Characteristics of Effective Interpreter Education Programs in the United States

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Dedication

This dissertation is dedicated to my first two instructors of American Sign Language, **Jon Barr** and **LindaLee Massoud**. They both played vital roles in influencing the decisions that would shape my life and their continued mentorship across the years has meant the world to me. Thank you so much for allowing God to use you both to impact my life.

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Abstract

The general purpose of this study was to investigate effective practices of interpreting education programs in the United States as measured by the readiness to credential gap. The increasing demand for interpreters has created an environment with under-credentialed interpreters and this is compounded by the fact that the field of interpreter education is relatively new and little research has been done regarding interpreter education. There has been much dispute as to the content and experiences sign language interpreting programs need to include, but there have been no clearly identified characteristics of successful interpreter education programs shown to result in graduates who emerge as competent practitioners ready for credentialing. This research identified the readiness to credential gap of programs across the United States and studied characteristics of these programs that are contributors to facilitating graduation success in the credentialing process.

When considering the current readiness to credential gap as determined by this study, it is important to note that the gap differs depending on if a graduate is exiting a two-year program or exiting a four-year program. Also there is a difference in the gap based on earning state or national credentials. Findings revealed that graduates earned state level credentials up to two years faster than national level credentials and graduates from four-year programs earned credentials at a faster rate than graduates of two-year programs. Curricular factors that have the largest impact on credentialing rates were the presence of Service Learning and extent of Practicum. Both curricular activities involved extensive real world application of the skills initially acquired in the class-based setting. The study outcomes support practice and

application of basics skills in the context within which the skills will be used. "Other than curricular" characteristics that impact credentialing include type of programs, faculty characteristics and out-of-class learning experiences.

Conclusions from the study were that first, two-year interpreting programs need to be restructured to better align their curriculum to facilitate student transfer into baccalaureate-level programs. Second, because it is clear that faculty roles are deemed critical, much more needs to be known about the necessary qualifications and skills of faculty. Educational opportunities that foster faculty development need to be expanded. Third, classroom instruction alone is insufficient to produce prepared practitioners and students in training profit substantially form long-term, field-based experiences such as practicum and service learning. Fourth, several literature-based speculations about conditions of education programs that might influence student outcomes (e.g., lack of facilities and characteristics of classroom instruction) were not borne out by the results of this study. Finally, interpreting education programs need to develop and maintain better tracking systems to allow continued investigation into the outcomes of training programs.

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CHAPTER ONE

OVERVIEW OF THE STUDY

Introduction and Background to the Problem

Sign Language Interpreting is a relatively new profession in the human service field. Interpreters are needed in areas including, but not limited to, education, employment, medical, legal, financial, state and local government services and public accommodations for people with widely divergent linguistic needs. The Rehabilitation Act of 1973 - Section 504, The Education of All Handicapped Children Act (Public Law 94-142) (1975), and The Americans with Disabilities Act of 1990 mandate the provision of sign language interpreters in a variety of settings. These combined regulations increased the demand for interpreters at such a rapid and dramatic rate that the profession was not prepared to respond (Witter-Merithew & Johnson, 2004), thus creating a national shortage of qualified interpreters. Winston and Cokely (2007) conclude that there will be more interpreters retiring from the field in the next ten years than entering and this ratio will further increase the demand for interpreters.

Historically, the first interpreters for the deaf were family members, educators, and clergy (Winston, 2004). Interpreting was done on a volunteer basis or deaf individuals would express their gratitude to the interpreter with small gifts. As the field moved toward professionalization, the primary system for the education of sign language interpreters became sign language interpreting programs (Humphrey & Alcorn, 2007). Initially known as Interpreter Training Programs (ITP), these programs are now more appropriately referred to as Interpreter Education Programs

(IEP). The change of nomenclature reflects a philosophical shift in how the interpreter profession is perceived. "Interpreter training" reflects a trade-based perspective while "interpreter education" reflects a more academic perspective (Witter-Merithew & Johnson, 2004).

Interpreter Education Programs

Formal preparation of interpreters began in 1975 with the passage of amendments to The Rehabilitation Act of 1973 (Burch, 2002). Funds were allocated to establish four programs under the National Interpreter Training Consortium. The programs were located in Minnesota, New York, California, and New Orleans. Eventually, more programs were established and were primarily two-year programs housed in community colleges and vocational training centers. In the 1980s an initiative was begun to expand the condensed skills-focused training to a more broad based liberal arts programs that included comprehensive skill training. This push reflected the belief (Shaw, Collins, & Metzger, 2006) that two years is not enough time to adequately prepare practitioners (Humphrey, 2000; Johnson & Witter-Merithew, 2004) and the trend to move toward four-year degree programs emerged (Burch, 2002). Maryville College in Tennessee established the first baccalaureate Interpreter Education Program in 1974 (Witter-Merithew & Johnson, 2004). This began a trend and currently there is general consensus that a bachelor's degree is essential for interpreters in a variety of interpreting situations (Burch, 2002; Dean & Pollard, 2001; Witter-Merithew & Johnson, 2004). This agreement resulted in the Registry of Interpreters for the Deaf (RID) passing a ruling that, as of December

2012, any candidate for certification for the national interpreting exam must have a bachelor's degree (Registry of Interpreters for the Deaf, 2007).

RID (2010) currently lists 107 two-year and four-year IEPs at its website (www.rid.org) and the National Consortium of Interpreter Education Centers (NCIEC) website (http://www.nciec.org/) lists 144 certificate, two-year, and four-year interpreter education programs; however, it remains uncertain how many IEPs actually exist. Confusion exists because many programs listed as interpreter education programs are actually American Sign Language (ASL) or Deaf Studies degrees (Witter-Merithew & Johnson, 2004). Some programs offer minors or concentrations in interpreting while others do not address interpreting at all.

Preparedness of Interpreters

In addition to the expansion of interpreter education to four-year programs, other steps were taken to address the issue of interpreter preparation. One initial step was taken to address the quality of interpreter education by the Conference of Interpreter Educators (CIT) when this organization developed national standards for interpreter education (CIT, 1995). These national standards are "…to be used for the development of education and self-analysis of post secondary interpreter education programs" (p. 2). These standards were adopted by the recently established Conference on Collegiate Interpreter Education (CCIE) when official accreditation programs began in 2007. The standards will guide new programs in their development and serve as a benchmark for existing programs. (See Appendix A for a complete list of the current CCIE Standards.)

Another step was undertaken by Witter-Merithew and Johnson (2005) as part of a U.S. Department of Education grant project. These researcher-educators met with stakeholders (deaf consumers; interpreting students; interpreter educators; interpreter practitioners; employers; and policy-makers) in the field of interpreting and interpreter education to identify and develop a detailed list and explanation of entry-to-practice competencies. Witter-Merithew and Johnson (2005) categorized the resulting entry-to-practice skills into five domain competency areas: Theory and Knowledge; Human Relations; Language Skills; Interpreting Skills; and Professionalism. (See Appendix B for the complete Entry-to-Practice Competencies.)

Readiness to Work Gap/Readiness to Credential Gap

Anderson and Stauffer (1990) first described a crisis situation in the field of sign language interpreting as the readiness to work gap This gap refers to the generally accepted fact that IEP graduates are not typically employment-ready upon graduation (Patrie, 1994; Witter-Merithew & Johnson, 2005). The concept of the readiness to work gap and a readiness to credential gap are closely related and the terms are often used interchangeably. However, there is a distinction to be made. The former indicates that students graduate but are not prepared to gain employment as an interpreter practitioner competent to provide services across a wide variety of settings. The latter indicates that students graduate and may be employed to provide rudimentary interpreting services in limited settings, but are not ready to obtain interpreting credentials set forth by the field both at the state and national levels. Both of these terms indicate that IEP graduates are not ready to enter the interpreting profession as fully qualified and certified professionals. The “sad” reality, as it

specifically relates to the world of work, is that students do graduate from IEPs and obtain employment, often facing requirements that they are not prepared to meet (Witter-Merithew & Johnson, 2005). Sheer demand for interpreters and poor governmental oversight virtually assure that some poorly qualified individuals will in fact work in situations that exceed their professional skills. This reality makes the task difficult, if not impossible, to statistically measure the readiness to work gap. Using credentials to measure preparedness is a more objective and quantifiable way to gauge the actual qualification of IEP graduates. Because of this, the better term to consistently identify a discrepancy in skills and capability on the job, may be the readiness to credential gap. Those programs whose graduates take less time to earn credentials may be considered to have a lower readiness to credential gap, and likewise, those programs whose students take a longer time to achieve credentials may be considered to have a higher readiness to credential gap.

Soon after the Anderson and Stauffer (1990) study, Frishberg, Patrie, Robinson, and Stauffer (1994) wrote response papers confirming that the gap still existed. Over a decade later, Cokely (2005), Winston (2004), and Witter-Merithew & Johnson (2005) reiterated the now familiar lament from stakeholders regarding the continued existence of the gap between the completion of programs and the readiness for competent practice as evidenced by interpreting credentials. As part of the 2005 study, Witter-Merithew and Johnson met with seven deaf and non-deaf experts in the field of interpreting and interpreter education. This group was referred to as the Authority Opinion Group (AOG). All of the AOG members "…acknowledge that there is an existing competence gap between successfully exiting an interpreter

preparation program (IPP) and entering a successful practice" (p. 14). They state, "IPP graduates…cannot demonstrate the requisite skills to achieve regional and/or national certification upon graduation" (p. 14) and they agree that it is imperative to address the gap between graduation and certification. One of the AOG members, Dr. Theresa Smith, declares, "Everyone knows that the average grad from an IPP is not ready yet to try for certification" (p. 14). She goes on to say, "…there is a gap between graduation and certification…currently grads 'go out into the field' and do their best to learn more, meanwhile deaf people miss information and are misrepresented" (p. 15).

Because IEPs are the primary producers of interpreters, the future of the field of interpreting lies in the quality of education delivered by these IEPs. If changes are not made to improve the quality of the education provided by IEPs, the status quo will remain and the field of interpreting will be in peril while deaf individuals suffer because of incompetent, unqualified interpreters.

Statement of the Problem

Despite the move to four-year programs, the establishment of entry-to-practice competencies and recognized standards for interpreter education, there remains debate about how to properly educate interpreting students so that they emerge from interpreter education programs as competent practitioners. There has been much dispute as to the content and experiences programs need to include (Cokely, 2005; Humphrey, 2000; Patrie, 1994; Stauffer, 1994; Witter- Merithew & Johnson, 2005). Despite this, there have been no clearly identified characteristics of successful interpreter education shown to result in graduates who emerge from the IEPs as

competent practitioners. In effect, little research has been done to identify effective practices of existing programs.

Purpose of the Study

The general purpose of this study was to expand the limited research existing in the field of interpreter education, specifically as it relates to the readiness to credential gap. In order to accomplish this, the researcher identified programs that have a low readiness to credential gap and studied characteristics of these programs that are contributors to their success.

Research Questions

Using the information obtained through this research study, the following specific research questions were addressed:

1. What is the readiness to credential gap of IEPs in the United States?
2. What curricular related characteristics (as identified in the review of literature) of successful Interpreting Education Programs affect readiness?
3. What "other than curricular" related characteristics of successful Interpreting Education Programs affect readiness?
4. Are there promising techniques unique to individual programs that are not covered by the literature?

Overview of Methodology

In order to answer the above research questions, this three-phased sequential, mix-method design study used survey data and personal interviews. In Phase One, the researcher used a quantitative approach using pre-existing data from the NCIEC 2009 IEP Needs Assessment. (See Appendix C for the 2009 NCIEC IEP Needs

Assessment.) A portion of the information from the 2009 NCIEC Needs Assessment was used quantitatively. Another portion of the Needs Assessment data used the responses to the questions related to achievement of interpreting credentials to rank schools into three tiers: Tier One – short readiness to credential gap; Tier Two – medium readiness to credential gap; and Tier Three – long readiness to credential gap. All of the IEPs from Tier One were invited to participate in the Phase Two portion of the study. Five schools agreed to participate in the study.

The five schools that agreed to participate became the sample and focus of Phase Two of this research project. Phase Two employed a qualitative approach using semi-structured interviews with approved program representatives conducted via phone.

Phase Three used the information gathered from the literature review, the NCIEC Needs Assessment, and the Tier One interviews to develop an assessment tool that categorized suggested characteristics, curriculum, and practices of IEPS. The Phase Three assessment tool was sent to all of the schools that were invited to participate in the 2009 NCIEC Needs Assessment. This phase used a quantitative approach. Using a four point Likert scale, respondents were asked to rank how each identified factor defines their institution or is utilized by their institution and to rank the importance of each identified factor. Respondents were also given opportunities to comment on each factor listed.

Rationale for the Study

The increasing demand for interpreters has created an environment with under-credentialed interpreters and this is compounded by the fact that the field of

interpreter education is relatively new and little research has been done regarding interpreter education. This study provides valuable information regarding factors that promote a low readiness to credential gap in the field of interpreter education.

Significance of the Study

This study researched collective characteristics of and practices employed by IEPs to address this critical situation in the field. Successful characteristics and best practices were identified and will be shared with other interpreter educators who can modify their programs to incorporate more effective techniques and strategies. The information will also be shared with organizations involved with interpreter training.

Definition of Terms

In this study the following terms and definitions will apply:

American Sign Language (ASL): A visual gestural language with facial grammar, physical affect markers, spatial linguistic information and fingerspelling.

American Sign Language Teachers Association (ASLTA): The only national organization dedicated to the improvement and expansion of the teaching of ASL and Deaf Studies at all levels of instruction.

Commission on Collegiate Interpreter Education (CCIE): Formed out of the Conference of Interpreter Trainers, the CCIE supports and maintains interpreter education standards and provides accreditation to professional degree programs in interpretation.

Conference of Interpreter Trainers (CIT): A professional organization whose membership consists primarily of teachers of ASL/English Interpreting.

Credentials: Comprehensive Skills Certificate, Interpreting Certification, Transliterating Certification, Certificate of Transliteration, Certificate of Interpretation, NIC Certification, EIPA, State Quality Assurance, NAD, other assessment skills systems.

Educational Interpreter's Performance Assessment (EIPA): National interpreting assessment for interpreters in the K-12 setting.

Interpreter Education Program (IEP): A two or four year degree program that educates students to become skilled at sign language interpreting so that upon graduation a student can begin working as a sign language interpreter. This nomenclature indicates an academic perspective to the preparation of sign language interpreters.

Interpreter Preparation Program (IPP): A degree program which educates students to become skilled at sign language interpreting so that upon graduation a student can begin working as a sign language interpreter. This nomenclature indicates a trade-based perspective to the preparation of sign language interpreters.

Interpreter Training Program (ITP): A degree program which trains students to become skilled in sign language interpreting so that upon graduation a student can begin working as a sign language interpreter. This nomenclature indicates a trade-based perspective to the preparation of sign language interpreters.

National Association of the Deaf (NAD): A non-profit organization designed to empower Deaf and Hard of Hearing individuals.

National Consortium of Interpreter Education Centers (NCIEC): A collaborative network of five regional centers and one national center working to change the way

the field of sign language interpreting traditionally thinks of and provides education and professional development to sign language interpreters. They foster networks among all stakeholders in the academic, professional and consumer communities and investigate and disseminate proven approaches to teaching, mentoring, program administration, and consumer education.

National Interpreting Certification (NIC): A test developed jointly by the National Association of the Deaf and the Registry of Interpreters for the Deaf and administered by the Registry of Interpreters for the Deaf. This test involves a written test, an interview, and a performance test. Certification is awarded at three levels.

Practitioner: A person engaged in the practice of the profession of sign language interpreting.

Quality Assurance (QA): A state level assessment process that is designed to identify strengths and weaknesses in knowledge and skills of interpreting. Also known as a Quality Assurance Screening (QAS).

Registry of Interpreters for the Deaf (RID): A national membership organization representing the professionals who make communication possible between people who are deaf or hard of hearing and people who can hear.

Sign Language Interpreting: The art and science of receiving a message from one language and rendering it into another. It involves the appropriate transfer and transmission of culturally based linguistic and nonlinguistic information. The goal of interpreting is to transfer a message from a source language into a target language without skewing it while keeping in mind the linguistic needs of the recipient(s) of the message. Interpreting serves a diverse population in a variety of settings across a

broad range of fields and therefore requires professional interpreters to possess a breadth and depth of knowledge.

Delimitations of the Study

Delimitations are intentional decisions that researchers make to narrow their studies (Cresswell, 2005). Delimitations must be considered when designing the research study. The following delimitations created the boundaries for this study:

1. Programs were identified from the NCIEC website.
2. Only schools who could report their school to credential rate were considered.
3. During Phase Three, schools were not considered if they had been in existence for less than the amount of time needed to graduate a class.
4. Only schools in the United States were considered.
5. Only Sign Language Interpreting Programs (not ASL or Deaf Studies) were considered.

Limitations of the Study

Cresswell (2005) explains that limitations are potential weaknesses or problems with the study identified by the researcher. The limitations of this study are as follows:

1. Though the Educational Interpreter Performance Assessment is a nationally recognized credential, it will not be considered in the initial phase of the study because this information was not included in the 2009 NCIEC Interpreter Education Program Needs Assessment.
2. Data were collected in specific areas thought to affect readiness to credential, however some potential areas of influence may have been omitted.

3. Because the researcher relied on institutional self reporting, the awarding of credentials may be inaccurately reported.
4. During interviews, sign language interpreting program representatives may have wanted to present information about the program in the most positive light and may misrepresent program's strengths and inadequacies.
5. Program representatives reported what they believed to be the reasons for alumni success. Program alumni may have different opinions about what were the real program strengths that led to credentialing.
6. Response rates are not at the full control of the researcher and there was a low response rate for Phase Three.

Organization of the Study

Chapter one introduces the research study. It includes an introduction and background to the problem, statement of the problem, purpose of the study, research questions, rationale for the study, significance of the study, definition of terms, delimitations of the study, limitations of the study, and organization of the study.

Chapter two presents the review of the literature on Interpreter Education Programs. This chapter is divided into the pertinent sections addressing entry level competencies, current program inadequacies and recommended approaches or techniques for lessening or eliminating the readiness to credential gap.

Chapter three describes the research methods including, the type of design, participants, instrumentation survey and interview forms, procedure, research design and data analysis techniques, methods of verification, the role of the researcher, and procedures to protect human subjects.

Chapter four contains a discussion of the results relative to each research question, accompanied by a presentation of the data in table format.

