2011-12-07

A Content Analysis of Evaluation Instruments Used by Special Education Teacher Preparation Programs

Megan Sue Langford
Brigham Young University - Provo

A Content Analysis of Evaluation Instruments Used by Special Education Teacher Preparation Programs

Megan Sue Langford

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

Master of Science

Darlene Anderson, Chair
Mary Anne Prater
Michelle Marchant

Department of Counseling Psychology and Special Education

Brigham Young University

December 2011

ABSTRACT

A Content Analysis of Evaluation Instruments Used by

Special Education Teacher Preparation Programs

Megan Sue Langford

Department of Counseling Psychology and Special Education

Master of Science

The purpose of this study was to conduct a content and component analysis of evaluation instruments used to evaluate preservice teacher performance by special education teacher preparation programs. Direct observation (DO) and summative evaluation (SE) forms were collected from a random sample of Special Education teacher preparation programs that are recognized by the Council for Exceptional Children (CEC). The forms were then coded for content and components based on predetermined categories to identify similarities and differences. Variances among the DO and SE forms indicated possible methods for evaluating preservice teacher knowledge, skills, and dispositions.

Keywords: Special Education Teachers, Teacher Preparation, Teacher Evaluation, Evaluation Instruments, Content Analysis, Professional Teacher Standards

ACKNOWLEDGEMENTS

There are many people who have been instrumental in helping me complete my thesis. First, I am appreciative of the research assistants who helped with the initial stages of the project, Rob Kirkham and Mary Buynak. Also later assistance was provided in the coding and data entry by Kinsey Ward, Naomi Phillips, and Maile Scholer. Their time and efficient efforts were wonderful. I am also grateful to countless friends, colleagues, and coworkers who supported and encouraged me throughout my coursework and research. To my knowledgeable and wise professors who guided me to deeper insights and understanding of the world of research, thank you. Dr. Tina Dyches, graduate committee coordinator, you always had a kind word of motivation when I needed it most. Each one of my committee members have been an invaluable source of encouragement for me. I thank each one of you for your investment in me. Especially to Dr. Darlene Anderson whose patient and kind words always came at the most opportune moments, thank you. You taught me to always ask questions; there is always something fascinating to discover. I admire and appreciate your passion for research and for the field of special education. Lastly, to my incredible parents and family: Mom and Dad, thank you for instilling in me a love of life and learning. Thank you for teaching me to continually strive for excellence. To my brothers and sisters, thank you for believing in me and always loving me. I love you all.

TABLE OF CONTENTS

LIST OF TABLES

Table *Page*

LIST OF FIGURES

Number *Page*

Introduction

Educating America's children is perhaps one of the greatest challenges facing our nation (National Commission on Excellence in Education, 1983). Recent legislation such as the No Child Left Behind Act (NCLB) has confirmed the need for research-based, effective instruction to ensure student learning and achievement (No Child Left Behind Act, 2008). More than that, the act has mandated that students be taught by well-trained and effective professional educators who can demonstrate mastery of the content they teach. Individual states must determine what highly qualified truly means by formulating teacher licensing policies and passing legislation that aligns with federal guidelines (U.S. Department of Education, 2004, Berliner, 2005).

The requirement for states to define effective teaching calls for rigorous assessment and accountability systems. Various organizations and associations have proposed professional teaching standards including the Council of Chief State School Officer's (CCSSO) Interstate New Teacher Assessment and Support Consortium (INTASC), the National Board of Professional Teaching Standards (NBPTS), the National Council for Accreditation in Teacher Education (NCATE), and the Council for Exceptional Children (CEC). NCATE currently uses the CEC standards when evaluating and accrediting special education teacher preparation programs (Otis-Wilborn, Winn, Ford, & Keyes, 2000). These standards are often accompanied by a statement recommending the use of the standards to inform state education licensing and teacher development requirements (Council for Exceptional Children, 2009; Council of Chief State School Officers, 2007).

Teacher preparation programs around the nation are charged with the task of producing highly qualified teachers by translating these standards into a usable framework that aligns with their program objectives. These objectives must then be taught to preservice teachers and

accurately assessed. Assessment of the knowledge and skills of beginning teachers is an essential yet challenging and complex task (Berliner, 2005; Espin & Yell, 1994).

Statement of the Problem

While the federal government, through NCLB, has mandated that teachers become highly qualified, the exact definition of what makes teachers highly qualified remains elusive (Darling-Hammond & Youngs, 2002; Darling-Hammond & Sykes, 2003). The federal government has allowed individual states to decide how teachers can become licensed (U.S. Department of Education, 2004, Berliner, 2005).

State teacher licensing agencies and institutions of higher education (IHEs) need a source to inform decisions on essential teacher competencies. Teachers entering the field of education need a vast repertoire of knowledge and skills to prepare them for the complex task of teaching our increasingly diverse students (Brownell, Sindelar, Kiely, & Danielson, 2010; Council for Exceptional Children, 2009). While these essential teacher competencies have been defined through the development of various professional teaching standards (e.g. National Board of Professional Teaching Standards (NBPTS), Interstate New Teacher Assessment and Support Consortium (INTASC) Standards, Council for Exceptional Children (CEC) Standards), current methods in evaluating teacher competency vary greatly (Blanton, Sindelar, & Correa, 2006; Otis-Wilborn et al., 2000). This variance makes it difficult to know what it means for a teacher to be highly qualified.

Statement of the Purpose

Current practices of evaluating teacher competency should be analyzed to identify probable methods of evaluation which could create a more unified approach to producing competent, well-trained educators (Blanton et al., 2006). This research study was conducted to

inform state teacher licensing agencies and teacher preparation programs regarding current practices in evaluating preservice special education teacher performance. Institutions of higher education that are recognized by CEC, the largest professional organization of special educators, were selected as study participants based on an established, documented standard of excellence (Council for Exceptional Children, 2009). The current study identified similarities and differences in direct observation (DO) and summative evaluation (SE) forms used by CEC recognized special education teacher preparation programs that may lead to probable best practices.

Traditionally, preservice teachers have been evaluated during their field experiences using one of five common approaches: 1) process-product portfolio; 2) teacher evaluation checklists; 3) professional standard checklists; 4) large scale surveys; and 5) commercially available observation forms (Blanton, et al., 2006). Research indicates the need for a multi-method approach, most commonly found by combining a direct observation form and a summative teacher evaluation checklist based on professional teaching standards (Blanton et al., 2006). For this reason, the present study will focus on the analysis of direct observation and summative evaluation forms.

It is speculated that many special education teacher preparation programs use a direct observation form to collect classroom data on observable teacher and student behaviors in a classroom setting. These data are used to evaluate the knowledge and implementation of pedagogical skills studied during course work (Blanton et al., 2006). Direct observation forms are often used multiple times throughout a field experience as a formative assessment to promote preservice teacher reflection and to change behavior.

Summative evaluation forms, sometimes referred to as teacher evaluation checklists, are clinical practice evaluations. Summative evaluation forms may include various skills and competencies necessary for effective teaching and are often based on professional teaching standards (Blanton et al., 2006). University supervisors generally complete these forms following course work and during the field experience to assess a preservice teacher's preparedness to enter the field of education. However, some teacher preparation programs use these forms throughout preservice teacher training to shape teacher behavior. Thus the form can be used for formative and summative purposes. A summative evaluation form may help a teacher preparation program decide whether or not a teacher candidate should receive teacher licensure.

The purpose of the present research was to identify current practices in the preparation of future special educators -- specifically focusing on the tools used to assess teaching performance. Data derived from the analysis of the content of DO and SE forms can help special education teacher preparation programs to create valid and reliable evaluation instruments which can be used to assess the specific knowledge, skills, and competencies that beginning teachers should possess. In addition, the results may allow IHEs more confidence in the evaluation of teacher knowledge and skills. The following research questions guided the current study.

Research Questions

1. What are the similarities and differences in the content of the direct observation forms used to evaluate preservice teacher performance in a random sample from Council for Exceptional Children (CEC) recognized undergraduate special education teacher preparation programs?

2. What are the similarities and differences in the content of the summative clinical practice evaluation forms used to evaluate preservice teacher performance from a random sample of CEC recognized undergraduate special education teacher preparations programs?

Understanding more about these direct observation and summative evaluation forms can assist special education teacher preparation programs in creating evaluation instruments. Additionally, this information can inform probable best practices that may be used to produce highly qualified educators.

Review of the Literature

The primary focus of the following discussion is to explain the role of teaching standards and their impact on teacher preparation. This is followed by a description of common practices in teacher preparation. The discussion will conclude with an explanation of evaluation methods for special education preservice teachers.

Professional Teacher Evaluation

The purpose of standards is to create shared understanding between teacher preparation programs, state licensing agencies, policy makers, and the public. These standards typically include knowledge and skills that teachers should know and be able to perform with a certain level of accuracy and competency. National and state policy makers use professional teaching standards to determine how teachers can become licensed or certified. They also drive educational policy and are used for re-licensing and professional development. Teacher preparation programs additionally incorporate teaching standards into the design of program content, including the field experience and other licensure requirements.

Standards commonly used. Research has shown that maintaining high standards increases the level of professionalism and accountability in education (Danielson, 2007). Two sets of professional teaching standards will be discussed in this review: The Interstate New Teacher Assessment and Support Consortium (INTASC) Standards and the Council for Exceptional Children (CEC) Standards. A framework for effective teachers developed by Charlotte Danielson, published in "*Enhancing Professional Practice: A Framework for Teaching*" (2007) will also be discussed.

CEC standards. In April 2002 the Board of Directors of the Council for Exceptional Children (CEC) published their standards in a document titled, "The Council for Exceptional Children Definition of a Well-Prepared Special Education Teacher." The CEC Board noted that its standards were specifically designed to align with the INTASC standards and the National Board for Professional Teaching Standards (NBPTS) which will be discussed in the next section. As the largest professional organization of special educators, CEC actively promotes effective practices. CEC has developed standards for beginning and advanced special education teachers.

The most recent version of the CEC standards was published in the sixth edition of *What Every Special Educator Must Know* (CEC, 2009). These standards were conceptualized using empirical research and have been validated since 1992 using rigorous scientific research methods (CEC, 2009). This most recent edition of the CEC standards consists of 10 Initial Content Standards and 6 Advanced Special Educator Standards. These two sets of standards are meant to project the increase of knowledge and skills that special educators should gain with experience. See Appendix A for a complete list of the 10 Initial Content Standards recommended for the teacher preparation. The ten standards include the following: foundations, characteristics of learners, instructional strategies, individual differences, learning environments and social

interactions, instructional planning, language, ethics and professional practice, assessment, and collaboration.

To better ensure an IHE is adequately preparing preservice teachers, any individual can specifically look at the Initial Content Standards. IHEs can also align their program objectives and course contents with these standards.

In addition to the standards, the Council for Exceptional Children has produced a common core that can be used by teacher preparation programs to develop program objectives. The common core includes 54 knowledge and 71 skill competencies recommended for beginning special education teachers "in order to serve individuals with specific exceptionalities safely and effectively" (CEC, 2009; p. 229).

The preface of "The Council for Exceptional Children Definition of a Well-Prepared Special Education Teacher" states:

> CEC expects at a minimum that entry-level special educators possess a bachelor's degree from an accredited institution, have mastered appropriate core academic subject matter content, and can demonstrate that they have mastered the knowledge and skills in the CEC Common Core and an appropriate Area of Specialization. (p. 1)

CEC works at the state and national level and with teacher preparation institutions to ensure that the standards inform program objectives, course content, assessment criteria, and licensing requirements.

INTASC standards. The Interstate New Teacher Assessment and Support Consortium (INTASC) Standards were specifically written by the Council of Chief State School Officers (CCSSO) to inform policy and are widely accepted throughout the United States. INTASC was created in 1987 and is comprised of members of state education agencies and national education

agencies. The overall aim of the consortium is to promote positive reform and better correlation among teacher preparation programs, state licensing agencies, and professional development programs. The consortium contends that teachers should combine content knowledge with the strengths and needs of individual students to maximize student learning. As state education agencies work with teacher preparation programs to set licensing policies, standards are intended to ensure congruency. It is expected that states adopting the INTASC standards carefully align state licensing procedures with the standards to ensure that beginning teachers are well-prepared.

In 1992 the consortium published their original document titled "Model Standards for beginning Teacher Licensing, Assessment, and Development: A Resource for State Dialogue". Since the distribution of this original document, INTASC has created specific standards for teachers of the arts, science, foreign language, math, and science. Most recently they published "Model Standards for Licensing General and Special Education Teachers of Students with Disabilities: A Resource for State Dialogue" (2001). The INTASC Standards include 10 standards that reflect what a teacher should know and be able to perform. These standards are written as statements of understanding. See Table 1 for a description of the INTASC Standards.

To improve coordination between professional organizations, state teacher licensing agencies, teacher preparation programs, and accrediting agencies, CEC revised their standards to directly align with the INTASC Standards in 2003 (CEC, 2009). Both the INTASC and CEC standards consist of 10 domains that encompass the knowledge and skills that should be part of a well-trained special educator's repertoire. This alignment is demonstrated in Table 2. This table also shows alignment to the Framework for Teaching developed by Charlotte Danielson (2007), described below.

