The overall Cronbach's alpha for the final instrument after reconfiguration to a three item scale was $\alpha=.067$. An independent samples *t*-test was conducted to evaluate the means and variability of the two groups identified as former and current special education teachers. Current special education teachers

had slightly higher mean scores and lower standard deviations on the retention questions.

Overall the difference found between the two groups approaches significance, but is not considered to be statistically significant. When the instrument was reconfigured, a theme of administrative support emerged. Thus, this study found that support is a strong retention factor for special education teachers.

CHAPTER 1: Introduction and Review of the Literature

The shortage of special education teachers has concerned school districts across the nation for many years. Filling numerous vacancies in all areas of special education has become increasingly difficult. This shortage has not only potentially weakened the quality of education schools have provided for children with disabilities, but has threatened districts' capacity to fully implement the Individuals with Disabilities Education Act (IDEA) (Whitworth, 1999). Indeed, the 1997 and 2004 changes to IDEA, and the 2002 implementation of the No Child Left Behind Act (NCLB), have intensified the impact of these shortages (Nichols, Bicard, Bicard, & Casey, 2008), largely because all teachers must now be "highly qualified." To meet the highly qualified standard, a teacher must have significant credit hours in a core content area and must pass a certification test. In Kansas, for example, teachers must have hours in the core and must pass the "Praxis" exam. The Praxis assesses a teachers' knowledge of basic special education principles with emphasis on understanding exceptionalities, legal issues, and delivery of instruction. Unfortunately, many Kansas districts have difficulty filling secondary special education positions, not because potential candidates have failed this certification test, but rather because they lack the necessary credit hours in the core subject areas.

Teacher shortages limit school districts' ability to provide quality services to students because districts must often hire uncertified or unqualified teachers (Billingsley, 2004; OSEP, 2004). Recent data indicate that only 86% of special education teachers are prepared for the special education positions they hold (Nichols et al., 2008). If teacher quality is considered a key

predictor of student success, then highly qualified special education teachers are imperative for the success of students with disabilities (Ferrandino, 2002).

In addition to finding qualified special education teachers, another challenge is retaining them. A complicating factor in this regard is IDEA's mandate to educate a student with disabilities in the least restrictive environment. This requirement has greatly increased the number of special education students educated in the general education setting and thus has created additional responsibilities for special educators to instruct students in both the general standards while simultaneously addressing their academic deficits. This task is further complicated by NCLB's goal of ensuring all students pass high stakes tests based on general education standards. Thus, special education teachers face additional and intensive pressures to support students in an inclusive setting while improving specific academic content and skills for students with disabilities (Mathur & Rutherford, 2004). Additional factors that complicate the challenge of retaining special educators are lack of planning time, paperwork burdens, difficulty or lack of time for collaboration with general educators, and complications in scheduling students. Given the demands of IDEA and NCLB, and these additional responsibilities, the need to hire and retain qualified and effective special education teachers will remain a daunting task for districts. Moreover, the retention of special education teachers continues to challenge school districts. Special education teachers are more likely to leave teaching than any other group of teachers (Billingsley, 2002; Ingersoll, 2001) due to many of the issues previously noted. Thus, determining the factors that may increase retention rates is critical in addressing the special

education teacher shortage (Billingsley, 2002; Boe, Bobbitt, Cook, & Weber, 1995).

This study was designed to identify potential key factors associated with retention of special educators, for the purpose of helping districts determine which teacher applicants are more likely to remain in the special education field once hired. The existing literature on teacher retention, public policy, and studies of special education attrition and retention were reviewed and synthesized to develop specific interview questions for use by school district administrators and human resource personnel in this regard. The goals of this study were to determine: (a) whether the interview questions designed to assess special education teacher retention and based on the literature demonstrate validity; (b) if the interview questions demonstrate reliability; (c) if current and former special education teachers differ significantly in response to these questions; and (d) if current and former special education teachers differ significantly in their ranking of retention factors. These questions were then field tested with special education directors and piloted with current and former special education teachers to determine if they were predictive of resiliency and potential retention among employed special educators. Failing to address the issue of retaining teachers defeat attempts to increase the supply of teachers.

For many years, special education teacher shortages across the nation have been a major concern. In 1983, *A Nation at Risk* reported that the number of qualified special education teachers was inadequate (Nichols et al., 2008) compared with the demand. Although the early 1990's saw an increase in special education teachers, this increase was not enough to meet future demands. Over time, the shortage increased from 7.4% in 1994 to 13.4% in 2003 (Boe, 2006).

Currently, the shortage of special education teachers continues to be in a critical state (Boe, Cook, Bobbitt, & Terhanian, 1998; Carlson, Chen, Schroll, & Klein, 2003; Katsiyannis, Zhang, & Conroy, 2003). A recent article in US News and World Report (“Special education teachers as one of the 50 best careers of 2010, this should have strong growth over the next decade,” 2009) predicted the need for special education teachers will increase 13 to 20 percent in the next ten years, depending on specific grade levels. The highest need is projected at the elementary level. This increased need is predicted from turnover rates, retirement, and growth in the overall demands inherent in meeting the needs of students identified with disabilities

Special Education Teacher Shortages

The shortage of special education teachers affects almost all parts of the country. The American Federation of Teachers (1999) reported 98% of school districts nationwide have experienced a shortage of special education teachers. Katsiyannis et al. (2003) also reported 33,000 special education positions were filled with uncertified teachers nationally and as many as 4,000 positions go unfilled each year. These unfilled positions, or positions filled with unqualified/uncertified teachers, impact the quality of instruction and outcomes for students with disabilities (Murnane, Singer, & Willett, 1988).

Predictions indicate there will be 2.2 million special education teacher vacancies in the U.S. by the year 2012, with many vacancies occurring in “hard to fill” areas such as emotional/behavioral disorder, severe/profound disability, and learning disability (Johnson et al. 2001). By location, special education teacher shortages are greatest in all special education areas

in the West, Rocky Mountains, Great Plains/Midwest, and Alaska, with fewer shortages reported in the Northeast (McLeskey, Tyler, & Flippin, 2003).

While most school districts experience challenges with teacher turnover, researchers have documented higher turnover rates in special education than general education (Boe, Bobbit, Cook, Whitener, & Weber, 1997). Concern over critical special education teacher shortages has led to several studies trying to isolate the question of why these shortages occur in the first place. This question is of course most significant because teacher turnover creates staffing problems and is a factor undermining educational programs' stability, continuity, and quality (Ingersoll & Smith, 2003). Understanding the reasons for teacher turnover would greatly benefit students, school districts, and policymakers. Achieving a better understanding of key retention factors as they apply to teachers who chose to stay versus those who leave is the first step to halting and/or slowing down turnover rates.

Many studies have identified several factors that have perpetuated the current shortage. These factors include an increased number of students identified as needing special education services, retirements, the credentialing process, and legislative mandates (Andrews, Miller, Evans, & Smith, 2003). Teachers who are fully certified in the area of their primary teaching assignment is an indicator of retention, but many districts have been forced to hire uncertified teachers with the hope of teachers securing certification while on the job. Two policy mandates, The Individuals with Disabilities Education Act (IDEA) and the No Child Left Behind Act (NCLB), have increased pressure to recruit, retain, and/or hire special education teachers who are

fully certified and committed to the field of special education. In addition, Brownell and Smith (1992) noted a decrease in the collegiate enrollment in special education programs for teachers in the early 1990's, with the demand for special education teachers continuing to exceed the number of teachers graduating from accredited programs throughout the decade (Boe, Cook, Paulsen, Barkanic, & Leow, 1999; Miller, Brownell, & Smith, 1999). The trend of low numbers of qualified applicants continues today with an insufficient supply of qualified teachers available for all classrooms (Thornton, Peltier, & Medina, 2007).

Boe et al. (1995) have blamed the teacher shortage in part on school districts' inability to retain special education teachers. This inability can be devastating for districts in terms of services, costs in time and resources, and the difficulty of dealing with unfilled positions (Boe, Bobbitt, & Cook, 1997; Brownell et al., 1997). According to Ingersoll (2001), the "teacher shortage" is in reality a myth because the supply of teachers is adequate, but the apparent demand is created by an excessive turnover rate. Thus, if schools retained a greater percentage of teachers, the demand would diminish. If one accepts Ingersoll's theory, determining reasons for and solutions to teacher retention is vital to maintaining a district's workforce.

Reasons for Teacher Turnover

Factors that influenced a teacher's decision to leave the field of special education centered on the three broad categories: external factors, employment factors, and personal factors (Billingsley, 1993). External factors included economic, societal, and institutional; employment factors included certification, experience, work conditions and commitment to

teaching; personal factors included life circumstances. In 2003, Billingsley defined the following factors that contribute to special education teachers leaving the field: (a) Employability – teachers with other employment opportunities are more likely to depart; (b) Personal decisions – teachers depart for reasons unrelated to work; (c) Level of education and certification – teachers who are better prepared to teach are less likely to depart; (d) Mentors – high quality mentoring programs provided when teachers enter the field make it less likely teachers will depart; (e) Decision making power – teachers involved in the decision making process are less likely to leave; (f) Administrative support – teachers with strong administrative support are less likely to leave; (g) School climate – teachers working in a more collaborative and supportive school climate are less likely to depart; and (h) Job design – teachers with limited paperwork, reasonable caseloads, resources to support students, and/or time for collaboration and curriculum development are less likely to depart. In summary, some of the retention factors that have been identified to influence teachers to stay in the field are linked to personal characteristics, work related variables, and/or a combination of factors.

Characteristics of Teachers who Leave or Remain

Teachers' reasons for leaving the field of education can be both personal and professional in nature. Brownell, Smith, McNellis, & Lenk (1994-1995) concluded that even though work variables are important, a teacher's personal qualities and educational background can mediate the effects of less desirable work conditions on leaving.

Researchers have investigated the relationship between attrition and demographic

variables such as age, gender, and race, as well as how teachers manage stress and how they function in the classroom under difficult conditions.

Age affects supply and demand and is the only demographic variable consistently linked to attrition (Billingsley, 2004). In terms of special education teachers, the younger the teacher, the more the likely the teacher is to leave (Boe, Bobbitt, & Cook, 1997; Singer, 1993). Miller et al. (1999) found teachers with less experience are also more likely to leave the field. This makes sense as age and experience are highly correlated (Billingsley, 2003).

The effects of gender and race have led to mixed findings. Boe et al. (1997) and Miller et al. (1999) found the variable of race was not significant. In studies regarding gender, little relationship was found between gender and attrition, with the exception of those teachers in urban school settings. In one study male teachers employed in urban schools were more likely to indicate an intention to leave the field (Morvant, Gersten, Gillman, Keating, and Blake, 1995).

A study by Mitchell and Arnold (2004) found that if special education teachers lacked effective behavioral management skills, they were less able to perform their job duties, and subsequently became dissatisfied with their jobs. Researchers have found that issues such as lack of classroom management, lack of student progress, range of disabilities, and disrespect from students all contribute to a special education teacher's intent to leave the field (Brownell, Smith, McNellis, & Miller, 1997). How teachers handle frustration with parental failure to follow through at home with agreed upon consequences and parental refusal to assume responsibility for the actions of their children (Kaff, 2004), also seem to have an impact on career decisions.

Additional research by Kegel-Flom (1983) found characteristics such as self-confidence, an independent spirit, internal initiative and drive were common traits in highly regarded teachers. Wilson and Sapir (1982) found that the unsuitable qualities of special education teachers include compulsiveness, inflexibility, and defensiveness with colleagues, parents, and administration.

Expert special education teachers however, tend to remain in the field. Stough and Palmer (2003) conducted a study to determine what constitutes an expert special education teacher. Nineteen nominated special education teachers in five different school districts were interviewed, videotaped, and observed. Their findings, validated by others in the field (Beutel, 2006), indicated knowledge of educational practices and student characteristics, the ability to work with varying student behaviors, knowledge of and use of instructional strategies, and an emphasis on all aspects of educational outcomes were necessary for success as a special education teacher.