Chapter five restates the purpose of the study and reviews the methodology. It summarizes the findings, conclusions, implications of the study and recommendations for future research.

CHAPTER TWO

REVIEW OF LITERATURE

Chapter Introduction

In order to more fully understand the current state of interpreter education, the following literature review was conducted. The research of literature related to interpreter education revealed a very limited pool of research-based, peer-reviewed information. Further, explicit information related to the facilitation of student mastery of requisite interpreting knowledge and skills is not part of the available body of knowledge (Winston, 2004).

Entry Level Competencies and Interpreting Credentials

It is recognized that the fundamental requirements for students entering the profession are cultural and communicative competency in each language in which they will work (Kelly, 2001; 2004; Winston, 2004). What constitutes competency, however, lacks clarity. At the national level, the Registry of Interpreters for the Deaf (RID) is the governing body that establishes and sustains standards that help to define the field of sign language interpreting as well as interpreting practitioners. The RID National Testing System (NTS) administers the national interpreting certification tests that measure both knowledge and skill as a sign language interpreter. Holders of generalist certificates have met or exceeded a nationally recognized standard of minimum competence in interpreting and/or transliterating (Registry of Interpreters for the Deaf, 2005) and are deemed qualified to interpret in a variety of settings including both community based and educational settings. The RID set minimum professional practice standards as Certificate of Transliteration and/or Certificate of

Interpretation (Burch, 2002; Witter-Merithew & Johnson, 2004). Those tests have been phased out and replaced with the National Interpreter Certification (www.rid.org) also administered by the Registry of Interpreters for the Deaf.

A second credentialing body that has national acceptance, though in a more limited scope, is the Educational Interpreter Performance Assessment (EIPA). This interpreting assessment is administered by the Boys Town National Research Hospital (classroominterpreting.org). The EIPA evaluates knowledge and skills of interpreters who work in elementary and secondary educational settings. While some states accept EIPA levels of 3.0 or higher, an EIPA score of 4.0 or higher is required to be a nationally certified interpreter recognized by RID (rid.org).

A third option for interpreting credentials is independent state level credentialing bodies. Many states such as Virginia (http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/), Florida (http://www.fridcentral.com/Default.aspx?pageId=136809), and Kansas (http://www.srskansas.org/kcdhh/text/KQAS/KQAS.htm) have a State Quality Assurance Screening (QAS). The QAS is a state level assessment process that is designed to identify strengths and weaknesses in knowledge and skills of interpreting and transliterating. Other states such as Texas (http://www.dars.state.tx.us/dhhs/bei.shtml) and Michigan (http://www.michigan.gov/documents/dleg/Memo_Interpreter_Test_Now_Open-SE_298469_7.pdf.) offer a Board for Evaluation of Interpreters Test (BEI) which is similar in nature to the QAS. State credentials are recognized only in the state where they are issued unless special arrangements for reciprocity have been agreed upon.

While, interpreting credentials can be earned on the state and national level, only interpreters who hold credentials at a national level are considered "Certified Interpreters."

However, employment as an interpreter is not contingent on being credentialed. There are no defined federal regulations and few state regulations monitoring entry into the work (Burch, 2002; Witter-Merithew & Johnson, 2004). As a result, practitioners can and do interpret without credentials or academic degrees, especially in the K-12 setting (Witter-Merithew & Johnson, 2004; Witter-Merithew & Johnson, 2005).

To further complicate the issue, there is a lack of consensus between the profession and marketplace as to the common attributes an entry-level practitioner must possess. The definition of what constitutes a "qualified" practitioner is subject to interpretation (Witter-Merithew & Johnson, 2004) and while there is a national standard of certification set forth by RID, state level credentials vary between states. Witter-Merithew & Johnson (2004) have estimated that 55 % of the identifiable interpreting labor force remains un-credentialed and of those that are credentialed, the majority of certifications are awarded for performance at the lowest level. According to Witter-Merithew & Johnson (2005), one reason that this is perpetuated is that the majority of interpreting is performed without supervision regardless of the complexity of the assignment or the qualifications of the practitioner. This leads to "lack of quality control, accuracy, reliability, and effectiveness of the interpretation" (p, 22).

Ideal Program

It is not just the researchers in the field that recognize this gap, but many graduates from IEPs also report that they feel insufficiently prepared in many of the skill areas necessary for professional work as an interpreter (Dean & Pollard, 2001). In a study of working interpreters in the Rochester, New York area, none of the 48 interpreters felt “very well prepared” by their IEP. These data have puzzled educators preparing entry-level practitioners who will be ready to interpret (Cokely, 2005; Roy 2000; Winston, 2007; Witter-Merithew & Johnson, 2004). Currently, there is no national standard of what constitutes an effective IEP (Frishberg, 1986; Roy 2000). The participants of the Witter-Merithew & Johnson (2005) study compiled a list of 20 recommendations that an ideal interpreter education program, which results in competent practitioners, should consider.

1. A baccalaureate degree should be the minimum requirement for entry into the field.
2. A national curriculum for interpreter education needs to be developed that is researched based.
3. The curriculum should adhere to the CIT and ASLTA standards.
4. The study of interpretation must be an interdisciplinary, liberal arts education that requires fluency in ASL and English, as well as a broad "real world" knowledge base, without specializing in areas like educational or medical interpreting until after the baccalaureate degree is successfully completed.
5. There is a need to establish multiple exit points (e.g. two-year program, four-year program) with mandatory requirements that must be assessed.

6. Outcomes/job expectations for associate's, bachelor's and master's degree graduates must be defined and clearly stated.
7. The ideal program needs to design a "model recruitment plan" for student populations that includes scholarship opportunities, and ensures an adequate number of scholarships are available for qualified applicants.
8. The ideal preparation program should have a way to screen and terminate seriously dysfunctional or inept applicants (e.g., identity issues, mental health issues, distracting physical deformities).
9. Students must demonstrate bilingual and bi cultural (English/ASL) competence prior to acceptance in an IEP.
10. Diversity education should be an integrated part of the curriculum, including appropriate resources.
11. Critical/analytical thinking must be integrated into the curriculum and assessed as one of the expected outcomes.
12. The program must educate interpreters to make better decisions, including context-demands and deaf-centric sensitivity.
13. Knowledge of ASL and English discourse styles, both in classroom application and real-world experiences must be incorporated early in the program.
14. English proficiency with the ability to deliver formal speeches is requisite.
15. Requiring intrapersonal thinking is critical to prepare individuals to be self-reflective practitioners.
16. Courses on Deaf Culture and Literacy must be required within the interpreting program.

17. The curriculum should adequately address the politics and power issues in society, the Deaf Community, and the Interpreting Community.
18. The program should include an intercultural component, second/third language, and liberal arts/interdisciplinary framework.
19. At the baccalaureate level, students must graduate as an ASL-English bilingual.
20. IPP graduates should be able to pass a national certification.

(p. 17 – 18).

Current Program Inadequacies

Many researchers believe one reason for the current readiness-to-credential gap is a lack of pre-requisite language skills (primarily ASL) of students entering IEPs. This is exacerbated by the fact that most IEPs are housed in community college settings with open-door policies. Students almost always enter an IEP with less than fluent ASL skills and therefore practitioners enter the workforce needing remediation and continued development of ASL proficiency (Humphrey, 2000; Roy, 2000; Witter-Merithew & Johnson, 2004).

There is profession-wide lack of agreement about what an interpreter must know and do to participate in an appropriate way (Roy, 2000; Witter-Merithew & Johnson, 2004; Winston, 2004). Some cite the basis for the gap is that the traditional pedagogical approach to interpreter education has not been successful (Shaw et al., 2006), that is the "monologue" approach used by most IEPs is less than effective (Cokely, 2005; Roy, 2000; Shaw et al., 2006). Others cite an inadequate supply of materials for use in the classroom (Bowen-Bailey, 2006; Moller & Finkbone, 2000). Lack of research-based data has yielded a wide variety of "home-grown" assessment

tools with little reliability and validity (West & Whitney, 2000). There is little communication and sharing of tools among teachers and trainers (Moller & Finkbone, 2000; West & Whitney, 2000).

There are several other areas that can be considered weaknesses in interpreter education. Some claim that student assessment is the Achilles' heel in our field. While it is a vital component of preparing students to become professional interpreters, how to conduct effective assessment remains vague and complex (West & Whitney, 2000; Winston, 2004). Another area that is lacking is a period of supervised interpreting practicum, such as is required in the professions of education and the medical field (Dean & Pollard, 2001; Shaw et al., 2006). Interpreter Practitioners indicated (Winston, 2007) that they would have liked more mentoring, test preparation, deaf instructors, hands on experience/practicum and ethics instruction.

Effective Practices Definition

While the definition and differentiation between, "standard," "best" and "effective" practices seems somewhat nebulous and varies from field to field, the Effective Practices Team (EPT) of the National Consortium of Interpreter Education Centers has identified and implemented definitions as it relates to current standards and practices in interpreter education. Standard Practices are those "common practices." Best Practices are identified as "research-verified, research-based, or followed by exemplary institutions;" and Effective Practice is defined as "verified by research as yielding target outcomes" (http://www.nciec.org/projects/ept_history.html).

Recommended Approaches for Reducing the Readiness to Credential Gap

There are many recommendations for techniques that will lessen or eliminate the readiness to credential gap. Witter-Merithew and Johnson (2004) state that the solution can be found in collective agreement about entry and exit criteria for IEPs, the scope and sequence of what should be taught and supported by an appropriate length of study, and whether accreditation of interpreter education programs is mandatory or voluntary.

Cokely's (2005) study revealed that most entry level interpreters engage in one-on-one interpreting. He suggests that IEPs' focus should be more discourse-based and less monologue-based. Other researchers state that interpreting should be taught as a discourse analysis (Bowen-Bailey, 2006; Burch, 2002; Cokely, 2005; Davis, 2005; Ingram, 2000; Johnson & Witter-Merithew, 2004; Shaw et al., 2006; Roy, 2000; Winston & Monikowski, 2000).

Pre-testing screening process (Johnson & Witter-Merithew, 2004; Shaw et al., 2006) and ASL and English fluency requirements (Humphrey, 2000; Johnson & Witter-Merithew, 2004; Shaw et al., 2006; Swabey, 2005; Winston, 2004) are also cited as strategies to increase IEP student success. Language fluency must be mastered prior to program entrance so focus during the course of the interpreting program can build on the pre-existing skills and lead to the development of the more complex competence that the art of interpreting demands. Too much time is spent teaching foundational language skills to bring students to the fluency level needed leaving little time to concentrate on developing more complex interpreting skills (Winston, 2004).

Many believe the solution lies partly with more qualified interpreter educators. Winston (2004) suggests that one of the more critical challenges that IEPs confront on a daily basis is the ability to identify and assess qualified and competent faculty. There is a need for educators who are skilled and competent as educators as well as practitioners (Roy, 2000; Winston 2004). Faculty need to understand how learning best occurs, be able to construct learning activities based on the needs of the learner, and evaluate their own effectiveness as educators (Winston, 2004). Educators who have advanced training in language study and are researchers (Roy, 2000) are better positioned to have success in preparing students.

On a related point, some suggest that more IEP faculty need to be involved in the Conference of Interpreter Trainers (CIT) (Winston, 2004; Witter-Merithew & Johnson, 2004). One study indicated that only 49 of 150 programs have representation in the CIT membership (Witter-Merithew & Johnson, 2004).

Translation has been found to be an effective technique (Cokely, 2005; Davis, 2000; Winston & Monikowski, 2005). Translation activities aid students with a deeper understanding of the interpreting process and allow students to hone discrete skill sets without the time-imposed pressure of simultaneous interpreting. Students can build confidence and can focus on message production. For all of the same reasons that translation should be included in a curriculum, the skill of consecutive interpreting should be included (Bowen-Bailey, 2006; Cokely, 2005; Davis, 2000; Moeller & Finkbone, 2000; Winston, 2004; Winston & Monikowski, 2005). The caution to be kept in mind is to recognize and instruct that while consecutive interpreting can be used as a stepping stone to simultaneous interpreting, the use of

consecutive interpreting can also be an intentional decision on the part of the interpreting practitioner (Cokely, 2005; Russell, 2002).

Another suggested strategy is the use of graduation portfolios (Humphrey, 2000). Portfolios would consist of written and videotaped evidence demonstrating readiness to enter the field of work. Portfolios could contain graded work, excerpts from student journals, letters from professional interpreters and/or clients, and video tapes. Portfolios are evaluated by a faculty member, professional interpreter, and a member of the deaf community.

During the early years of the interpreting profession, young interpreters were apprenticed through involvement and interaction within the deaf community (Burch, 2002; Cokely, 2005; Fleischler & Clark, 1994; Winston, 2004). This practice greatly diminished with the inception of formal academic programs (Burch, 2002; Cokely, 2005), much to the detriment of the interpreter. There is general consensus that successful IEPs infuse the knowledge and experience of the deaf community into every aspect of the program (Burch, 2002; Cokely, 2005; Fleischler & Clark, 1994; Roy, 2002; Monikowski and Peterson, 2005; Winston, 2004; Witter-Merithew & Johnson, 2004) because they are essential language and cultural models. As interpreter education "shifted into academia, it has, albeit unintentionally, lost experience and expertise of the deaf community" (Monikowski & Peterson, 2005 p. 209). The use of deaf individuals to verify that the "product" is satisfactory to the consumers is another suggestion (Humphrey, 2000; Winston, 2004).

Winston (2004) states that critical thinking skills are key to an interpreting education. Currently many IEPs operate on the lower levels of Bloom's Taxonomy

(Bloom, 1956; Anderson, & Krathwohl, 2001). More attention needs to be given to evaluation and synthesis and not just knowledge and comprehension (Winston, 2004). Students need to be taught how to analyze interpreting situations (Davis, 2005; Dean & Pollard, 2001).

The inclusion of self-assessment (Johnson & Witter-Merithew, 2004; Winston, 2004) is also recommended to be an integral part of the IEP curriculum. Students need to assess their own skills and abilities. They need to construct knowledge, not simply receive it. Students need to take responsibility for their own learning and foster lifelong learning habits (Winston, 2004).

The use of deaf and hearing mentors to help interpreting students upgrade their skills and help them to navigate the profession (Fleishler & Clark, 1994; Johnson & Witter-Merithew, 2004; Winston, 2004) is also cited as a tool used in effective interpreting programs.

Monikowski and Peterson (2005) suggest that Service Learning contributes to more effective graduation outcomes. According to Valerius & Hamilton (2001), Service Learning is "…student engagement in their local community to apply and learn course concepts" (p. 229). It is the application of academic learning in social situations while serving the needs of the community and reflecting upon those interactions. Monikowski and Peterson acknowledge the limitations of the classroom environment and students believed that the "Service Learning added something unique to their understanding of what they were learning in the classroom" (p. 204).

The review of the literature clearly identifies that there is much work needed to inform effective interpreter education. While the literature contains

recommendations on some of the directions and activities that might increase the quality of preparation of interpreters before they enter the field, little empirical evidence supports the assertions outcomes. That is, despite the recommendations there are few if any studies attempting to relate specific training practices to outcomes, graduates qualifications. This study provided evidence in how the use of specific practices impacts graduate's ability to earn interpreting credentials.

CHAPTER THREE

RESEARCH METHODS

Chapter Introduction

The purpose of this chapter is to describe the research methods that were used in this study. This chapter provides an overview of the research hypothesis, research questions, research design, participants, instrumentation survey and interview forms, methods of verification, limiting researcher bias, procedures to protect human subject, data collection procedures, and data analysis techniques.

Research Hypothesis and Research Questions

The researcher anticipated identification of "specific curricular" and "other than curricular" characteristics that contribute to lowering the school to credential gap. Data were thus sought to address the following questions concerning characteristics of successful Interpreting Education Programs:

Research Question One: What is the readiness to credential gap of IEPs in the United States? This research question was descriptive and no research hypotheses were tested.

Research Question Two: What curricular related characteristics (as identified in the review of literature) of successful Interpreting Education Programs affect readiness?

Corresponding Null Hypotheses: There is no relationship between tier rank and the various curricular related factors found in the NCIEC study and there is no relationship between the rate to credentialing and the various curricular related factors found in the Phase Three Study.

Research Question Three: What "other than curricular" related characteristics of successful Interpreting Education Programs affect readiness?

Corresponding Null Hypotheses: There is no relationship between tier rank and the various "other than curricular" related factors found in the NCIEC study and there is no relationship between the rate to credentialing and the various "other than curricular" related factors found in the Phase Three Study.

Research Question Four: Are there promising techniques unique to individual programs that are not covered by the literature? This research question was descriptive and no research hypotheses were tested.

Research Design

This study used survey data and personal interviews as part of a sequential, mix-method design. The study began with a quantitative analysis of preexisting data, followed by a semi-structured interview driven qualitative investigation and concluded by a quantitatively and qualitatively analyzed survey. Creswell (2003) indicates that the sequential, mixed method design is best if the researcher seeks to "…elaborate or expand the findings of one method with another method" (p. 16). In this study, both survey and interview procedures were used to address the research questions.

Participants

In the fall of 2009, the National Consortium of Interpreter Education Centers (NCIEC) conducted an Interpreter Education Program Needs Assessment. The NCIEC distributed this survey to all of the programs listed on their website. (See Appendix D for a list of the institutions that were invited to participate in the study.)

The population for this study on the readiness to credential gap was the two-year and four-year interpreting training programs that participated in the 2009 NCIEC Interpreter Education Program Needs Assessment. Schools whose responses indicated a lower school to credential gap (6 – 18 months) were considered the more effective IEPs and were labeled as Tier One schools. The nine Tier One programs were invited to participate in Phase Two of the data collection; five of the nine schools agreed to participate. The five schools that agreed to participate served as the sample and focus of Phase Two of this research project. During phase three of this study, using the list of schools from the NCIEC website, a second assessment tool was sent to all of the two and four year interpreting education programs that had been in existence for the minimum amount of time required for an entire class to complete the program.

Instrumentation Survey and Interview Forms

As noted above, this study used the data collected by the 2009 NCIEC Interpreter Education Program Needs Assessment. The survey included information related but not limited to: program age, level, location; faculty and staff educational background, and interpreting credentials; program budget, program enrollment, class size, entrance and exit requirements; student demographics and student load; and the timeline for completion of the credentialing process at the state and national levels.