Table 1

INTASC Standards

Principle 1	The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and can create learning experiences that make these aspects of subject matter meaningful for students.
Principle 2	The teacher understands how children learn and develop, and can provide learning opportunities that support their intellectual, social and personal development.
Principle 3	The teacher understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to diverse learners.
Principle 4	The teacher understands and uses a variety of instructional strategies to encourage students' development of critical thinking, problem solving, and performance skills.
Principle 5	The teacher uses an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement in learning, and self-motivation.
Principle 6	The teacher uses knowledge of effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom.
Principle 7	The teacher plans instruction based upon knowledge of subject matter, students, the community, and curriculum goals.
Principle 8	The teacher understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social and physical development of the learner.
Principle 9	The teacher is a reflective practitioner who continually evaluates the effects of his/her choices and actions on others (students, parents, and other professionals in the learning community) and who actively seeks out opportunities to grow professionally.
Principle 10	The teacher fosters relationships with school colleagues, parents, and agencies in the larger community to support students' learning and well-being.

Table 2

Comparison of CEC Standards and Danielson Framework to the INTASC Standards

INTASC Core Principles	CEC Standard Domain Areas	Danielson Framework Components
Content Knowledge	Foundations	Demonstrates a knowledge of content and pedagogy Designs coherent instruction Engages students in learning
Learner Development	Characteristics of Learners	Demonstrates knowledge of students Sets instructional outcomes Assesses student learning Using Questioning and Discussion Techniques Engaging Students in Learning
Learner Diversity	Individual Differences	Demonstrating Knowledge of Students Designs coherent instruction Creates and environment of respect and rapport Establishes a culture for learning Instruction Domain
Instructional Strategies	Instructional Strategies	Planning and Preparation Instruction
Learning Environment	Learning Environments and Social Interactions	Planning and Preparation The Classroom Environment Instruction
Communication	Language	The Classroom Environment Instruction
Planning for Instruction	Instructional Strategies	Planning and Preparation Instruction
Assessment	Assessment	Planning and Preparation Instruction Professional Responsibilities
Reflective Practices and Professional Development	Ethics and Professional Practice	Professional Responsibilities
Community	Collaboration	Planning and Preparation Professional Responsibilities

Danielson's framework for teaching. Like professional teaching standards, Charlotte Danielson's *Enhancing Professional Practice: Framework for Teaching* (2007) draws on empirical and theoretical research to define the responsibilities of teachers. Danielson's Framework consists of 4 domains and 22 components which detail the various duties included in a teacher's job description. Table 3 summarizes the domains and components of the framework. Like the INTASC Standards, this framework is intended for all educators; expert and novice, general and special. The framework also follows the lead of other professional fields, such as medicine and business, in establishing a common language or vocabulary that fosters effective communication (Danielson, 2007).

The comprehensive nature of Danielson's (2007) framework is suitable for use as an evaluation tool. Each of the 22 components can be directly observed and measured. In her publication, Danielson has organized each domain and its components on a continuum of proficiency. Each continuum contains indicators for performance under the following categories: unsatisfactory, basic, proficient, and distinguished. Danielson recommends her framework be used for formative evaluation to promote reflection and growth. The nature of the framework lends itself to repeated use that would show professional development over time.

Application of professional standards in general context. Standards can be implemented as a safeguard to the public (Council of Chief State School Officers, 2007). When research-based standards are used to inform national and state policy and within teacher preparation programs, the public can be more confident that beginning teachers have the knowledge and skills required to be effective educators of all students (Otis-Wilborn et al., 2000). Otis-Wilborn and colleagues also urged the use of standards in preservice teacher education programs, for practicing teachers, and as an impetus for professional development.

Professional teaching standards can lead evaluators to look for evidence that indicates a teacher has met an expected level of performance (Danielson, 2007; Otis-Wilborn et al., 2000). Using professional teaching standards to inform direct observation forms can help ensure that teachers are using effective teaching strategies based on empirical research. This may ultimately assist IHEs in producing highly qualified educators. Using effective evaluation procedures that are clearly linked to professional teaching standards in preservice teacher education programs may build public confidence in IHEs (Council of Chief State School Officers, 2007; Danielson, 2007).

Implementing professional teaching standards has been shown to have a positive effect on preservice teacher learning and performance (Brownell, Ross, Collon, & McCallum 2005; Ryan & Krajewski, 2002; Otis-Wilborn et al., 2000, Otis-Wilborn & Winn, 2000). Using the same standards for assessment of teacher performance and for professional development after licensure has been awarded is likely to further enhance public confidence in teachers (Council of Chief State School Officers, 2007; Danielson, 2007). A limited but growing number of studies show the link between indicators of teacher performance and student outcomes (Darling-Hammond, 2000b). More research in this area may lead to further insights on how teacher behavior impacts student learning and performance. Results of a recent study suggested that beginning special education teachers rely more on their classroom management and general instructional practices than their knowledge of teaching content (Brownell et al., 2009). Brownell et al. also pointed out the need for additional research to determine the relationship between classroom practices and student achievement gains.

As practicing teachers continue to rely on teaching standards, the relicensure process can become more streamlined and effective. Relicensure agencies, such as state offices of education,

Table 3

Summary of a Framework for Teaching (Danielson, 2007)

Domain	Component
Planning and Preparation	Demonstrating knowledge of content and pedagogy
	Demonstrating knowledge of students
	Selecting instructional goals
	Demonstrating knowledge of resources
	Designing coherent instruction
	Assessing student learning
The Classroom Environment	Creating an environment of respect and rapport
	Establishing a culture for learning
	Managing classroom procedures
	Managing student behavior
	Organizing physical space
Instruction	Communicating clearly and accurately
	Using questioning and discussion techniques
	Engaging students in learning
	Providing feedback to students
	Demonstrating flexibility and responsiveness
Professional Responsibilities	Reflecting on teaching
	Maintaining accurate records
	Communicating with families
	Contributing to the school and district
	Growing and developing professionally
	Showing professionalism

should use professional teaching standards as part of the relicensure process for practicing teachers (Council of Chief State School Officers, 2007).

Professional teaching standards provide a natural course of study for professional development (CEC, 2009; Council of Chief State School Officers, 2007). As teachers who are currently practicing are trained in ideas that represent "good practice" as defined by professional teaching standards and established by research, teachers will hopefully implement these practices which will promote better student learning and achievement. Continued professional development may also support teachers, whose classroom demographics are rapidly changing, creating the need for different pedagogical techniques to meet the needs of diverse learners.

Use of standards to meet the needs of diverse learners. Most teacher performance standards reflect the knowledge and pedagogy required for general education purposes with little or no emphasis on meeting the needs of diverse learners (Otis-Wilborn et al., 2000). Diverse learners can be defined as students who have special needs due to differences in race, ethnicity, culture, nationality, mental or physical development, or learning style. Using teacher performance standards, special education teacher preparation programs must develop a framework that reflects the unique skills necessary for teaching individuals with various needs and disabilities. Danielson (2007) in her most recent edition broadened the original framework to place more emphasis on meeting the needs of diverse learners. This expansion may be due to the rapidly changing demographics of students within the public education system as well as the increase of students with special needs who are being included in the general education classroom. This emphasis on diverse learners lends credence to using professional teaching standards for special education teachers as well as general education teachers.

The Council for Exceptional Children focuses on teaching students with diverse needs. A detailed look at the language of the CEC standards as found in Appendix A will reflect a strong connection to meeting the needs of diverse learners. Each of the 10 domains includes specific wording defining the knowledge and skills necessary for a special educator or any educator who works with individuals with exceptionalities.

Using teacher standards to assess teacher competency and provide documentation for licensure purposes is an essential process. For IHEs determining if a teacher is well trained and prepared for the classroom is a complex task which could be more effectively solved by using teacher standards to develop a more accurate and reliable evaluation instrument. Blanton and colleagues (2006) strongly confirmed the need for researchers to identify a "credible and versatile measure of teacher quality" to follow the direction set forth by the NCLB policy (p. 115). In a review of current evaluation practices, Berliner (2005) noted that direct observation is a key component of accurate assessment of a teacher's knowledge and skills. The assessment of student teachers will be further discussed in a later section of this review titled Special Education Student Teacher Evaluation Approaches.

Overall, professional teaching standards, such as the INTASC or CEC Standards, are a valuable tool in designing teacher preparation programs, establishing educational policy, fostering professional development, and evaluating teacher performance. Standards are intended to ensure a high level of quality. Two of the prominent challenges in the field of education are somewhat alleviated by using standards. These challenges are (a) adequately preparing teachers and (b) accurately assessing teacher knowledge and skills. These issues will be discussed further in the following sections of this review.

Teacher Preparation

Teacher preparation programs have changed over time as research has evolved, providing information about how teacher behavior affects student learning. Wideen, Mayer-Smith, and Moon (1998) reviewed 97 studies that investigated learning how to teach. The review yielded four common components that produce conceptual change in student teachers: (a) the use of a pedagogy that helps student teachers examine their beliefs; (b) a strong vision within the program that fosters program cohesion; (c) a small program size with a high degree of faculty-student collaboration; and, (d) carefully constructed field experiences in which university and school faculty collaborate extensively.

Throughout history, research has shown that teacher quality directly influences student learning and achievement (CEC, 2009; Blanton et al. 2006; Fenstermacher & Richardson, 2005; Darling-Hammond 1999, 2000a). For this reason, research continues to be conducted on teacher quality. Studying teacher preparation methods and evaluation methods may help elevate student learning and achievement. However, specifically defining quality teaching is difficult.

The traditional definition of good teaching was challenged by the No Child Left Behind Act (NCLB; 2008) which used information from two analytical studies that presented student learning as an indicator of teacher quality rather than teacher behavior (Hess, 2001; Walsh, 2001). NCLB further stressed the importance of teachers' content mastery and verbal ability rather than educational pedagogy. In a comparison of general education and special education teacher preparation programs, Brownell et al. (2005) found that both types of programs place heavy emphasis on pedagogy. However, Brownell and colleagues noted that general education programs teach more pedagogy that is subject-specific, while special education programs tend to use a more general pedagogical approach.

Research on effective special education teacher preparation programs is not well established at this time (Brownell et al., 2005). More extensive research has been conducted to examine general education teacher preparation programs. After a brief overview of the identified research, I will explain their results in greater detail. Two studies were identified that compared special education and general education teacher preparation programs (Boe, Shin, & Cook ,2007; Brownell et al., 2005). Prater and Sileo (2004) looked specifically at special education fieldwork requirements across the nation. Lastly, Nougaret, Scruggs, and Mastropieri (2005), compared the teaching performance of fully licensed first year special education teachers with the performance of non-certified teachers enrolled in an alternate route to licensure program.

Boe, Shin, and Cook (2007) conducted a study funded by a grant from the U.S. Department of Education and a grant from the Graduate School of Education at the University of Pennsylvania. They used the Schools and Staffing Survey (SASS) data from 1999-2000 to investigate relationships between the amount of teacher preparation and various indices of teacher qualification for general education and special education teachers within the first five years of teaching. The teacher qualification indicators included (a) licensure in main teaching assignment, (b) in- and out-of-field teaching assignment, (c) degree major field, (d) degree level, and (e) teacher reports of being well prepared to teach. Results suggested that special education teachers report being less well prepared than their general education counterparts in the areas of teaching assigned subject matter, planning lessons effectively, using a variety of instructional methods, and using computers in classroom instruction. It should be noted that extensive teacher preparation was the best predictor of special education teachers reporting they were well prepared. For special education teachers, extensive teacher preparation in pedagogy paired with supervised teaching assignments proved to be a strong indicator of teacher competency. This

data analysis suggests that extensive special education teacher preparation consisting of a significant amount of instruction in pedagogy and a supervised teaching assignment yields the most prepared special education teachers.

In a comparative review of descriptions of general and special education teacher preparation programs Brownell et al. (2005) found seven indicators of exemplary general education teacher preparation programs. The investigators used this research to design a framework for analyzing features of special education teacher preparation programs. Sixty-four publications describing special education teacher preparation programs were identified and reviewed. Overall, the researchers found that five of the initial seven indicators were represented in special education teacher preparation programs. These indicators were: (a) well-designed, extensive field experiences; (b) emphasis on collaboration; (c) self-analysis of program effectiveness and impact; (d) focus on student diversity and inclusion; and (e) sustaining a constructivist approach toward teacher knowledge. One of these indicators is strongly related to this current research study: (a) well-designed, extensive field experiences. Direct observation forms are commonly used in field experiences. An analysis of direct observation forms may provide insight into the organization of the field experience and the knowledge or skills required by the teacher preparation program.