Work Factors Affecting Attrition/Retention

Many researchers emphasize work factors as the most likely factor to contribute to special education teacher attrition (Billingsley, 2003; Billingsley, Carlson, & Klein, 2004). These studies found that poor working conditions lead to stress and/or burnout. Billingsley, Bodkins, and Hendricks (1993) used a “structured open ended questionnaire” to gather data on those who left special education. Their findings concluded that working conditions such as professional support, job design, feedback received, and resource availability were the primary reasons

teachers left. Billingsley contended if teachers experience desirable working conditions, they experience greater job satisfaction. Ultimately teachers are the largest cost of any district, understanding factors that contribute to teacher satisfaction is essential to improving retention (Perie, Baker, & Whitener, 1997). This satisfaction tends to lead to increased commitment, and greater commitment results in greater likelihood to remain in the field.

Work conditions such as support from administrators, overall positive school environment, supportive colleagues, and reasonable job design aid in retaining special education teachers (Andrews et al., 2002; Miller et al., 1999). Administrative support and educational leaders who facilitated shared goals, provided opportunities for professional growth, created collaborative environments, responded to teachers' concerns, and provided instructional support and resources increased retention rates by increasing the job satisfaction of special education teachers (Billingsley, 2004; Gersten, Keating, Yovanoff, & Harniss, 2001; Littrell, Billingsley, & Cross, 1994; Payne, 2005).

Administrative support refers to the support given to teachers both at the building and district levels. An administrator's direct influence on working conditions makes a difference in retention, as lack of good administrative support is identified as one of the greatest predictors for a special education teacher's decision to leave the field of special education (George, George, Gersten, & Grosenick, 1995; Ingersoll & Smith, 2003; Kaff, 2004; Miller et al., 1999; Shen, 1997). Lack of administrative support was the most frequently cited reason teachers gave for leaving in a 1994 report from the National Center for Education Statistics (Bobbitt, Leich,

Whitener, & Lynch, 1994).

Job design is often considered one of the most critical work-related factors that could affect a teacher's career decision. Gersten et al. (2001) conducted a study involving 887 special education teachers to examine specific job-design factors on their effect on teachers' intent to stay or leave the field of special education. The findings of this study strongly suggested that districts must seriously examine teachers' job designs and improve workplace conditions in order to improve retention. Poor working conditions, identified as large classes, high caseloads, and/or lack of resources, were frequently cited as contributing to teachers deciding to leave their jobs. "A poorly designed job can affect teachers in negative ways, leading to withdrawal from involvement in the job and eventual decision to leave the position or field" (Gersten et al., p. 551). Platt and Olson (1990) found similar results when they questioned 76 former special education teachers. Reasons for leaving related to job design were identified as excessive paperwork, stress, high caseloads, and lack of resources.

A large-scale study, *A High Quality Teacher for Every Classroom, Study of Personnel Needs in Special Education* [SPeNSE], (2002) found positive school climate ratings indicated a greater chance teachers would stay in their positions. In SPeNSE's study, school climate was measured according to the following criteria: supportive school administration; available resources to teachers; collegiality among the staff; cooperation among the staff; perceptions of school safety; and feelings of acceptance in the school. A negative environment and consistently poor job design can lead to teachers who remain on the job, but do as little work as

possible and who expect less of their students than the students are capable of doing (Yee, 1990).

Although the research regarding caseloads is inconclusive, most qualitative descriptions of teachers report high caseloads as a reason for leaving (Billingsley et al., 1993; Brownell, et al., 1994-95; Morvant et al., 1995). Similar to the research on caseloads, research on the service delivery model has been mixed, although Embich (2001) concluded there is a greater risk of burnout of special education teachers who worked primarily in general education classrooms. George et al. (1995), however, found that self-contained teachers of emotionally disturbed students tended to leave the field more often than self-contained resource teachers of other special education students.

Research also indicates that role conflicts intrinsic in the inclusion model not only affect teacher job satisfaction, but have a significant impact on teacher effectiveness with students (Billingsley, 2003). Special education teachers with beliefs incongruent with the inclusion model tend to seek other positions as some special educators struggle with the changing roles and responsibilities (Billingsley, 2004). Morvant et al. (1995) found that inclusion creates role dissonance and/or conflict for some teachers due to inadequate support from general education teachers. As the role of special education teachers continues to change from resource room instructors to collaborative co-teachers and inclusion specialists, ambiguity leads to frustration and burnout (Embich, 2001; Klingner & Vaughn, 2002; Weiss & Lloyd, 2002).

In general, job satisfaction has a huge influence on teachers' intent to stay in the field of special education. Work conditions influence overall job satisfaction (Billingsley, 2004; Gersten

et al., 2001). Studies have shown that excessive paperwork, lack of support, lack of clarification of roles, lack of planning time, coordinating with general education classroom teachers, and caseload all contribute to a teachers' job satisfaction. Other studies suggest it is a combination of factors that determines whether a special education teacher remains in the field. For example, Brownell et al. (1994-1995) found that even though work variables are important, teacher characteristics operate in conjunction with them to influence decisions to stay. Overall, the research indicates the need to address several aspects of a teacher's job in order to positively impact special education teacher retention.

Demands of NCLB

The shortage of special education teachers existed prior to the implementation of NCLB. However, the difficulty associated with recruiting, hiring, and retaining special education teachers has become even greater with its passage (Beutel, 2006). NCLB requires all students to perform at "proficient" levels on state assessments by the 2013-14 school year (Thorton et. al., 2007). NCLB also requires all classroom teachers to be highly qualified, which is defined as teachers who: (a) hold a bachelor's degree from an accredited four-year institution, (b) have full state certification (not a provisional license or a waiver license), and (c) demonstrate competence in the subject area or areas they teach (Berry, Hoke, & Hirsch, 2004). In addition, some states require passing certain exams a prerequisite of competence. For example, in Kansas, teachers must now pass the multiple choice Praxis II Test of Special Education with a score of 160. As a result of the "highly qualified" requirements of NCLB, the job pool for special education

teachers has decreased and has the potential to continue to decline (Simpson, LaCava, & Graner, 2004). Although the highly qualified teacher requirement for special education applies only to those teachers who provide direct instruction in a particular core area, many special education teachers at the secondary level teach multiple core subject areas (Billingsley & McLeskey, 2004). Thus, the mandate for highly qualified teachers further increases the special education teacher shortage. Another contributor to the special education teacher shortage is the requirement that teachers must hold certificates in both a content area and special education. According to the 2008-2009 state of Kansas Licensed Personnel Report, only 72.8% of the teachers assigned to teach special education core classes of English Language Arts, History/Government, Math and Science were highly qualified in those areas (KSDE, 2009).

Solutions to the Shortage Problem

Hirsch, Koppich, and Knapp (2001) suggested the following solutions for addressing teacher shortages: offering college scholarships and/or forgiving loans; offering enticements in the form of higher salaries and benefits; reducing barriers related to the hiring process such as utilizing uniform hiring approaches or creating websites where districts can post openings and applicants can post resumes; and offering incentives when re-distributing teachers across critical shortage areas. Currently, several districts in the Kansas Association of Special Education Administrators (KASEA) Northeast Region 2 offer employment incentives for special education teachers. For example, Unified School District (USD) 501 offers a signing incentive and the Holton Special Education Cooperative offers a one-time relocation incentive to special education

hires. The Auburn-Washburn district gives special education teachers 4% additional salary.

Better induction programs, enhanced professional development, better working conditions, and improved role design may all potentially increase retention rates (Billingsley, 2004; Brownell, Hirsch, & Seo, 2004). Administrators can support special education teachers and increase retention by ensuring relevant and necessary professional development opportunities are provided. Training special education teachers as leaders and providing professional development may influence retention probability and positively impacts commitment (Gersten et al., 2001). Therefore, the quality of professional development offered is critical as many teacher preparation programs fail to produce teacher candidates equipped to meet the job demands (Council for Exceptional Children [CEC], 2000; Payne, 2005).

New teachers are generally enthusiastic and excited about starting their careers in special education. Teachers need personal support from a trusted and experienced individual to acquire the skills needed to build success and commitment to the field. Whitaker (2000) recommended that districts implement a mentoring or induction program to support all beginning special education teachers because they pose the highest attrition risk. Indeed, it has been shown that high-quality induction and mentoring programs have a positive impact on beginning teachers and help decrease the number of special education teachers leaving the field within five years (Smith & Ingersoll, 2004). Induction programs however, must be designed specifically for special education teachers in response to the fragility of the early teaching years and must deal directly with needs that emerge from the unique challenges and situations special educators face

(Billingsley, 2004; Griffin, Winn, Otis-Wilborn, & Kilgore, 2003). The typical goals of induction programs are: (1) improve instruction; (2) increase retention; (3) promote personal and professional well-being; (4) satisfy mandated requirements; and (5) transmit the culture and expectations of the district (Gehrke, 2006). Although programs specifically designed for special education are rare, (Boyer & Gillespie, 2000), they have been proven to be a positive factor in the retention of special education teachers.

Lack of a strong, positive school organization is a major contributor to high rates of attrition (Ingersoll, 2001). This refers to low salaries, lack of administrative support, student discipline problems, and limited decision-making authority. To reduce attrition, policymakers and administrators must facilitate the development of a better organization and work environment for special education teachers (Billingsley, 2004). Schools that provide a more comprehensive support system such as availability of a mentoring program, administrative support, positive interactions with other experienced professionals in the school environment, and professional development can improve retention (Guarino, Santibanez, Daley, & Brewer, 2004).

Addressing Teacher Shortages in Kansas

As in most areas of the country, Kansas will face certain teacher shortages in the coming years. It has been estimated that 36 % of the current teaching force in Kansas will be eligible to retire in the next five years, with over 1,000 positions currently vacant across the State (Ginsberg et al., 2007). Some school districts have been forced to recruit outside of the United States to find

candidates in some areas. For example, USD 501 recruited teachers from Spain, India, and the Philippines in order to fill positions in special education, math and science. While the shortage data is incomplete in some areas, it is clear that the greatest shortages are, and will continue to be, in special education. Ginsberg et al. suggested that the state continue “to collect data and disseminate information on teacher vacancies, but also identify the credentials and endorsements of those filling vacancies that exist so the full extent of the shortage problem can be understood.” Further, the authors suggested that the following areas must be understood and addressed to address the shortage: teacher recruitment, state regulations, teacher retention, and teacher preparation.

In 2008, Kansas had a total of 615 provisionally qualified special education teachers (13.8%), 195 unqualified special education teachers (4.4%), and 24 teachers without a license or holding an expired license (0.5%) (KSDE, 2009). A provisionally qualified teacher holds a valid Kansas license with a provisional subject or grade level endorsement or a provisional license or waiver for the assignment. An unqualified teacher holds a valid Kansas license without the appropriate subject or grade level endorsement for the assignment.

As previously noted, the state of Kansas can grant licensure waivers to districts. The waiver allows districts to place a “not fully qualified” teacher in a teaching assignment. Seventy-six percent of all waivers issued were for special education (KSDE, 2009). During the 2007-2008 school year, 399 waivers were issued for special education, with 249 new requests and 150 renewal waivers. The Kansas State Department of Education reported that after five years, less

than one-third of the special education teachers on waivers were still teaching in the same assignment as the waiver stipulated.

The average annual attrition rate for special education personnel in the state of Kansas over a 33-year period is 10.7% (McKnab, 2010). During the 2008-09 school year 8,775 teachers were employed in special education with 834 leaving special education the next school year. This is an attrition rate of 9.5%. Of those who failed to return, 373 were interrelated teachers; with an attrition rate of 11.5% in that category. The interrelated teacher category accounts for 58% of the teaching positions and leavers from this category accounted for 65% of the overall teaching personnel's attrition rate. "Conventional wisdom would suggest a major factor for higher attrition in the interrelated category is more related to teacher variables (less experience, teaching on a waiver, less commitment to the field, and earning college credit while teaching) than variables related to the students within the category" (McKnab, 2010, p. 3-4).