During Phase Two, following the approval of the Institutional Review Board (IRB) at The University of Tennessee – Chattanooga, this researcher conducted semi-structured interviews with approved program representatives (see Appendix E for sample letter). The interview questions were developed by the researcher and reviewed by a content expert and an expert in program evaluation. It was then piloted

using four former interpreter education program coordinators. Based on their feedback, the instrument was modified to increase ease and understanding and additional questions were added to ensure a comprehensive collection of relative data. (See Appendix F for Phase Two questions.)

In Phase Three, information collected from the literature review, the NCIEC Needs Assessment and the Tier One investigation was used to develop an assessment tool that categorized suggested characteristics, curriculum, and practices of IEPS. (See Appendix G for Phase Three survey). The first portion of the survey asked respondents to identify the approximate amount of time, relative to graduation, required for students to earn credentials. Credentials that were included were the following: "State Administered Credential; EIPA 3.5 – 3.9; EIPA 4.0 or Higher; National Level (RID)." The time frames were the following: "They Have Them upon Graduation; Less than 6 Months; 6 – 12 Months; 13 – 18 Months; 19 – 24 Months; More than 2 years; and We do not Track." Date ranges were selected to parallel the NCIEC study. The two additional time frames, "They Have Them upon Graduation" and "1 – 6 Months" were added because they were not included in the original NCIEC survey. In the second part, using a four point Likert scale, respondents (see Appendix H for sample participation request letter) were asked how each identified factor defines their institution or is utilized by their institution ("Great Extent; Moderate Extent; Minimal Extent; We Do Not Include It") and to rank the extent to which they believed that each identified factor contributes to a low graduation to credential rate ("Great Extent; Moderate Extent; Minimal Extent; It Does Not Impact The Graduation To Credential Rate"). In order to encourage further

discussion of the identified characteristics, a section for comments was provided after each question on the survey. The survey questions were developed by the researcher and reviewed by a content expert and an expert in program evaluation. The survey was then piloted using four former interpreter education program coordinators. Based on their feedback, the instrument was modified to increase ease and understanding.

Methods of Verification

Several safeguards were utilized to ensure the verification of the data collected. The precautions included triangulation, pilot studies, and member checking.

"Triangulation is the process of corroborating evidence from different individuals, types of data, or methods of data collections in descriptions of themes in qualitative research" (Creswell, 2005, p. 252). "Especially in terms of using multiple methods of data collection and analysis, triangulation strengthens reliability as well as internal validity" (Merriam, 1998, p. 207). Fielding and Fielding (1986) and Merriam (1998) emphasized that triangulation is a strategy employed to improve the credibility, dependability, and "confirmability" of the research. For the purpose of addressing the research questions, triangulation occurred through various data collection techniques including 2009 NCIEC IEP Needs Assessment Survey, semi-structured interviews, and Phase Three survey.

Pilot studies were conducted as a method to increase the validity of the surveys and interview forms. According to Mackey and Gass (2005), a pilot is a trial of the proposed procedures, materials, and methods and is used to uncover problems prior to the main study (Mackey & Gass, 2005; Sampson, 2004). A pilot study can be

used to help assess feasibility and refine research instruments and data collection methods (Mackey & Gass, 2005; Sampson, 2004). Schwab (1999) indicates that those involved in the pilot need to be persons who are similar to those who will be involved in the research. For these reasons, Phase Two interviews and the Phase Three survey were piloted using four former coordinators of Interpreter Education Programs from across the nation. Based on their feedback, the instruments were modified to increase ease and understanding and to address any gaps in the data collection process.

For the Phase Two data, member checking was also employed. Member checking is a process in which the researcher is "…taking data and tentative interpretation back to the people from whom they were derived and asking them if the results are plausible" (Merriam, 1998, p. 204). Member checking, asking participants to verify the analysis, guarantees that there is a linkage between the analysis and the reality that is perceived by the study's participants. The results of the qualitative data were written up and sent back to the five participating institutions. Respondents were asked to verify that their responses as reported by this researcher were accurate and did indeed represent their original responses. Respondents replied with minor corrections and those corrections were made to the final document.

Limiting Researcher Bias

In conducting this project, the researcher was aware of potential biases that could influence this study. In order to reduce bias, the following steps were taken: triangulation of data sources; production of videotaped and written records of all collected data; member check; and clarification of the researcher's perspectives.

According to Merriam (1998), a researcher's bias involves clarifying the researcher's assumptions, worldview, and theoretical orientation at the beginning of the study. I am a white, hearing, female, interpreter educator. For 13 years, I worked in a four-year interpreting education program at Tennessee Temple University, a small private, Christian university in Chattanooga, TN. In addition to being an interpreter educator, I am also an interpreting practitioner. I am currently employed and have been consistently employed as a part time community based freelance interpreter, a video relay interpreter and a video remote interpreter. I have a strong commitment and allegiance to interpreter education and the interpreting profession. Throughout this study I have been aware of my preconceived ideas of what makes an effective interpreter education program and have taken steps to ensure that these biases did not impose themselves into the study. I did not include any data regarding the university at which I was employed in this study.

Procedures to Protect Human Subjects

Human subjects were protected in accordance with the procedures of the University of Tennessee- Chattanooga guidelines as outlined by the Institutional Review Board. Permission was secured prior to any data collection. (See Appendix I for a copy of the IRB Approval.) The identities of interviewees and participating institutions were kept confidential. Pseudonyms and unrevealing nomenclature (e.g., "University A") have been used extensively. Regardless of actual gender, the first person, feminine pronoun has been used in all discussion of the results. All documentation has been kept in a secure and locked area in my office.

Data Collection Procedures

This study was conducted in three distinct phases of data collection. Phase One used pre-existing data collected by the NCIEC. In the fall of 2009 the NCIEC conducted a follow up to their 2007 Interpreter Education Program Needs Assessment. This survey was electronically disseminated to all of the known two-year and four-year interpreting education and deaf studies programs in the United States as listed on the NCIEC website. This researcher was not directly involved in the needs assessment research project; however, this researcher did use the data from the 2009 project.

The data collected during Phase One were used for two distinct functions. First the data from the NCIEC needs assessment were used to identify the population for Phase Two of the data collection. Second, information from the 2009 NCIEC Needs Assessment was used for statistical computations.

Question 69 (related to the associate degree level) and Question 105 (related to the baccalaureate level), "What is the average time after graduation for your AA/AS degree-granting program students to secure initial national level professional credentials (RID or NAD)?" taken from the 2009 Interpreter Education Program Needs Assessment, was used to establish IEP group ranking. Institutions that replied "6 to 12 months" or "12 to 18" months were grouped into Tier One; institutions who replied "19 to 24 months" were grouped into Tier Two; and institutions who responded "More than 24 months" were grouped into Tier Three. Institutions who responded "Do not currently track" were eliminated from the study sample.

As originally proposed, the design of the Phase One portion of the study was to use both state and national level credentials to establish tier rank. However, as it became apparent from the results that many states do not have a state administered credential or institutions do not track state level credential rates, the decision was made to solely rely on responses to the questions related to national level credentials.

In Phase Two of the data collection, the five institutions were queried. Prior to the interview, the respondents were supplied with a complete copy of the questions that would be discussed. The primary means of data collection in this phase was semi-structured interviews with approved program representatives conducted via phone. A brief overview of the study was provided to establish rapport and clarify any questions participants may have regarding the study. The interview contained open-ended questions to allow the participants to respond in any manner they wished. This approach was selected based upon the work of Patton (1990). Patton describes three types of interviewing techniques: (1) informal, conversational interviews; (2) semi-structured interviews; and (3) standardized, open-ended interviews. With a semi-structured interview, the interviewer is given the autonomy to probe within the predetermined areas of inquiry and stay focused (Lofland & Lofland, 1984). Interviews were recorded and written transcripts of the sessions were made. Both the original recording and the transcript were filed. Using Microsoft Excel (2007), the respondents replies were categorized by question.

In Phase Three, information collected from the literature review, the NCIEC Needs Assessment and the Tier One investigation of Phase Two was used to develop a survey that categorized identified IEP characteristics, curriculum and practices.

Using Zoomerang (www.zoomerang.com) as the selected online survey deployment tool, the survey was deployed on a Tuesday at 8:00 am EST., May, 2010. An invitation to participate in the study was sent to all of the qualifying programs (n=126) listed on the NCIEC website. Each invitation included an individual link, or electronic code, in order to track participation. Respondent or survey tracking allows the researcher to co-relate or link individual responses to the respondent. With tracking you can see how a particular respondent answered a survey. Survey tracking also allows you to send reminders. One week later, a reminder was sent to all of those who had not yet responded to the survey. The following week on a Monday at 8:00 am PST, the invitation to take the survey was sent out again. During that week, the researcher attempted to contact by phone all of the individuals who had yet to take the survey to encourage them to do so. At the completion of the three weeks, the survey was closed and data were transferred from the online survey tool to a Microsoft Office Excel (2007) spread sheet. Qualitative data were grouped by question using the Microsoft Office Excel (2007) tool and quantitative data was input into Statistical Package for the Social Sciences (SPSS) (2010). State Level credential include state quality assurance screening or other state administered credential and an EIPA rate of 3.5 – 3.9. National level credentials include credentials conferred by the RID or an EIPA rating of 4.0 or higher. Programs were asked two questions related to state level credentials and two questions to national level credentials. If an institution indicated a time line for both a state administered credential and an EIPA rate of 3.5 – 3.9 that differed, the response representing the shortest amount of time was used. The same criterion was used to establish a timeline for national credentials using an EIPA

Rating of 4.0 or Higher and the RID. In both cases, state level and national level, if a single response was given, that response was used.

Data Analysis Techniques

Phase One data provided by the NCIEC was used to rank IEPs based on the readiness to credential gap and that ranking was used to develop Phase Two. The Phase Two qualitative interviews and the Phase Three qualitative responses were summarized by constant comparison methods (Lincoln & Guba, 1984). Using SPSS, the Phase One and Phase Three quantitative responses were analyzed by conventional descriptive statistics and inferential statistics, ANOVAs where assumptions were met and Chi Square where assumptions were not met.

CHAPTER FOUR

RESULTS

Chapter Introduction

The purpose of this study was to identify characteristics of effective interpreting education programs across the United States. Chapter four presents the findings from the data gathered. The chapter includes discussion regarding how data were collected and prepared for analysis; how the statistical procedures were carried out; and the results of the statistical analyses relative to each of the research questions presented in Chapter One.

Research Questions

1. What is the readiness to credential gap of IEPs in the United States?
2. What curricular related characteristics (as identified in the review of literature) of successful Interpreting Education Programs affect readiness?
3. What "other than curricular" related characteristics of successful Interpreting Education Programs affect readiness?
4. Are there promising techniques unique to individual programs that are not covered by the literature?

Data Collection and Preparation

In this descriptive study, three phases were utilized to collect and analyze the research data. Phase One was conducted between November 2009 and December 2009. The NCIEC conducted an Interpreter Education Program Needs Assessment. Using the programs listed on the NCIEC website, the survey was sent to 130 institutions across America. A total of 54 institutions completed the survey. Of that

number, 31 institutions tracked the credential rates of their students at a national level. Two of those institutions indicated that they had both a two-year and a four-year degree. These programs were considered individually. A total of 33 programs (from 31 institutions) were considered from the NCIEC data. Table 4.1 expresses the demographical disbursement of programs between two-year and four-year programs. As may be seen, only about 1 in 3 schools offer the baccalaureate degree.

Table 4.1
Degree Type - Phase One Data (NCIEC)

Type	Frequency	%
Associate	20	60.6
Baccalaureate	13	39.4
Total	33	100

Table 4.2 represents the distribution of private and public schools. Nearly 85% of the schools offering IEPs are public colleges and universities.

Table 4.2
Type of Institution - Phase One Data (NCIEC)

Type	Frequency	%
Public	28	84.8
Private	5	15.2
Total	33	100

Using the information from Phase One, all programs were grouped and ranked based on their credential rate at the national level. Not all programs were in states that administered credentials. Because of the inconsistency of states to administer credentials, credentialing at the state level was not considered. Because RID is considered the national minimal standard for interpreting practitioners the grouping was based on data relating to RID credentialing. Graduates from Tier One schools

required 6 – 18 months to earn national credentials; Graduates from Tier Two schools required 19 – 24 months and Graduates from Tier Three schools required more than 24 months to earn national credentials.

During Phase Two of the study, requests for an interview were sent to the nine schools listed in Tier One. Five schools responded. In March 2010 the interview was piloted using four former IEP coordinators. Questions were added, deleted and modified. In April 2010, Phase Two interviews with five IEP coordinators from Tier One programs were conducted. Geographically, the institutions were located in the Northeast, Midwest, Northwest, and Southwest. Prior to the interview respondents were sent a list of 27 questions that would be discussed. Interviews lasted between 1 hour and 1.5 hours and all interviews were conducted via phone and were digitally recorded. Notes were taken during the interview and upon completion of the interviews the interviews were transcribed. Responses were originally organized using a Microsoft Word (2007) document and then were transferred to a Microsoft Excel (2007) spread sheet organizing all of the responses by questions allowing for ease of analysis.

Information from the literature review along with information gathered in the interviews was used to construct the questions for the Phase Three survey. The survey was reviewed by a content expert and an expert in program evaluation and then piloted using four former IEP coordinators. In late May 2010 surveys were deployed using Zoomerang (www.zoomerang.com). Individual links were distributed to track participation. An invitation to complete the survey was sent to 126 schools listed in the NCIEC list. Schools that were ASL only programs or had been in

existence less than 4 years were not considered. One week later, in June 2010, reminders were sent out. A follow up call was made to all of those listed on the NCIC website to verify any information change and steps were taken to maximize survey response rate. In total, 30 responses were received. One school replied twice and the second submission was eliminated. Three schools did not report credentialing rates and were eliminated. A total of 26 valid responses were received. That represents a 20 % useable survey return rate.

Table 4.3 provides the demographic distribution of the type of institution. The majority (53.8 %) of participating schools offer associate level degrees.

Table 4.3
Degree Type - Phase Three Data

Type	Frequency	*%*
Associate	14	53.8
Baccalaureate	12	46.2
Total	26	100

Coding the Data

For Phase Two and Three of the study, as the survey materials were collected, each institution was given a unique identification code. The five Phase Two respondents were identified alphabetically (Respondent A – Respondent E) and the 26 Phase Three respondents were identified numerically (Respondent 1 – Respondent 26).

In order to input responses into a statistical software program, codes were assigned for the following Phase One survey items: Tier Ranking (1 = Tier One schools: 6 – 18 Months to earn national credentials; 2 = Tier Two schools: 19 - 24 Months to earn national credentials; and 3 = Tier Three Schools: more than 24

months to earn national credentials); Average Interpreting Class Size (1 = 10 or Fewer Students, 2 = 11 – 15 students); Program Start Date: (1 = 1970 – 1990, 2 = 1991 – 2009). The following codes were used for Phase Three survey items: Rate to Credential timeline (6 = Upon Graduation; 5 = 1 – 6 Months; 4 = 7 – 12 Months; 3 = 13 – 18 Months; 2 = 19 – 24 Months; 1 = More Than 24 Months).

Research Analysis

Using SPSS the Phase One and Phase Three quantitative responses were analyzed by conventional descriptive and inferential statistics, ANOVAs where assumptions were met and Chi Square where assumptions were not met. Phase Two and Phase Three qualitative data were analyzed using constant comparisons (Lincoln & Guba, 1984).

Results

Reporting of the results is organized relative to the research questions. Sections consist of quantitative and qualitative results as appropriate. For the qualitative results, Phase Two Respondents were identified alphabetically (Respondent A –. Respondent E) and Phase Three Respondents were identified numerically (Respondent 1 – Respondent 26)

Research Question 1: What is the readiness to credential gap of IEPs in the United States?

Descriptive statistics were used to address research question 1. Tables 4.4 and 4.5 present data from the NCIEC 2009 IEP Needs Assessment. Table 4.4 demonstrates the credential rate of the queried institutions. The largest percentage

(n=14, 42.4%) of institutions requires more than 24 months from the time of graduation to credentialing at the national level.

Table 4.4
Credential Rate – Phase One Data (NCIEC)

Institutions divided by Tier	Frequency	%
Tier 1: 6 – 18 Months	9	27.3
Tier 2: 19 - 24 Months	10	30.3
Tier 3: More than 24 Months	14	42.4
Total	33	100

Table 4.5 indicates the measures of central tendency for the credential rates of the NCIEC study. The average amount of time needed to earn national level credentials is 19 – 24 months, with "More than 24 months" being the most common response.

Table 4.5
Measures of Central Tendency for Credential Rates – Phase One Data (NCIEC)

Factor	N	Mean	Median	Mode
National Level	33	2.152	2.00	3

Note: 1 = 6 – 18 Months; 2: 19 - 24 Months; 3: More than 24 Months

Table 4.6 demonstrates the timeline for credentialing using Phase Three data. State level credentials are earned at a much faster rate than national level credentials.

Table 4.6
Timeline for Credentialing – Phase Three Data

	State		National	
Credential Gap	Frequency	%	Frequency	%
They have them upon graduation	9	34.6	1	3.8
Less than 6 months	1	3.8	2	7.7
6 to 12 months	5	19.2	2	7.7
13 to 18 months	2	7.7	6	23.1

19 to 24 months	1	3.8	3	11.5
More than 2 years	5	19.2	7	26.9
Missing	3	11.5	5	19.2
Total	26	100	26	100

Table 4.7 indicates the measures of central tendency for the credential rates. The average amount of time needed to earn state level credentials is 7 – 12 months while the average amount of time needed to earn national level credentials is between 18 – 20 months, the approximate the midpoint between 13 – 18 months 19 – 24 months, represented by a mean score of 2.619. The majority of programs indicate that their graduates are able to earn state level credentials upon graduation but more than 24 months are required to earn national level credentials.

Table 4.7
Measures of Central Tendency for Credential Rates – Phase Three Data

Factor	N	Mean	Median	Mode
State Level	23	4	4.00	6
National Level	21	2.619	3.00	1

Note: 6 = Upon Graduation; 5 = 1 – 6 Months; 4 = 7 – 12 Months; 3 = 13 – 18 Months; 2 = 19 – 24 Months; 1 = More Than 24 Months

Research Question 2: What curricular related characteristics (as identified in the review of literature) of successful Interpreting Education Programs affect readiness?

For the purpose of this study, "curricular related characteristics" refers to any item that is related to program requirements, instruction and/or assessment. Both quantitative and qualitative data were used to address this research question.