An important study investigating the effectiveness of special education teacher preparation programs identified several strengths of field experiences within traditional teacher licensure programs (Prater & Sileo, 2004). The research likewise examined the requirements of special education field experiences across the nation. The researchers specifically sought information about who identifies and assigns fieldwork placements, qualifications and compensation for mentor teachers, who serves as supervisors and how many students they

supervise, credits provided for the fieldwork, and the strengths and limitations of the fieldwork as determined by the respondent. Surveys were mailed out to one third of the IHEs as listed in the *National Directory of Special Education Personnel Preparation Programs* (Council for Exceptional Children, 1991). Fifty-three percent or 115 surveys were returned and representing 42 states and Puerto Rico. Results indicated that most special educators attended institutions that are state and NCATE approved. They also showed that the average duration of fieldwork prior to student teaching was 163 hours with 3.5 observations conducted by university supervisors during the same time period. Student teachers averaged 457 hours with 6.5 observations. Common strengths of the field work programs as represented by the respondents included: (a) strong collaboration between the university and public schools to produce rigorous, competency-based training; (b) use of well-qualified former graduates as mentor teachers; (c) multiple settings to provide experience across age, grade, and special education disability types; (d) experience with diverse cultural, racial, and ethnic populations; and (e) use of multiple field experiences throughout coursework to allow for application of theory and methods. Interestingly, common limitations of the programs included all the elements listed as strengths by other universities, as well as: (a) employing a more ethnically and racially diverse faculty; (b) developing a dual licensure program to produce teachers certified in general and special education; (c) implementing a school-wide model for field experiences; and (d) increasing financial and personnel support to decrease the ratio of university supervisors to students teachers (Prater & Sileo, 2004).

To determine whether teacher education programs produce better special education teachers than teachers without formal training, Nougaret, Scruggs, and Mastropieri (2005), compared the performance of 20 first year special education teachers who followed a traditional

route to licensure in relation to 20 teachers with provisional licenses. An experienced, trained observer who was unaware of the licensure status of each teacher used Charlotte Danielson's *Framework for Professional Practice* (1996) to evaluate the performance of each teacher. Three domains reflecting the duties of a teacher were used to evaluate the teachers: planning and preparation, classroom environment, and instruction. Overall, the first year teachers who were traditionally educated and licensed outperformed the first year teachers with emergency provisional licenses to a significant degree, with an average effect size of 1.64. These results suggested that traditional teacher preparation programs for special education teachers do have a significant positive impact on teacher performance.

Research on the effectiveness of special education teacher preparation programs needs to expand if we are to confidently state that teachers entering the workforce are highly qualified. The limited amount of current research in this area is indicative of a possible correlation between teacher competency and extensive teacher preparation in pedagogy paired with supervised teaching assignments (Boe et al., 2007). These results are in contrast to the current direction of federal legislation (i.e., No Child Left Behind, 2004), which places heavy emphasis on content knowledge rather than on pedagogy and field experience. Boe et al. (2007) as well as Brownell et al. (2005) recommended that further research be conducted to investigate the effectiveness of both general and special education teacher preparation. It is speculated that the results of the present study could provide evidence suggesting that traditional paths to teacher licensure, represented in the selected sample of CEC recognized teacher preparation programs, are likely to include the best practices mentioned above, specifically appropriate pedagogy and adequate field experience.

Special Education Preservice Teacher Evaluation Approaches

Defining good teaching and measuring the effects of teaching are unusually difficult (Blanton et al., 2006; Berliner, 2005; Fenstermacher & Richardson, 2005). Definitions of good teaching focus on measuring aspects such as creativity, student learning, teacher knowledge, and teacher behavior (Blanton et al., 2006). As researchers have conducted more studies regarding the combined effectiveness of teacher behavior and knowledge various processes have been designed and implemented by universities granting teaching degrees and certificates. Evaluation approaches have included case studies, portfolio assessment, standardized tests, commercially available observation forms or program specific observation forms, rankings on meeting various published standards of effective teaching, action research, and completion of course work at a predetermined level of competency (Blanton et al., 2006; Darling-Hammond & Snyder, 2000).

Following a review of current practices in measuring teaching quality, Blanton et al., (2006), noted two main reasons for using a multiple method approach in evaluating the performance of teachers: first, there are many different conceptions of quality or competency; second, the purposes for which a teacher is being evaluated, even for licensure, and the background conditions may vary. For example, an IHE may place greater importance on obtaining a thorough and comprehensive measure of teacher behavior than a school district. This would particularly be the case if a school district were experiencing a severe teacher shortage.

Research shows that a common practice in a multi-method evaluative approach often involves the use of a direct observation and a summative evaluation form (Blanton et al., 2006). Because of the need to obtain meaningful and valid measures of teacher performance at the preservice level, the focus of this study will be to examine two common measures used in the multi-method evaluation approach: both the direct observation and summative evaluation forms.

Direct observation, or process-product observation, is a valuable method for evaluating teacher performance recommended by Blanton et al. (2006). Research suggests that direct observation can be a highly reliable measurement of a preservice or beginning teacher's ability to apply the pedagogical knowledge and skills gained in teacher preparation programs (Blanton et al.; Boe et al., 2007). Summative evaluations are a more comprehensive record of a preservice teacher's knowledge and skills, as they include knowledge and skills that may not be directly observed.

While researchers have noted that neither the INTASC standards nor the CEC standards have been formally developed into teacher evaluation checklists, the standards' high level of credibility and reliability has been acknowledged (Blanton et al. 2006). Therefore, Blanton et al. (2006) strongly recommend that further studies be conducted to examine the use of the INTASC and CEC standards as evaluation measures. While many IHEs have used these standards to write their own evaluation forms, virtually no research has been conducted examining the specific content of direct observation and summative evaluation forms in a random sample of CEC recognized programs. It is hoped that the present study will provide further evidence supporting the use of CEC standards as an assessment tool to evaluate the knowledge and skills of undergraduate preservice special education teachers.

Methods

A content and component analysis was conducted to obtain descriptive information about items included in the direct observation and summative evaluation forms. The content and component analysis identified the similarities and differences in the basic format and semantic content of these forms. Each of the forms was coded for specific key elements discussed in detail in the procedures section of this chapter.

The methodologies used in the research study are explained below. This includes a description of the conceptual basis for the study methodology, the sampling procedure, the procedures, data collection, and data analysis.

Conceptual Basis for Methodology

A content and component analysis study was conducted to analyze direct observation and summative evaluation forms used by special education teacher preparation faculty to collect performance data to evaluate a student teacher as a partial fulfillment of requirements to receive a teaching certificate or degree. Neuendorf (2002) described content analysis as a qualitative or quantitative methodology which can be used to analyze content of various communication formats such as written text, verbal speech or even the implied meaning of communication. In 1952, Bernard Berelson wrote a foundational book on how to conduct content analyses of various types of communication. Berelson (as cited in Krippendorff, 2004), suggested 17 possible functions of content analysis with the first being to describe trends in communicative documents, as well as to compare media, and to define stylistic patterns. The present research study used quantitative as well as qualitative methodologies to analyze written text to meet those three functions.

Roberts (1997) explained that while content analysis can be used for quantitative and qualitative purposes, quantitative methodology is used specifically when a hypothesis is being tested. Qualitative methods are used to guide a content analysis when inferences will be drawn from the data (Roberts, 1997). It is anticipated that data from this analysis may help IHEs and state education agencies better understand current practices used in evaluating preservice teacher performance.

Neuendorf (2002) emphasized the use of an integrated approach to content analysis. The four common approaches include: descriptive, inferential, psychometric and predictive. Descriptive content analyses are used to clearly and concisely delineate the semantic content within a form of communication. Inferential content analyses are used when researchers are interested in the implied meaning of communication. Psychometric content analyses are often used when making a clinical diagnosis of an individual or to measure psychological messages within communication. Predictive content analyses are used to determine a probable outcome or the desired effect of communication.

This study employed descriptive content analysis methodologies to look and semantic content and components of the DO and SE forms. A descriptive approach allows researchers to specifically define the manifest content within communication and does not allow for inferences (Neuendorf, 2002). Researchers are then able to present their results as a clear statement of the explicit content. Inferential content analysis allows researchers to draw conclusions from text or dialogue analysis. Although Berelson (as cited in Neuendorf, 2002) is quick to caution researchers about making firm or conclusive inferences, he suggests that content analysis can be used to effectively recommend *probable* inferences.

Frankel and Wallen (2009) added that themes can be generated from large amounts of descriptive data. *Themes* are generally defined as groupings of ideas or words of similar meaning. Conclusions can then be drawn and used to compare various communications. This study will create themes primarily based on the organization, implementation, and format of the collected forms.

Within any content analysis the selected form of communication is coded for content. Types of content that can be coded include manifest content or latent content. Manifest content

is described at words or phrases or surface content that exist within the communication (Neuendorf, 2002). Latent content is described as the underlying message or meaning of the surface content (Neuendorf, 2002). This study conducted an analysis of the manifest content to reveal possible trends or patterns in the current practices used in evaluating preservice teacher performance at CEC recognized programs.

Sampling

Accredited IHEs can apply to become recognized by the Council for Exceptional Children. Institutions that apply for CEC program recognition must go through a rigorous application process that shows adherence to the professional standards of CEC as outlined in their publication *What Every Special Educator Must Know* (CEC, 2009). A list of IHEs that are currently recognized by CEC was obtained from the National Council for Accreditation of Teacher Education (NCATE) website (http://www.ncate.org/). The NCATE website includes a feature to search for all NCATE accredited teacher preparation program that you can narrow by certain parameters. A search for CEC recognized programs was conducted that identified 260 IHEs with current CEC recognition. These teacher preparation programs were organized alphabetically by state, then by name of the college or university. Individual programs were given a number beginning with one and ending with 260. A random numbers table was then used to select 100 CEC recognized programs as participants in this study. A detailed description of how a teacher preparation program can become recognized by CEC follows.

Current procedures for CEC program regulations as outlined in *What Every Special Educator Must Know* (CEC, 2009), include a formal performance-review. Institutions wishing to gain CEC recognition can apply directly through NCATE or through CEC. The performance-review requires a teacher preparation program to provide quality evidence in seven areas: (1)-

conceptual framework; (2)-candidate content, pedagogical, and professional knowledge, skills and dispositions; (3)- assessment system and program evaluation; (4)- field experiences and clinical practice; (5)- diversity; (6)- faculty qualification, performance and development; (7)- program governance and resources (CEC, 2009). See Table 4 for a summary of the CEC program recognition criteria. All CEC recognized programs are accredited by the National Council for Accreditation of Teacher Education (NCATE). Teacher preparation programs that are accredited by Teacher Education Accreditation Council (TEAC) are currently not able to apply for CEC recognition (CEC, 2009).

CEC's rigorous recognition process shows their commitment to preparing well-trained special educators as recorded in *What Every Special Educator Should Know and Do: "*The quality of educational services for individuals with exceptionalities resides in the abilities, qualifications, and competencies of the personnel who provide the services" (CEC, 2009, p. iv). In essence, the CEC holds a high standard of excellence. Teacher preparation programs recognized by CEC were selected as participants in this study as representatives of a high quality program. It is hoped that the following analysis of evaluation forms used by these schools will yield evidence of best practice.

Procedures

Once the random sampling procedure was used to select teacher preparation programs for participation in the study, a form letter (Appendix B) describing the purpose of the project and requested information was sent via email. Email addresses were gathered from the websites of each college or university. A follow up email was sent 10 days after the initial email to encourage a response. After the second email, only seven surveys were completed and two participants emailed the requested DO and SE forms. It was speculated that the poor response

rate may have been due to sending the emails out in June when many professors were not working. It was decided, therefore, to delay further data collection until the fall. Participants who had not responded to the first email were contacted again. Responses increased and resulted in the receipt of a total of seven DO and SE forms and 21 surveys. An attempt was made to contact some universities by phone, but this effort did not yield additional data. It should be noted that all participating programs did not use both a DO and SE form. Some used one or the other, yet a total of seven DO and seven SE forms were collected from a total of 11 programs. One program reported that the same form was used for DO and SE purposes.

Forms were then coded for manifest content by trained coders using a coding form and codebook. Direct observation forms were evaluated for basic organization, implementation, and format, methods of data collection, teacher-student interaction, lesson plans, lesson delivery, assessment of student learning, class behavior management, and professionalism. Summative evaluation forms were evaluated for basic organization, implementation, and format. Appendix C contains the codebook which describes in detail how each form was coded. Appendix D includes the coding sheets used to code each form.

Four independent coders coded the direct observation and summative evaluation forms. Three undergraduate researchers and the lead author acted as coders. Coders were trained by allowing them to read and discuss the codebook (Appendix C), which included operationalized definitions of all the terms on the coding sheets (Appendix D). Training also involved practice coding direct observation and summative evaluation forms which were not included in the random sample. Upon completion of the training, all coders took an assessment to determine their preparedness to code the forms. The assessment evaluated their knowledge of terminology

Table 4

Council for Exceptional Children Program Recognition Criteria

CEC Program Recognition Criteria

1. Demonstrate adherence to CEC professional standards through an evidence-based program review.
2. Provide evidence of quality practice in the following areas:
    a. Conceptual framework including: program vision, program components, and curricula
    b. Candidate content, pedagogical, and professional knowledge, skills, and dispositions
        i. Content Standards
        ii. Liberal Education
        iii. General Curriculum
    c. Assessment systems and program evaluation
    d. Field experiences and clinical practice
    e. Diversity
    f. Faculty qualification, performance and development
    g. Program governance and resources

Information from *What Every Special Educator Must Know* (2009), p. 43-44

used for coding, and methods used to code the forms. All coders completed the assessment with 100% accuracy.

In addition to collecting the direct observation and summative evaluation forms, participants were asked to respond to a brief eight-question survey to provide additional data on the frequency of use of the forms, who completes the forms, the training provided to faculty members who complete the forms, and the reliability of the forms. See Appendix E for participant survey. Survey information clarified semantic content and procedures used with the DO and SE forms.