The Structured Employment Interview

The employment interview process has become more important and challenging given the high stakes of finding quality special education teachers who will remain with the district. Since the applicant pool of special education teachers with the necessary skills is fairly small according to (Trimble, 2001), an employment interview tool could be very helpful in searching for teachers best suited for their districts. This is so, according to Kirkwood and Ralston (1999, p. 60) because such a tool helps districts "get a more realistic picture of the applicant, as compared to the one portrayed by resumes and references is compelling." Some districts have

turned to commercial teacher hiring tools such as the Teacher Perceiver Interview developed by Gallop to help them select teachers who have the requisite qualities and skills (Metzger & Wu, 2009).

Structured interviews are interviews wherein the interviewer asks a set of questions often in the same sequence to all applicants (Emley & Ebmeier, 1997). During structured interviews, applicants are rated for each question asked of them using a scoring rubric. Researchers have found that predictive validity, consistency, and inter-rater reliability increase when using a structured interview process (Harris & Eder, 1999). Structured interviews can measure a variety of skills and abilities, using a standard set of questions and behavioral response anchors to evaluate the applicant (Ryan & Tippins, 2004).

Validity and reliability studies also suggest that structured interviews can help predict job performance (Huffcutt, Roth, Conway, & Stone, 2001). Harvey and Struzziero (2000) stated that many of the common methods used for applicant screening do not meet acceptable reliability and validity standards. Using a standardized set of interview questions with an established rubric can increase consistency even when used by non-experts (Maurer, 2002). Structured interview questions can also minimize the potential for bias both in the form of the questions and the scoring. Campion, Campion, and Hudson (1994) found that in some cases structured interviews correlated significantly with cognitive ability tests.

Using interview notes, rubrics or rating scales, multiple interviews, and interviewer training along with a set of standardized questions, increases the predictive validity of the

structured interview process (Schmitt & Borman, 1993). Other characteristics important to an effective structured interview process are: delayed evaluation of applicants, decomposition of ratings throughout the process, and using questions based on a systematic job analysis (Dipboye & Gaugher, 1993).

Haberman's "Star Teacher" Interview is a set of fourteen research-based interview questions that according to the author assesses the beliefs of an applicant. The interviewer scores each applicant responses on a matrix, the score ranges from zero (least preferred) to three (most preferred). The instrument is said to predict a teacher's success in working with high-poverty populations. Haberman's questions are designed to identify a personal orientation toward teaching, as well as to find applicants fitting his vision of a "good urban teacher" defined as one who is persistent, flexible, intelligent, resourceful, and energetic (Haberman, 1995/2004). Teachers, who are successful in the most difficult situations and environments, and with the most challenging students, are not successful because of unique teacher preparation programs. The fact is that most of these necessary traits/characteristics cannot be taught as subject matter in college classes or workshops (Haberman, 1991).

Similar to Haberman's interview system, the Gallup Organization's Teacher Perceiver Interview (TPI) is built around themes. This commercial interview instrument, revised in 1994, is a series of 60 open-ended prompts related to twelve themes devised from research identifying the characteristics of successful teachers. Some of these themes revolve around internal factors such as perception, objectivity, investment, and innovation, which can reveal an applicant's attitudes,

beliefs and behaviors. The major difference between Gallup's and Haberman's interview systems is that Gallup's does not claim to measure effective teaching, but rather looks for patterns in an applicant's life which parallel the habits and behavioral patterns of successful teachers. If an applicant scores low, according to Gallop, he/she does not have the qualities of a good teacher. Applicants' answers are compared to Gallup's pool of 400 high-quality teachers, identified nationally by teachers, principals and parents. Alternately Haberman claims to be able to identify applicants with the potential to become successful and excellent teachers.

ICIS Instrument

The Interactive Computer Interview System (ICIS) is a computer adaptive interview system utilizing the American Association of School Personnel Administrator's (AASPA's) publication titled *Teachers of the Future* and the Praxis III Assessment from Educational Testing Service (ETS) for question development. The ICIS has a special education teacher interview component. This component was designed to include elements of a special education teacher's role based on the state standards, principles set by professional organizations, and current research (Beutel, 2006). The original ICIS interview instrument was developed in 2002-2003 (Ebmeier, 2006), with the special education component added in 2006. Beutel (2006) field tested the special education component and determined that the instrument was a reliable and valid tool for differentiating special education teacher quality. The special education interview questions are grouped into four areas: Knowledge of Students, Knowledge of Collaboration, Knowledge of Instruction, and Knowledge of Professional Practice.

Cronbach's alpha scores were used to assess subscale and overall reliability. The tool's overall demonstrated reliability is $\alpha=.930$. The four subscales yielded the following reliabilities: Knowledge of Students ($\alpha=.675$), Knowledge of Instruction ($\alpha=.811$), Knowledge of Professional Practice ($\alpha=.787$), Knowledge of Collaboration ($\alpha=.779$).

Validity for this instrument was established through various means. In developing the constructs, Beutel (2006) reviewed state preparatory programming and criteria for certification for special education teachers. Research on roles, responsibilities, and teacher qualities were studied and recommendations from special education organizations such as the Council for Exceptional Children (CEC), states' standards, and university programming served as guiding principles in the development of the interview tool.

Questioning Techniques

During structured interviews, the applicant may be asked to recall a difficult situation encountered during prior employment or maybe asked to predict their solutions to hypothetical job-related situations (Peterson, 2002). Such questions are sometimes called "situation based" questions. An interviewer is trying to assess the applicant's problem solving skills with these types of questions. Another type of questioning with higher predicative potential is "behavior-based" questioning (Smith, 2006). Deems (1994) stated that behavior-based questions are constructed on the premise that past behavior is the single best predictor of future behavior. Questions based on situations or behaviors have the potential to help the interviewer find applicants who will promote positive relationships and increase the probability of teacher

longevity.

Self-developed interviews that seem structured, in which the interviewer follows a set of questions to ask each applicant, usually developed at the local level, lack measures of validity or reliability. Interviews that are unstructured and the interviewer develops the questions as the interview is taking place, the questions have the potential to be guided by the interviewee. This could lead to greater error selecting the best candidate.

Interviewing to Determine Potential for Special Education Retention

It is important for administrators to understand the factors that compel special education teachers to leave the field. The need to retain special education teachers has been well documented through many studies. One obvious strategy to address the shortage is to hire special education teachers who are most likely to stay in the field. The interview process is critical for identifying and hiring such teachers. The unique roles and responsibilities inherent in special education jobs must be considered when conducting interviews or when considering new interviewing processes (Levine, 2001). Such an interview process could result in hiring more special education teachers who will remain in special education (Dugan, 2007).

Summary

To better understand special education teacher retention, a critical review of special education attrition and retention was the basis for question development for this instrument. Overall, the research indicated various factors related to job satisfaction and/or work conditions as influencing one's decision to remain or leave the field of special education. The strongest

effects of job satisfaction were from role problems, administrative support, and overall stress (Cross & Billingsley, 1994). Most of this research tends to rely on information from those who have already left the field and have identified factors such as excessive paperwork, lack of support from administration, caseload, general education teacher support, and role ambiguity as major contributors. The questions designed for this study were also influenced by the researcher's belief that career-changing decisions are related to factors stemming from a teacher's personal and professional experiences within education. Thus, questions were developed to connect the research regarding retention factors and interviewing techniques in order to identify special education teachers with the potential of longevity.

CHAPTER 2: Methodology

Research Questions

The main objective of this study was to identify factors that predict whether a teacher will remain in special education. In particular, the goals of this study were to determine: (a) whether the interview questions designed to assess special education teacher retention and based on the literature demonstrate validity; (b) if the interview questions demonstrate reliability; (c) if current and former special education teachers differ significantly in response to these questions; and (d) if current and former special education teachers differ significantly in their ranking of retention factors. This chapter also presents the research methodology employed, including instrumentation, population and sampling, and data collection and analysis.

Description of the Sample

Participants in this study were former and current special education teachers. The special education teachers were selected from the school districts located in the Kansas Association of Special Education Administrators (KASEA) Region 2 (Southeast Kansas Education Service Center, the Holton Special Education Cooperative, the Wamego Special Services Cooperative, the Kaw Valley Cooperative, Auburn-Washburn, Shawnee Heights, Seaman, Manhattan, Geary County, Silver Lake, and Topeka). These districts represent a mix of urban, suburban, and rural areas.

The sample consisted of 40 participants, current special education teachers (N=20) and former special education teachers (N=20). Former special education teachers were identified by

Human Resource Departments and by KASEA Region 2 special education directors. Current were identified by Human Resource Departments and district websites. Each participant is currently, or was at the time of teaching, certified to teach special education in Kansas. The majority of the participants were Caucasian women. All participants taught in an interrelated special education classroom and/or in an inclusion setting. Table 1 provides a breakdown of respondents by group, teaching level and number.

Table 1

Frequency and Percent of Participation According to Level

Level	Total		Current		Former	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Elementary (K-5)	19	47.5%	9	45%	10	50%
Middle (6-8)	11	27.5%	4	20%	7	35%
High (9-12)	10	25%	7	35%	3	15%
Total	40	100%	20	100%	20	100%

Interview Procedure

Names of potential participants were obtained through direct communication with special education directors and human resource departments and from staff listings on district websites. Interviews were conducted in person or over the phone during a time period of three months. Interviews ranged from 30 to 45 minutes. The researcher recorded responses and at a later date, the items were scored comparing the interviewee’s response with the rubric.

Instrument Development

To answer the research questions it was imperative to have a valid and reliable instrument. However, a review of existing literature yielded no instrument capable of predicting whether an applicant will stay in the field for a period of time beyond five years. Therefore an instrument was developed to predict longevity in special education using a current Interactive Computer Interviewing System [ICIS] product as a guide. This instrument was not created to be used as a stand-alone instrument. Rather, it was designed to be used in conjunction with the current ICIS system.

The ICIS was originally developed in 2003. Since that time, additional scales have been added to address various teacher categories, such as special education teachers. The current special education instrument consists of 36 questions divided into the following five themes: Knowledge of Students, Knowledge of Instruction, Knowledge of Professional Practice, Knowledge of Curriculum, and Knowledge of Collaboration (Beutel, 2006). This special education teacher interview tool demonstrated an overall reliability of ($\alpha = .930$).

The purpose of this study was to develop another component that could be added to the existing ICIS special education scale including questions predictive of special education teacher retention. Retention factors outlined in the literature were categorized into several broad areas: support, impact of federal policy, job design, stress, and work factors. Questions were developed and scoring rubrics created in order to score each response using a three-point scale. Rubrics are scoring guides which will allow the scorer to rate the degree to which a particular standard of

response has been met (Clay, 2001). The three-point scale mirrored the approach utilized by Ebmeier (2006) in his interview system in which a score of “1” represents a response considered below expectations, and a “3” indicates a response that exceeds expectations.

The interview questions were developed based on retention literature with specific emphasis on the work of Billingsley, Boe, Bobbitt, and Brownell (and colleagues who collaborated with them). For example, Billingsley (1993) and Brownell and Smith (1993) developed conceptual models of the influences on teachers’ career decisions. Both models outlined variables that may be related to retention. Billingsley proposed three general factors will influence special education teachers’ career decision, external, employment, and personal. External factors include economic and societal influences; employment factors include professional qualifications, work conditions, work rewards, and commitment; and personal factors are those more closely related to family issues. Brownell and Smith adapted Brofenbrenners’ model that focuses on the relationship between the microsystem (setting), mesosystem (collegiality and administrative support), the ecosystem (social structures), and the macrosystem (cultural beliefs). Billingsley (2004) further synthesized these models into four main areas that address retention, teacher characteristics and personal factors, teacher qualifications, work factors, and affective factors such as stress. Gersten and colleagues (2001) designed a path diagram based on their research that assigned a value to certain factors and indicated retention probability. This path included variables such as support from administrators and other teachers, professional development opportunities, and stress related to job design. The

SPeNSE (2002) study highlighted school climate and used measures of supportive administrative behavior, shared beliefs amongst colleagues, and access to necessary materials as indicators of retention.