Quantitative Results: Research Question Two

Table 4.8 presents the Chi-Square tests for the curricular related factors taken from the NCIEC survey. The null hypotheses are that there are no relationships between tier rank and the various curricular related factors found in the NCIEC study. None of the comparisons reached the conventional rejection levels of .05 and therefore failed to reject the null hypotheses.

Table 4.8
χ^2 for Curricular Factors – Phase One Data (NCIEC)

Factor	χ^2	*df*	*p*
ASL Entry Requirements	.343	2	.842
Interpreting Entry Requirements	.424	2	.809
ASL Exit Requirements	7.881	4	.096
Interpreting Exit Requirements	.885	2	.642

Table 4.9 indicates the extent to which interpreting programs incorporate various curricular factors as reported in the Phase Three survey. Self Analysis is the technique that is incorporated to the greatest extent; almost 81 % indicated that they incorporate Self Analysis to a great extent. A total of 69.2 % of the programs indicated that they incorporate Critical Thinking to a great extent and 65.4 % programs indicate that they incorporate Discourse Based Instruction to a great extent. The following techniques are reported as not being used by some programs: Service Learning (19.2 %); Demand Control Schema (11.5 %); Portfolios (11.5 %); Transcription (7.7 %); and Translation (3.8 %).

Table 4.9
Incorporation of Curricular Factors – Phase Three Data

Curricular Factor	Great Extent	Moderate Extent	Minimal Extent	Do Not Include It	Did Not Answer

Discourse Based	65.4	34.6	0	0	0
Discourse Analysis	46.2	50	3.8	0	0
Consecutive Interpreting	53.8	42.3	3.8	0	0
Transcription	7.7	53.8	26.9	7.7	3.8
Translation	23.1	57.7	11.5	3.8	3.8
DC	34.6	26.9	26.9	11.5	0
Critical Thinking	69.2	23.1	7.7	0	0
Self Analysis	80.8	11.5	3.8	0	3.8
Preparation for Credential	34.6	38.5	15.4	0	11.5
Service Learning	30.8	38.5	3.8	19.2	7.7
Portfolios	26.9	30.8	19.2	11.5	11.5

Note: Displayed by percentage

Tables 4.10 and 4.11 represent Chi-Square results using the Phase Three data for curricular factors relative to state and national level credentialing rates respectively. The null hypotheses are that there are no relationships between the rate to credentialing and the various curricular related factors found in the Phase Three study. Thirteen tests (both at the state and national level) failed to reach the conventional rejection alpha level of .05 and therefore failed to reject the null hypotheses. The single exception is Service Learning at the state level. A two-way contingency table analysis was conducted to evaluate if there was a difference in the rate to credentialing based on the incorporation of Service Learning. The two variables were time to credential (Upon Graduation; 1 – 6 Months; 7 – 12 Months; 13 – 18 Months; 19 – 24 Months; More Than 24 Months) and incorporation of Service Learning (Great Extent; Moderate Extent; Minimal Extent; We Do Not Include It). Time to state level credentials and incorporation of Service Learning were found to

be significantly related at χ^2 (20, N=22) = 34.628, p=.022. The decision was made to reject the null hypothesis. The four programs that do not include Service Learning require greater than two years obtaining state level credentialing.

Table 4.10
χ^2 for Curricular Factors –Phase Three Data - State Level

Factor	χ^2	*df*	*p*
Consecutive Interpreting Instruction	9.20	10	.513
Discourse Base Approach	6.17	10	.800
Discourse Analysis	6.491	10	.772
Transcription	23.514	20	.264
Translation	22.697	20	.304
Demand Control Theory	17.621	15	.283
Critical Thinking	11.483	10	.321
Self Analysis	8.474	10	.583
Preparation for Credentials	19.473	15	.193
Requirement of Credentials by the state	29.474	30	.493
Service Learning	34.628	20	.022*
Portfolio	26.398	20	.153
Entry Requirements - Interpreting	10.276	10	.417
Exit Requirements - Interpreting	8.532	5	.129

N=22; *p<.05

Table 4.11
χ^2 for Curricular Factors –Phase Three Data - National Level

Factor	χ^2	*df*	*p*
Consecutive Interpreting Instruction	7.370	5	.195
Discourse Base Approach	4.341	5	.501
Discourse Analysis	4.105	5	.534

Transcription	7.012	15	.957
Translation	10.783	15	.768
Demand Control Theory	14.733	15	.471
Critical Thinking	11.133	10	.347
Self Analysis	12.255	10	.268
Preparation for Credentials	17.045	15	.316
Service Learning	24.444	15	.058
Portfolio	20.089	20	.452
Entry Requirements - Interpreting	9.137	10	.519
Exit Requirements - Interpreting	7.255	5	.202

Note. N=21

Qualitative Results: Research Question Two

Entrance Requirements

Entrance requirements differ from college to college but there was consensus that strict entrance requirements impact student success. Four of the five programs have rigorous requirements for entrance into the interpreting portion of the program. Respondent E indicated that because the selection process into the interpreting program is carefully conducted, most students succeed once they are admitted. The one university (B) that does not have entrance requirements into the interpreting department indicates that the university is so selective that they enroll good quality students in the program without any additional selection criteria. This past year there were 39,000 applications for only 2800 freshman spots. The average SAT at this university is 1560 out of 1600.

Exit Requirements

There are differing opinions regarding the utilization of exit exams. Only one of the five programs interviewed in Phase Two required an external performance

exam. Three of five encourage an external performance exam, but do not require it. Respondent D purports that the key to student success is setting exit requirements. She feels that the requirement of exit exams does impact credentialing rates. It raises the standard and makes credential expectations of the students. That in turn impacts their educational experience. She states, "…it impacts their involvement and dedication and how they do their work hours and how they interact." Respondent C's program requires the EIPA; however she believes that the requirement for the EIPA is not an extrinsic motivation that leads to credentialing. According to her, the motivation to earn credentials is intrinsic. It is also interesting to note that three of the five programs provide partial or total funds for students to take external assessments (knowledge based and/or performance based).

Curriculum in General

Only one respondent indicated that the strength of the program was directly related to the interpreting program curriculum. Respondent B states that one of the key factors for the success of the program is in the structure of the curriculum. The curriculum is built upon what graduates will be doing, that is to say type of situations and settings where they will work indicating that assignments are interactive in nature therefore the program focuses on discourse based interpreting. She argues that most places do what they have always done and that sadly most programs do not have the luxury of having multiple full-time faculty members. She continues, "You can't do meaningful curriculum work with adjuncts."

Instructional and Assessment Techniques

The respondents in Phase Two and Three all tended to be eclectic in their instructional approach, not favoring a specific approach or technique over another. Respondent A describes her program as having more of a breadth of knowledge and not a depth of any specific approach. The same results were found for the types of assessments used. The types of assessments varied greatly among the respondents. There was no consistent approach, format, or rubric.

Practicum

In Phase Two and Phase Three, the requirements for the practicum (also called internship, fieldwork or field study) varied in structure and duration. Regardless of the structure or requirements, three out of five of the Phase Three respondents indicated that the practicum experience was one of the more critical factors to student success. Respondent C indicted that "What goes on in the classroom is a minor part of our students learning the language/culture. Internship classes are crucial to skill development"

Service Learning

Respondent C indicates that Service Learning has an amazing impact on the success of her students. It differs from simply requiring students to attend deaf events, she explains, because for the typical events, students would attend, but they did nothing or very little and made little to no effort to get involved. With Service Learning, students are much more involved. Respondent 15 indicted "It does improve student's understanding of deaf individuals and their comfort level with them, which probably improves their performance to some extent on the state test. "

Test Preparation

While many programs provided some instruction related to preparation for specific credentialing assessments the common response was that instruction was more on procedure and format and not on "teaching to the test." No special attention or focus was given to helping students pass a specific test. Respondent 18 commented, "I don't like teaching toward a particular test. I've seen too many 'certified' but unqualified interpreters." Respondent 26 states, "We believe that the entire program prepares students for credentialing." "Teaching to the test is temporary," she adds.

Research Question 3: What "other than curricular" related characteristics of successful Interpreting Education Programs affect readiness?

For the purpose of this study, "other than curricular" related characteristics refers to any item that is not directly related to program requirements, instruction and/or assessment, but instead deals with factors such as type of program and student, class size, quality of faculty, adequacy of resources and technology, funding, campus and community environment, and out of class opportunities. Both quantitative and qualitative data were used to address this research question.

Quantitative Data – Research Question Three

Table 4.12 represents chi-square results using the NCIEC results for "other than curricular" Factors relative to tier rank of the programs. The null hypotheses are that there are no relationships between the tier rank and the various "other than curricular" related factors found in the NCIEC data. Most tests failed to reach the conventional rejection level of .05 and therefore failed to reject the null hypotheses.

The single exception in this set of data is the type or length of program. A two-way contingency table analysis was conducted to evaluate if there was a difference in the tier rank based on the length of the program. The two variables were tiers (Tier One, Tier Two, and Tier Three) and length of program (two and four year). Tier rank and length of program were found to be significantly related, χ^2 (2, N=33) = 20.32, p=.00. The decision was made to reject the null hypothesis. One-hundred percent of the schools in Tier one were four-year programs, contrasted with none of those with associate levels belonging to Tier One. This trend is further amplified by 93 % of those in Tier One having two-year programs and only 7 % with a four-year program.

Table 4.12
χ^2 for "Other Than Curricular" Factors – Phase One Data (NCIEC)

Factor	χ^2	*df*	*p*
Degree Type	20.315	2	.000**
Type of Institution	4.997	2	.082
Minimum Degree of Program Director	7.726	4	.102
Minimum Credential for Program Director	9.120	4	.058
Resources	19.762	16	.231
Minimum Degree for Full Time Interpreting Faculty	6.140	8	.632
Minimum Credential for Full Time Interpreting Faculty	4.058	4	.398
Minimum Degree for Full Time ASL Faculty	5.063	8	.751
Minimum Credential for Full Time ASL Faculty	13.551	8	.094
Institutional Support	3.861	2	.145

**p=<.01

Table 4.13 represents ANOVA results using the NCIEC data for "other than curricular" factors relative to tier rank of the programs. A one-way analysis of variance was conducted to evaluate the relationship between the tier rank Tier and the

average size of the interpreting skills courses. The null hypothesis stated that there is no difference in tier rank based on the average number of students in an interpreting skills course. The independent variable was the size of the average interpreting skills class, included three levels: Tier One, Tier Two, and Tier Three. The dependent was the average size of the class: 10 Students or Fewer or 11 – 15 students. (No response was larger than 15). The results of the ANOVA were F (2, 24) =.450, p = .643. Thus failing to reach the conventional rejection levels of .05, therefore the decision was made to retain the null hypothesis.

Table 4.13
ANOVA for "Other Than Curricular" Factors – Phase One Data (NCIEC)

	Sum of Squares	df	Mean Square	*F*	*p*
Between Groups	.244	2	.122	.450	.643
Within Groups	6.497	24	.271		
Total	6.741	26			

Table 4.14 represents the results of two Chi Squares for "other than curricular factors. Two, two-way contingency table analysis were conducted to evaluate if there was a relationship between the tier rank and the date when the program was established. For the first Chi Square, the two variables were tiers (Tier One, Tier Two, and Tier Three) and the decade in which the program began (1970s, 1980s, 1990s, and 2000s.). The results were χ^2 (6, N=33) 7.936, p=.243. A similar Chi Square was conducted using the same tier rank but grouping the establishment dates into larger time frames (Prior to 1990 and 1991 – Present) The relationship between the tier ranks and the two decade grouping of when the programs were established were found to be significantly related, χ^2 (2, N=33) = 6.947, p=.031. The decision was to reject the null hypothesis. A total of 77.8% (n=7) of the Tier One schools

were established subsequent to 1990 while 76.9 % (n=10) of the Tier Three schools were established prior 1990.

Table 4.14
X^2 for "Other Than Curricular" Factors – Phase One Data (NCIEC)

Factor	χ^2	*df*	*p*
Single Decade Grouping Program was Established	7.936	6	.243
Grouping Program was established	6.947	2	.031*

Note: p<.05

Table 4.15 represents the frequency rates of the receipt of grants to support the program. A total of 46.1 % (n=12) of institutions receive some level of grant support. Of that number, 26.9 % indicate that it is very important to the program.

Table 4.15
Frequency of Receipt of Grants – Phase Three Data

Grants	Frequency	%
We do not receive any additional grant funding.	10	38.5
It is nice, but we could live without it	5	19.2
It is very important to the program	7	26.9
Missing	4	15.4
No Answer	25	100.0

Table 4.16 represents the frequency of the incorporation of a cohort structure. A total of 53.9 (n=14) have a cohort structure either by design or default.

Table 4.16
Frequency of Cohort Structure – Phase Three Data

Cohort structure	Frequency	%
Yes, by Design	4	15.4
Yes, by Default	10	38.5
No	9	34.6
No Answer	3	11.5
Total	25	100

Table 4.17 represents the incorporation of "other than curricular" factors using Phase Three factors. Overall, 61.5 % indicated that they are supported by the local interpreting community to a great extent.

Table 4.17
Incorporation of "Other Than Curricular" Factors – Phase Three Data

Factors	Great Extent	Moderate Extent	Minimal Extent	Did Not Answer
Support by Interpreters	61.5	30.8	3.8	3.8
Interact w/ Native Users	46.2	30.8	11.5	11.5
Tracking of Students	30.8	46.2	15.4	7.7

Note: Displayed by percentage

Table 4.18 represents the self reported adequacy of the facilities and resources available to the interpreting program. In general, the majority of programs (>50%) indicated that they had Excellent or Above Average classroom facilities, and resources and 73.1 % indicated that they had Excellent or Above Average resources. While 38.5 % indicated that their sign language laboratory facilities were Excellent, 46.1 % indicated that they were merely adequate or insufficient.

Table 4.18
Quality of Facilities and Resources – Phase Three Data

Factor	Excellent	Above Average	Adequate	Insufficient	Did Not Answer
Class Facilities	26.9	42.3	15.4	7.7	7.7
Lab Facilities	38.5	0	34.6	11.5	15.4
Resources	30.8	42.3	11.5	7.7	7.7
Technology	42.3	0	42.3	7.7	7.7

Note: Displayed by percentage

Table 4.19 represents Chi-Square results of "other than curricular" factors relative to State Level credentialing rates The null hypothesis for each test is that

there is no relationship between the rates to credentialing and the various "other than curricular" related factors found in the Phase Three study. Most failed to reach the conventional rejection levels of .05 and therefore failed to reject the null hypotheses. The exception is the Type of Program at the state level. A two-way contingency table analysis was conducted to evaluate if there was a difference in the rate to credentialing based on the incorporation of Type of Program. The two variables were time to credential (Upon Graduation; 1 – 6 Months; 7-12 Months; 13 – 18 Months; 19 - 24 Months; More Than 24 Months) and Type of Program (Two Year or Four Year). Time to credentials and Type of program were found to be significantly related at, χ^2 (5, N=23) = 14.629, p=.012 (state level). The decision was made to reject the null hypothesis.

Table 4.19

χ^2 for "Other Than Curricular" Factors – Phase Three Data - State Level

Factor	χ^2	*df*	*p*
Degree Type	14.629	5	.012*
Type of Students	16.299	15	.362
Support by Community	8.780	15	.889
Interaction with Native Users	12.157	15	.667
Classroom Facilities	19.354	20	.499
Resources	17.559	20	.616
Lab Facilities	10.819	15	.765
Technology	10.083	15	.814
Cohort System	12.031	10	.283
Requirement of Credentials by the State	29.474	30	.493

N=23; *p<.05

Table 4.20 represents Chi-Square results of "other than curricular" factors relative to national level credentialing rates. The null hypothesis for each test is that there is no relationship between the rates to credentialing and the various "other than curricular" related factors found in the Phase Three study. All tests failed to reach the conventional rejection levels of .05 and therefore failed to reject the null hypotheses.

Table 4.20
χ^2 for "Other Than Curricular" Factors – Phase Three Data - National Level

Factor	χ^2	*df*	*p*
Degree Type	10.977	5	.052
Type of Student	17.576	15	.286
Support by Community	8.750	5	.119
Interaction with Native Users	23.600	15	.072
Classroom Facilities	22.708	20	.303
Resources	25.750	20	.174
Lab Facilities	21.563	15	.120
Technology	24.950	15	.051
Cohort System	13.165	10	.215
Tracking	18.338	15	.245

N= 21

Qualitative Results: Research Question Three

External Opportunities for Learning

All of the Phase Two programs provide external opportunities to foster language acquisition and interpreting skill and agree that this is beneficial to the students. This is accomplished through service learning, campus clubs, classroom requirements, as well as individuals getting out into the community. Most of the Phase Two programs were located within a large deaf community and they agree that close proximity to a large deaf population is an advantage. Respondent E believes

that interaction with the local deaf community is vital to student success. Respondent 16 states, “ITP students who take advantage of the large deaf population pick up language/culture rapidly.” Respondent 18 echoed this sentiment by saying, “Students who willingly make friends with members of the deaf community and interact more than the required amount of time tend to do MUCH better on their state certification exam.”

Technology

The Phase Two respondents indicate that technology is useful, but they do not see it as a critical component to student success. Respondent A reports that technology is helpful, but that it is not a primary factor in student success. Respondent B indicates that it is an advantage to record and analyze the work, but does not list it among the more critical aspects of the program. Respondents C and D indicate that because of the students’ personal possession of technology (including laptops and cameras with video recording capabilities) that it is not as imperative for the program to provide technology. Respondent E concludes that technology is important, but not as important as the people (i.e. *faculty*).

Adoption by Outside

Four out of five respondents listed relationship with the community (interpreting and deaf) as one of the more critical factors of their success. Respondent D indicates that community interaction requires the coordinator to network and that she worked hard to lay a foundation of community support. Respondent E indicates that the local interpreting community makes a huge

investment in our students. …"I think part of our program success is how much the interpreting community is invested in us…"

CCIE Standards

Only one program was fully accredited by the CCIE. The remaining institutions consider the CCIE Standards when they design or make changes but have not applied for CCIE Accreditation

Student Characteristics

The Phase Two programs unanimously agree that the population that they serve consists of traditional (19 – 23 years old) female students. Four out of five have predominantly white students and one program, located in the south western portion of the United States, has a mixture of white and Hispanic students.