Data Collection and Analysis

The following section will describe the procedures used for gathering manifest content from the collected DO and SE forms and a basic description of content analysis. This will be followed by the data analysis procedures and a summary of the methodology.

Manifest content. Manifest content is described as documenting or recording exact semantic content as it exists within a form of communication (Neuendorf, 2002; Frankel & Wallen, 2009). Manifest content is commonly used with descriptive forms of content analyses. Coding for manifest content has a high degree of reliability because researchers use the words, phrases, or pictures that are explicit within the surface content of the communication (Frankel & Wallen, 2009).

The codebook (Appendix C) designed for this study included various categories used to identify the similarities and differences among evaluation forms. Direct observation forms were coded for content in 10 categories: organization, implementation, format, data collection methods, teacher/student interaction data, lesson plan, lesson delivery, assessment of student learning, class behavior management, and professionalism. Summative evaluation forms were

coded for content in three categories: organization, implementation, and format. A differing number of indicators were coded under each category. These indicators are based on predicted elements expected to be present but that may differ among evaluation forms. Coding sheets (Appendix D) required coders to record characteristics of indicators of form attributes. The coding sheets included 22 indicators for direct observation forms and 16 indicators for summative evaluation forms. Information from the coding forms was then entered into SPSS for statistical analysis. Data gathered from the survey (Appendix E) were used as a supplementary source to identify or clarify contextual information about the use of the forms, who completed the forms, and how often preservice teachers are evaluated using the respective forms and reliability of the evaluation forms.

Content analysis. As previously discussed, the primary methodology was a quantitative content analysis. While this study looked at content and components, the phrase content analysis will be used to describe the primary methodology of this study. Content analysis was selected as the methodology due to its ease of use and reliability when describing semantic content (Neuendorf, 2002). Once data were collected and coded for manifest content, the results were tabulated and prepared for reporting.

As part of the training to establish reliability of the coding, five direct observation forms and five summative evaluation forms from programs not selected to participate in this study were coded by all coders. All coders yielded consistent results.

After all the DO and SE forms were coded, information from the coding sheets was entered into Statistical Package for the Social Sciences (SPSS). Computer-based statistical applications were then used to identify patterns and trends in the data. These data allowed

researchers to make inferences about probable effective practices in evaluating special education preservice teacher performance.

Results

The purpose of this study was to identify similarities and difference in evaluation instruments used to measure preservice teacher performance. Direct observation (DO) and summative evaluation (SE) forms used by IHEs recognized by CEC were collected and coded for specific criteria then analyzed. Participants were also asked to complete an eight-question survey to clarify implementation procedures regarding the DO and SE forms. First the participant response rate will be presented, followed by an analysis of the direct observation forms, then the summative evaluation forms. This section will conclude with the results of the survey.

Participant Response Rate

A random sample of 100 special education teacher preparation programs was contacted via email to participate in this study. Participants were asked to email electronic copies of the direct observation (DO) and summative evaluation (SE) forms used to measure preservice teacher performance and to answer an eight-question survey of contextual information. A total of eleven programs sent copies of the direct observation and/or summative evaluation forms and 21 programs responded to the survey. Not all universities reported using both a DO and SE form. A total of seven DO forms and seven SE forms were collected. Only three programs sent both a DO and SE form. One program reported that the DO and SE forms are combined.

Similarities and Differences in the Content of the Evaluation Forms

This study used a content analysis to compare the components and features of DO and SE forms. This section will present the results for the DO forms then the SE forms, followed by the results of the survey of contextual information.

Direct observation forms. Results of the content analysis indicated many similarities and differences among the various DO forms collected. The content within direct observation (DO) forms was coded for 22 indicators within 10 categories (see Appendix C and D for the codebook and coding forms). Results will be presented by category. A total of seven DO forms were collected from CEC recognized special education teacher preparation programs. These DO forms were then coded and analyzed to identify similarities and differences.

Organization. In order to analyze the similarities and differences between the organization of DO forms, collected forms were coded for four indicators: number of pages, total number of domains, total number of questions or items, and domain organization. Total number of pages held a minimum value of 2, a maximum value of 8 and a mean of 3.71 (*sd* = 1.704). Total number of domains yielded a range from 0 to 10 with a mean of 4.71 (*sd* = 3.094). Total number of questions or items on the DO from varied from 13 to 37 with a mean of 25.86 (*sd* = 9.353) (see Table 5).

Table 5

Direct Observation Form Organization

	N	Minimum	Maximum	Mean	SD
Total number of pages	7	2	6	3.71	1.704
Total number of categories	7	0	10	4.71	3.094
Total number of questions/ items	7	13	37	25.86	9.353

Category organization was defined as headings or themes used on the form to organize the evaluation criteria. Among the DO forms collected, 4 different category organization systems were used: (a) CEC standards 28.6%; (b) lesson components 14.3%; (c) no apparent category organization 14.3%; and, (d) other 42.9% (see Figure 1). The other methods of category organization included university standards, or college of education standards.

Implementation. Data on how the DO form was implemented included the number of times the form was used to evaluate the preservice teacher and who completed the form. This section will contain results for the seven DO forms collected and additional data gathered on the survey are reported with all survey results. The frequency with which the DO form was used to

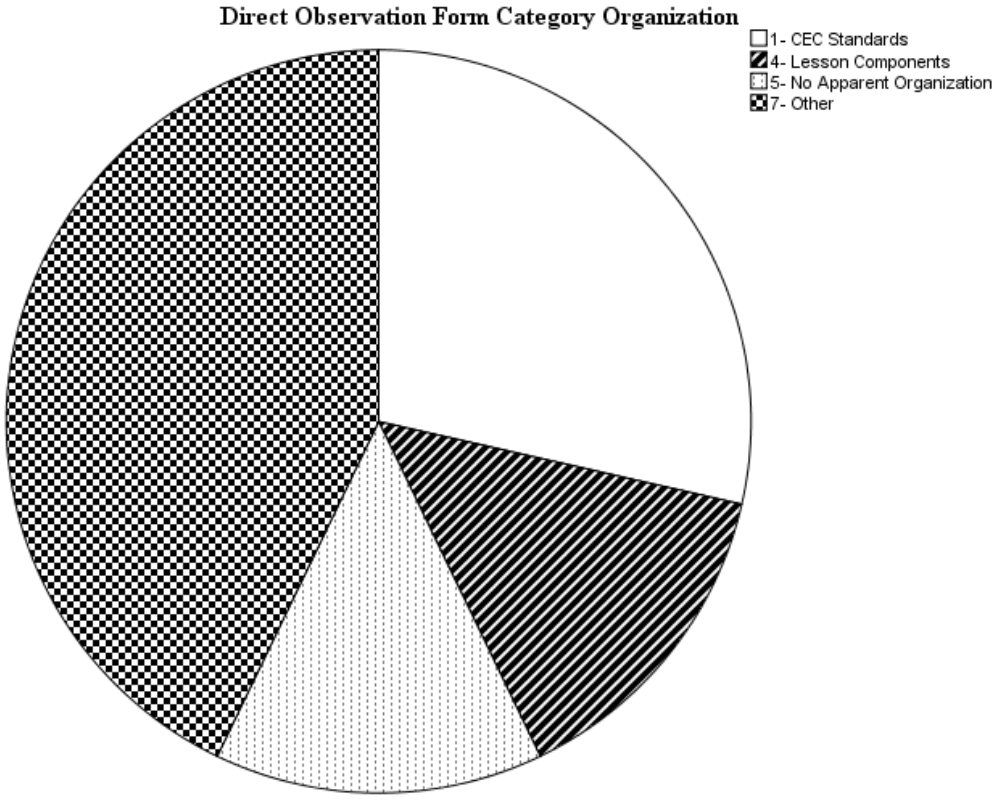

Figure 1: *Direct Observation Form Category Organization*

evaluate preservice teachers ranged from one to six times with a mean of 3.14 (*sd* = 2.116). The person completing the evaluation form included cooperating teachers, university supervisors, the preservice teacher (self-evaluation), and in one instance, a peer. As derived from the content of the DO forms, preservice teachers are typically evaluated by the University Supervisor (see Figure 2). Within the *Other* category, one form indicated that the DO form was to be completed by the university supervisor or the cooperating teacher and the other form indicated a peer as the evaluator.

Format. DO forms were coded for 3 indicators related to format: (a) basic structure, (b) evaluation scale, and (c) explanation of the evaluation scale.

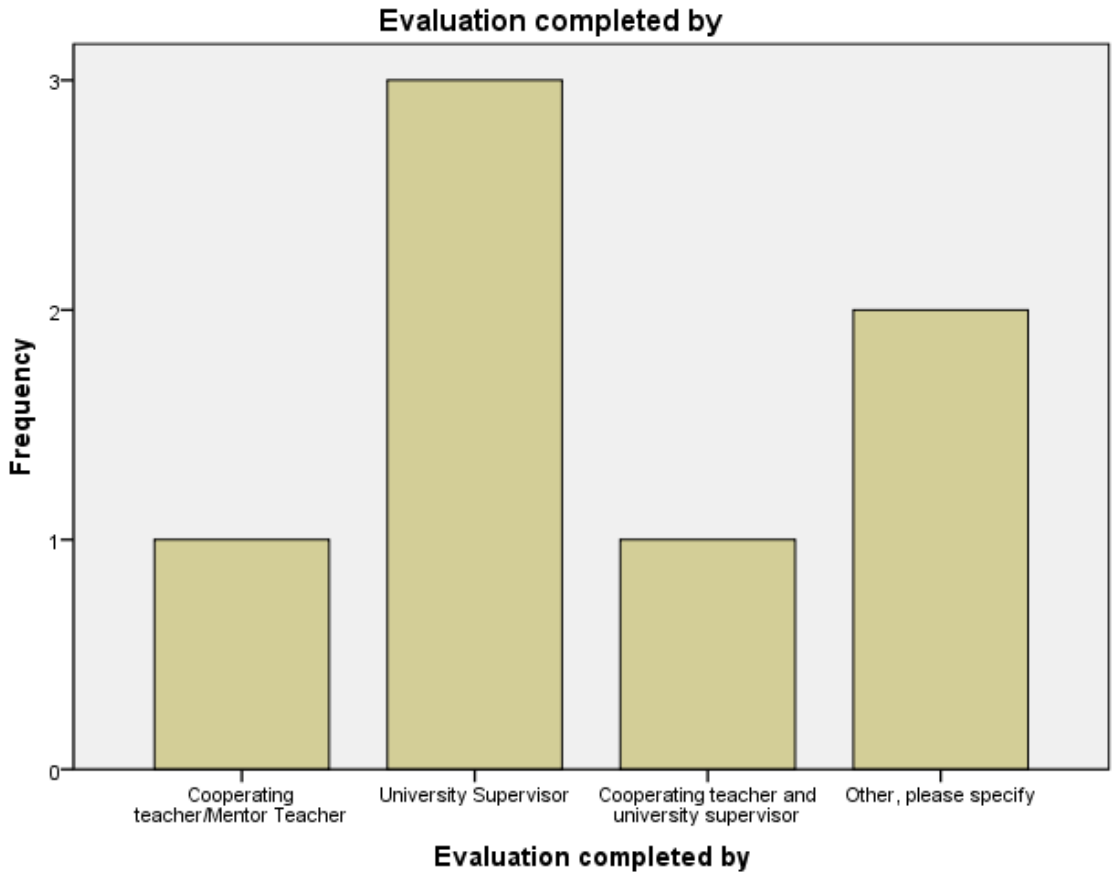

Figure 2: *Direct Observation Form Completion by Evaluator*

In the category of basic structure we identified possible formats as having open-ended questions, having a moderate amount of structure by listing 2-5 elements of teaching, having a specific and highly structured format according to standards, or having a specific format regarding teaching or lesson delivery style. Among the seven DO forms coded, it was found that none used an open-ended format or a moderate amount of structure. All forms collected were found to have a high degree of structure that followed specific criteria following a set of standards or requiring a specific lesson delivery style (see Table 6). More than 71% of DO forms followed a specific format of standards or university expectations. More than 28% required a specific format of teaching or lesson delivery.

Table 6

Direct Observation Form Format - Basic Structure

	Frequency	Percent	Valid Percent	Cumulative Percent
Open-ended questions	0	0	0	0
Moderate structure of 2-5 elements of teaching	0	0	0	0
Specific- highly structured by standards/university expectations	5	71.4	71.4	71.4
Specific- requires specific format of teaching/lesson delivery	2	28.6	28.6	100.0
Total	7	100.0	100.0	

All DO forms used either a Likert-scale or rubric format for evaluating preservice teacher performance. One DO form (14.3%) used a Likert-scale with a range or two or three numbers. The other six forms used a rubric. Three (42.9%) of the DO forms used a rubric with a range of

two or three numbers, and the other three (42.9%) of the DO forms used a rubric with a range of 4 numbers.

All forms collected included an explanation of the evaluation scale, although it should be noted that in two cases it was a separate page of the form. On 57.1% of the DO forms the explanations of the evaluation scale were one- or two-words in length. On 42.9% of the DO forms the evaluations were full sentence explanations.