Validity

Validity is defined as the extent to which a test measures what it is designed to measure. In terms of research design or instrumentation, the term refers to the degree to which a study or measure supports the intended conclusion drawn from the results. Face validity (a self-evident measure of validity) establishes that the tool seems to be an appropriate way to investigate or evaluate what you know.

Content validity refers to the accuracy of the tool in terms of measuring the content it is intended to measure. Messick (1989) notes that the content validity of a measure can be improved by using a panel of experts to review the test specifications and the selection of items (also see DeMauro, 1990; Holub, 2002). Content validity involves comparing the content of the measurement based on known literature, in consultation with experts in the field. In this study, data collected from the expert check was used to modify the questions and rubrics. Feedback from the experts was used in the revisions of the questions and rubrics to improve clarity, consistency and content. The questions for the study were based on literature and studies on special education teacher attrition and retention.

When developed, the initial interview questions and rubric levels were shared with KASEA Region 2 directors of special education, who served as expert item reviewers. An

introductory letter was sent to each director. These expert reviewers were given a rating scale on which to rate each question based on quality and the ability of the question to provide adequate information about the applicant in terms of potential for retention (Appendix B). Using a 1 to 5 scale, any question not averaging 4 or higher was removed. This feedback facilitated the development of the final revision of the questions and rubrics that were used for the study (Appendix C). The scoring rubrics, also reviewed by the expert group, followed a similar pattern to those already developed for the ICIS instrument for special education teachers. Table 2 represents an example of an interview question and rubric.

Table 2

Example of Interview Question with Answer Rubric

What support do you need as a special education teacher?	<p>Level 3 The candidate is able to provide clear specific examples of how colleagues/administration can support him/her. Examples may include: providing plan time, time for collaboration, sharing resources, legal guidance, etc.</p> <p>Level 2 The candidate is able to talk in general terms of what support he/she would need.</p> <p>Level 1 The candidate is vague in his/her response. Perhaps the candidate feels they know others are busy and think support is important but may be limited, or expresses desire for autonomy.</p>
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Reliability

Reliability is the degree to which applying the same measurement procedure in the same

way will produce the same results (Sax, 1989). A measure is considered reliable if it produces consistent results and considered to have good internal reliability if items in the instrument have a strong relationship to one another. Reliability may be improved using a structured interview. As Schriesheim, Solomon, and Kopeman (1989) noted, asking the same questions in the same order has the potential to increase reliability due the consistency of the procedure. Cronbach's alpha reliability was calculated to determine the degree of correlation within the constructs from which the scale was developed. This statistic is an overall item correlation where the values range between 0 and 1.00. Values above 0.7 are often considered to be acceptable (Nunnally, 1978). The scoring rubrics used to score responses contain key content and were used to increase internal reliability (Beutel, 2006). To increase consistency in administration and scoring, the researcher conducted all interviews.

Statistical Method

To begin comparing the current and former educators' groups with regard to their survey results, Levene's test for homogeneity of variance was applied for each group, and the assumption of equal variances for the current and former educator groups was verified with a Levine statistic of .000 and significance level of $p=1.000$. This should be interpreted as meaning the current and former educator groupings of respondents had very similar ranges and distributions for their survey results. The data meet the homogeneity of variance assumption, and analysis progressed to examine the differences between the current and former groups of educators surveyed by conducting a *t*-test.

The *t*-test examines whether or not the means of two groups are statistically different from each other. The unpaired, or "independent samples" *t*-test is used when two separate, independent and identically-distributed samples are obtained, one from each of the two

populations being compared (former and current special education teachers). Each investigation included a within groups and between groups statistical test for significant variance. However, the small number of respondents in each group being compared and the limited scale range of the interview questions made it difficult to detect significant differences within or between groups.

CHAPTER 3: Results

Research Questions

It is important to understand the factors that influence special education teacher retention. This study used the factors cited in the research literature and indicated through attrition and retention studies to develop interview questions that would predict retention. Teachers were interviewed and also asked to rank the importance of seven retention factors. The goals of this study were to determine: (a) whether the interview questions designed to assess special education teacher retention and based on the literature demonstrate validity; (b) if the interview questions demonstrate reliability; (c) if current and former special education teachers differ significantly in response to these questions; and (d) if current and former special education teachers differ significantly in their ranking of retention factors.

Instrument Analysis

Content validity refers to the accuracy of the tool in terms of measuring the content it is intended to measure. Messick (1989) notes that the content validity of a measure can be improved by using a panel of experts to review the test specifications and the selection of items. The initial interview questions, based on literature and studies on special education teacher attrition and retention, and rubrics were shared with directors of special education, who served as expert item reviewers. Revisions of the questions and rubrics to improve clarity, consistency and content were considered based on feedback from the expert group. Studies with similar procedures have used a content expert approach in judging validity of the items to the content

domain (DeMauro, 1990; Holub, 2002).

Reliability analysis allows one to study the properties of measurement scales and the items that compose the scales. The reliability analysis procedure calculates a number of commonly used measures of scale reliability and also provides information about the relationships between individual items in the scale. Using reliability analysis, one can determine the extent to which the items in the instrument are related to each other, receive an overall index of the repeatability or internal consistency of the instrument, and identify problem items that should be excluded from the instrument. Table 3 is a listing of the original nine questions used in this study.

Cronbach's alpha is a commonly used reliability measure that is calculated from pairwise correlations between items. Internal consistency ranges between zero and one. A commonly-accepted rule of thumb is that an alpha (α) of 0.6-0.7 indicates acceptable reliability, and 0.8 or higher indicates good reliability. Overall reliability of the instrument was analyzed using Cronbach's alpha. Individual questions were analyzed to determine if the overall reliability of the instrument would be increased or decreased if each item were maintained or removed. In order to achieve a more acceptable alpha level, questions were deleted based on the original item-total statistic scores (Table 4). The reliability analysis was re-run each time an item was removed in an attempt to increase the reliability of the instrument until Cronbach's alpha was above 0.6. Table 5 and Table 6 represent the instrument's Cronbach's alpha reliability coefficient for internal consistency when individual questions were removed. To increase the

reliability further, question seven was removed. Table 6 shows that the Cronbach alpha would decrease if additional items were deleted. Table 7 shows the original Cronbach's alpha score and the final alpha score for the remaining questions 2, 3 and 8.

Table 3

Questions in Original Instrument

-
1. What role should a mentor have in working with new special education teachers?

 2. What support do you need as a special education teacher?

 3. How would you characterize an effective working relationship between special education teachers and administration?

 4. How has your philosophy of special education been impacted by the requirements of NCLB and revisions of IDEA?

 5. What specifically reduces the effectiveness of a special education teacher?

 6. What factors within the school or organization would you consider in deciding if a specific job is a good fit for you?

 7. Do you believe it is possible in special education today to make a difference in students' lives?

 8. What kind of expectations do you have for general education teachers with regard to shared students?

 9. How do you handle situations in which the team you are working with is frequently unable to obtain consensus in decision-making?
-

Table 4

Nine Item–Total Statistics

	Scale				
	Mean if	Scale	Corrected Item-	Squared	Cronbach's
	Item	Variance if	Total	Multiple	Alpha if Item
	Deleted	Item Deleted	Correlation	Correlation	Deleted
Question 1	19.53	3.384	.023	.083	.354
Question 2	19.80	3.036	.215	.197	.261
Question 3	19.70	2.626	.441	.352	.132
Question 4	20.28	3.384	-.035	.184	.397
Question 5	19.35	3.721	-.105	.182	.386
Question 6	19.38	3.420	.078	.153	.324
Question 7	19.78	3.153	.188	.201	.277
Question 8	19.80	2.779	.369	.262	.179
Question 9	19.60	3.169	.038	.116	.361

Comparison of Means

To compare the current and former special education teachers' groups mean scores on the three item scale, Levene's test for homogeneity of variance was applied to each group. The data met the homogeneity of variance assumption, and analysis progressed to examine the differences between the current and former groups of educators interviewed by conducting a *t*-test.

Table 5

Item-Total Statistics with Questions 1, 4, 5, 6, 9 Removed

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Question 2	7.18	1.328	.273	.183	.562
Question 3	7.08	1.046	.529	.299	.338
Question 7	7.15	1.464	.205	.102	.604
Question 8	7.18	1.174	.424	.204	.439

Table 6

Item-Total Statistics with Question 7 Removed

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Question 2	4.80	.831	.359	.168	.580
Question 3	4.70	.677	.530	.281	.318
Question 8	4.80	.831	.359	.168	.580

The equality of variance and equality of means of the original instrument between groups rendered a *t*-statistic of 1.546 with a *p*-value of .142, which did not indicate the presence of a significant difference. Table 8 shows the results of the tests for equality of variance and equality

of means for the two groups and is based on the mean scores when questions were deleted. After the deletion, the t-statistic is 1.889 with a p-value of .067 which does approach significance.

Table 7

Reliability Statistics (original/questions removed)

Cronbach's Alpha Based on Standardized				
Items	Cronbach's Alpha	Items		N of Items
Questions 1-9	.330	.332		9
Questions 2, 3, 8	.604	.603		3

Interview questions were scored using a three-point rubric. Table 9 provides the group means and standard deviations of these scores. Current special education teachers have a slightly higher mean score and lower standard deviation, as depicted in Table 10. Overall the difference between group means approaches significance at $p=.067$, but is not considered to be statistically significant.

Rankings

The two-part design of this instrument included the interview questions and rankings of the most important retention factors. The rankings included in the instrument were designed to determine what current and former special education teachers identified as the most important retention factors and if there was a significant difference between the two groups. Participants were asked to rank seven items such as administrative support, job design and professional development. The following descriptive statistics depict how respondents ranked the seven

factors on each of the two questions. Table 11 provides a breakdown of the rank ordering on the factors influencing a special education teacher's decision to leave. Table 12 lists a breakdown of factors that would encourage a special education teacher to stay. It should be noted the N=39 as one respondent did not want to do the ranking.

Table 8

Equality of Variances and Equality of Means of Questions 2, 3, 8

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	.000	1.000	1.889	38	.067	.700	.371	-.050	1.450
Equal variances not assumed			1.889	37.933	.067	.700	.371	-.050	1.450

Table 13 depicts the top three rankings by both the current and former special education teachers. The three factors that consistently ranked the highest between both groups of respondents that would influence their decision to leave were: (a) lack of administrative support, (b) excessive paperwork, and (c) high or difficult caseload. Table 14 depicts the top three rankings of factors that would encourage teachers to stay. These rankings are the top three by both groups: (a) administrative support, (b) general education cooperation and (c) job assignment/working conditions. Table 15 depicts the factors ranked lowest by both groups on

both ranking questions. Professional development was the lowest ranked factor followed by mentoring, and collaboration.