Faculty

All five respondents discussed the importance of quality faculty who are competent educators as well as practitioners. Respondent C stressed this point by saying that one of the more critical components to student success is a highly qualified faculty who are credentialed, involved in professional development, and active at the national level. She went on to say that "I don't think that we would have the curriculum in the way that it is structured if we didn't have the faculty to make it so. I think that certainly curriculum is crucial, but the only reason we have that curriculum is because we have such qualified faculty…you couldn't have a curriculum without the faculty that supports it. " Respondent E added, technology is important, but not as important as the people (i.e. *faculty*).

Faculty as Interpreters

All five programs have faculty that are engaged as practitioners and identify this as an important factor for student success. Respondent A indicates that there is a conscious decision among the faculty to do it for the benefit of the program. Respondent B supports this by stating that continuing as interpreting practitioners is for the betterment of the students. One reason is that interpreting in the community provides real life experiences that can be brought back to the classroom. Respondent C adds that it is important to have recent practical experience. When Respondent E was hired, it was understood that as the Director she would interpret in the community and would take students with her. Respondent E drove the point home by adding, "we are only as good as our up-to-date knowledge and skill and we are only as good as we are invested in the community."

Faculty as Researchers

All of the programs have faculty that are currently engaged in research. Several of the programs have nationally recognized and respected researchers in the field of Deaf Culture, ASL, ASL Linguistics, and interpreting as faculty members.

External Funding

All five programs are currently receiving or have received significant external funding (grants and/or monetary awards) to cover one or several aspects of the program. External funding currently covers or has covered in the past, student tuition reimbursements, labs, students to take tests, resources (videos, books, etc.). All of them indicated that to some extent, external funding is an integral aspect of the program. Initially Respondent A indicated that grant funds were not essential, but

then later stated that the program is grant funded and without grant funds the program would not exist.

Research Question 4: Are there promising techniques unique to individual programs that are not covered by the literature?

This study revealed no promising techniques for instruction that had not already been identified and discussed in the literature review. The only related response was that Respondent A indicated that having a program that focuses solely on educational interpreting, as compared with all of the potential areas in which an interpreter may work, was helpful. It is difficult to cover every aspect of the field of interpreting. Focusing on a single arena of interpreting allows for more specific focus which ultimately allows for greater success in this given area. Dahl and Wilcox (1990) indicate that two thirds of recent IEP graduates found initial employment as educational interpreters. With the overwhelming majority of interpreters operating in the K-12 setting, more specialized programs may better prepare students.

Other Interesting Results

There is disagreement about the purpose or expected end result of a degree in Sign Language Interpreting. The prevailing literature bemoans the school to credential gap and insists that steps need to be taken to change it. Phase Two Respondent C supports this by saying "…if we are graduating students and we are saying they're work ready and our national organization says entry-level certification is RID certification, then there should not be a gap for students who are graduating. They should be able to take the test and pass it." However, there were several programs that disagree with this. Respondent 22 states that "Ours in an entry level

program. We are not preparing people for national certification." She goes on to say, "… the goal of our program is not for students to be nationally certified. There is no way they could be ready for national certification in three years." Respondent 19 indicates that her program cautions students that few will be ready for the performance/interview portion of the RID upon graduation. And finally, Respondent 6 stated "I object to the assumption here that the goal is to lower the graduation to credentialing gap. Two years of seasoning post graduation with intense mentorship should be expected and not as a catalyst to credentialing. Your metric here is flawed…We are not aiming to speed this process up. We are aiming to foster lifelong learning and professional development."

CHAPTER FIVE

DISCUSSION

Chapter Introduction

This chapter will summarize the findings of this study. The chapter will revisit the problem, purpose and significance; discuss methodology and limitations; offer conclusions from the research; and provide discussion, implications for practice, and recommendations for future research.

Statement of the Problem

Interpreter Education Programs are the primary tool used to prepare interpreters to fill the increasing demand for sign language interpreters. However, there remains debate about how to properly educate interpreting students so that they emerge from these programs as competent practitioners. There has been much dispute as to the content and experiences programs need to include (Cokely, 2005; Humphrey, 2000; Patrie, 1994; Stauffer, 1994; Witter- Merithew & Johnson, 2005). Despite this, there have been no clearly identified and agreed to characteristics of successful interpreter education shown to result in graduates who emerge from the IEPs as competent practitioners. In point of fact, although a topic of considerable discussion, very little research has been done to identify effective practices of existing programs.

Purpose

The general purpose of this study was to expand the limited research existing in the field of interpreter education, specifically as it relates to the readiness to credential gap. The researcher evaluated the readiness to credential gaps of IEPs

across the nation and studied characteristics of these programs to determine curricular and "other than curricular" factors that led to more successful interpreting education programs.

Significance of the Study

This study was one of the first to conduct a comprehensive investigation of the characteristics of and practices employed by IEPs. Successful characteristics and best practices were identified and may be useful for interpreter educators to incorporate into programs. Information from this study will also be for agencies who are involved with training for interpreter educators.

Methodology and Limitations

A three-phased, sequential, mix-method design study used survey data and personal interviews. In Phase One, the researcher used a quantitative approach using pre existing data from the NCIEC 2009 IEP Needs Assessment. The data were used to identify the population for the Phase Two portion of the data collection as well as for general statistical computations comparing tier ranking with curricular and "other than curricular" factors. Phase Two employed a qualitative approach using semi-structured interviews with approved program representatives. In Phase Three a self developed assessment tool was sent to all of the schools that were invited to participate in the 2009 NCIEC Needs Assessment. This phase incorporated both a quantitative and a qualitative portion. Using a four-point Likert scale, respondents were asked to rank how each identified factor defined their institution or is utilized by their institution and to rank the importance of each identified factor.

There were two main limitations for this study. The first limitation was a lack of tracking of graduate credential rates on the parts if IEPs nationwide. In the 2009 NCIEC (Cokely & Winston, 2010) survey, 130 programs were invited to participate. Fifty-four institutions responded to the survey. The total response rate for the study was 41 %. Of that number, 63% were associate level programs and 35 % were baccalaureate level programs. Of those who did respond, 30 % of two-year programs did not track and 28 % of four-year programs did not track. Lack of tracking data results in a less than complete understanding of the current state of interpreter education in the United States. This limitation was beyond the control of the researcher.

The second main limitation that was encountered centered on the Phase Three Survey response rate. The survey response rate, also known as the completion rate or return rate, indicates the percentage of the individuals who were invited to respond to a survey that actually returned a usable survey. The return rate for Phase Three was 20 %. There were several potentially contributing factors to the low response rate. One could have been the length of Survey. The survey contained 112 questions with 51 questions allowing for qualitative responses. The survey took between 20 – 30 minutes to complete. Additionally, the survey was deployed in late spring near the end of the traditional academic year. Since most IEPS are small departments staffed with a single full-time faculty member who also administrates the program, there may not have been the time needed to complete the survey.

A fair concern might revolve around the extent which the low response rate affects the validity of the findings as, for example, Dey (1997) likens the acquisition

of a high response rate to reaching research nirvana. However, the reality is that response rates for most surveys have been declining over the past four decades (Brehm, 1993; Fogliani; 1999; Johnson & Owens, 2003; Steeh, 1981). Americans are seemingly reluctant to complete surveys (Groves, 1989; Steeh, 1981). One such example is depicted by considering the longitudinal response rates of national American Counsel of Education and the Cooperative Institutional Research Program student Surveys administered from 1961 – 1991. Response rates were as high as 65 % in the 60s. In the 70s this number dropped to 40 %. By the mid to late 80's the response rate had decreased to 23 % and by the early 90s the response rate was as low as 21 % (Dey, 1997). Hikmet and Chen (2003) report that single figure response rates from mail surveys are quite common.

The traditional school of thought has maintained that high response rates are necessary for sample representativeness and the elimination of response bias. This is based on the assumption that there is a bias resulting from distinct differences between the people who responded to a survey versus the people who did not respond. Currently, this belief is being challenged as some studies demonstrate that low response rate does not always indicate response bias (Dey, 1997). While a response rate of 100 % is the ideal, Krosnick (1999) has indicated that "…it is not necessarily true that representativeness increases monotonically with increasing response rate. Remarkably, recent research has shown that surveys with low response rates can be more accurate than surveys with much higher response rates" (p.540). Visser, Krosnick, Marquett, and Curtin (1996) compared the accuracy of self administered mail surveys and phone surveys for predicting the outcomes of state-

wide elections in Ohio over a 15 year period of time. The mail survey response rate was 20 % and phone survey response rate was 60 %. The mail survey predicted the outcome of the elections with a 1.6 % average error while the telephone surveys had a 5.2 % average error rate. The mail survey also documented voter demographics more accurately. In another study (Keeter, Kennedy, Dimock, Best & Craighill, 2006) the results of a five-day survey, yielding a 25% response rate, were compared with results of a more rigorous study with a 50 % response rate, in which data collection occurred over a several month period. The results of the comparison of the two surveys were statistically indistinguishable. Furthermore, the demographic and social composition of both surveys was in line with government benchmarks.

By examining the results of eighty-one national surveys with response rates varying from 5 % to 54 %, Holbrook, Krosnick, and Pfent (2007) found that surveys with much lower response rates were only minimally less accurate. In line with Holbrook et al. (2007), studies by Brehm (1993) indicated that statistically correcting for demographic biases in sample composition had little impact on the substantive inferences of correlational analyses. Additionally, the substantive conclusions of an investigative study have often remained unchanged by improved response rate.

In this study, potential explanations for the survey response rate were the time of year, the length of the survey, and the lack of incentives offered. For these reasons and perhaps others, people were simply resistant to complete the survey. Although a recognized limitation, good reason from numerous studies (Brehm, 1993; Keeter et al., 2006; Holbrook et al., 2007) to conclude that the study outcomes remain potentially generalizable.

Major Conclusions

Research Question One: What is the readiness to credential gap of IEPs in the United States?

This readiness to credential gap refers to the generally accepted fact that IEP graduates are not typically employment-ready upon graduation (Patrie, 1994; Witter-Merithew & Johnson, 2005), thus inferring that they are not ready to earn the national credentials that would allow them to enter the profession as recognized competent practitioners. The Witter-Merithew & Johnson (2005) study "…acknowledges that there is an existing competence gap between successfully exiting an interpreter preparation program (IPP) and entering a successful practice" (p. 14). Phase Two Respondent C supports this by saying "…if we are graduating students and we are saying they're work ready and our national organization says entry-level certification is RID certification, then there should not be a gap for students who are graduating. They should be able to take the test and pass it."

When considering the current gap as determined by this study, it is important to note that the gap differs depending on if a graduate is exiting a two-year program or exiting a four-year program. Also there is a difference in the gap based on earning state or national credentials.

When considering the NCIEC data information that combined two-year and four-year programs and looked only at national level credentials, the readiness to credential gaps can be described as 27 % of students are able to obtain credentials within 6 – 18 months post graduation. Another 30.3 % are able to earn them within

18 - 24 months after graduation and 42.4% require more than 24 months to obtain national credentials.

Using the Phase Three data, the average amount of time needed to earn state level credentials (regardless of type of program) is 7 – 12 months while the average amount of time needed to earn national level credentials is between 18 – 19 months. The majority of programs indicate that their graduates are able to earn state level credentials upon graduation but more than 24 months are required to earn national level credentials.

When applying the Phase Three data to further explore the credential rate at the state level, it is reported that 72.7 % (n=8) of graduates from 4-year degrees are able to earn state level credentials upon graduation. The remaining 27.3 % (n=3) have state level credentials within 6 – 12 months. A total of 100 % of graduates have state level credentials within one year of graduation. Conversely for Associate level programs, only 8 % (n=1) have credentials upon graduation and only 33.3% percent have their state level credentials one year after graduation. For 66.7 % of graduates from two-year programs, it takes more than a year and 41.7 % require more than two years post graduation to earn state level credentials.

When applying Phase Three data to further explore the credential rate at the national level, only graduates from one program had national credentials upon graduation and that was a four- year program. The majority 50 % (n=5) of graduates from four-year programs require 13 – 18 months after graduation to earn national credential. A total of 80 % (n=8) have national credentials by 13 – 18 months post graduation. Only 20 % (n=2) require 19 – 24 months and no program requires longer

than 24 months. On the other hand, the average graduates from two-year programs 63.3 % require more than 2 years post graduation to earn national credentials.

Summary of Readiness to Credential Gap

Using these data the readiness to credential gap can best be explained that graduates from four-year program may be able to secure state level credentials upon graduation, but may take up to one year to earn national credentials. Graduates from associate level programs may require almost two years for state level credentials and over 2 years for national level credentials. Within the structure of a two-year program students are rushed through language development and then hurried through the theoretical foundation (Witter-Merithew & Johnson, 2005). Fluency in American Sign Language cannot be achieved in two years (Roy, 2000).

Research Question 2: What curricular related characteristics (as identified in the review of literature) of successful Interpreting Education Programs affect readiness?

Various Suggested Approaches

In the literature review, several approaches or skills were suggested to foster effective interpreter education. Some cite the basis for the credentialing gap is that the "monologue" approach used by most IEPs is less than effective (Cokely, 2005; Roy, 2000; Shaw et al., 2006). This study results did show that 65.4 % of the respondents use a discourse-based approach to instruction a great extent in classroom discussion. Winston (2004) states that critical thinking skills are key to an interpreting education and of the programs in this study, 69.2 % incorporate critical thinking to a great extent. Winston (2004) also suggests that students need to assess

their own skills and abilities, construct knowledge, not simply receive it and take responsibility for their own learning and foster lifelong learning habits. In this study, 80.8 % of respondents indicate they incorporate self analysis to a great extent. It appears that programs are including some of the suggested approaches. This may indicate a shift in what is being included in programs. Much of the literature regarding interpreter education has been written within the last decade and books such as the Effective Interpreting Series (Roy, 2000; 2005; 2006) have increased the dissemination of information, potentially resulting in the inclusion of suggested techniques. What were former gaps in instruction are now being covered by the curriculum.

Practicum

Dean and Pollard (2001) and Shaw et al. (2006) suggest the requirement of more structured supervision in the interpreting practicum would lead to more effective interpreting programs. Quantitatively (Phase Three), the results regarding practicum were not significant, but the qualitative data confirmed a significant impact. In Phase Two and Phase Three, the requirements for the practicum varied in structure and duration, however regardless of the structure or requirements, three out of five of the Phase Three respondents indicated that the practicum experience was one of the more critical factors to student success. Respondent C indicted that "What goes on in the classroom is a minor part of our students learning the language/culture. Internship classes are crucial to skill development." These data strongly suggest that the practicum experience has considerable impact on student success. This parallels the student teaching aspect of teacher education. Most teachers declare that one of

the more significant elements in their teacher preparation was the collective school experience gained during student teaching (Guyton & McIntyre, 1990). Student teaching, similar in nature to the interpreting practicum, is the culminating experience in a teacher education program. Just as student teaching is a key experience that is critically important to the making of a teacher, the practicum experiences is critical in the development of competent interpreting practitioners.

Service Learning

When considering the Phase Three data, time to state level credentials and incorporation of Service Learning were found to be significantly related. It is important to note that the significance did not rest with the number of programs that incorporated it, but rather in those who did not incorporate Service Learning; graduates from all four programs who did not incorporate Service Learning required more than two years post graduation to earn state level credentials. Students believe that Service Learning experiences added something unique to their understanding of what they were learning in the classroom (Monikowski & Peterson, 2005).

Respondent C indicated her belief that Service Learning has an amazing impact on the success of her students. Service Learning differs from deaf events, she explains, because for the typical events, students would attend, but they did nothing nor did they get involved. With Service Learning, students are much more involved. Respondent 15 indicted “It (Service Learning) does improve student’s understanding of deaf individuals and their comfort level with them, which probably improves their performance to some extent on the state test. “

Summary of Curricular Factors

The literature has much to say regarding curricular factors, techniques or approaches that should be incorporated into an effective interpreter education program (Roy, 2000; 2005; 2006). Quantitative results from this study yielded only one curricular factor with significance and that was Service Learning. Qualitative results from this study yielded only one agreed upon curricular related factor that impacted interpreter education and that was the Practicum experience. Perhaps, ironically, these are two aspects of the curriculum that actually do not take place in the classroom, but out in the community. But it is important to note that both involve practice in the real world application of the skills initially acquired in the school based setting. More than anything else this area of the study seems to support practice and application of basics skills in the context within which the skills will be used. Both have the common thread of practice and experience within situations and presumably activities not unlike those that will eventually constitute the world of work.

Research Question 3: What "other than curricular" related characteristics of successful Interpreting Education Programs affect readiness?

The results from this study revealed evidence that more significant differences can be observed when considering "other than curricular" characteristics than when considering curricular characteristics. These appeared as follows:

Type of Program

The most significant difference can be seen with the type of program: The discussion of this factor has already been covered above when discussing the current

school to credential gap. It is abundantly clear that graduates from four-year programs earn state and national credentials at a much faster rate than their counterparts at two-year colleges. Despite this, two-year degree programs outnumber four-year degree programs almost two to one (www.rid.org). And the number of students being educated in two-year programs exceeds students being educated in four-year programs almost three to one. According to the 2009 IEP Needs Assessment (Cokely & Winston, 2010), 1037 students are being educated in associate level programs while only 378 students are enrolled in baccalaureate level programs. This result seems to support the consensus that a bachelor's degree is essential (Burch, 2002; Dean & Pollard, 2001; Witter-Merithew & Johnson, 2004) and that two years is not a realistic time frame to become an interpreter (Witter-Merithew & Johnson, 2005). Requiring language fluency prior to interpreter instruction allows for increased understanding of the theoretical framework and practice developing skills.

Faculty

The key finding in the Phase Two qualitative portion of the study was the importance of the programs' faculty. This finding overwhelmingly affirms the general conclusions of the literature that one solution for reducing the school to credential gap lies with utilizing more qualified interpreter educators. Clearly there is a documented need for educators who are skilled and competent as educators as well as practitioners (Roy, 2000; Winston 2004). Faculty need to understand how learning best occurs, be able to construct learning activities based on the needs of the learner, and evaluate their own effectiveness as educators (Winston, 2004). Educators who have advanced training in language study and are researchers (Roy, 2000) are better

positioned to have success in preparing students. Winston (2004) suggests that one of the two more critical challenges that IEPs confront on a daily basis is the ability to identify and assess qualified and competent faculty.