Data collection. The data collection category specifically examined the method of data collection used in completing the DO form. The following six different methods were considered:

- All data obtained during direct observation of lesson delivery
- Data obtained in pre-conference and during direct observation
- Data obtained in pre-conference, during direct observation, and post observation
- Data obtained through video of lesson delivery
- Unclear method of data collection
- Other method, please specify.

Among the forms collected and coded, 42.9% of the forms included evidence that data were collected during a pre-conference, direct observation, and a post-conference. Nearly 43% of the forms included evidence that data were collected during a direct observation. A total of 14.3% of the forms indicated a pre-conference and direct observation.

Teacher/student interaction data. DO forms were coded for evidence of teacher and student interaction. Seventy-one point 4 percent of the DO forms did collect some type of teacher/student interaction data. Of all forms analyzed, 28.6% of the DO forms gathered a corrective feedback; 28.6% gathered praise and corrective feedback, and 14.3% gathered a

student response rate (see Table 7). No datum on teacher and student interaction was indicated on 28.6% of the sampled forms.

Lesson plan. This indicator sought to determine if the DO form reflected information about a lesson plan. In 57.1% of the cases, the DO forms indicated that a lesson plan was collected by the observer. The remaining 42.9% did not indicate that a lesson plan was collected by the observer. Of the DO forms that required a lesson plan, 75% graded the lesson plan and included a score on the DO form. In 25% of the cases it was unclear whether the lesson plan was graded. It also appeared that 100% of the lesson plans were the original creation of the preservice teacher and not a scripted lesson plan or a plan from a program or book.

Lesson delivery. The intention was to explore the evidence with respect to specific types of lesson delivery. Possible categories included: (a) effective teaching cycle, (b) Direct

Table 7

Direct Observation Form: Evidence of Teacher/Student Interaction

	Frequency	Percent	Valid Percent	Cumulative Percent
Not Collected	2	28.6	28.6	28.6
Collected: student response rate	1	14.3	14.3	42.9
Teacher praise/feedback and Corrective feedback	1	28.6	28.6	71.4
Corrective feedback/error correction	2	28.6	28.6	100.0
Total	7	100.0	100.0	

instruction, (c) Madeline Hunter, (d) discrete trial, (e) other, or (f) no specific lesson delivery style indicated. All DO forms collected fell within two categories: effective teaching style (57.1%) and no specific lesson delivery style indicated (42.9%).

Assessment of student learning. This indicator asked for evidence of student learning outcome data collected by the observer. On 42.9% of the DO form student learning results were collected by the observer. On 57.1% no evidence existed on the form indicating that student learning data were gathered as part of the observation.

Class and behavior management. In looking for similarities and differences among DO forms regarding class behavior management, DO forms were coded for evidence of data on student engagement. Possible criteria included collecting data on percent of students on-task, student responses, other, or no data collected. Only 14.3% of the forms requested data in the form of student responses. Fourteen point three percent recorded student questions, and 71.4% of the forms did not collect any form of student engagement data.

Professionalism. This indicator sought evidence on a professionalism grade for the preservice teacher in five areas including teacher interaction with students, communication, reflection, accepting feedback, and goal setting or focus for the next observation. All of the forms included an evaluation question on professionalism when interacting with students. Evaluation of preservice teacher communication with parents or students was present on 28.6% of the DO forms. Seventy-one point four percent of the DO forms did not include an evaluation of preservice teacher communication with students or with parents. Preservice teacher reflection was included on 42.9% of the DO forms. Only 14.3% of the DO forms evaluated the preservice teacher on accepting or implementing feedback. In the area of goal setting or identifying a focus

for the next observation 71.4% of DO forms did not include this, while 28.6% of DO forms did include goal setting or identifying a focus the next observation.

Summative evaluation forms. The content within summative evaluation (SE) forms was coded for 16 indicators within three categories: organization, implementation, and format (see Appendix C and D). Results will be presented by category. A total of seven SE forms were received and coded for the purpose of this study.

Organization. Content analysis of the SE forms included four indicators: (a) total number of pages; (b) category organization; (c) total number of categories; (d) total number of questions or items evaluated. Results are summarized in Table 8. The total number of pages ranged from 2 pages to 35 pages in length with a mean of 9.14 (*sd*= 11.510). The total number of categories ranged from 4 to 19 with a mean of 8.86 (*sd*= 5.178). The total number of questions or items evaluated ranged from 19 to 53 with a mean of 33.86 (*sd* = 12.13).

Table 8

Summative Evaluation Form Organization

	N	Minimum	Maximum	Mean	SD
# of pages	7	2	35	9.14	11.510
Total # of categories or themes	7	4	19	8.86	5.178
Total # of questions/items	7	19	53	33.86	12.130

Category organization was the final indicator in the area of organization. Categories included CEC standards, INTASC standards, state education agency (SEA) standards, or university standards. Of the SE forms collected 28.6% were organized by CEC standards, 14.3%

by INTASC standards, 14.3% by SEA standards, 14.3% by a combination of CEC and INTASC standards, and 28.6% by university standards.

Implementation. The analysis of implementation indicators on SE forms examined two different criteria: the number of times the SE form was used to evaluate the preservice teacher and who completed the SE form. Details on the implementation were not always apparent on the SE forms so further data were collected using the survey and are presented later in this section.

As identified on the SE forms, 42.9% were used once to evaluate the preservice teacher, 42.9% were used twice, and 14.3% were used three times. The SE form was completed only by the university supervisor 42.9% of the time and was completed by the cooperating teacher and university supervisor 57.1% of the time. Survey results elaborated on this data, indicating that in some programs the preservice teachers self-evaluate using the SE form, but this was not apparent on the SE forms coded within this study.

Format. Summative Evaluation (SE) forms were coded for 10 indicators in the category of format: (a) placement information; (b) directions; (c) basic structure; (d) evaluation scale; (e) explanation of evaluation scale; (f) area for comments; (g) summary statement; (h) strengths; (i) weaknesses; (j) final grade. These results will be presented by indicator.

Placement information regarding the student teaching position, such as the school name and grade level was present on 71.4% of the forms suggesting that this information was regarded as important when evaluating a preservice teacher.

Directions on how to complete the evaluation were included on only 42.9% of the SE forms. The survey requested additional information on training provided to evaluators and is presented in the section on survey results.

The use of university or state education agency (SEA) standards was the most common format used in defining the basic structure of the SE form with 57.1% of forms using this organizational framework. INTASC standards were used on 28.6% of SE forms while only 14.3% used CEC standards to organize the evaluation form. This was a surprising result because all schools were CEC recognized programs. A large degree of overlap was apparent in CEC standards and SEA or university standards but was not specifically analyzed.

All analyzed SE forms used a Likert-scale or a rubric to evaluate the preservice teacher. 71.4% used a rubric (57.1% used a range of 4; 14.3% used a range of five) while 28.6% used a Likert-scale (14.3% used a range of 3; 14.3% used a range of five).

Only one SE form did not include an explanation of the evaluation scale. Of the 85.7% that did include an explanation, an equal portion used short and long explanations. See Table 9 for a summary of the explanation of evaluation scales used on SE forms.

Table 9

Summative Evaluation Form Explanation of Evaluation Scale

	Frequency	Percent	Cumulative Percent
Not present	1	14.3	14.3
Present: one-two word explanations	2	28.6	42.9
Present: short phrase explanations	1	14.3	57.1
Present: full sentence explanations	1	14.3	71.4
Present: multiple sentence explanations	2	28.6	100.0
Total	7	100.0	

A space was provided for evaluator comments, examples, or justification statements within each category on 71.4% of the SE forms. An overall summary statement was included on 71.4% and not included at all on 28.6% of SE forms.

To further clarify the types of comments included on SE forms, the indicator was broken down into two further questions looking at strengths and weaknesses. Twenty-eight point six percent of the SE forms specifically requested the evaluator to list strengths and weaknesses, while the remaining 71.4% of the SE forms did not expressly call for strengths and weaknesses of the preservice teacher. The final indicator within the format of SE forms was recommendation for a final grade. This was included on only 14.3% of SE forms while 85.7% of forms did not require the evaluator to suggest a final grade for the preservice teacher on the SE form.

Survey of contextual information. A survey was designed to further clarify information that researchers had questions about and that may not have been clearly apparent within the content analysis of the Direct Observation (DO) and Summative Evaluation (SE) forms. In all, 19 CEC recognized teacher preparation programs responded to the survey. Survey questions included four categories: frequency of form use, preservice teacher evaluator, training provided for evaluators, and reliability of the evaluation forms. See Appendix E for a copy of the survey of contextual information.

Frequency of form use. The first question on the survey asked how often the direct observation (DO) form was used to evaluate the knowledge and skills of a preservice teacher. A total of 15 responses yielded a minimum value of two and a maximum value of 10 with a mean of 5.0667 (*sd* = 2.28). This datum was different from the values identified through the content

analysis which indicated that the frequency with which the DO form was used to evaluate preservice teachers ranged from one to six times with a mean of 3.14 (*sd* = 2.116).

Table 10

Frequency of Evaluation Comparison of Results by Content Analysis and Survey

	Direct Observation Form				Summative Evaluation Form			
	Min	Max	Mean	SD	Min	Max	Mean	SD
Content Analysis	1	6	3.14	2.116	1	3	1.71	.756
Survey	2	10	5.07	2.28	1	5	1.93	1.07

The same question was asked of the summative evaluation (SE) form. Fourteen responses indicated a minimum value of one and a maximum value of five with a mean of 1.93 (*sd*= 1.07). Once again, these values different from the content analysis figures which ranged from one to three with a mean of 1.71 (*sd*= 0.756). See Table 10 for a comparison of the frequency of use as identified by the content analysis and the survey.

Preservice teacher evaluator. The person completing the DO and SE forms varied from program to program. A total of 20 programs responded to the questions on the survey regarding who evaluates the preservice teacher. See Table 11 for a summary of the results by form and by evaluator. All the responding universities and colleges reported that a university supervisor completes both DO forms and SE forms. Seventy-five percent reported that the cooperating teacher also completes both forms. Self-evaluations are required at 40% of the responding programs. One university reported that self-evaluations will begin during Fall semester 2011. Another university reported that some DO forms are completed by a peer of the preservice teacher.

Table 11

Evaluators of DO and SE Forms

Summative Evaluation Form Evaluator	Direct Observation Form Evaluator					
		University Supervisor	Cooperating Teacher	Self-Evaluations	Other	Total
	University Supervisor	19	14	7	1	19
	Cooperating Teacher	16	14	6	2	16
	Preservice Teacher	7	7	4	1	7
	Other	0	0	0	0	0
	Total	20	15	8	2	20

Training provided for evaluators. The next question on the survey asked respondents to briefly describe the training provided to personnel who complete the DO and SE forms. A total of 20 responses were received. Table 12 contains a summary of the training as reported by the participants. Forty-five percent, or nine programs, reported training all evaluators each semester. Training at the beginning of each placement was conducted at 15% of responding programs. Annual training was provided by a reported 15% of programs. Two universities reported that university supervisors are required to train cooperating teachers. One program reported that no training is provided because the form is completed by the individuals who created the form. Another program reported no training, but relies on extensive experience and requires a minimum of a master's degree for all cooperating teachers. One program reported an unknown training procedure.

Reliability of evaluation forms. The first question addressing reliability of the evaluation forms targeted the procedures used to ensure consistent evaluations between the various

Table 12

Summary of Training Provided to Evaluators

Type/Amount of Training	Number of Programs	Percent
Each semester	9	45
Beginning of each placement	3	15
Annual	3	15
Responsibility of University Supervisor	2	10
None, developers are evaluators	1	5
None, extensive experience & master's degree required	1	5
Unknown	1	5

personnel who completed the forms. A total of 17 programs addressed this question and results are summarized in Table 13. Five programs, or 29.4%, reported use of collaboration in the comparison of scores. Data were tracked over time at 4 programs representing 23.5% of respondents. An additional 23.5% of programs reported that no procedures were used to ensure consistency among evaluators. Training sessions were used to ensure more consistency at two of the responding programs. One program reported that revisions to the DO and SE forms were routinely made to help ensure greater consistency.

The final question on the survey asked respondents to briefly describe any attempts the program had made to determine inter-rater reliability. Seventeen programs responded to the question. Twelve of the programs or 70.6% reported that no attempts had been made to

Table 13

Summary of Procedure Used to Ensure Consistent Evaluations

Procedures to Ensure Consistent Evaluations	Number of Programs	Percent
Collaboration and comparing scores	5	29.4
Data tracked over time	4	23.5
None	4	23.5
Training sessions	2	11.8
Revision to the forms	1	5.9
Unknown	1	5.9

determine inter-rater reliability on the DO or SE forms. Three of the respondents reported using only informal efforts through the collaboration of evaluators. Two programs reported using informal procedures during training sessions. No programs reported formal attempts to establish an inter-rater reliability measure or coefficient.

Discussion

The purpose of this study was to identify similarities and differences in evaluation instruments used by Council for Exceptional Children (CEC) recognized special education teacher preparation programs. A content and component analysis of direct observation (DO) and summative observation (SE) forms, accompanied by a survey, was used. The analysis examined 10 categories on DO forms and 3 categories on SE forms. In addition, a survey was used to collect data on contextual information for the evaluation forms. This section will include a summary of research findings, limitations of the study, and implications for research and practice.