Table 9

Overall Mean Scores of the Respondent Groups

	Current			Former		
	N	Mean	Std. Deviation	N	Mean	Std. Deviation
Question 1	20	2.75	.444	20	2.50	.607
Question 2	20	2.50	.513	20	2.20	.523
Question 3	20	2.60	.503	20	2.30	.571
Question 4	20	1.95	.686	20	1.80	.616
Question 5	20	2.90	.308	20	2.70	.470
Question 6	20	2.75	.444	20	2.80	.410
Question 7	20	2.45	.510	20	2.30	.470
Question 8	20	2.40	.503	20	2.30	.571
Question 9	20	2.89	.410	20	2.30	.801

Table 10

The Mean, Standard Deviation, and Standard Error of the Mean by Respondent Group of Questions 2, 3, 8

Group	N	Mean	Std. Deviation	Std. Error Mean
Current	20	7.500	1.147	.256
Former	20	6.800	1.196	.268

Table 11

Factors Ranked by Priority Influencing Decision to Leave (Current/Former)

Factor	#1Rank	#2 Rank	#3 Rank
Lack of Administrative Support	13	9	6
Lack of Collegial Support	3	8	2
Collaboration time	1	1	9
Paperwork Issues	10	6	5
Unclear Role Specification	6	4	7
Caseload	6	10	8
Professional Development	0	1	2

Table 12

Factors Ranked by Priority Encouraging to Stay (Current/Former Teachers)

Factor	#1Rank	#2 Rank	#3 Rank
Cooperation From Gen Ed	3	9	10
Administrative Support	11	11	4
Planning time	3	2	12
Job Assign/Work Conditions	14	12	6
Job Design	6	4	1
Mentorship	2	1	4
Professional Development	0	0	2

Table 13

The Mean, Standard Deviation, and Sum by Respondent Group of Factors Ranked by Priority Influencing Decision to Leave

	Former Special Education Teacher			Current Special Education Teacher		
	Mean	SD	Sum	Mean	SD	Sum
Admin Support	1.25	1.29	25	1.90	1.12	38
Paperwork	1.35	1.26	27	1.00	1.30	20
Caseload	1.05	1.05	21	1.25	1.21	25

Table 14

The Mean, Standard Deviation, and Sum by Respondent Group of Factors Ranked by Priority Factors Encouraging to Stay

	Former Special Education Teacher			Current Special Education Teacher		
	Mean	SD	Sum	Mean	SD	Sum
Admin Support	1.25	1.29	25	1.70	1.17	34
Gen Ed Coop	.85	.988	17	1.00	1.03	20
Job Assign/working conditions	1.85	1.27	37	1.75	1.02	35

Table 15

The Mean, Standard Deviation, and Sum by Respondent Group of Factors Ranked Lowest

	Former Special Education Teacher			Current Special Education Teacher		
	Mean	SD	Sum	Mean	SD	Sum
Professional Development	.050	.224	1	.10	.447	2
Mentoring	.350	.813	7	.250	.716	5
Collaboration	.50	.827	10	.20	.410	4

CHAPTER 4: Discussion

The purpose of this study was to develop and field test potential questions that would identify special education teacher applicants committed to staying in the field. Currently there is a structured interview tool (ICIS-Special Education) that administrators and those in charge of hiring special education teachers can use to improve the quality of teachers hired. This study was designed to supplement the basic instrument by testing a component that would help identify special education teachers likely to stay in the profession. The study was conducted by interviewing former and current special education teachers to field test questions that could be added to the ICIS-Special Education edition. Participants' answers to the questions were scored using a three-point rubric. The three levels mirrored Buettel's (2006) rubric used when field-testing the original questions that eventually became part of the ICIS-Special Education edition. A score of three represented an answer exceeding expectations, a score of two was a response that met expectations, and a score of one was considered below expectations.

The participant's profiles in both groups were similar in many ways. A majority of the participants were female Caucasians teaching students with several types of disabilities in an inclusion-type setting. The fact that many taught, or teach, in the inclusive education setting is an important factor to note as the mandates outlined in the reauthorization of the Individuals with Disabilities Education Act (IDEA) in 1997 and 2004 resulted in different and additional responsibilities for special education teachers in such setting. Special education teachers are now responsible for the academic progress of students in the context of the general education curriculum and state standards.

Validity of this study was established through an extensive literature review and questions designed to address the various retention factors. The questions were designed to

target resiliency regarding variables that influence retention i.e., work conditions. To help establish content validity, special education directors serving as experts conducted an independent review of the questions. The feedback provided was used to modify the questions and rubrics. Items that did not meet a minimum of 4 out of 5 were not retained in the final instrument. Reliability of the instrument administered in this study was strengthened by the use of scoring rubrics, which were also modified based on feedback from the expert group. The researcher used the rubrics to score answers given by the participants. Overall reliability of the instrument was analyzed using Cronbach's alpha scores. Individual questions were analyzed to determine if reliability would be increased or decreased if a given question were removed. To achieve a more acceptable alpha level, questions were deleted based on the original item-total statistic scores. Reliability analysis was re-run each time a question was removed in an attempt to increase the reliability of the instrument. The three questions that resulted in an alpha of .604, which approaches significance, were grouped in to create a subscale with a theme of support.

Participants were asked to rank the importance of seven items related to teacher retention. They were asked to rank by priority factors that would influence a decision to leave and also by factors that would encourage a decision to stay in the field. A rank of one was first priority and a seven was of low priority. The means of the retention factors ranked the strongest ranged from .85 to 1.90 and included factors such as administrative and general education support and work variables. The means of the retention factors that were the lowest among the seven items, professional development and mentoring, ranged from .05 to .50.

Current and Former Teacher's Understanding

Perceptions of support contributed to teachers' overall sense of efficacy. According to this study, specific support areas teachers lacked were: support from the building principal, and

support for collaboration with general education teachers. Gersten et al., (2001) addressed the importance of collaborative relationships among teachers in the special education attrition literature. Administrative support included personal, emotional, and professional support (professional development) as well as assistance with problematic situations, decision making, and collaboration. Overall, there seemed to be a mismatch between expectations and what the special education teachers experienced as this study found the impact of interactions with administrators and other professionals in the school environment was an important variable. Ingersoll and Smith (2003) proposed that improving the working environment may be one cost-effective means of reducing the number of teachers who leave and that administrative support has shown to be the strongest relationship with teachers' decision to remain in teaching. "Teachers are more satisfied with teaching as a career when they receive support from administrators, cooperation from their colleagues, the resources needed to teach, and when they are not burdened with non-teaching duties" (Perie et al, 1997, p. 62).

To address issues of special education teacher shortages, one must examine and understand factors contributing to a teacher's decision to remain in the field. Beyond the validity and reliability questions, this study also considered current and former special education teacher's understanding of factors related to retention, using their responses to questions regarding retention and then ranking of key factors. Their rankings contradicted the relative weight assigned to retention factors in the literature. Two factors the literature referenced as highly important were professional development and formal mentoring programs. The literature supported mentoring as helping teachers cope with the many challenging tasks assigned to them. As to professional development, Brownell et al (1994-1995) found that teachers who received greater professional development opportunities also experienced greater job satisfaction. In the

present study, only three participants ranked professional development in the top three. The findings in this study also found that mentoring was not highly ranked. Seven participants ranked mentoring within the top three factors in terms of importance. This seemingly contradictory finding may be in part to the participants ranking the factor low due to their own poor experiences in with mentoring and professional development.

There were also several factors that were consistent with the literature. Those factors were related to administrative support (Billingsley et al., 1993), overall job and work conditions (Billingsley, 2003; Billingsley et al., 2004), and cooperation with general education staff (Gersten et al., 2001). In this study, 28 of the 40 participants ranked administrative support in the top three. An interesting discovery from this study was that both groups, former and current special education teachers, ranked the same factors consistently either high or low.

Because administrative support was such an important factor in teachers' decisions to remain in, or leave the field, building administrators and district administrators should concentrate great effort to ensure this support exists. The roles and responsibilities of a special education teacher are unique to this discipline, i.e. scheduling (pull-out and inclusion), collaborating with general educators and related service providers, completing various paperwork requirements, a need for extensive content knowledge in a wide range of subject matter, and supervising paraeducators. An administrator with an understanding of these challenges is one way to help ensure necessary supports for special education teachers.

The literature has shown that administrative support is often linked to retention. The school administrator establishes the overall culture that influences a level of support and shapes the organizational conditions under which the teachers work. Environments that fail to promote positive collegial interactions reduce teacher efficacy and create professional isolation. District

policy should limit caseloads to ensure that special education teachers have reasonable caseloads and corresponding support.

Overall job satisfaction relates to the working conditions of a particular job assignment. Research indicated that paperwork has a negative effect on job satisfaction and is a contributing factor to special education teachers leaving the field. Not only excessive paperwork, but also the changing requirements of the paperwork, adversely affected the teachers. For example, requirements of the IEP are often changed year after year. District administrators and staff could help prepare special education teachers for the challenges of the job by teaching organizational methods to help with the paperwork and data collection demands. As the inclusion movement continues to progress, the need for general education support and cooperation will continue to grow. Responses to the interview questions indicated that staff believed the inclusion delivery model was ideal, but the dissonance between the ideal and the reality was evident when trying to overcome certain complications. For example, team teaching with general educators required extensive co-planning and cooperation to be effective but time for such activities was not built into the schedule. The literature mirrors this experience in that research has shown that when peer relations were strong and team teachers had sufficient planning and collaboration time, there was a higher rate of job satisfaction. Job satisfaction and peer relations correlated with greater likelihood of special education teacher retention (Gersten et al., 2001).

Although research (Carlson et al., 2003; Griffin et al., 2003) indicated that professional development and mentoring programs were critical to special education teacher retention, the respondents in the present study showed the respondents did not place a high value on either mentoring or professional development. The teachers in this study may not have valued professional development because professional development opportunities were only

occasionally provided, or failed to address topics/issues significantly relevant to them. As indicated through responses, there was a belief that professional development was not directed, systematic, and/or relevant. Professional development was the factor ranked lowest in terms of influencing a decision to leave or encouraging teacher retention.

Implications

All teachers comprising the former special education group were currently working in a general education capacity. This flight from special education to general education has impacted the shortage in special education. A combination of several factors appeared to influence special education teachers' decisions to leave special education for general education. Factors such as IEP demands, excessive caseload, and lack of administrative support were highlighted.

This study developed questions and rankings based on the literature and studies of special education teacher attrition and retention. Interestingly, current and former special education teachers had similar perceptions regarding some of the retention factors but also ranked others differently. As Gersten and colleagues (2001) pointed out, administrators should focus on retaining current special education teachers rather than focusing on constantly recruiting new special education teachers. This study, as well as others, has shown that both school and district administrators have a strong/important role in promoting retention, validated by the rankings and responses to the questions.

Limitations

One of the major limitations of this study was the difficulty finding special education teachers who have left the field and were willing to discuss their reasons for leaving. As a result of this difficulty, the study was limited to 40 participants. Another limitation was that former special education teachers were asked to respond to the potential interview questions based on

remembered experiences, which could have been influenced by the fact they were all still currently working in education. Consideration should also be given to expanding this study in terms of sample size and greater gender and ethnic diversity. The small number of questions asked could also be seen as a limitation to this study.

Suggestions for Future Research

This study should be expanded and replicated as an addition to the current ICIS-Special Education Employment Interview System. Adding these potential retention questions to the current tool may increase the validity and reliability of the additional questions when measured as part of a larger interview system. If such a study could be done, it would be beneficial to have a variety of raters to provide inter-rater reliability. This would allow computation of the external consistency of the instrument.

Consideration of replicating this study would be appropriate if a large enough sample size of former special education teachers who have left education totally could be located. If such a sample could be found (200 teachers), the larger sample size could improve analysis of the interview questions. Many districts conduct exit interviews, questions addressing retention could be added to the process in order to make adjustments in the schools across the district.

Another interesting study would be to focus on the retention rates of special education teachers selected by a structured interview process such as the ICIS and teachers selected by more traditional interview methods.

Future research should specifically address the retention factors and the concerns of the current special education teachers. With shortages of fully certified special education teachers, decreases in the number of college graduates in special education, and estimates of increasing numbers of students with disabilities, it is vitally important for school districts to be aware of

attrition and retention issues. Questioning teachers about their work environment expectations whereby the interviewer could analyze whether the teacher's expectation matched a school's actual environment could provide the interviewer with important retention information.

Descriptors used by applicants to describe themselves and/or questions motivating them to become special education teachers could reveal characteristics indicative of retention. An interview protocol designed to guide the applicant to share their experiences could provide helpful information to the interviewer about an applicant's potential fit and improve the probability of retention.

A study focusing on teachers' personal characteristics and retention would benefit retention and recruitment efforts. Information and ideas from teachers who have chosen to remain in the field could also benefit retention efforts. Brownell et al. (1997) reported in their survey that former special education teachers would consider returning if they had more administrative support, better working conditions, and flexibility in certification requirements. This researcher believes school administrators should become more sensitive to the needs of special education teachers and involve them in more decisions regarding job design. While future studies and literature reviews may yield different results and highlight different factors, administrators will continue to face the serious challenge of staffing our schools with qualified special education teachers who will help districts make AYP within the demands of NCLB. More importantly, administration must staff schools with those most highly qualified to teach students, a pool that remains limited. Creating an environment that encourages teachers to stay long enough to develop mastery and become experts in the field may ensure that one day we will no longer face annual special education teacher shortages.