In this study, all five respondents discussed the importance of quality faculty members who are competent educators as well as practitioners. Respondent C stressed this point by saying that one of the more critical components to student success is a highly qualified faculty who are credentialed, involved in professional development, and active at the national level. She went on to say that "I don't think that we would have the curriculum in the way that it is structured if we didn't have the faculty to make it so. I think that certainly curriculum is crucial, but the only reason we have that curriculum is because we have such qualified faculty…you couldn't have a curriculum without the faculty that supports it. "

All five programs have faculty that are engaged as practitioners and identify this as an important factor for student success. Respondent E emphasized the point by adding, "…we are only as good as our up-to-date knowledge and skill and we are only as good as we are invested in the community." All of the programs have faculty that are currently engaged in research. Several of the programs have nationally recognized and respected researchers in the field of Deaf Culture, ASL, ASL Linguistic, and interpreting as faculty members.

Finally, a major concern related to this finding is that according to the NCIEC 2009 IEP Assessment (Cokely & Winston, 2010), 43 IEP faculty members are expected to retire in the next 5 years and an additional 175 faculty members are

expected to be needed in the next 5 years. This shortfall makes this finding of faculty skill and capacity even more critical to the field.

Age of Program

Another factor that was found to have a significant impact on the success of the interpreter education program was when the program was established, a factor not considered in any of the literature identified in this study. The relationship between the tier ranks and the two-decade grouping of when the programs were established were found to be significantly related. The study revealed that 77.8% (n=7) of the Tier Three schools were established subsequent to 1990 while 76.9 % (n=10) of the Tier One schools were established prior 1990.

It could be that the older programs are the associate level programs, and as has already been discussed, the four-year programs seem to be more effective than two-year programs when considering the school to credential gap. The relationship between the type of degree program and the two decade grouping of when the programs were established were found to be significantly related. The study showed that 58 % (n=11) of associate level programs were established prior to 1990 and 85 % (n= 13) of the baccalaureate level were established subsequent to 1990. It could also be that associate level programs were established long ago and may be using antiquated and outdated methods and approaches. This is supported by Phase Two Respondent B's statement that most places do what they have always done and that sadly most programs do not have the luxury of having multiple full-time faculty members to do meaningful curriculum work.

Involvement in the Deaf Community

There is general consensus that successful IEPs infuse the knowledge and experience of the deaf community into every aspect of the program (Burch, 2002; Cokely, 2005; Fleischler & Clark, 1994; Roy, 2002; Monikowski & Peterson, 2005; Winston, 2004; Witter-Merithew & Johnson, 2004) because they are essential language and cultural models.

The results of this study seemed to support this conclusion. All of the Phase Two programs provide external opportunities to foster language acquisition and interpreting skill enhancement, and all agree that this activity is beneficial to students. Programs demonstrated clear intention to develop and foster service learning programs, campus clubs, and activities to provide students with additional community based interaction. Most of the Phase Two programs were located within a large deaf community and program directors agreed that close proximity to a large deaf population is an advantage. Respondent E believes that interaction with the local deaf community is vital to student success and Respondent 16 states, "ITP students who take advantage of the large deaf population pick up language/culture rapidly." The key to this finding is that regardless of the numerous opportunities that a program provides, it is the amount to which students avail themselves to these opportunities will ultimately influence their success.

Resources and Facilities

In the literature, some authors (Bowen-Bailey, 2006; Moller & Finkbone, 2000) cited an inadequate supply of materials for use in the classroom as a contributing factor to the school to credential gap. The results of this study differed

from the literature. In general, the majority of programs (>50%) indicated that they had Excellent or Above Average classroom facilities and 73.1 % indicated that they had Excellent or Above Average resources. This shift in perception of sufficiency of materials and resources could be the result of the increased number of students' possessing personal technology, including laptops and cameras with video recording capabilities. Now it is not as imperative for the programs to provide technology. This perception shift could also be the result of increased accessibility and limitlessness of resources via the internet. Lack of facilities and/or recourses does not seem to be a concern or shortcoming for interpreter education programs.

Summary of "Other Than Curricular" Factors

In summary, the type of program, the quality of the faculty and the extent to which students are involved in the deaf community are all "other than curricular" factors that seem to have the greatest impact on credential rates. Age of the program also has an impact; however, age of program is not a factor that can be changed. To mitigate the effects, programs can take steps to ensure that practices employed by the program are current.

Research Question Four: Are there promising techniques unique to individual programs that are not covered by the literature?

No promising techniques for instruction that had not already been identified and discussed in the literature review emerged in this study. The only related response was that Respondent A indicated that having a program and focusing solely on educational interpreting, as compared to all of the potential areas in which an interpreter may work, was helpful. It is difficult to cover every aspect of the field of

interpreting. Focusing on a single arena of interpreting allows for more specific focus which ultimately allows for greater success in this given area. Specialized programs (such as those focusing on educational interpreting) were not addressed directly in the literature review covered by this study, but the subject was listed among the suggested factors for an ideal IEP (Witter-Merithew & Johnson, 2005). The suggestion stated, "The study of interpretation must be an interdisciplinary, liberal arts education that requires fluency in ASL and English, as well as a broad 'real world' knowledge base, without specializing in areas like educational or medical interpreting until after the baccalaureate degree is successfully completed" (p. 17). Community based interpreting differs greatly from educational interpreting (Jones, 2005). Stuckless et al. (1989) reported that more than 50 % of graduates of interpreter education programs become employed as educational interpreters. Dahl and Wilcox (1994) reported that greater than two-thirds of recent graduates of interpreter education programs gain employment in the educational setting. It would seem reasonable that specialized programs should exist.

Summary of Emerging Techniques

The implication is that the difference noted across the tiers resides far more in implementing what is known to be successful than in implementing some new approach, though that does not exclude the future implementation of additional approaches.

Additional Conclusions

An interesting and incidental discovery in this research, that does not directly address a specific research question, centers on the intended purpose or expected end

result of a degree in Sign Language Interpreting. The prevailing literature supports the belief that interpreter education programs should result in credential ready graduates. The literature bemoans the school to credential gap and insists that steps need to be taken to change it. Frishberg, Patrie, Robinson, and Stauffer (1994), Winston (2004), Witter-Merithew & Johnson (2004, 2005) and Cokely (2005) indicate that programs need to produce graduates who are able to earn interpreting credential upon graduation. However, there were several programs that disagree with this school of thought. Respondent 22 states, "Ours in an entry level program. We are not preparing people for national certification." She goes on to say, "… the goal of our program is not for students to be nationally certified. There is no way they could be ready for national certification in 3 years." Respondent 19 indicates that her program cautions students that few will be ready for the performance/interview portion of the RID upon graduation. And finally, Respondent 6 stated "I object to the assumption here that the goal is to lower the graduation to credentialing gap. Two years of seasoning post graduation with intense mentorship should be expected and not as a catalyst to credentialing. Your metric here is flawed…We are not aiming to speed this process up. We are aiming to foster lifelong learning and professional development."

In fact what is seen here is that a nearly collectively stated belief is not fully accepted by all of the training programs in the field. Some schools do not accept the fact that all students should emerge from programs as fully prepared and credential-ready practitioners. This disagreement seems to suggest that initial training is satisfactory to gain entrance and perhaps apprentice in the workplace. The issue of

the goal in mind is not universally accepted and it would seem difficult to move forward without consensus upon this important goal.

Discussion

The findings in the study offered many tentative conclusions, but also created additional questions. Most of these questions are not likely to be answered immediately, but are questions nevertheless that the field should consider.

The primary finding of the study is that four-year programs produce greater credential ready students. Why is this difference in training time the case? Do two-year programs have different expected outcomes than four-year programs? If so, are students, who enter two-year programs fully aware of the expected outcomes, especially if that outcome is not credentialing? Why do two-year programs in interpreting still exist? Is it a matter of money and location? If so, what steps could be taken to mitigate these very considerable factors? What would be the short term outcome if two year programs were eliminated or restructured so that instead of offering degrees in interpreting, they offered degrees in ASL or Deaf Studies that would be in alignment for transfer into a four-year program in interpreting? Would the elimination or restructuring of two-year programs produce fewer but more qualified practitioners? How would this impact interpreting profession in general? Could distance education for sign language interpreters become a reasonable solution for interpreter education?

The second major finding is that the faculty is a critical component of effective interpreter education. What exactly do these faculty members do that alters program outcome? Faculty need to be competent practitioners, instructors, and

researchers. What is being done to foster faculty development at a national, state, and local level? How is the field going to address the shortage of interpreter educators? One can earn more as a practitioner than as an educator; how does this impact the field of interpreter education? Who takes the responsibility of oversight of interpreter educators? What are they providing in terms of professional development? What graduate programs currently in existence provide advanced level training? Why are there not more? What mentoring is done with new faculty entering the field of interpreter education? What mentoring can be done? Perhaps pairing up a new researcher with a seasoned researcher would strengthen the amount of research in the field. Perhaps "swap programs" were IEP directors go and visit each other's programs would increase awareness.

It seems that the facilities and resources are adequate and not an issue of concern within interpreter education. Greater availability of commercially produced material as well as a virtually unlimited supply of public domain material has reduced this felt need. Are public domain resources as good as the commercially produced material?

This study aimed at identifying more effective types of instructional approaches provided. Classroom instruction did not seem to play as big a role as did real world experience. It appears that didactic instruction is good to lay an overall foundation, but the real key is the real world application of the program instruction within the deaf community ultimately culminating in the practicum experience. If this is the case, what types of opportunities are being provided? Are the practicum experiences broad in nature and do they provide experience in a wide range of

interpreting areas (e.g. medical, educational, and business) or are they very limited in scope and provide only a limited single placement? What are the pros and cons for each approach?

Where schools need to be located is a factor that contributes to student success, but it is an issue over which the program directors and faculty have no control. When considering the location for new programs, consideration needs to be given to a large deaf community which would allow for increased interaction. What can be done for programs that already exist, but are not located within or in close proximity to large deaf communities? Can exposure to the deaf community through the use of technologies like video phones and video conferencing compensate for lack of a local deaf population?

When the program was established is another factor that has implications for student success, but cannot be changed. How do older programs infuse new information into the program? Do they want to change? If now why? If so, how do they know what changes to make? Is there really time and personnel who can achieve this?

Not all IEPs believe that their program should lead to credentialing. Is this true of both two-year and four-year program? If they do not feel the program should lead to credentialing, what do they believe the outcome should be? How does the field of interpreter education reconcile difference of perspectives? Are prospective students fully aware of the end result when enrolling in a program?

Tracking of students seemed to be another key issue. Why do programs not track students? Is it a matter of not enough time or personnel? Do schools know how

to track students? How much could be benefited if tracking was done and we had a realistic understanding of the state of interpreter education?

Implications for Practice

Based on the findings of this research, the following recommendations are offered:

1. Support needs to be given to programs to aid in tracking of students in the form of tools or a national database.
2. Opportunities for faculty development need to be increased. Much is being done regarding professional development of interpreting through RID and its affiliate chapters. However, apart from the bi annual CIT conference, very few opportunities are provided to further develop interpreter education program faculty.
3. Institutions should be more selective in hiring interpreting faculty. A tool to assist universities in hiring interpreting faculty should be created and disseminated to universities.
4. Two-year interpreting programs need to be restructured to better align their curriculum to facilitate student transfer into baccalaureate level programs.
5. Interpreting Education Programs need to foster more opportunities for out of the class learning. Students need to be provided with real world experience through interaction within the deaf and interpreting communities through practicum and service learning.

Recommendations for Future Research

As a result of this study, the following recommendations are suggested for further research:

1. Acquire a better understanding of the program perceptions of alumni: This study considered the perceptions of program directors. Graduates of the programs may have differing viewpoints. Future research should solicit the opinions of graduates.
2. Query programs as to factors that discourage or prohibit tracking of alumni: So many schools do not engage in tracking of their alumni. Without tracking it is hard to get an accurate understanding of where the field of interpreter education stands. This matter of tracking needs to be resolved to accomplish the important function of program evaluation.
3. Conduct quasi-experimental studies using control groups to empirically determine effectiveness of various instructional approaches: This study yielded very general results regarding a variety of approaches and factors. A series of experimental designs that each considered a single approach would allow for more in-depth consideration of specific approaches. This research would further investigate the effectiveness of instructional approaches.
4. Investigate faculty demographics: This study investigated factors primarily related to the program and focused on faculty minimally. Greater consideration should be given to the faculty of institutions. It is clear that faculty roles are deemed critical, much more needs to be known about the necessary qualifications and skills of faculty.

5. Ascertain the perceptions of what can and should be the expected outcomes from a degree in Sign Language Interpreting: Researchers and expert opinion leaders agree that graduates need to be credential ready, but this study indicated that not all IEP directors are in agreement. This perception could be perpetuating the gap. At the very lease a more common agreed to goal needs to be established.
6. Investigate the types of credentials are recent graduates are seeking. Now that EIPA has become more widely accepted, studies should be done to determine if there has been a shift in the types of certifications graduates are attempting.
7. Explore demographics of current IEP students in relationship to rate to credential. The Phase Two programs unanimously agree that the population that they serve consists of traditional (19 – 23 years old) female students. Four out of five have predominantly white students and one program, located in the south western portion of the United States, has a mixture of white and Hispanic students. The type of student enrolled may impact the credential rate.
8. Conduct longitudinal studies of credentials post graduation. This study considered credential rates up to "more than two years." It would be valuable to investigate the proportions of graduates who exceed the two year mark and additionally the proportion of graduates who never achieve national level credentials.
9. Consider the validity of training programs that focus on a specific area of interpreting such as educational or medical interpreting.

Conclusion

The school to credential gap in interpreter education is a systemic crisis that requires collaboration between and among all stakeholders to resolve. With the growing needs of well trained professionals and the extreme shortage of active interpreters that is on the horizon, careful attention to the issue seem to be essential. Change is required and as Witter-Merithew and Johnson (2005) summarize the direction of the field, "…it is time we held employers feet to the fire, set ourselves a deadline and begin working on the infrastructures. We all own the gap" (p. 15).

References

Americans with Disabilities Act of 1990, as Amended, 42 U.S.C. 12101 *et seq* (2008).

Anderson, G., & Stauffer, L. (1990). Identifying standards for the training of interpreters for the deaf people. University of Arkansas. Rehabilitation Research and Training Center on Deafness and Hearing Impairment.

Anderson, L. W. & Krathwohl, D.A., (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. New York, NY: Longman.

Bloom, B. S. & David R. Krathwohl. (1956). Taxonomy of educational objectives: The classification of educational goals Handbook 1: The cognitive domain. New York, NY: David McKay Co, Inc.

Bowen-Bailey, D. (2006). Putting theory into practice: Creating video resources for discourse based approaches to interpreter education. In C.B. Roy (Ed.), *New approaches to interpreter education* (pp. 125-137). Washington, D.C.: Gallaudet University Press.

Brehm, J. (1993). *The Phantom Respondents* Ann Arbor, MI: University of Michigan Press

Burch, D. D. (2002). Essential education for sign language interpreters in pre-college educational settings. *Journal of Interpretation*, 125-145.

Cokely, D. (2005). Curriculum revision in the twenty-first century: Northeastern's experience. In C. B. Roy (Ed.), *Advances in teaching sign language interpreters* (pp. 1-21). Washington, D.C.: Gallaudet University Press.

Cokely, D., & Winston, B. (2010, April 22). Recent Findings: Trends in Interpreter Education Programs/Powerpoint, Webinar.

Commission on Collegiate Interpreter Education. (2007, September 12). National Interpreter Education Standards Retrieved September 5, 2009 from http://www.ccie-accreditation.org/PDF/Standards_Sept2007.pdf

Creswell, J. W. (2005). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (2nd ed.). Upper Saddle River, NJ: Pearson.

Dahl, C., & Wilcox, S. (1990). Preparing the educational interpreter: A survey of sign language interpreting training programs. *American Annals of the Deaf,* 135(4), 275-279.

Davis, J. E. (2000). Translation techniques in interpreter education. In C. B. Roy (Ed.), *Innovative practices for teaching sign language interpreters* (pp. 109 – 31). Washington, D.C.: Gallaudet University Press.

Davis, J. E. (2005). Teaching observation techniques to interpreters. In. C.B. Roy (Ed.), *Advances in teaching sign language interpreters* (pp. 22- 48). Washington, D.C.: Gallaudet University Press.

Dean, R. K., & Pollard, R. W. (2001). Application of demand-control theory to sign language interpreting: Implications for stress and interpreter training. *Journal of Deaf Studies and Deaf Education,* 6(1), 1-14. doi:10.1093/deafed/6.1.1

Dey, E. (1997). Working with low survey response rates: The efficacy of weighting adjustments. *Research in Higher Education,* 38(2), 215-227.

Education for All Handicapped Children Act of 1975, Pub.L. 94-142, U.S. Code vol. 20, 1400 et seq.

Fielding, N., & Fielding, J. (1986). *Linking data: The articulation of qualitative and quantitative methods in social research.* London, England: Sage.

Florida Registry of Interpreters for the Deaf Quality Assurance Screening. Retrieved on March 7, 2010 from *http://www.fridcentral.com/Default.aspx?pageId=13680.9*

Fogliani, M. (1999). Low Response Rates and their Effects on Survey Results, *Methodology Advisory Committee paper* November 1999 meeting.

Frishberg, N. (1994). *A response to the "readiness-to-work gap" paper*. Paper presented at the Mapping our course: A collaborative venture; Proceedings of the 10th National Convention, Conference of Interpreter Trainers.

Groves, R. M. (1989). *Survey errors and survey costs*. New York, NY: Wiley.

Guyton, E., & McIntyre, D. J. (1990). Student teaching and school experiences. In W. R. Houston (Ed.), *Handbook of research on teacher education* (pp. 514-534). New York, NY: Macmillan.

Hikmet, N., & Chen, S. (2003). An investigation into low mail survey response rates of information technology users in health care organizations. *International Journal of Medical Information,* 72, 29-34. doi:10.1016/j.ijmedinf.2003.09.002

Holbrook, A., Krosnick, J., & Pfent, A. (2007). The causes and consequences of response rates in surveys by the news media and government contractor survey research firms. In J. M. Lepkowski, N. C. Tucker, J. M. Brick, E. D.

De Leeuw, L. Japec P. J. Lavrakas, & R. L. Sangster (Eds.), *Advances in telephone survey methodology*. New York, NY: Wiley.

Humphrey, J. H. (2000). Portfolios: One answer to the challenge of assessment and the "readiness to work" gap. In C.B Roy (Ed.), *Innovative practices for teaching sign language interpreters* (pp. 153-175). Washington, D.C.: Gallaudet University Press.