Summary of Research Findings

A content and component analysis was used to identify the similarities and differences in the direct observation (DO) and summative evaluation (SE) forms collected. The forms were collected from a random sample of special education teacher preparation programs currently recognized by the Council for Exceptional Children (CEC). The results of the content analysis will first be presented for the DO forms followed by the SE forms.

Direct observation forms. The results of the content and component analysis of DO forms will be explained according to the most consistent findings achieved and those having the greatest variation. Two consistent elements were noted in the category of DO form format. First, the most consistent element identified was the use of a Likert-scale or rubric. All seven DO forms submitted used a Likert-scale or rubric to evaluate preservice teacher performance. Secondly, all forms were highly structured, requiring the evaluator to focus on predetermined criteria according to either professional teacher standards or a specific method of lesson delivery. This may suggest that the CEC recognized programs in this sample valued professional teacher standards and research-based teaching methods. The use of this method in evaluating preservice teachers could lead to teacher education programs turning out higher number of well-trained teachers who also value professional teacher standards and research-based teaching methods.

Next, according to the survey results, the DO form was most commonly completed by a university supervisor or both the university supervisor and the cooperating teacher. This may suggest that the programs in this sample valued the expertise of the university supervisor and the selected cooperating teachers. Further research is needed to determine the value of using a single evaluator (university supervisor) versus using two evaluators (university supervisor and cooperating teacher).

Under the professionalism category, it should be noted that all DO forms collected included an evaluation of the preservice teacher's professionalism in interacting with students, stressing the importance of building and maintaining appropriate relationships with students.

Lastly, another consistent finding was the lack of a specific method for collecting class behavior management data. While researchers did not start out with specific hypotheses, the coding forms developed prior to collecting DO forms were did anticipate that forms would collect some type of data on class behavior management. However, the results obtained showed that this specific type of data is not collected. The coding forms were purposely structured to demonstrate similarities or differences in the class behavior management data collected by an evaluator. The measure specifically targeted student engagement data reported either as a percentage of students' on- or off-task or a student response rate. Among the forms collected, no methods of collecting class behavior management data were noted. Future research investigating the reasons underlying teacher preparation programs' decisions to include (or exclude) a behavior management component in their evaluation of preservice teachers appears to be warranted.

In regard to differences among DO forms, the most frequent variation was observed in the organization of evaluation criteria. Organizational methods included professional teacher standards, CEC standards, State or university standards, lesson components, and other methods developed by the respective program. The frequency of the evaluation also differed greatly, ranging from 2 to 10 times during student teaching. Prater and Sileo (2004), indicated student teachers are observed an average of 6.5 observations during student teaching. They also report variance in the length of student teaching experiences, indicating that on average student teachers

are observed once for every 70.3 hours. In retrospect, it may have been beneficial to collect data on the length of the student teaching experience, for the sake of comparison.

Another important variation was noted in the area of teacher/student interaction data. Seventy-one percent of the forms indicated that some type of teacher/student interaction data were collected, but the type of data were very diverse. For example, questions asked by students, praise rate, response rate, praise and response rate. In addition, some universities simply rated the teacher on a statement such as "teacher interacts appropriately with students" or "teacher demonstrates professionalism when working with students." This may suggest that teacher/student interaction data are valued, but the most effective or best method to collect these data has not yet been determined or may not be evident, based on previous research.

In a similar area, evidence of student learning outcome data were required by just under half (42.9%) of the programs submitting DO forms. These data were collected by asking the preservice teacher to provide information concerning students' acquisition of the learning objective. Finally, in the category of professionalism a great degree of variance was observed in the types of questions or indicators included on the forms. The examples ranged from an area on goal setting (71%), teacher reflection (42.9%), communication with parents and/or students (28.6%), to implementing/accepting feedback (14.3%).

Summative evaluation forms. The results of the content and component analysis of SE forms will be explained according to the most consistent findings and those with the greatest variation. The summative evaluation form was consistently used either once or twice during a preservice teacher's clinical experience to evaluate performance and knowledge. Secondly, like the DO form, the SE form was most frequently completed by the university supervisor or the university supervisor and cooperating teacher. Two other similarities were found on all or

almost all of the SE forms: (1) a rubric or Likert-scale, and (2) evaluator comments and/or a summary statement. Finally, SE forms were consistent in *not* recommending a final grade; only one SE form included the recommendation for a final grade.

Three indicators were noted as having the most variation among the SE Forms. First, we found wide variance in the length of the evaluation form, which ranged from 2 pages to 35 pages. The second indicator reflected the specific number of evaluation items or questions, which ranged from 19-53 evaluation items. The variance in the length of the SE form and in the number of evaluation items suggests that SE forms ranged from being short with few questions (2 pages with 19 evaluation items) to lengthy with many evaluation criteria (35 pages and 53 evaluation items). This may indicate that the evaluations yield varying amounts of specific information about the knowledge, skills and disposition of the preservice teacher. It is likely that a 35 page evaluation with 53 questions would contain greater detail than a 2 page evaluation with 19 questions.

The third and last area of variation noted among SE forms was in the categories used to organize the SE form. The collected sample forms were organized according to the following categories: CEC standards, INTASC standards, State Education Agency (SEA) standards, or University Standards. This was somewhat surprising because all participants were CEC-recognized. However, this variance may suggest differences in regulations imposed on special education teacher preparation programs by their respective colleges, universities, or State Education Agency, requiring the use of a specific set of criteria to evaluate preservice teachers. It should also be noted that a great deal of overlap or direct alignment may exist between the various standards used. Specifically the alignment between CEC and INTASC standards should be noted as reflected in Table 2. Further research may provide insight as to how programs that

use SEA or university standards show alignment with CEC standards during the review process and how these are incorporated in course design and instruction.

Limitations

The analysis of the data must be considered in light of the study's limitations. First, the categories for analysis were selected by the researcher based on probable features of DO and SE forms. The categories were based on researcher experience as no previous research similar in nature could be found. Next, a limitation of all content analyses is that the final analysis is limited to the specific written text and wording on the page. Researchers cannot account for variances in implementation, semantic and practical interpretation of form content, training for evaluators, and procedures.

The survey that accompanied the request for forms was used in an attempt to limit these differences by providing additional information with respect to frequency of evaluation, the number of and role of the respective evaluators, the amount and nature of the evaluator training, and to the existence of reliability data. Only one of the programs reported gathering reliability and validity data on their respective evaluation instruments. The specific data were not provided by the responding program.

Furthermore, special education teacher preparation programs selected for participation in the study were randomly selected from a list of the 260 programs currently recognized by CEC. Thus CEC recognition was the only criteria used in selecting participants. Results can only be interpreted in terms of CEC's reputation as a leader in the field of special education and the rigorous process CEC uses to evaluate teacher preparation programs.

Finally, these results are limited by the response rate. Researchers contacted 100 CEC recognized programs, but received a limited number of responses. A total of 7 CEC recognized

teacher preparation programs provided copies of the DO and SE forms while 21 programs completed the survey. Current findings must therefore be interpreted with caution.

Implications for Research and Practice

Additional research is needed in the area of special education preservice teacher evaluation (Brownell et al., 2005). The current study specifically examined the content of evaluation instruments used by CEC recognized teacher preparation programs. As the first study of its kind, it is recommended that more research be conducted in this area. In addition, due to the limited response rate obtained in the present research, it is recommended that the study be repeated to help generalize the findings to the broader population examined. It may be valuable to include a different sample of IHEs, such as using rankings, demographic regions, IHEs with diverse pedagogical approaches, number of teachers produced, etc. Future research could also look at the specific correlation between professional teaching standards and evaluation instrument criterion.

Response rates show that fewer IHEs sent in the DO and SE forms (n=11) and responses to the survey (n=21). If this study was repeated, a request for the DO and SE forms and not to complete a survey may yield a greater number of forms. The survey appeared to distract from the primary focus of this study, which was to collect and analyze the DO and SE forms. In addition, some of the participants were reluctant to disclose their evaluation forms. Perhaps a more explicit purpose of the study would be beneficial in a replication.

In the manual, *What Every Special Educator Must Know* (2009), CEC specified the knowledge, skills, and dispositions deemed to be most critical for special educators. These directly correlate with the CEC Standards. CEC's position on teacher performance is that teacher competency should be demonstrated and maintained by all special educators. Brownell

and colleagues (2010) additionally noted that it is critical for special education teachers to demonstrate proficiency in the classroom, emphasizing that teacher performance has become increasingly important in light of requirements to become highly qualified and to use response to intervention (RTI) approaches. Direct observation forms can be specifically used to measure teaching skills (Blanton et al., 2006). In addition, a summative evaluation form can be used to ensure that preservice teachers understand and can apply the various skills associated with the RTI process. An analysis of the content of DO and SE forms, particularly with respect to the similarities and differences in the forms can be used to inform the development of evaluation instruments used in special education teacher preparation programs.

Professional teacher standards have been acknowledged to be a valuable component in relation to the evaluation of teacher competency (Blanton et al., 2006; Danielson, 2007, Otis-Wilborn, et al., 2000, Otis-Wilborn & Winn, 2000). Following a review of professional teacher standards, Blanton and colleagues (2006) recommended examining the use of INTASC and CEC standards as evaluation measures. It may be beneficial to use professional teacher standards to create evaluation instruments that could be used by any IHE. This may be a wise investment of time, rather than having each IHE create their own evaluation forms. A common evaluation instrument may also further ensure that teachers are highly qualified. CEC's detailed handbook, *What Every Special Educator Must Know* (2009), may be of particular interest when designing a common evaluation instrument. However, a common evaluation instrument from INTASC, NBPTS, or CEC may be welcomed by IHEs. Validating such an instrument could also be conducted to ensure consistent evaluation and reliability.

Within the present study, it was suspected that CEC-recognized special education teacher preparation programs would use the CEC standards to create evaluation instruments. Findings

suggested that the CEC standards were more explicit on SE forms than on DO forms. Further research is needed to determine if this is common practice and to identify the reasons underlying this difference.

On the survey, eight out of 20 responses indicated that the program currently requires or is beginning to require preservice teachers to use the DO form to do a self-evaluation. This is typically done using a video of them teaching. Capizzi, Wehby, and Sandmel (2010) indicate that self-evaluation can be valuable in improving instruction. Results show that video self-evaluation may be enhanced when the evaluation is done with an experienced teacher watching the video with them and asking structured questions to guide preservice teacher reflection. This formal video analysis improved teacher instruction by increasing the number of lesson components and the specific behavioral praise used by the teacher. Further research is needed to determine whether this is a common trend and the merit of using self–evaluation via a DO form to develop the teaching and reflection skills of beginning teachers.

The results of the present analysis suggest that on the basis of the current sample noticeable variation exists in the content of the DO and SE forms used to evaluate preservice special education teachers - among CEC recognized programs. As indicated previously, results must be interpreted with caution due to the small sample size. Thus additional research is needed to determine best practice in evaluating preservice special education teacher performance.

Conclusion

The present study included a content and component analysis of evaluation instruments used by CEC recognized teacher preparation programs to evaluate preservice teacher performance. The similarities and differences among DO and SE forms indicated possible

methods and probable best practices in evaluating preservice teacher knowledge, skills, and dispositions. Further research is recommended to substantiate and extend the results of the current study and to strengthen the evidence regarding the instruments teacher preparation programs use to evaluate the performance of preservice special education teachers.

References

Berliner, D. (2005). The near impossibility of testing for teacher quality. *Journal of Teacher Education, 56* (3), 205- 213.

Blanton, L. P., Sindelar, P. T., & Correa, V. I. (2006). Models and measures of beginning teacher quality. *Journal of Special Education, 40,* 115-127. doi:10.1177/00224669060400020201

Boe, E., Shin, S., & Cook, L. (2007). Does teacher preparation matter for beginning teachers in either special or general education? *The Journal of Special Education, 41,* 158-170.

Brownell, M.T., Sindelar, P.T., Kiely, M.T., & Danielson, L.C. (2010). Special education teacher quality and preparation: Exposing foundations, constructing a new model. *Exceptional Children, 76* (3, 357-377.

Brownell, M. T., Bishop, A. G., Gersten, R., Klingner, J. K., Penfield, R. D., Sindelar, P. T. et al. (2009). The role of domain expertise in beginning special education teacher quality. *Exceptional Children, 75,* 391- 411.

Brownell, M. T., Ross, D. D., Colon, E. P., & McCallum, C.L. (2005). Critical features of special education teacher preparation: A comparison with general teacher education. *Journal of Special Education, 38,* 242-252. doi:10.1177/00224669050380040601

Capizzi, A. M., Wehby, J. H., Sandmel, K. N. (2010). Enhancing mentoring of teacher candidates through consultative feedback and self-evaluation of instructional delivery. *Teacher Education and Special Education, 33,* 191-212. doi:10.1177/0888406409360012

Council for Exceptional Children. (2009). *What every special educator must know: Ethics, standards, and guidelines for special educators*. (6th ed.). Arlington, VA: Author.