References

- American Federation of Teachers (AFT) (1999). *Survey and Analysis of Teacher Salary Trends 1999*. Retrieved January 24, 2009 from <http://www.aft.org/research/survey99/index.html>
- Andrews, L., Miller, N., Evans, S., & Smith, S. (2003). An internship model to recruit, train, and retain special education for culturally diverse classrooms. A program description. *Teacher Education and Special Education*, 26 (1), 74-78.
- Berry, B., Hoke, M. & Hirsch, E. (2004). The search for highly qualified teachers. *Phi Delta Kappan* 85(9), 684-689.
- Beutel, J. (2006). The Development and Field Test of an Employment Interview System Designed to Identify the Highly Qualified Special Education Teacher. Dissertation, University of Kansas, Lawrence, Kansas.
- Billingsley, B.S. (1993). Teacher retention and attrition in special and general education: A critical review of the literature. *The Journal of Special Education*, 27, 137-174.
- Billingsley, B. (2002). *Special education teacher retention and attrition: A critical analysis of literature*. Gainesville, FL: Center of Personnel Studies in Special Education.
- Billingsley, B. (2003). Special education teacher retention and attrition: A critical analysis of the literature. Center on Personnel Studies in Special Education, 47.
- Billingsley, B. (2004). Special Education Teacher Retention and Attrition: A Critical Analysis of the Research Literature. *Journal of Special Education*, 38(1), 39-55. Retrieved Dec 19, 2008, from Questia database: <http://www.questia.com/PM.qst?a=o&d=5006550810>
- Billingsley, B., Bodkins, D. & Hendricks, M. (1993). Why special educators leave teaching: Implications for administrators. *Case in Point*, 7(2), 23-29.
- Billingsley, B., Carlson, B. & Klein, S. (2004). The working conditions and induction support of early career special educators. *Exceptional Children*, 70, 333-347.
- Billingsley, B. & McLeskey, J. (2004). Critical issues in special education teacher supply and demand: Overview. *The Journal of Special Education*, 38(1), 2-4.
- Bobbitt, S. A., Leich, M. C., Whitener, S. D. & Lynch, H. F. (1994). *Characteristics of stayers, movers, and leavers: Results from the teacher followup survey*; Washington DC: U.S. Department of Education, Office of Educational Research and Improvement, National Center of Educational Statistics, NCES 94-337. Retrieved December 11, 2008 from <http://nces.ed.gov/pubs97/97450/97450-d.asp>

- Boe, E. (2006) Long-term trends in the national demand, supply, and shortage of special education teachers. *The Journal of Special Education*, 40 (3), 138-150.
- Boe, E., Bobbitt, S. & Cook, L. (1997). Whither didst thou go? Retention, reassignment, migration, and attrition of special and general education teachers form a national perspective. *The Journal of Special Education*, 30, 371-389.
- Boe, E., Bobbitt, S., Cook, L., & Weber, A. (1995, May) *Retention, transfer, and attrition of special and general education teachers in national perspective*. Paper presented at the National Dissemination Forum on Issues Relating to Special Education Teacher Satisfaction, Retention, and Attrition, Washington, DC.
- Boe, E., Bobbitt, S., Cook, L., Whitener, S., & Weber, A. (1997). Why didst thou go? Predictors of retention, transfer, and attrition of special and general education teachers from a national perspective. *The Journal of Special Education*, 30(4), 390-411.
- Boe, E., Cook, L., Bobbitt, S., & Terhanian, G. (1998). The shortage of fully certified teachers in special and general education. *Teacher Education and Special Education*, 21, 1-21.
- Boe, E., Cook, L., Paulsen, C., Barkanic, G., & Leow, C. (1999). *Productivity of teacher preparation programs: Surplus or shortage in quantity and quality of degree graduates* (Data analysis report no. 1999-DAR2). Philadelphia: University of Pennsylvania, Graduate School of Education, Center for Research and Evaluation in Social Policy.
- Boyer, L., & Gillespie, P. (2000). Keeping the committed, the importance of induction and support programs for new special education teachers. *Teaching Exceptional Children*, 33(1), 10-15.
- Brownell, M., Hirsch, E. & Seo, S. (2004). Meeting the demand for highly qualified special education teachers during severe shortages: What should policymakers consider? *Journal of Special Education*, 38, 56-61.
- Brownell, M.T., & Smith, S.W. (1992). Attrition/retention of special education teachers: Critique of current research and recommendations for retention efforts. *Teacher Education and Special Education*, 15(4), 229-248.
- Brownell, M.T., & Smith, S.W. (1993). Understanding special education teacher attrition: A conceptual model and implications for teacher educators. *Teacher Education and Special Education*, 16(3), 370-382.
- Brownell, M., Smith, S., McNellis, J. & Lenk, L. (1994-1995). Career decisions in special education: Current and former teacher's personal views. *Exceptionality*, 5, 83-102.
- Brownell, M., Smith, S., McNellis, J. & Miller, M. (1997) Attrition in special education: Why teachers leave the classroom and where they go. *Exceptionality* 7, 143-155.

- Campion, M. A., Campion, J. E. & Hudson, J. P. (1994, December). Structured Interviewing: A note on incremental validity and alternative question types. *Journal of Applied Psychology*, 79(6), 998-1002.
- Carlson, E., Chen, L., Schroll, K. & Klein, S. (2003). SPeNSE: Study of personnel needs in special education. Retrieved December 12, 2008, from <http://ferdig.coe.ufl.edu/spense/Results.html>.
- Clay, B. (2001). *Is this a trick questions? A short guide to writing effective test questions*. Kansas: Kansas Curriculum Center/KSDE.
- Council for Exceptional Children, (2000). *Bright futures for exceptional learners: An action to achieve quality conditions for teaching and learning*. Reston, VA: Author.
- Cross, L. H., & Billingsley, B. S. (1994). Testing a model of special educators' intent to stay in teaching. *Exceptional Children*, 60, 411-421.
- Deems, R. (1994). *Interviewing: More than a gut feeling*. West De Moines, IA: American Media Publishing.
- DeMaruo, G. (1990). *The three stage development of the NTE School Psychologist Specialty Area Test from a job analysis perspective*. Educational Testing Service.
- Dipboye, R. & Gaugler, B. (1993). Cognitive and behavior processes in the selection interview. In Schmitt, Neal & Borman, W.C. (eds), *Personnel Selection in Organizations* (135-170). San Francisco: Jossey-Bass Publishers.
- Dugan, E. P. (2007). The reliability of building administrators' and special education administrators' ratings of special education teacher applicants using an interactive computerized interview system. Dissertation, University of Kansas, Lawrence, Kansas.
- Ebmeier, H. (2006). *American Association of School Personnel Administrators' Interactive Interview System Technical Manual* (v.3). AASPA 533-B Mur-len Road, Olathe, Kansas 66062
- Embich, J.L. (2001). The relationship of secondary special education teachers' roles and factors that lead to professional burnout. *Teacher Education and Special Education*. 24(1), 58-69.
- Emley, K. & Ebmeier, H. (1997). The Predictive Validity of Branched and Structured Employee Interviews. *Journal of Personnel Evaluation in Education* 11(1), 39-56.
- Ferrandino, V. (2002). The importance of good teaching. *Principal* 81(4), 80.

- Gehrke, R. S. (2006). An investigation of factors leading to the retention of first year special education teachers. Ph.D dissertation, Arizona State University.
- George, N., George, M., Gersten, R. & Grosenick, J. (1995). To leave or to stay? An exploratory study of teachers of students with emotional and behavioral disorders. *Remedial and Special Education*, 16(4), 227-236.
- Gersten, R., Keating, T., Yovanoff, P., & Harniss, M. (2001). Working in special education: Factors that enhance special educators' intent to stay. *Exceptional Children*, 67(4): 549-567.
- Ginsberg, R., Mehring, T., Mercer, D., Holen, M., Tompkins, A., Dye, G., & Iorio, S. (2007). *Addressing teacher shortages in Kansas: A comprehensive approach*. Kansas Council of Education Deans. Paper presented at the Teacher Recruitment and Retention Summit on Education, Topeka, KS.
- Griffin, C.C., Winn, J.A., Otis-Wilborn, A., & Kilgore, K.L. (2003). *New teacher induction in special education*. (COPSSE Document Number RS-5E). Gainesville, FL: University of Florida, Center on Personnel Studies in Special Education. Retrieved January 3, 2009 at www.coe.ufl.edu/copsse/docs/RS-5/1/RS-5.pdf
- Guarino, C., Santibanez, L., Daley, G., & Brewer, D. (2004). A review of the research literature on teacher recruitment and retention (TR-164-EDU). Santa Monica, CA: RAND
- Haberman, M. (1991). The Pedagogy of Poverty Versus Good Teaching. *Kappan*, 72(5), 290-294.
- Haberman, M. (1995/2004). *Star Teachers of Children in Poverty*, Houston, TX Haberman Educational Foundation.
- Harris, M.M. & Eder, R.W. (1999). The state of employment interview practice. *The employment interview handbook* (p. 369-398). Thousand Oaks, CA: Sage.
- Harvey, V. & Struzziero, J. (2000). *Effective Supervision in School Psychology*, Bethesda, MD: NASP.
- Hirsch, E., Koppich, J. & Knapp, M. (2001). *Revisiting what states are doing to improve the quality of teaching: An update in patterns and trends*. Seattle, WA: Center for the Study of Teaching and Policy, University of Washington.
- Holub, T. (2002). *The use of recommended practices by preschool/early childhood special education school psychologists in the Midwest*.

- Huffcutt, A., Roth, P., Conway, J., & Stone, N. (2001). Identification and meta-analytic assessment of psychological constructs measured in employment interviews. *Journal of Applied Psychology*, 86(5), 897-913.
- Ingersoll, R. (2001). Teacher turnover and teacher shortages: An organizational analysis. *American Educational Research Journal*, 38(3): 499-534.
- Ingersoll, R., & Smith, T. (2003). The wrong solution to the teacher shortage. *Educational Leadership*, 60, 30-33.
- Johnson, S., Birkeland, S., Kardos, S., Kauffman, D., Liu, E. & Peske, H. (2001). Retaining the next generation of teachers: The importance of school-based support. *Harvard Educational Letter: Research Online*. Retrieved November 3, 2008 from <http://www.edletter.org/past/issues/2001-ja/support.shtml>
- Kaff, M.S. (2004). Multitasking is Multitaxing: Why Special Educators are leaving the field. *Preventing School Failure*, 48 (2) p.10-17.
- Kansas Department of Education Teacher Education and Licensure (KSDE). (2009). Teacher education and licensure regulations and standards for Kansas educators. www.ksde.org/cert
- Katsiyannis, A., D. Zhang, & M. Conroy (2003). Availability of special education teachers: Trends and Issues. *Remedial and Special Education*, 24 (4): 246-53.
- Kegel-Flom, P. (1983). Personality traits in effective clinical teachers. *Research in Higher Education*, 19, 73-82.
- Kirkwood, W.G., & Ralston, S.M. (1999). Inviting Meaningful Applicant Performances in Employment Interviews. *The Journal of Business Communication*, 36(1), 55+. Retrieved April 19, 2009, from Questia database: <http://www.questia.com/PM.qst?a=o&d=5001245498>
- Klingner, J., & Vaughn, S. (2002). The changing roles and responsibilities of an LD Specialist. *Learning Disability Quarterly*, 25, 19-31.
- Kozleski, E., Mainzer, R., & Deshler, D. (2000). *Bright futures for exceptional learners: An action agenda to achieve quality conditions for teaching and learning*. Reston, VA: Council for Exceptional Children.
- Levine, B. (2001). An examination of the factors related to the attrition and retention of special education teachers. Doctorial dissertation, University of Alabama, Tuscaloosa.
- Littrell, P., Billingsley, B., & Cross, L. (1994). The effects of principal support on special and general educators' stress, job satisfaction, school commitment, health, and intent to stay in teaching. *Remedial and Special Education*, 15, 297-310.