Humphrey, J., & Alcorn, B. (2007). *So you want to be an interpreter: An introduction to sign language interpreting* (4th ed.). Seattle, WA: H & H Publishing.

Individuals with Disabilities Education Act of 1990, Public Law 1001-476m U.S. Code vol. 20 secs. 1400-1485

Johnson, L., & Witter-Merithew, A. (2004). Interpreting skills acquired at a distance: Results of data-driven study. *Journal of Interpretation*, 95-119.

Johnson, L., Witter-Merithew, A., & Taylor, M. (2004). Entry to Practice competencies for ASL/English interpreters: Distance opportunities for interpreter training center. Retrieved January 23, 2010 from http://www.unco.edu/DOIT/Competencies_brochure_handout.pdf

Johnson, T., & Owens, L. (2003). Survey response rate reporting in the professional literature. *American Association for Public Opinion Research,* 127-133.

Jones, B. (2005). Competencies of K-12 educational interpreters: What we need versus what we have. In E.A. Winston (Ed.), *Educational interpreting: How it can succeed* (pp. 113 – 131). Washington, DC: Gallaudet University Press.

Kansas Department of Social and Rehabilitation Services. Retrieved on March 2, 2010 from http://www.srskansas.org/kcdhh/text/KQAS/KQAS.htm.

Keeter, S., Kennedy, C., Dimock, M., Best, J., & Craighill, P. (2006). Gauging the impact of growing non-response on estimates from a national RDD telephone survey. *Public Opinion Quarterly,* 70(5), 759-779.

Kelly, J. E. (2001). *Transliterating: Show me the English*. Alexandria, VA: RID Press.

Kelly, J. E. (2004). *ASL to English: Say it like they mean it.* Alexandria, VA: RID Press.

Krosnick, J. (1999). Survey research. *Annual Review of Psychology*, 50, 537-567. doi:10.1146/annurev.psych.50.1.537

Lincoln, Y., & Guba, E. (1985). *Naturalistic inquiry*. New York, NY: Sage.

Lofland, J., & Lofland, L. H. (1984). *Analyzing social settings*. Belmont, CA: Wadsworth Publishing.

Mackey, A., & Gass, S. (2005). *Second language research: Methodology and design*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Merriam, S. B. (1989). *Qualitative research and case study applications in education:* San Francisco, CA: Jossey-Bass.

Michigan Department of Energy, Labor, and Economic Growth. Retrieved on March 2, 2010 from http://www.michigan.gov/documents/dleg/Memo_Interpreter_Test_Now_Open-SE_298469_7.pdf.

Microsoft. (2007). Microsoft Excel [computer software]. Redmond, Washington: Microsoft

Microsoft. (2007). Microsoft Word[computer software]. Redmond, Washington: Microsoft

Moeller, J. P., & Finkbone, B. D. (2000). *The way we do the things we do*. Paper presented at CIT at 21: Celebrating excellence, celebrating partnership; Proceedings of the 13th National Convention Conference of Interpreter Trainers, Portland, Oregon.

Monikowski, C., & Peterson, R. (2005). *Sign language interpreting and interpreter education: Directions for research and practice*. Oxford, England: Oxford University Press.

National Consortium of Interpreter Education Centers. Path to interpreting: Choosing a school. Retrieved September 2, 2009 from http://www.discoverinterpreting.com/?choosing_a_school

National Consortium of Interpreter Education Centers. Retrieved September 5, 2009 from http://www.nciec.org/index.html.

National Consortium of Interpreter Education Centers. Retrieved March 2, 2010 from http://www.nciec.org/projects/ept_history.html.

Patrie, C. J. (1994). *A response to the "readiness-to-work gap" paper*. Paper presented at the Mapping our course: A collaborative venture; Proceedings of the 10th National Convention, Conference of Interpreter Trainers.

Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). London, England: Sage.

Registry of Interpreters for the Deaf. (2005). Retrieved on September 2, 2009 from http://rid.org/education/edu_certification/index.cfm.

Registry of Interpreters for the Deaf. (2007). Retrieved on October 3, 2009 from http://www.rid.org/education/testing/index.cfm/AID/81.

Rehabilitation Act of 1973, Public Law 93-112, U.S. Code vol. 29 secs. 701 et seq.

Robinson, R. (1994). *A response to the "readiness-to-work gap" paper*. Paper presented at the Mapping our course: A collaborative venture; Proceedings of the 10th National Convention, Conference of Interpreter Trainers.

Roy, C. B. (2000). Training interpreters – past, present, and future. In C.B. Roy (Ed.), *Innovative practices for teaching sign language interpreters* (pp. 1-14). Washington, D.C.: Gallaudet University Press.

Roy, C. B. (Ed.). (2005). *Advances in teaching sign language interpreters* Washington, D.C.: Gallaudet University Press.

Roy, C. B. (Ed.). (2006). *New approaches to interpreter education.* Washington, D.C.: Gallaudet University Press.

Russell, D. (2002). Reconstructing our views. In L. Swabey (Ed.), *New designs in interpreter education: Proceedings of the 14th national convention of the conference of interpreter trainers* (pp. 5-16). Minneapolis/St. Paul, MN: CIT.

Sampson, H. (2004). Navigating the waves: The usefulness of a pilot in qualitative research. *Qualitative Research*, 4(3). 383-402. do:10.1177/1468794104047236

Schwab, D. (1999). *Research methods for organizational study*. Mahwah, NJ: Lawrence Erlaum and Associates, Inc.

Shaw, R., Collins, S. D., & Metzger, M. (2006). MA to BA: A quest for distinguishing between undergraduate and graduate interpreter education, bachelor of arts in interpretation curriculum at Gallaudet University. In C. B Roy (Ed.), *New approaches to interpreter education* (pp. 1-21). Washington, D.C.: Gallaudet University Press.

SPSS for Windows, Rel. 11.0.1. 2001. Chicago, IL: SPSS Inc.

Stauffer, L. (1994). *A response to the "readiness-to-work gap" paper*. Paper presented at the Mapping our course: A collaborative venture; Proceedings of the 10th National Convention, Conference of Interpreter Trainers.

Steeh, C. (1981). Trends in nonresponse rates. *Public Opinion Quarterly,* 45, 40-57.

Stuckless, E. R., Avery, J. C., & Hurwitz, T. A. (1989). Educational interpreting for deaf students: Report of the national task force on educational interpreting. Rochester, NY: National Technical Institute for the deaf at Rochester Institute of Technology.

Texas Department of Rehabilitation Services. Retrieve on March 2, 2010 from http://www.dars.state.tx.us/dhhs/bei.shtml

Virginia Department for the Deaf and Hard of hearing. (1994). Virginia Quality Assurance Screening Manual. Retrieved on March 2, 2010 from http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/14/ca/f1.pdf

Visser, P., Krosnick, J., Marquette, J., & Curtin, M. (1996). Mail surveys for elections forecasting? An evaluation of the Columbus dispatch poll. *Public Opinion Quarterly,* 60, 181-127.

West, E. A., & Whitney, P. (2000). *Assessing interpreting skills: Practice, procedures, partnership*. Paper presented at CIT at 21: Celebrating excellence, celebrating partnership; Proceedings of the 13th National Convention Conference of Interpreter Trainers, Portland, Oregon.

Winston, E. A. (2005). Designing a curriculum for American Sign Language/English interpreting educators. In M. Marschark, R. Peterson & E. A. Winston (Eds.), *Sign language interpreting and interpreter education: Directions for research and practice* (pp. 208-234). New York, NY: Oxford University Press.

Winston, E. A., & Cokely, D. (2007). *NCIEC interpreter practitioner needs assessment: final report:* The National Consortium of Interpreter Education Centers.

Winston, E. A., & Monikowski, C. (2000). Discourse mapping: Developing textual coherence skills. In C. B. Roy (Ed.), *Innovative practices for teaching sign language interpreters* (pp. 15-32). Washington, D.C.: Gallaudet University Press.

Winston, E. A., & Monikowski, C. (2005). Discourse mapping: The GPS of discourse translation. In C.B. Roy (Ed.), *Advances in teaching sign language interpreters* (pp. 49-77). Washington, D.C.: Gallaudet University Press.

Witter-Merithew, A., & Johnson, L. (2004). Market disorder within the field of sign language interpreting: Professionalization implications. *Journal of Interpretation,* 19-41.

Witter-Merithew, A., & Johnson, L. (2005). *Toward competent practice: Conversations with stakeholders.* Alexandria, VA: RID Press.

Appendix A

Commission on Collegiate Interpreter Education (CCIE) National Standards

1: Language Competence
Expressive ASL
Receptive ASL
Expressive Signed English
Receptive Signed English
Written English
Spoken English

2: Transfer Competence
Source language comprehension: ASL
Source language comprehension: English
Target language production: Interpreting
Target language production: Transliterating
Target language production: Spoken English

3: History and Theory
Identify historical milestones
Identify current practices
Professional/technical competence
Membership in professional organizations
Interpreter role
Interpreter responsibilities
Theories of interpretation
Theories of transliteration
Professional ethics
Cross-cultural interaction
Certification/licensure
Business practices
Application of the Code Of Ethics
Manipulate physical setting
Obtain credentials

4: Methodological Competence
Assessment of language: ASL
Assessment of language: Signed English
Assessment of language: Spoken English
Simultaneous Voice to Sign Interpreting
Simultaneous Voice to Sign Transliterating
Simultaneous Sign to Voice Interpreting
Simultaneous Sign to Voice Transliterating
Consecutive Sign to Voice Interpreting
Consecutive Voice to Sign Interpreting

Consecutive Voice to Sign Transliterating
Consecutive Sign to Voice Transliterating

5. Cultural Competence
Deaf culture
American culture
Cultural literacy
Cultural diversity/differences
Respect and acceptance
Beliefs, values, experiences

6. Subject Matter Competence
Broad general knowledge
Specialized knowledge
Educational settings/subject matter
Interpreting competence
Transliterating competence

7. Techniques and Logistics
Assess environmental setting
Manipulate environmental setting
Select/use equipment
Adjust to consumer preferences
Teamwork

8. Research
Research protocol
Analyze studies
Develop outlines
Conduct literature reviews
Write research paper
Citations and references

9. Practicum and Internship
Professional responsibilities
Ethical conduct and decision making
Language preferences and group diversity
Service delivery models
Professional development plan
Live-long learning
Mentorship
Public versus private agencies
Educational interpreting
Community interpreting
Credentials and certification

Appendix B

Entry-to-Practice Competencies

Domain 1: Theory and Knowledge Competencies

This cluster of competencies embodies the academic foundation and world knowledge essential to effective interpretation.

1.1 Demonstrate world knowledge through a discussion of current and historical events in regional, national, and international contexts and by describing systems that support society (e.g., governmental, educational, religious, social, and judicial).

1.2 Demonstrate knowledge of linguistics and cross-cultural and interpretation theories by discussing the implications of each for the work of interpreters in various contexts (e.g., approaches to the process and analysis of task).

1.3 Apply linguistics and cross-cultural and interpretation theories by analyzing a wide range of consecutive and simultaneous interpreting samples in a manner that reflects synthesis of the theoretical frameworks as they apply to the interpretations.

1.4 Compare and contrast linguistic characteristics in a variety of signed language interpretations.

1.5 Identify and discuss personal and professional demands that occur during interpreting and identify strategies leading to an effective interpretation (e.g., strategies to prevent injuries, reduce stress, ensure personal safety, use of team interpreting).

1.6 Discuss professional and ethical decision-making in a manner consistent with theoretical models and standard professional practice.

1.7 Compare and contrast majority and minority cultures in American society (e.g., social norms, values, identity markers, humor, art forms, language use, oppression).

1.8 Identify and discuss the major historical eras, events and figures in the D/deaf Community that impact D/deaf and hard of hearing people, and the resulting implications for interpreting (e.g., audism, Deaf President Now, Clerc, Milan).

1.9 Demonstrate critical analysis of current literature in the interpreting discipline by writing a research paper.

Domain 2: Human Relations Competencies

This cluster of interpersonal competencies fosters *effective communication and productive collaboration with colleagues, consumers, and employers.*

2.1 Demonstrate collegiality by showing respect and courtesy to colleagues, consumers and employers, and taking responsibility for one's work.

2.2 Advocate for conditions of employment that safeguard the rights and welfare of consumers and interpreters.

2.3 Demonstrate respect for ASL, English and contact varieties of ASL by using cultural norms appropriate to each language while conversing and

interpreting.
2.4 Recognize and respect cultural differences among individuals by demonstrating appropriate behavioral and communicative strategies both while conversing and while interpreting.
Example: In groups comprised of D/deaf people exclusively and groups of D/deaf and hearing people, apply appropriate strategies for introductions, turn-taking, and follow-up.
2.5 Collaborate with participants and team members in a manner that reflects appropriate cultural norms and professional standards during all phases of assignments and implement changes where appropriate and feasible.
2.6 Demonstrate an understanding of professional boundaries by following generally accepted practices as defined by the code of ethical conduct.

Domain 3: Language Skills Competencies
This cluster of competencies relates to the use of American Sign Language and English.
3.1 Demonstrate superior proficiency and flexibility in one's native language (L1) by effectively communicating in a wide range of situations, with speakers of various ages and backgrounds.
3.2 Demonstrate near-native like communicative competence and flexibility in one's second language (L2) by effectively communicating in a variety of routine personal and professional situations with native and non-native speakers of varying ages, race, gender, education, socio-economic status, and ethnicity.
3.3 Demonstrate advanced and effective public speaking skills in both ASL and English through the spontaneous delivery of an informal and a prepared formal presentation

Domain 4: Interpreting Skills Competencies
This cluster of technical competencies are related to effective ASL-English interpretation of a range of subject matter in a variety of settings.
4.1 Apply academic and world knowledge during consecutive interpretation using appropriate cultural adjustments, while managing internal and external factors and processes, in a manner that results in accurate and reliable interpretations in both ASL and English.
Example: In low-risk settings with moderately technical, moderately paced monolog, the individual manages personal filters and intra-personal, environmental, logistical and situational factors by adhering to appropriate norms, rituals, and protocol.
4.2 Integrate academic and world knowledge during simultaneous interpretation using appropriate cultural adjustments while managing internal and external factors and processes in a manner that results in accurate and reliable interpretations in both ASL and English.
4.3 Analyze the effectiveness of interpreting performance generated by self and peers by applying contemporary theories of performance assessment and peer review.

4.4 Demonstrate the ability to effectively team interpret during consecutive and simultaneous low-risk interactional assignments.
4.5 Demonstrate flexibility to transliterate or interpret by observing the language use of D/deaf or hard of hearing consumers and/or make adjustments based on consumer feedback.
4.6 Negotiate meaning in ASL and English while interpreting in a manner that conforms to recognized linguistic, cultural and professional norms of the speaker(s).
Examples: Identifies where breakdowns occur, applies strategies for seeking clarification in appropriate manner/at the appropriate times, and determines questions to ask to gain further meaning.
4.7 Demonstrate the ability to use technology and equipment specific to ASL-English interpreting.
Examples: Video remote interpreting, video relay services, microphones.

Domain 5: Professionalism *Competencies*
This cluster of competencies are associated with professional standards and practices.
5.1 Demonstrate a commitment to career-long learning and critical self-assessment by creating an on-going professional action plan.
5.2 Demonstrate planning skills in preparing for assignments and flexibility in adapting to changes that arise during assignments.
5.3 Demonstrate self-awareness and discretion by monitoring and managing personal and professional behaviors and applying professional conflict resolution strategies when appropriate.
Examples: Has awareness of personal filters, intrapersonal factors, and reactions to a variety of situations and subject matter. Knows when to request breaks, whether to accept assignments, how to work with a team interpreter, and facilitate replacement in a responsible manner.
5.4 Demonstrate professional integrity by avoiding conflicts of interest, adhering to the code of ethical conduct, and applying standard professional business practices.
Examples: Control working conditions, set appropriate fees, perform bookkeeping.
5.5 Demonstrate commitment to the interpreting profession by becoming a member of and participating in professional organizations and activities.
5.6 Demonstrate commitment to the D/deaf Community by supporting and contributing to D/deaf-related organizations and activities.
5.7 Demonstrate awareness of community resources by identifying organizations and agencies that could or do serve D/deaf people.
5.8 Discuss state and national interpreter certification and/or licensure and the implications of these systems on the employment of interpreters.
5.9 Identify and discuss the scope and authority of state and federal laws impacting D/deaf people and interpreters.
Example: Who is responsible for implementing the law, definition of who is qualified to interpret under the law.

Appendix C

NCIEC 2009 Interpreter Education Program Needs Assessment

This survey consists of 10 pages, and takes about 15 minutes to complete if you have all of the relevant information in-hand. If at any time you need to leave, simply submit the information you've filled in so far, and when you're ready to come back to your survey click on the link you received via email. When you return to your survey you'll be taken to the next page, so make sure to fill in all you can on the page before you click submit!
While you're taking this survey, you'll be able to use the back button on your browser to go back to previous pages, but if you leave and come back to your survey you'll only be able to move forward.
Thank you for your attention to detail in taking this survey.

NCIEC Interpreter Education Program Survey

Thank you for your attention to detail in taking this survey.

Section I: Program and Contact Information

1. Institution Name:
2. Institution's website:
3. Program Name:
4. Program Address:

    Name:

    Company:

    Address:

    City:

    State:

    Zip:

5. Program Website:
6. Program Email Address:
7. Person responsible for program:

8. What are your institutional current minimum academic qualifications for the person responsible?
9. What are the minimum professional credentials for this person?
10. This person's email address:
11. Program Phone Number (V):
12. Program Phone Number (TTY):
13. Program Phone Number (Video Phone):

Section II: Basic Program Information

Is your institution:

14. Which describes your Interpreter Education Program:

AA/AS

BA/BS

MA/MS

Other, please specify _____

15. Of the programs you selected in #14, which best describes your instructional delivery?

AA/AS predominantly (75%+) face-to-face

AA/AS predominantly (75%+) distance

AA/AS predominantly (75%+) blended

BA/BS predominantly (75%+) face-to-face

BA/BS predominantly (75%+) distance

BA/BS predominantly (75%+) blended

MA/MS predominantly (75%+) face-to-face

MA/MS predominantly (75%+) distance

MA/MS predominantly (75%+) blended

Other, please specify _____

16. Are non-degree and degree students in classes together?
17. Are full-time and part-time students in classes together?
18. Does your full-time program also contain an ASL Program?
19. If yes, it is offered in the same unit as your Interpreting Program?
20. If no, in which unit is the ASL Program offered?
21. Are you administratively responsible for the ASL Program? If no, who is?
22. Do you believe that your program is unique? Why?
23. Do you believe that you have institutional support for your IEP?
24. What are the indications of that support?