Council of Chief State School Officers. (2007 June 7). *Interstate new teacher assessment and support consortium: Model state teacher policy.* Retrieved March 1, 2008 from http://www.ccsso.org/Projects/interstate_new_teacher_assessment_and_support_consortium/#modelstates

Danielson, C. (2007). *Enhancing professional practice: A framework for teaching* (2nd ed.). Alexandria Va.: Association for Supervision and Curriculum Development.

Darling-Hammond, L. (2000a). *Studies of excellence in teacher education*. Washington, DC: AACTE Publications.

Darling-Hammond, L. (2000b). *Teacher quality and student achievement: A review of state policy evidence*. Education Policy Analysis Archives, 8(1). Retrieved October 21, 2008 from http://epaa. asu.edu/epaa/v8n1.

Darling-Hammond, L. (1999). *Teacher quality and student achievement: A review of state policy evidence.* New York: National Council on Teaching and America's Future. Retrieved September 3, 2008, from http://www.tc.edu/nctaf/publicatikons/ index.html

Darling-Hammond, L., & Baratz-Snowden, J. (2007). A good teacher in every classroom: Preparing the highly qualified teachers our children deserve. *Educational Horizons, 85,* 111-132.

Darling-Hammond, L. & Sykes, G. (2003). Wanted: A national teacher supply policy for education: The right way to meet the "Highly qualified teacher" challenge. *Education Policy Analysis Archives, 11*(33). Retrieved February 11, 2010 from http://epaa.asu.edu/epaa/v11n33/.

Darling-Hammond, L. & Youngs, P. (2002). Defining "highly qualified teacher": What does "scientifically-based research" actually tell us? *Educational Researcher, 31(9),* 13-25. doi:10.3102/0013189X031009013

Frankel, Jack R. & Wallen, N. E. (2009). *How to design and evaluate research in education* (7th ed.). New York: McGraw-Hill.

Fenstermacher, G. D., & Richardson, C. (2005). On making determinations of quality in teaching. *Teachers College Record, 107,* 186-213. doi:10.1111/j.1467-9620.2005.00462.x

Krippendorff, K. (2004). *Content analysis: An introduction to its methodology.* Thousand Oaks, CA: Sage Publications. Retrieved from http://books.google.com/books?id=q657o3M3C8cC&printsec=frontcover&dq=KrKrippendor&cd=1#v=onepage&q=&f=false

National Commission on Excellence in Education. (1983). *A nation at risk: The imperative for educational reform.* United States Department of Education. Retrieved on November 17, 2008 from http://www2.ed.gov/pubs/NatAtRisk/index.html

Neuendorf, K. (2002). *The content analysis guidebook.* Thousand Oaks, CA: Sage Publications.

No Child Left Behind Act of 2001, 20 U.S.C. § 6319 (2008).

Otis-Wilborn, A., & Winn, J. (2000). The process and impact of standards-based teacher education reform. *Teacher Education and Special Education, 23*(2), 78-92. doi: 10.1177/088840640002300203

Otis-Wilborn, A., Winn, J., Ford, A., & Keyes, M. (2000). Standards, benchmarks, and indicators: Designing a framework for professional development of preservice and practicing teachers. *TEACHING Exceptional Children, 32*(5), 20-28.

Prater, M. A., & Sileo, T. W. (2004). Fieldwork requirements in special education preparation: A national study. *Teacher Education and Special Education, 27*, 251-263.

Roberts, Carl. (Ed.) (1997). *Text analysis for the social sciences: methods for drawing statistical inferences from texts and transcripts.* Malwah, NJ: Lawrence Erlbaum Associates, Inc. Retrieved from http://books.google.com/books?id=1tg1tHuUjAC&pg=PA18&dq=Content+analysis+Roberts&cd=2#v=onepage&q=CConten%20analysis%20Roberts&f=false

U.S. Department of Education. (2004). *No child left behind: A toolkit for teachers*. Washington, D.C.: Education Publications Center.

Walsh, K. (2001). *Teacher certification reconsidered: Stumbling for quality.* Retrieved January 13, 2009 from http://www.abell.org/pubsitems/ed_cert_1101.pdf

Appendix A

Council for Exceptional Children (CEC) Initial Content Standards

1. Foundations	Special educators understand the field as an evolving and changing discipline based on philosophies, evidence-based **principles and theories**, relevant **laws and policies**, diverse and **historical** points of view, and **human issues** that have historically influenced and continue to influence the field of special education and the education and treatment of individuals with exceptional needs in both school and society. Special educators understand how these **influence professional practice**, including assessment, instructional planning, implementation, and program evaluation. Special educators understand how **issues of human diversity** can impact families, cultures, and schools, and how these complex human issues can interact with issues in the delivery of special education services. They understand the **relationships of organizations** of **special education** to the organizations and functions of schools, school systems, and other agencies. Special educators use this knowledge as a ground upon which to construct their own personal understandings and philosophies of special education. Beginning special educators demonstrate their mastery of this standard through the mastery of the CEC Common Core Knowledge and Skills, as well as through the appropriate CEC Specialty Area(s) Knowledge and Skills for which the program is preparing candidates.
2. Development and Characteristics of Learners	Special educators know and **demonstrate respect** for their students first as unique human beings. Special educators understand the **similarities and differences in human development** and the characteristics between and among individuals with and without exceptional learning needs. Moreover, special educators understand how **exceptional conditions** can **interact** with the domains of human development and they **use this knowledge to respond to the varying abilities and behaviors of individuals** with exceptional learning needs. Special educators understand how the experiences of individuals with exceptional learning needs can impact families, as well as the individual's ability to learn, interact socially, and live as fulfilled contributing members of the community. Beginning special educators demonstrate their mastery of this standard through the mastery of the CEC Common Core Knowledge and Skills, as well as through the appropriate CEC Specialty Area(s) Knowledge and Skills for which the program is preparing candidates.
3. Individual Learning Differences	Special educators understand the **effects that an exceptional condition** can have on **an individual's learning** in school and throughout life. Special educators understand that the beliefs, traditions, and values across and within cultures can affect relationships among and between students, their families, and the school community. Moreover, special educators are **active and resourceful in seeking to understand how primary language, culture, and familial backgrounds interact with the individual's exceptional condition** to impact the individual's academic and social abilities, attitudes, values,

	interests, and career options. The understanding of these learning differences and their possible interactions **provides the foundation** upon which **special educators individualize instruction** to provide meaningful and challenging learning for individuals with exceptional learning needs. Beginning special educators demonstrate their mastery of this standard through the mastery of the CEC Common Core Knowledge and Skills, as well as through the appropriate CEC Specialty Area(s) Knowledge and Skills for which the program is preparing candidates.
4. Instructional Strategies	Special educators possess a repertoire of evidence-based **instructional strategies to individualize instruction** for individuals with Exceptional learning needs. Special educators select, adapt, and use these instructional strategies to promote **positive learning results in general and special curricula** and to **modify learning environments appropriately** for individuals with exceptional learning needs. They enhance the **learning of critical thinking, problem-solving, and performance skills** of individuals with exceptional learning needs, and increase their self-awareness, self-management, self-control, self-reliance, and self-esteem. Moreover, special educators emphasize the **development, maintenance, and generalization** of knowledge and skills across environments, settings, and the life span. Beginning special educators demonstrate their mastery of this standard through the mastery of the CEC Common Core Knowledge and Skills, as well as through the appropriate CEC Specialty Area(s) Knowledge and Skills for which the program is preparing candidates.
5. Learning Environments and Social Interactions	Special educators actively **create learning environments** for individuals with exceptional learning needs that foster cultural understanding, safety and emotional well-being, positive social interactions, and **active engagement** of individuals with exceptional learning needs. In addition, special educators **foster environments in which diversity is valued** and individuals are taught to live harmoniously and productively in a culturally diverse world. Special educators shape **environments to encourage the independence**, self-motivation, self-direction, personal empowerment, and self-advocacy of individuals with exceptional learning needs. Special educators **help their general education colleagues integrate individuals** with exceptional learning needs in general education environments and engage them in meaningful learning activities and interactions. Special educators use **direct motivational and instructional interventions** with individuals with exceptional learning needs to teach them to respond effectively to current expectations. When necessary, special educators can safely **intervene with individuals with exceptional learning needs in crisis**. Special educators coordinate all these efforts and **provide guidance and direction to paraeducators and others**, such as classroom volunteers and tutors. Beginning special educators demonstrate their mastery of this standard through the mastery of the CEC Common Core Knowledge and Skills, as well as through the appropriate CEC Specialty Area(s) Knowledge and Skills for which the program is preparing candidates.

6. Language	Special educators actively **create learning environments** for individuals with exceptional learning needs that foster cultural understanding, safety and emotional well-being, positive social interactions, and **active engagement** of individuals with exceptional learning needs. In addition, special educators **foster environments in which diversity is valued** and individuals are taught to live harmoniously and productively in a culturally diverse world. Special educators shape **environments to encourage the independence**, self-motivation, self-direction, personal empowerment, and self-advocacy of individuals with exceptional learning needs. Special educators **help their general education colleagues integrate individuals** with exceptional learning needs in general education environments and engage them in meaningful learning activities and interactions. Special educators use **direct motivational and instructional interventions** with individuals with exceptional learning needs to teach them to respond effectively to current expectations. When necessary, special educators can safely **intervene with individuals with exceptional learning needs in crisis**. Special educators coordinate all these efforts and **provide guidance and direction to paraeducators and others**, such as classroom volunteers and tutors. Beginning special educators demonstrate their mastery of this standard through the mastery of the CEC Common Core Knowledge and Skills, as well as through the appropriate CEC Specialty Area(s) Knowledge and Skills for which the program is preparing candidates.
7. Instructional Planning	Individualized decision-making and instruction is at the center of special education practice. Special educators develop **long-range individualized instructional plans** anchored in both general and special education curricula. In addition, special educators systematically translate these individualized plans into carefully selected **shorter-range goals and objectives** taking into consideration an individual's abilities and needs, the learning environment, and a myriad of cultural and linguistic factors. Individualized instructional plans emphasize **explicit modeling** and **efficient guided practice** to assure acquisition and fluency through maintenance and generalization. Understanding of these factors as well as the implications of an individual's exceptional condition, guides the special educator's selection, adaptation, and creation of materials, and the use of powerful instructional variables. Instructional plans are **modified based on ongoing analysis of the individual's learning progress**. Moreover, special educators facilitate this instructional planning in a **collaborative context** including the individuals with exceptionalities, families, professional colleagues, and personnel from other agencies as appropriate. Special educators also develop a variety of **individualized transition plans**, such as transitions from preschool to elementary school and from secondary settings to a variety of postsecondary work and learning contexts. Special educators are comfortable using **appropriate technologies** to support instructional planning and individualized instruction. Beginning special educators demonstrate their mastery of this standard

	through the mastery of the CEC Common Core Knowledge and Skills, as well as through the appropriate CEC Specialty Area(s) Knowledge and Skills for which the program is preparing candidates.
8. Assessment	Assessment is integral to the decision-making and teaching of special educators and special educators use **multiple types of assessment information** for a variety of educational decisions. Special educators use the results of assessments to help identify exceptional learning needs and to develop and implement individualized instructional programs, as well as to adjust instruction in response to ongoing learning progress. Special educators understand the **legal policies and ethical principles of measurement and assessment** related to referral, eligibility, program planning, instruction, and placement for individuals with exceptional learning needs, including those from culturally and linguistically diverse backgrounds. Special educators understand **measurement theory and practices** for addressing issues of validity, reliability, norms, bias, and interpretation of assessment results. In addition, special educators understand the appropriate **use and limitations** of various types of assessments. Special educators collaborate with families and other colleagues to assure **nonbiased, meaningful assessments and decision-making**. Special educators conduct **formal and informal assessments** of behavior, learning, achievement, and environments to design learning experiences that support the growth and development of individuals with exceptional learning needs. Special educators use assessment information to **identify supports and adaptations** required for individuals with exceptional learning needs to access the general curriculum and to participate in school, system, and statewide assessment programs. Special educators **regularly monitor the progress** of individuals with exceptional learning needs in general and special curricula. Special educators **use appropriate technologies** to support their assessments. Beginning special educators demonstrate their mastery of this standard through the mastery of the CEC Common Core Knowledge and Skills, as well as through the appropriate CEC Specialty Area(s) Knowledge and Skills for which the program is preparing candidates.
9. Professional and Ethical Practice	Special educators are guided by the profession's ethical and professional practice standards. Special educators practice in multiple roles and complex situations across wide age and developmental ranges. Their practice requires ongoing attention to **legal matters** along with serious professional and **ethical considerations**. Special educators engage in **professional activities** and participate in learning communities that benefit individuals with exceptional learning needs, their families, colleagues, and their own professional growth. Special educators view themselves as **lifelong learners** and regularly reflect on and adjust their practice. Special educators are aware of how their own and others' attitudes, behaviors, and ways of communicating can influence their practice. Special educators understand that culture and language can interact with exceptionalities, and are **sensitive to the many aspects** of diversity of individuals with exceptional learning needs and their families. Special

	educators actively plan and engage in activities that foster their professional growth and keep them **current with evidence-based best practices**. Special educators know their own limits of practice and practice within them. Beginning special educators demonstrate their mastery of this standard through the mastery of the CEC Common Core Knowledge and Skills, as well as through the appropriate CEC Specialty Area(s) Knowledge and Skills for which the program is preparing candidates.
10. Collaboration	Special educators routinely and effectively collaborate with families, other educators, related service providers, and personnel from community agencies in culturally responsive ways. This collaboration assures that the needs of individuals with exceptional learning needs are addressed throughout schooling. Moreover, special educators embrace their special role as advocate for individuals with exceptional learning needs. Special educators promote and advocate the learning and well-being of individuals with exceptional learning needs across a wide range of settings and a range of different learning experiences. Special educators are viewed as specialists by a myriad of people who actively seek their collaboration to effectively include and teach individuals with exceptional learning needs. Special educators are a resource to their colleagues in understanding the laws and policies relevant to individuals with **exceptional learning needs**. Special educators use collaboration to facilitate the successful transitions of individuals with exceptional learning needs across settings and services. Beginning special educators demonstrate their mastery of this standard through the mastery of the CEC Common Core Knowledge and Skills, as well as through the appropriate CEC Specialty Area(s) Knowledge and Skills for which the program is preparing candidates.