- Mathur, S. & Rutherford, R. (2004). Special education services for students with disabilities in Arizona. In A. Molnar (Ed.), *State of education in Arizona annual report*, Tempe, AZ: Arizona Educational Policy Initiative, Arizona State University.
- Maurer, S. (2002). A practitioner-based analysis of interview job expertise and scale format as contextual factors in situational interviews. *Personnel Psychology*, *55*, 307-27.
- McLeskey, J., Tyler, N., & Flippin, S. (2003). *The supply and demand for special education teachers: A review of research regarding the chronic shortage of special education teachers*. (COPSSE Document Number RS-1E). Gainesville, FL: University of Florida, Center on Personnel Studies in Special Education.
- McKnab, P. (2010). *Kansas Special education personnel attrition rates of personnel employed during the 2008-2009 school year who did not return for the 2009-2010 school year*. Report submitted to the Student Support Services section of the Kansas State Department of Education.
- Messick, S. (1989). In R. Linn (Ed.) *Educational Measurement (3rd ed.)* American Council on Education: New York. pp. 13-103.
- Miller, M.D., Brownell, M. T., & Smith, S.W. (1999). Factors that predict teachers staying in, leaving, or transferring from the special education classroom. *Exceptional Children*, *65*(5), 201-218.
- Mitchell, A., & Arnold, M. (2004). Behavior management skills as predictors of retention among south Texas special educators. *Journal of Instructional Psychology*, *31*(3), 214-219.
- Morvant, M., Gersten, R., Gillman, J., Keating, T., & Blake, G. (1995). Attrition/retention of urban special education teachers: Multi-faceted research and strategic action planning. Final performance report, Volume 1. (ERIC Document Reproduction Service No. ED338154)
- Murnane, R.J., Singer, J.D. & Willett, J.B. (1988). The career paths of teachers: Implications for teachers supply and methodological issues for research. *Educational Researcher*, *17*(6), 22-30.
- Nichols, S. C., Bicard, S. C., Bicard, D.F. & Casey, L. B. (2008). A field of risk: The teacher shortage in special education. *Phi Delta Kappan*, *89*(8), 597-600.
- Nunnally, J. C. (1978). Psychometric theory (2nd ed.). New York: McGraw-Hill.
- Office of Special Education Programs (OSEP). (2004). *Twenty-Sixth Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act*. Washington, DC: U.S. Department of Education.

- Payne, R. (2005). Special education teacher shortages: Barriers or lack of preparation? *The International Journal of Special Education*, 20 (1), 88-91.
- Perie, M., Baker, D., & Whitener, S. (1997). *Job Satisfaction Among America's Teachers: Effects of Workplace Conditions, Background Characteristics, and Teacher Compensation*. Washington, D.C.: National Center for Education Statistics, U.S. Department of Education.
- Peterson, K. (2002). *Effective Teacher Hiring: A Guide to Getting the Best*. VA: ASCD.
- Platt, J., & Olson, J. (1990). Why teachers are leaving special education. *Teacher Education and Special Education*, 13, 192-196.
- Ryan & Tippins (2004). Attracting & selecting: What psychological research tells us. *Human Resource Management*, 43, 305-318.
- Sax, G. (1989). *Principles of Educational and Psychological Measurement and Evaluation (3rd ed.)*. California: Wadsworth Publishing Company, Inc.
- Schmitt, N. & Borman, W.C. (1993). *Personnel selection in organizations*. Jossey-Bass. New York NY
- Schriesheim, C., Solomon, E. & Kopelman, R. (1989). Grouped versus randomized format: An investigation of scale convergent and discriminant validity using LISREL confirmatory factor analysis. *Applied Psychological Measurement*, 13, 19-32.
- Shen, J. (1997). Teacher retention and attrition in public schools: Evidence from SASS: 91. *The Journal of Education Research* 91(2), 81-88.
- Simpson, R., LaCava, P. & Graner, P. (2004). The No Child Left Behind Act: challenges and implications for educators. *Intervention in School and Clinic* 40 (2), 67-75.
- Singer, J.D., (1993). Are special educator's career paths special? *Exceptional Children*, 59, 262-279.
- Smith, T. & Ingersoll, R. (2004). What are the effects of induction and mentoring on beginning teacher turnover? *American Educational Research Journal*, 41, 681-684.
- Smith, V. (2006) The development and field testing of a school psychologist employment interview instrument. Ed.D. dissertation, The University of Kansas.
- Special Education Teachers As one of the 50 best careers of 2010, this should have strong growth over the next decade. Retrieved January 4, 2010, from <http://www.usnews.com/money/careers/articles/2009/12/28/special-education-teachers.html>

- SPeNSE. (2002). A high-quality teacher for every classroom. *SPeNSE factsheet*. Retrieved January 9, 2009, from www.spense.org
- SPeNSE. (2007). Study of personnel needs in special education. Retrieved December 9, 2008, from <http://ferdig.coe.ufl.edu/spense/index.htm>
- Stough, L., & Palmer, D. (2003). Special thinking in special settings: A qualitative study of expert special educators. *Journal of Special Education* 36(4), 206-222.
- Thornton, B., Peltier, G. & Modina, R. (2007). Reducing the Special Education Teacher Shortage. *The Clearinghouse*, 80 (5), 233-238.
- Weiss, M. P., & Lloyd, J. W. (2002). Congruence between roles and actions of secondary special educators in co-taught and special education settings. *The Journal of Special Education*, 26, 58-68.
- Whitworth, J. (1999). *Preparing, recruiting, and retaining special education personnel in rural areas*. Abilene, TX: Abilene Christian University, Department of Education. (ERIC Document Reproduction Service No. ED939893)
- Wilson, B. & Sapir, S. (1982). The selection of special educators and learning disability specialists. *Journal of Learning Disabilities*, 15(3), 166-172.
- Yee, S.M. (1990). *Careers in the classroom: When teaching is more than a job*. New York: Teacher's College Press.

Approved by the Human Subjects Committee Lawrence Campus, University of Kansas. Approval expires one year from 2/23/2009. HSCL #17853

Appendix A – Human Subjects Approval and Participant Informed Consent Form

INFORMED CONSENT TO PARTICIPATE

The Development and Field Test of Questions Predicting Special Education Teachers' Retention. A Supplement to an Existing Interview System

INTRODUCTION

The Department of Teaching and Learning at the University of Kansas supports the practice of protection for human subjects participating in research. The following information is provided for you to decide whether you wish to participate in the present study. You may refuse to sign this form and not participate in this study. You should be aware that even if you agree to participate, you are free to withdraw at any time. If you do withdraw from this study, it will not affect your relationship with this unit, the services it may provide to you, or the University of Kansas.

PURPOSE OF THE STUDY

Given the necessity of hiring quality special educators combined with the reality that many do not remain teaching after five years, having a structured interview tool for differentiating a candidate that is more likely to remain in the field would be a great service to the field of special education. Using questions developed to be used as an addition to the special education teacher version of the Interactive Computer Interview System (ICIS), this study will determine if those responsible for interviewing and hiring special education teachers can determine potential longevity based on answers of the applicant.

PROCEDURES

As part of this project, you will be asked to complete a telephone or face to face interview simulation using questions that might be asked when interviewing a special education teacher candidate. The interview will be composed of approximately 10 questions regarding the perceptions of special educators. The interview can be completed in approximately 30 minutes.

RISKS

There are no anticipated burdens, inconveniences, pain, discomforts or risks associated with participation in the study.

BENEFITS

The field of special education will indirectly benefit from your participation in this study. The benefits of an interview tool that allows building administrators to reliably distinguish special education applicants that will remain in the field will be of benefit to the field in both the efficiency of the hiring process, retention and increase in quality hiring decisions.

PAYMENT TO PARTICIPANTS

Participants will not be paid for their participation in this research study.

PARTICIPANT CONFIDENTIALITY

Your name will not be associated in any way with the information collected about you or with the research findings from this study. The researcher(s) will use a study number or a pseudonym instead of your name. The researchers will not share information about you unless required by law or unless you give written permission. Permission granted on this date to use and disclose your information remains in effect indefinitely. By signing this form you give permission for the use and disclosure of your information for purposes of this study at any time in the future.

REFUSAL TO SIGN CONSENT AND AUTHORIZATION

You are not required to sign this Consent and Authorization form and you may refuse to do so without affecting your right to any services you are receiving or may receive from the University of Kansas or to participate in any programs or events of the University of Kansas. However, if you refuse to sign, you cannot participate in this study.

CANCELLING THIS CONSENT AND AUTHORIZATION

You may withdraw your consent to participate in this study at any time. You also have the right to cancel your permission to use and disclose information collected about you, in writing, at any time, by sending your written request to: Victoria L. Vossler, 1901 SW Damon Ct., Topeka, KS 66611. If you cancel permission to use your information, the researchers will stop collecting additional information about you. However, the research team may use and disclose information that was gathered before they received your cancellation, as described above.

QUESTIONS ABOUT PARTICIPATION

Questions about procedures should be directed to the researcher(s) listed at the end of this consent form.

PARTICIPANT CERTIFICATION:

I have read this Consent and Authorization form. I have had the opportunity to ask, and I have received answers to, any questions I had regarding the study. I understand that if I have any additional questions about my rights as a research participant, I may call (785) 864-7429 or (785) 864-7385 or write the Human Subjects Committee Lawrence Campus (HSCL), University of Kansas, 2385 Irving Hill Road, Lawrence, Kansas 66045-7563, email dhann@ku.edu or mdenning@ku.edu.

I agree to take part in this study as a research participant. By my signature I affirm that I am at least 18 years old and that I have received a copy of this Consent and Authorization form.

Type/Print Participant's Name

Date

Participant's Signature

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Appendix B – Expert Check on Constructs

Please review the attached employment interview questions and rank the questions using the following standards:

- Quality of the questions
- Gaining adequate knowledge about the candidate that could predict retention

Use the scale following for ranking each question:

5
4
3
2
1
 (Great question-needs to be included) (Not a good question)

Use this scale for ranking the level of response to the question in terms of providing you knowledge that could predict retention.

5
4
3
2
1
 (Adequate) (Not Adequate)

	(Great question-needs to be included)	(Not a good question)
1. What role should a mentor have in working with new special education teachers?	5 4 3	2 1
	Adequate	Not Adequate
Level 3 Candidate supports the idea of mentoring for new special education teachers. Mentor would provide guidance regarding things such as managing paperwork, building relationships with colleagues and administration, provide information regarding resources. Perhaps add something related to classroom management, instruction, accommodations and use of regular meetings to provide on-going support to build capacity.	5 4 3	2 1
Level 2 Candidate supports the idea of mentoring and would be willing to meet with the mentor on a regular basis. Mentions items that revolve around the process side. Examples include IEP process (paperwork), setting up meetings, etc.	5 4 3	2 1
Level 1 Candidate supports the idea of mentoring but feels it would be difficult to find the time to meet. Doesn't have a specific idea of what the important elements	5 4 3	2 1

would be for the new teacher to know/learn (any of the above-perhaps names 1).		
2. In 5 years what would your friends says that you will be doing in terms of a profession?	5 4 3	2 1
Level 3 Candidate states a desire to remain in the teaching profession, specifically teaching special education. If they plan to remain in sped in some capacity-but, not as a teacher...perhaps a consulting teacher, or a sped Director, etc. this is acceptable.	5 4 3	2 1
Level 2 Candidate specifically states long term goals that may include teaching special education but also a possibility of teaching general education.	5 4 3	2 1
Level 1 Candidate expresses a desire to explore teaching opportunities outside of the special education field.	5 4 3	2 1
3. What support do you need as a special education teacher?	5 4 3	2 1
Level 3 The candidate is able to provide clear specific examples of how colleagues/administration can support him/her . Examples may be providing plan time, time for collaboration, sharing resources, legal guidance , etc.	5 4 3	2 1
Level 2 The candidate is able to talk in general terms of what support he/she would need.	5 4 3	2 1
Level 1 The candidate is vague in his/her response. Perhaps the candidate feels they know others are busy and think support is important but may be limited, or expresses desire for autonomy .	5 4 3	2 1
4. How would you describe a working relationship between special education teachers and general education teachers that would be meaningful and of most benefit to all?	5 4 3	2 1
Level 3 Candidate describes an environment/relationship that works together to facilitate the successful implementation of the IEP and maximize student learning, shared ownership of students.	5 4 3	2 1
Level 2	5 4 3	2 1

Candidate describes an environment/relationship in which the general education teachers adheres to legal requirements as outlined in the IEP.		
Level 1 Candidate describes an environment/relationship in which the general education teachers do not understand the field of special education.	5 4 3	2 1
5. How would you characterize an effective working relationship between special education teachers and administration?	5 4 3	2 1
Level 3 Candidate describes an environment/relationship that facilitates the successful implementation of the IEP and maximizes student learning. (Offering support, attending IEP meetings, knowledge of resources and their allocation, knowledgeable in IDEA).	5 4 3	2 1
Level 2 Candidate describes an environment/relationship in which the administration adheres to legal requirements as outlined in the IEP.	5 4 3	2 1
Level 1 Candidate describes an environment/relationship in which the administration expects special education teachers to maintain full responsibility of their area.	5 4 3	2 1
6. How has your philosophy of special education been impacted by the requirements of NCLB and revisions of IDEA?	5 4 3	2 1
Level 3 Candidates states the changes brought on through IDEA have had a positive impact on the delivery model for special education students, and believes it is possible to make a difference in students' lives. (List several examples of positive changes)	5 4 3	2 1
Level 2 Candidate discusses the inclusion of special education students in a neutral or balanced way. (listing pros and cons)	5 4 3	2 1
Level 1 Candidate states that he/she believes the changes brought by IDEA are not good, and suggests self-contained or resource should be the primary delivery model.	5 4 3	2 1
7. What supports or changes to your current teaching assignment would help you feel more supported?	5 4 3	2 1

<p>Level 3 Candidate states factors related to improving overall system or school-wide support such as collaboration, administrator support, team participation in IEP meetings, and increased disability awareness of students.</p>	5 4 3	2 1
<p>Level 2 Candidate states factors related to personal needs, such as fewer students and planning time</p>	5 4 3	2 1
<p>Level 1 Candidate's major concern is about external factors such as salary, room assignment, recognition, life circumstances.</p>	5 4 3	2 1
<p>8. What specifically reduces the effectiveness of a special education teacher?</p>	5 4 3	2 1
<p>Level 3 Candidate states factors relevant to job design, such as paperwork, large caseloads, and demands of IDEA. May provide specific examples</p>	5 4 3	2 1
<p>Level 2 Candidate states factors that would indicate a lack of understanding of the role of a special education teacher by colleagues and/or administrators.</p>	5 4 3	2 1
<p>Level 1 Candidate state factors not directly related to the job or role of special education teachers. For example mentions factors such as salary, school placement, and personal issues</p>	5 4 3	2 1
<p>9. What factors within the school or organization would you consider in deciding if a specific job is a good fit for you?</p>	5 4 3	2 1
<p>Level 3 Candidate states he/she would consider the job based on factors such as desire to teach special education, the job design explained to them, (including caseload) and/or he/she felt the administration would be supportive.</p>	5 4 3	2 1
<p>Level 2 Candidate states he/she would consider the job based on location and need of district (factors unrelated to the job itself).</p>	5 4 3	2 1
<p>Level 1 Candidate states he/she would consider the job to get</p>	5 4 3	2 1

their foot in the door and needed a job.		
10. Have you taken part in any type of orientation or induction activities?	5 4 3	2 1
Level 3 Candidate is able to give examples of these organizational practices/activities and talk of them being meaningful. Such as mentoring, peer observation, professional development, and orientation to policies, procedures and practices.	5 4 3	2 1
Level 2 Candidate states they have participated but can't specifically think of many examples.	5 4 3	2 1
Level 1 Candidate states they have participated but did not benefit from participation	5 4 3	2 1
11. Do you believe it is possible in special education today to make a difference in students' lives?	5 4 3	2 1
Level 3 Candidate states they believe they can and/or do make a difference! They may offer examples. Response suggests strong level of commitment.	5 4 3	2 1
Level 2 Candidate states they believe they could if they had the right working conditions.	5 4 3	2 1
Level 1 Candidate states that in today's school environment it is difficult to have an impact.	5 4 3	2 1
12. Do you believe it is possible for special education teachers to manage or affect their working conditions/job design?	5 4 3	2 1
Level 3 Candidate states they believe they can. They may offer examples.	5 4 3	2 1
Level 2 Candidate states they believe they could if they had a more collaborative relationship with administration.	5 4 3	2 1
Level 1 Candidate states that in today's school environment it is difficult to make changes happen.	5 4 3	2 1
13. Do you see yourself ending your teaching career as a special education teacher? Why? Or Why not?	5 4 3	2 1
Level 3	5 4 3	2 1

Candidate expresses a commitment to the special education cause.		
Level 2 Candidate expresses a desire to stay in education, but does not limit it to the special education field.	5 4 3	2 1
Level 1 Candidate states that at this time he/she does not have a sense of what they will be doing.	5 4 3	2 1
14. What kind of expectations do you have for general education teachers with regard to shared students?	5 4 3	2 1
Level 3 General education teachers should collaborate, co-teach, and co-plan with special education teachers to meet the needs of all students.	5 4 3	2 1
Level 2 General education teachers seek input from special education teachers in working with student identified with special education needs .	5 4 3	2 1
Level 1 General education teachers leave the responsibility of special education students to the special education teacher.	5 4 3	2 1
15. What role do you believe the administration has in terms of overall building culture?	5 4 3	2 1
Level 3 Promotes a culture in which it is the responsibility of all staff to make sure that students are successful.	5 4 3	2 1
Level 2 Promotes a culture in which staff is responsible for their assigned teaching responsibility.	5 4 3	2 1
Level 1 Supportive of all staff but allows each to do what they feel is relevant to their assignment.	5 4 3	2 1
16. How do you handle situations in which the team you are working with is frequently unable to obtain consensus in decision making?	5 4 3	2 1
Level 3 The candidate states he/she would take a proactive role in building team cohesiveness, help problem solve and have discussions regarding the purpose of the meeting. Provides examples.	5 4 3	2 1
Level 2 The candidate states he/she would remind the team of	5 4 3	2 1

the legal requirements of the IEP/IDEA.		
Level 1 The candidate states he/she would avoid contributing to conflict and ask to be removed.	5 4 3	2 1

1. **Rank order the following factors that would most influence your decision to leave the field of special education: a 1 is the primary influence.**

- _____ Administrative support
- _____ Collegial support
- _____ Collaboration time
- _____ Paperwork
- _____ Role specification
- _____ Caseload
- _____ Professional Development

Keep? Yes or No

2. **Rank order the following factors that would encourage you to stay in the field:**

- _____ Cooperation from general education colleagues
- _____ Administrative support
- _____ Planning time
- _____ Job assignment/Work conditions
- _____ Job design
- _____ Mentorship
- _____ Professional Development

Keep? Yes or No

Appendix C-Final Copy of Questions and Scoring Rubric

1. What role should a mentor have in working with new special education teachers?

Level 3

Candidate supports the idea of mentoring for new special education teachers. Mentor would provide guidance regarding things such as managing paperwork, building relationships with colleagues and administration, provide information regarding resources. Perhaps add something related to classroom management, instruction, accommodations and use of regular meetings to provide on-going support to build capacity.

Level 2

Candidate supports the idea of mentoring and would be willing to meet with the mentor on a regular basis. Mentions items that revolve around the process side. Examples include IEP process (paperwork), setting up meetings, etc.

Level 1

Candidate supports the idea of mentoring but feels it would be difficult to find the time to meet. Doesn't have a specific idea of what the important elements would be for the new teacher to know/learn (any of the above-perhaps names 1).

2. What support do you need as a special education teacher?

Level 3

The candidate is able to provide clear specific examples of how colleagues/administration can support him/her. Examples may be providing plan time, time for collaboration, sharing resources, legal guidance, etc

Level 2

The candidate is able to talk in general terms of what support he/she would need.

Level 1

The candidate is vague in his/her response. Perhaps the candidate feels they know others are busy and think support is important but may be limited, or expresses desire for autonomy.

3. How would you characterize an effective working relationship between special education teachers and administration?

Level 3

Candidate describes an environment/relationship that facilitates the successful implementation of the IEP and maximizes student learning. (Offering support, attending IEP meetings, knowledge of resources and their allocation, knowledgeable in IDEA).

Level 2

Candidate describes an environment/relationship in which the administration adheres to legal requirements as outlined in the IEP.

Level 1

Candidate describes an environment/relationship in which the administration expects special education teachers to maintain full responsibility of their area.

4. How has your philosophy of special education been impacted by the requirements of NCLB and revisions of IDEA?

Level 3

Candidate states the changes brought on through IDEA have had a positive impact on the delivery model for special education students, and believes it is possible to make a difference in students' lives. (List several examples of positive changes)

Level 2

Candidate discusses the inclusion of special education students in a neutral or balanced way. (Listing pros and cons)

Level 1

Candidate states that he/she believes the changes brought by IDEA are not good, and suggests self-contained or resource should be the primary delivery model.

5. What specifically reduces the effectiveness of a special education teacher?

Level 3

Candidate states factors relevant to job design, such as paperwork, large caseloads, and demands of IDEA. May provide specific examples

Level 2

Candidate states factors that would indicate a lack of understanding of the role of a special education teacher by colleagues and/or administrators.

Level 1

Candidate state factors not directly related to the job or role of special education teachers. For example mentions factors such as salary, school placement, and personal issues.

6. What factors within the school or organization would you consider in deciding if a specific job is a good fit for you?

Level 3

Candidate states he/she would consider the job based on factors such as desire to teach special education, the job design explained to them, (including caseload) and/or he/she felt the administration would be supportive.

Level 2

Candidate states he/she would consider the job based on location and need of district (factors unrelated to the job itself).

Level 1

Candidate states he/**she would consider** the job to get their foot in the door and needed a job.

7. Do you believe it is possible in special education today to make a difference in students' lives?

Level 3

Candidate states they believe they can and/or do make a difference! They may offer examples. Response suggests strong level of commitment.

Level 2

Candidate states they believe they could if they had the right working conditions.

Level 1

Candidate states that in today's school environment it is difficult to have an impact.

8. What kind of expectations do you have for general education teachers with regard to shared students?

Level 3

General education teachers should collaborate, co-teach, and co-plan with special education teachers to meet the needs of all students.

Level 2

General education teachers seek input from special education teachers in working with student identified with special education needs.

Level 1

General education teachers leave the responsibility of special education students to the special education teacher.

9. How do you handle situations in which the team you are working with is frequently unable to obtain consensus in decision making?

Level 3

The candidate states he/she would take a proactive role in building team cohesiveness, help problem solve and have discussions regarding the purpose of the meeting. Provides examples.

Level 2

The candidate states he/she would remind the team of the legal requirements of the IEP/IDEA.

Level 1

The candidate states he/she would avoid contributing to conflict and ask to be removed.

10. Rank order the following factors that would most influence your decision to leave the field of special education: a 1 is the primary influence.

- _____ Administrative support
- _____ Collegial support
- _____ Collaboration time
- _____ Paperwork
- _____ Role specification
- _____ Caseload
- _____ Professional Development

11. Rank order the following factors that would encourage you to stay in the field:

- _____ Cooperation from general education colleagues
- _____ Administrative support
- _____ Planning time
- _____ Job assignment/Work conditions
- _____ Job design
- _____ Mentorship
- _____ Professional Development