Note: Information from Council for Exceptional Children. (2009). What every special educator must know: Ethics, standards, and guidelines for special educators. (6th ed.). Arlington, VA: Author. p. 24-28.

Appendix B

Letter of Introduction and Consent to Teacher Education Preparation Program Participants

Dear Educator:

My name is Megan Langford and I am a master's degree candidate at Brigham Young University conducting research under the direction of Darlene Anderson, PhD., in the Department of Counseling Psychology and Special Education.

We are currently studying the similarities and differences of direct observation and summative evaluation forms used to evaluate preservice teacher performance at colleges and universities that are recognized by the Council for Exceptional Children (CEC). Your school was selected as part of a random sample of teacher preparation programs that currently have CEC recognition. We invite you to participate by sending copies of the direct observation forms and summative or final evaluation forms used by university faculty to evaluate preservice teachers. In addition to sending the forms, please complete the brief four-question survey attached to this document.

The results of this analysis may inform future evaluation of preservice teachers to better ensure highly qualified educators are entering the teaching profession.

Your response to this email signifies your consent to participate in this study.

Electronic copies of the forms can be emailed directly to megansuelangford@gmail.com. If you prefer to send paper copies, please send copies to:

Dr. Darlene Anderson
237- D MCKB
Provo, UT 84602

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,

Megan Langford
Master's Degree Candidate
Brigham Young University
megansuelangford@gmail.com

Appendix C

Codebook

Direct Observation Form Coding Procedures

Step One:

Select a direct observation form from the "To Be Coded" file. Next, double check that the form is a direct observation form and not a summative evaluation form.

Step Two:

Enter the name of the teacher preparation program and or the college or university

Step Three:

Enter your name as the "Coder"

Step Four:

Code the direct observation form according to the specifications listed below.

Organization

II. Number of pages in length

- One page
- Two pages
- Three pages
- Four pages
- Five pages
- Six pages or more

III. Domain organization- Domain refers categories or themes that may be used to organize the direct observation form

- CEC standards- professional teaching standards written by the Council for Exceptional Children
- INTASC standards
- State Education Agency (SEA) standards- professional standards written for the specific state in which the
- Lesson component
- No apparent organization by domain
- Multiple domain organization used

  6a. CEC and INTASC

  6b. CEC and SEA standards

  6c. CEC and lesson components

  6d. INTASC and SEA standards

  6e. INTASC and lesson components

  6f. SEA and lesson components
- Other, please describe

IV. Total number of domains

- one domain
- two domains
- three- five domains
- five to eight domains
- eight to nine domains
- 10 domains
- More than 10 domains

V. Total number of questions/items

1- ###. Total number of questions/ items

0. Not applicable (not organized by questions/items)

Implementation

VI. Number of times form is administered/used in evaluating preservice teacher performance

- Once
- Twice
- Three times
- Four times
- Five times
- Six or more times

VII. Evaluation completed by

- Cooperating teacher/Mentor Teacher
- University supervisor
- Preservice teacher
- Cooperating teacher and university supervisor
- Other, please specify

Format

VIII. Basic Structure

- Open-ended questions
- Moderate structure of 2-5 elements of teaching
- Specific- highly structured by standards/university expectations
- Specific- requires specific format of teaching/lesson delivery

IX. Evaluation Scale

- Rubric

  1a. range of two or three options

  1b. range of four options

  1c. range of five options

  1d. range of six or more options

- Likert-scale

  2a. range of two or three options

  2b. range of four options

  2c. range of five options

  2d. range of six or more options

- Other, please specify

- No evaluation scale or rating system used

X. Explanation of Evaluation Scale

- Present

  1a. one-two word explanations

  1b. short phrase explanations

  1c. full sentence explanations

  1d. multiple sentence explanations

0. Not present

Data Collection Methods

XI. Method of collecting data

- All data obtained during direct observation of lesson delivery

- Data obtained in pre-conference and during direct observation

- Data obtained in pre-conference, during direct observation, and post observation
- Data obtained though video of lesson delivery
- Unclear method of data collection
- Other method, please specify

Teacher/Student Interaction Data Collected

XII. Evidence of teacher/student interaction

- Collected

  1a. student response rate

  1b. teacher praise/feedback rate

  1c. question/answer

  1d. corrective feedback/error corrections

  1e. other, please specify

0. Not Collected

Lesson Plan

XIII. Lesson plan provided to observer

- Yes
- No

XIV. Lesson plan

- Original creation of student teacher
- scripted lesson plan
- Specific to lesson being taught
- Lesson plan from program or book

XV. Lesson plan graded or collected by observer

- Yes

- No
- Unknown, not specified
- Not applicable- no lesson plan collected

Lesson Delivery

XVI. Lesson Delivery Style

- Form requires specific type of lesson delivery

  1a. Effective Teaching Cycle

  1b. Direct Instruction

  1c. Madeline Hunter

  1d. Discrete Trial

  1e. Other, please specify

- No specific lesson delivery required

Assessment of Student Learning

XVII. Student outcome data

- Data requested
- Data not requested

Class Behavior Management

XVIII. Student Engagement data collected

- Yes data are collected

  1a. percent on-task

  1b. response rate

  1c. other method of recording student engagement, please specify

- No data are collected

Professionalism

XIX. Interaction with students

- Present
- Not present

XX. Communication (requests data on how preservice teacher communicates with students, parents, colleagues, and community members

- Communication with students

1a. Present

1b. Not present

- Communication with parents

2a. Present

2b. Not present

XXI. Reflection

- Present
- Not present

XXII. Accepts Feedback

- Present
- Not present

XXIII. Goal setting or Focus for next observation

- Present
- Not present

Step Five:

Check to ensure that all fields have a value entered.

Step Six:

Paper clip a copy of the coding sheet to the front of the direct observation form. Mark the box on the file folder indicating the form has been coded and place it in the "Completed" file.

Summative Evaluation Form Coding Procedures

Step One:

Select a summative evaluation form from the "To Be Coded" file. Next, double check that the form is *a summative evaluation form* and not a d*irect observation* form.

Step Two:

Enter the name of the teacher preparation program and or the college or university

Step Three:

Enter your name as the "Coder"

Step Four:

Code the summative evaluation form according to the specifications listed below.

Organization

I. Number of pages in length

1. One page
2. Two pages
3. Three pages
4. Four pages
5. Five pages
6. Six pages or more

II. Domain organization- Domain refers categories or themes that may be used to organize the direct observation form

1. CEC standards
2. INTASC standards

3. State Education Agency (SEA) standards
4. No apparent organization by domain
5. Multiple domain organization used

   6a. CEC and INTASC

   6b. CEC and SEA standards

   6c. INTASC and SEA standards

   6d. Multiple domains, please specify

6. Other, please describe

III. Total number of domains (categories or themes)

0. No apparent domains or themes
1. One domain
2. Two – four domains
3. Five- eight domains
4. Eight- nine domains
5. Ten domains
6. More than 10 domains

IV. Total number of questions/items

1- ###. Total number of questions/ items

0. Not applicable (not organized by questions/items)

Implementation

V. Number of times form is administered/used in evaluating preservice teacher performance

1. Once
2. Twice

3. Three times
4. Four times
5. Five times
6. Six or more times

VI. Evaluation completed by

1. Cooperating teacher/Mentor Teacher
2. University supervisor
3. Preservice teacher
4. Cooperating teacher and university supervisor
5. Other, please specify

Format

VII. Includes information about placement for student teaching/field work (i.e.: name of school, name of cooperating teacher, grade level, subjects taught, etc)

1. Yes
2. No

VIII. Includes directions on how to complete the summative evaluation form

1. Yes
2. No

IX. Basic Structure

1. In order of CEC standards
2. In order of INTASC standards
3. In order of SEA standards
4. Other, please specify

X. Evaluation Scale

1. Rubric

    1a. range of two or three

    1b. range of four

    1c. range of five

    1d. range of six or more

2. Likert-scale

    2a. range of two or three

    2b. range of four

    2c. range of five

    2d. range of six or more

3. Other, please specify

4. No evaluation scale or rating system used

XI. Explanation of Evaluation Scale

1. Present

    1a. one-two word explanations

    1b. short phrase explanations

    1c. full sentence explanations

    1d. multiple sentence explanations

0. Not present

XII. Allows for rater comments, justification, or examples within each domain

1. Yes

2. No

XIII. Provides area rater to write a summary statement

1. Yes
2. No

XIV. Strengths- for asks rater to list or describe preservice teacher's strengths

1. Yes
2. No

XV. Weaknesses- form asks rater to list or describe preservice teacher's weakness/ areas to improve/challenges

1. Yes
2. No

XVI. Includes recommendation for final grade

1. Yes
2. No

Step Five:

Check to ensure that all fields have a value entered.

Step Six:

Paper clip a copy of the coding sheet to the front of the summative evaluation form. Mark the box on the file folder indicating the form has been coded and place it in the "Completed" file.

Codebook Glossary

CEC- Council for Exceptional Children international professional organization for educators, administrators, parents, or any individuals who work with children with exceptionalities.

CEC Standards- professional teaching standards written by the Council for Exceptional Children that can be used to guide the training of preservice or in-service teachers.

Domain organization- Domain refers categories or themes that may be used to organize the direct observation form

INTASC- Interstate New Teacher Assessment and Support Consortium established in 1987 to aid state education agencies in the training, licensure, and continued professional development of professional educators

INTASC standards- professional teaching standards developed by the consortium to guide the training and professional development of professional educators

SEA- State Education Agency

SEA standards- Professional teaching standards developed by a State. Some institutions of higher education may use the standards developed by the state in which they are licensing educators.

Appendix D

Coding Sheets

Direct Observation Form Coding Sheet

Program Name: _____

Coder: _____

Organization

I. Number of pages in length _____

II. Domain organization _____

III. Total number of domains _____

IV. Total number of questions/items _____

Implementation

V. Number of times form is administered/used _____

VI. Evaluation completed by _____

Format

VII. Basic Structure _____

VIII. Evaluation Scale _____

IX. Explanation of Evaluation Scale _____

Data Collection

X. Method of collecting data _____

Teacher/Student Interaction Data Collected

XI. Evidence of teacher/student interaction _____

Lesson Plan

XII. Lesson plan provided to observer _____

XIII. Lesson plan graded or collected by observer _____

Lesson Delivery

XIV. Lesson Delivery Style _____

Assessment of Student Learning

XV. Student outcome data _____

Class Behavior Management

XVI. Student Engagement data collected _____

Professionalism

XVII. Interaction with students _____

XVIII. Communication _____

XIX. Reflection _____

XX. Accepts Feedback _____

XXI. Goal setting or Focus for next observation _____

Summative Evaluation Form Coding Sheet

Program Name: _____

Coder: _____

Organization

I. Number of pages in length _____

II. Domain organization _____

III. Total number of domains (categories or themes) _____

IV. Total number of questions/items _____

Implementation

V. Number of times form is administered/used _____

VI. Evaluation completed by _____

Format

VII. Includes information about placement for student teaching/field work _____

VIII. Includes directions on how to complete the summative evaluation form _____

IX. Basic Structure _____

X. Evaluation Scale _____

XI. Explanation of Evaluation Scale _____

XII. Allows for rater comments, justification, or examples within each domain _____

XIII. Provides area rater to write a summary statement _____

XIV. Strengths _____

XV. Weaknesses _____

XVI. Includes recommendation for final grade _____

Appendix E

Participant Survey

University/ College Name _____

Completed by _____

Position/ Title _____

1. Frequency
    a. How often is the direct observation form used to evaluate the knowledge and skills of a preservice teacher?

    b. How often is the summative or comprehensive evaluation form used to evaluate a preservice teacher?

2. Completion
    a. Who completes the direct observation form? Circle all that apply.
        i. University supervisor
        ii. Cooperating teacher/ mentor teacher
        iii. Preservice teacher (self-evaluation)
        iv. Other, please list: _____
    b. Who completes the summative or comprehensive evaluation form?
        i. University supervisor
        ii. Cooperating teacher/ mentor teacher
        iii. Preservice teacher (self-evaluation)
        iv. Other, please list: _____

3. Training
    a. Please briefly describe the training provided to personnel, such as university supervisors and\or cooperating teachers, who complete the direct observation and summative evaluation forms.

4. Reliability
    How do you determine inter-rater reliability? Please include any data on reliability.