Section III: Faculty Information

25. What is the current total number of Interpreting faculty that your program employs?
26. What is the current total number of ASL faculty that your program employs?
27. How many of your interpreting faculty are full-time?
28. How many of your ASL faculty are full-time?
29. How many of your interpreting faculty are part-time?
30. How many of your ASL faculty are part-time?
31. Of your Interpreting faculty, how many are tenured?
32. Of your ASL faculty, how many are tenured?

33. How many of your current Interpreting faculty do you expect to retire in the next five years?
34. How many of your current ASL faculty do you expect to retire in the next five years?
35. How many new Interpreting faculty do you expect to need in the next five years?
36. How many new ASL faculty do you expect to need in the next five years?
37. What are your institutional current minimum academic qualifications for your full time interpreting faculty?
38. What are your institutional current minimum academic qualifications for your part time interpreting faculty?
39. What percent of your courses in your degree-granting programs are taught by full-time interpreting faculty?
40. What percent of your courses in your non-degree granting programs are taught by full-time interpreting faculty?
41. What are your institutional current minimum academic qualifications for your full time ASL faculty?
42. What are your institutional current minimum academic qualifications for your part time ASL faculty?
43. What percent of your courses in your degree-granting programs are taught by full-time ASL faculty?
44. What percent of your courses in your degree-granting programs are taught by part-time ASL faculty?

45. What are your institutional current minimum professional interpreting credentials for your full time interpreting faculty?
46. What percent of your courses in your non-degree granting programs are taught by full-time interpreting faculty?
47. What are your institutional current minimum professional interpreting credentials for your part time interpreting faculty?
48. What are your institutional current minimum professional teaching and/or interpreting credentials for your full time ASL faculty?
49. What are your institutional current minimum professional teaching and/or interpreting credentials for your part time ASL faculty?

Section IV: AA/AS Degree Granting Programs

50. Does your program offer an AA/AS degree?

Section IV: AA/AS Degree Granting Programs

51. What year was your AA/AS degree-granting program established?
52. Does your AA/AS degree-granting program currently have stated entry requirements to the ASL portion of your program? If YES, please describe.
53. Does your AA/AS degree-granting program currently have stated entry requirements to the interpreting portion of your program? If YES, please describe:
54. Does your AA/AS degree-granting program currently have stated exit requirements to the ASL portion of your program? If YES, please describe:

55. Does your AA/AS degree-granting program currently have stated exit requirements to the interpreting portion of your program? If YES, please describe.

56. Do you currently have a formal articulation agreement with a four-year degree-granting institution? If yes, with which institution(s)?

57. What best describes your articulation agreement? (please answer for the first institution with which you have an agreement)

    Institution-wide articulation agreement for general education creditsAA/AS

    IEP credit transfer for bachelor completion

    AA/AS IEP credit transfer to BA IEP program

    Coordinated AA/AS IEP credit transfer to BA IEP program

    Dual or simultaneous enrollment at both two year and four year institution

    Community College Baccalaureate

    University Centered Program (University located on Community College

    campus)

    Other, please specify _____

58. How long have you had the articulation agreement?

59. What is the ultimate degree that a student receives? (please answer for the first institution with which you have an agreement)

    BA in:

BS in:

60. What best describes your articulation agreement? (please answer for the second institution with which you have an agreement)

Institution-wide articulation agreement for general education credits

AA/AS IEP credit transfer for bachelor completion

AA/AS IEP credit transfer to BA IEP program

Coordinated AA/AS IEP credit transfer to BA IEP program

Dual or simultaneous enrollment at both two year and four year institution

Community College Baccalaureate

University Centered Program (University located on Community College

campus)

Other, please specify _____

61. What is the ultimate degree that a student receives? (please answer for the second institution with which you have an agreement)

BA in:

BS in:

62. If you currently do not have a formal articulation agreement, are you planning to seek one with a four-year degree-granting program? If yes, with which institutions?

63. If yes, when do you anticipate beginning this process?

64. If yes, when do you anticipate completing this process?

65. If yours is an AA/AS degree program and you do not have current agreements, do you anticipate:

    Maintaining the status quo; students take care of RID degree requirement themselves

    Seeking articulation agreements with four-year institutions

    Phasing out the current interpreting AA/AS degree program completely

    Converting from an interpreting program to an ASL/Deaf Studies program

    Other, Please Specify _____

66. Does your program need assistance identifying resources for transition or articulation to a bachelor's program? What resources would be helpful?

67. How do you track your graduates?

    Annual alumni surveys

    Personal contact

    Other, please specify _____

68. What is the average time after graduation for your AA/AS degree-granting program students to secure initial State level professional credentials?

    6-12 months

    12-18 months

    18-24months

    More than 24 months

    Do not currently track

No state level credentials offered

69. What is the average time after graduation for your AA/ASdegree-granting program students to secure initial National level professional credentials (RID or NAD)?

    6-12 months

    12-18 months

    18-24 months

    More than 24 months

    Do not currently track

    No state level credentials offered

Is your AA/AS degree-granting program:

If you have both full time and part time academic programs, both are offered through the same college or unit within the institution the full and part time options are offered through different units in the institution.

70. How do you recruit students for your program? Please select all that apply.

    My program regularly visits area high schools

    My program advertises in area newspapers

    My program relies on my institution's enrollment/recruiting office

    My program relies on word of mouth

    Other, please specify _____

71. At what stage is your program in the CCIE accreditation process?

72. If you have not yet applied, do you plan to?

73. If yes, when?

74. If no, why not?

Full Time AA/AS Degree Programs:

Please respond to the following questions only if you offer full time AA/AS Degree programs.

75. What is your average annual entering full-time freshman enrollment for the past five years in your AA/AS degree program?
76. What is your average annual entering full-time transfer student enrollment for the past five years in your AA/AS degree program?
77. What is your current total full-time freshman enrollment in your AA/AS degree program?
78. What is your current total full-time transfer student enrollment in your AA/AS degree program?
79. What are your course enrollment maximums (i.e. course capacities) in your full time AA/AS degree classes?
80. What are your course enrollment maximums (i.e. course capacities) in your full time interpreting skills development classes?
81. What is the average class size in your full time AA/AS degree classes?
82. What is the average class size in your full time interpreting skills development classes?
83. What is the average number of full time graduates from your AA/AS degree program over the last five years?
84. What is the number of full time graduates from your AA/AS degree program this calendar year?

85. How many courses do your AA/AS degree seeking students typically take per term (quarter or semester)?
86. How many total credits do your full-time AA/AS degree students typically take each term (quarter or semester)?

Part time AA/AS Degree Programs:

87. What is your average annual entering student enrollment for the past five years in your part-time AA/AS degree program?
88. What is your current total student enrollment in your part-time AA/AS degree program?
89. What are your course enrollment maximums (i.e. course capacities) in your part time AA/AS classes?
90. What is the average class size in your part time AA/AS degree classes?
91. What is the average number of graduates from your part time AA/AS degree program over the last five years?
92. What is the number of graduates from your part time AA/AS degree program this calendar year?
93. How many AA/AS degree courses do your part time students typically take per term (quarter or semester)?
94. How many total credits do your part-time AA/AS degree students typically take each term (quarter or semester)?

Section V: BA/BS Degree Granting Programs

95. Does your program offer a BA/BS degree?
96. What year was your BA/BS degree-granting program established?

97. Does your BA/BS degree-granting program currently have stated entry requirements to the ASL portion of your program? If YES, please describe:

98. Does your BA/BS degree-granting program currently have stated entry requirements to the interpreting portion of your program? If YES, please describe:

99. Does your BA/BS degree-granting program currently have stated exit requirements to the ASL portion of your program? If YES, please describe:

100. Does your BA/BS degree-granting program currently have stated exit requirements to the interpreting portion of your program? If YES, please describe:

101. Do you currently have a formal articulation agreement with any two-year degree-granting institutions? If yes, with which institution(s)?

102. Do you currently have a placement assessment procedure for accepting students from two-year institutions? If yes, can you describe that procedure?

103. How do you track your graduates?

Annual alumni surveys

Personal contact

Other, please specify _____

104. What is the average time after graduation for your BA/BS degree-granting program students to secure initial State level professional credentials?

6-12 months

12-18 months

18-24 months

More than 24 months

Do not currently track

No state level credentials offered

105. What is the average time after graduation for your BA/BS degree-granting program students to secure initial National level professional credentials (RID or NAD)?

6-12 months

12-18 months

18-24 months

More than 24 months

Do not currently track

No state level credentials offered

BA/BS degree-granting program:

If you have both full time and part time academic programs, both are offered through the same college or unit within the institution the full and part time options are offered through different units in
the institution.

106. How do you recruit students for your program?

My program regularly visits area high schools

My program advertises in area newspapers

My program relies on my institution's enrollment/recruiting office

My program relies on word of mouth

Other, please specify _____

107. At what stage is your program in the CCIE accreditation process?

108. If you have not yet applied, do you plan to? If yes, when? If no, why not?

Full Time BA/BS Degree Programs:

Please respond to the following questions only if you offer **full time** BA/BS Degree programs.

109. What is your average annual entering full-time freshman enrollment for the past five years in your BA/BS degree program?

110. What is your average annual entering full-time transfer student enrollment for the past five years in your BA/BS degree program?

111. What is your current total full-time freshman enrollment in your BA/BS degree program?

112. What is your current total full-time transfer student enrollment in your BA/BS degree program?

113. What are your course enrollment maximums (i.e. course capacities) in your full time BA/BS degree classes?

114. What are your course enrollment maximums (i.e. course capacities) in your full time interpreting skills development classes?

115. What is the average class size in your full time BA/BS degree classes?

116. What is the average class size in your full time interpreting skills development classes?

117. What is the average number of full time graduates from your BA/BS degree program over the last five years?

118. What is the average number of full time graduates from your BA/BS degree program over the last five years?

119. What is the number of full time graduates from your BA/BS degree program this calendar year?

120. How many courses do your BA/BS degree seeking students typically take per term (quarter or semester)?

121. How many total credits do your full-time BA/BS degree students typically take each term (quarter or semester)?

Part time BA/BS Degree Programs:

122. What is your average annual entering part-time student enrollment for the past five years in your BA/BS degree program?

123. What is your current total part-time student enrollment in your BA/BS degree program?

124. What are your course enrollment maximums (i.e. course capacities) in your part time BA/BS classes?

125. What is the average class size in your part time BA/BS degree classes?

126. What is the average number of part time graduates from your BA/BS degree program over the last five years?

127. What is the number of part time graduates from your BA/BS degree program this calendar year?

128. How many BA/BS degree courses do your part time students typically take per term (quarter or semester)?

129. How many total credits do your part-time BA/BS degree students typically take each term (quarter or semester)?

This survey is aimed at gathering data about AA/AS and BA/BS degree programs. However, we would also like to gather data about your program through a separate survey specific to programs that offer MA/MS degrees.

130. Does your program offer an MA/MS degree?

131. May we contact you for more information in the future?

This survey is aimed at gathering data about AA/AS and BA/BS degree programs. However, we would also like to gather data about your program through a separate survey specific to programs that offer non-degree certificate programs.

132. Does your program offer non-degree certificate courses?

133. May we contact you for more information in the future?

Do you have any other comments, questions or other feedback?

Appendix D

Two and Four Year Institutions Listed with the NCIEC

1. **Bishop State Community College** Mobile, AL
   AA/AAS
2. **University of Arkansas at Little Rock** Little Rock, AR
   AA+BA
3. **Phoenix College** Phoenix, AZ
   AA/AAS
4. **Pima Community College** Tucson, AZ
   AA/AAS
5. **University of Arizona** Tucson, AZ
   BA/BS
6. **Ohlone College Interpreter Preparation Program** Fremont, CA
   AA/AAS
7. **California State University Fresno** Fresno, CA
   BA/BS
8. **Golden West College** Huntington Beach, CA
   certificate
9. **Antelope Valley Community College** Lancaster, CA
   AA/AAS
10. **California State University at** Northridge Northridge, CA
    AA+BA
11. **Riverside Community** College Riverside, CA
    AA/AAS
12. **American River College** Sacramento, CA
    AA/AAS
13. **San Diego Mesa College** San Diego, CA
    AA/AAS
14. **Palomar College** San Marcos, CA
    AA/AAS
15. **El Camino College** Torrance, CA
    AA/AAS
16. **Mount San Antonio College** Walnut, CA
    AA/AAS
17. **Los Angeles Pierce Community** College Woodland Hills, CA
    AA/AAS
18. **Pikes Peak Community College** Colorado Springs, CO
    AAS
19. **University of Northern Colorado** Denver, CO
    BA/BS
20. **Front Range Community College- Westminster** Westminster, CO
    AA/AAS
21. **Northwestern Connecticut Community College** Winsted, CT
    AS

22. **Gallaudet University** Washington DC
    BA/MA
23. **St. Petersburg College** Clearwater, FL
    AA/AAS
24. **Daytona Beach Community College** Daytona Beach, FL
    AA/AAS
25. **Florida Comm College at Jacksonville** Jacksonville, FL
    AA/AAS
26. **University of North Florida** Jacksonville, FL
    BA/BS
27. **Miami Dade College** Miami, FL
    AA/AAS
28. **University of South Florida** Tampa, FL
    BA/BS
29. **Hillsborough Community College** Tampa, FL
    AA/AAS
30. **Georgia Perimeter College** Clarkston, GA
    AA/AAS
31. **Kapiolani Community College** Honolulu, HI
    AA/AAS
32. **Scotts Community College** Bettendorf, IA
    AA/AAS
33. **Kirkwood Community College** Cedar Rapids, IA
    AA/AAS
34. **Iowa Western Community College** Council Bluffs IA
    AA/AAS
35. **Idaho State University** Pocatello, ID
    AA+BA
36. **John A. Logan College** Carterville, IL
    AA/AAS
37. **Columbia College Chicago** Chicago, IL
    BA/BS
38. **Illinois Central College East Peoria Campus** East Peoria, IL
    certificate
39. **Quincy University** Quincy, IL
    BA/BS
40. **Southwestern Illinois College** Belleville, IL
    AA/AAS
41. **MacMurray College** Jacksonville, IL
    AA+BA
42. **William Rainey Harper College** Palatine, IL
    certificate
43. **Waubonsee Community College** Sugar Grove, IL
    AA/AAS
44. **Goshen College** Goshen, IN
    BA/BS

45. **Indiana University Purdue University Indianapolis (IUPUI)** Indianapolis, IN
    BA/BS
46. **Vincennes University** Indianapolis, IN
    AA/AAS
47. **Bethel College** Mishawaka, IN
    AA+BA
48. **Cowley County Community** Wichita, KS
    AA/AAS
49. **Johnson County Community College** Overland Park, KS
    AA/AAS
50. **Eastern Kentucky University** Richmond, KY
    BA/BS
51. **Delgado Community College** New Orleans, LA
    AA/AAS
52. **Northeastern University** Boston, MA
    BA/BS
53. **Northern Essex Community College** Haverhill, MA
    AA/AAS
54. **The Community College of Baltimore County** Baltimore, MD
    AA/AAS
55. **University of Southern Maine** Portland, ME
    BA/BS
56. **Siena Heights University** Adrian, MI
    BA/BS
57. **Baker College of Auburn Hills** Auburn Hills, MI
    AAS
58. **Oakland Hills Community College** Bloomfield Hills, MI
    AA/AAS
59. **Mott Community College** Flint, MI
    AA/AAS
60. **Lansing Community College** Lansing, MI
    AA/AAS
61. **Madonna University** Livonia, MI
    BA/BS
62. **Baker College of Muskegon** Muskegon, MI
    AAS
63. **Baker College of Port Huron** Port Huron, MI
    AAS
64. **North Central University** Minneapolis, MN
    BA/BS
65. **College of St. Catherine** St Paul, MN
    BA/BS
66. **Minnesota Court Interpreter Program** St Paul, MN
    certificate
67. **Saint Paul College** St Paul, MN
    AA/AAS

68. **Itawamba Community College** Fulton, MO
    AA/AAS
69. **William Woods University** Fulton, MO
    BA/BS
70. **Metropolitan Community College - Maple Woods** Kansas City, MO
    AA/AAS
71. **St. Louis Community College at Florissant Valley** Ferguson, MO
    AA/AAS
72. **Mississippi Gulf Coast Comm College** Gulfport, MS
    AA/AAS
73. **Hinds Community College** Raymond, MS
    AA/AAS
74. **Gardner-Webb University** Boiling Springs, NC
    BA/BS
75. **Central Piedmont Community College** Charlotte, NC
    AA/AAS
76. **Blue Ridge Community College** Flat Rock, NC
    certificate
77. **University of North Carolina-Greensboro** Greensboro, NC
    BS
78. **Wilson Technical Community College** Wilson, NC
    certificate
79. **Lake Region State College** Devils Lake, ND
    AA/AAS
80. **Metropolitan Community College** Omaha, NE
    certificate
81. **University of New Hampshire at Manchester** Manchester, NH
    BA/BS
82. **Camden County College** Blackwood, NJ
    AA/AAS
83. **Burlington County College** Pemberton, NJ
    AA/AAS
84. **Ocean County College** Toms River, NJ
    AA/AAS
85. **Union County College** Plainfield, NJ
    AA/AAS
86. **University of New Mexico** Albuquerque, NM
    BA/BS
87. **Santa Fe Community College** Santa Fe, NM
    AA/AAS
88. **Community College of Southern Nevada** North Las Vegas, NV
    AA/AAS
89. **Corning Community College** Corning, NY
    AA/AAS
90. **Keuka College** Keuka Park, NY
    BA/BS

91. **City University of NY/LaGuardia Community College** Long Island City, NY
    BA/BS
92. **Rochester Institute of Technology/NTID** Rochester, NY
    BA/BS
93. **Suffolk County Community College** Selden, NY
    ASL/ AA/AAS
94. **Ohio University** Chillicothe, OH
    AA/AAS
95. **Cincinnati State Tech and Community College** Cincinnati, OH
    AA/AAS
96. **University of Cincinnati** Cincinnati, OH
    BS
97. **Columbus State Community College** Columbus OH
    AA/AAS
98. **Sinclair Community College** Dayton, OH
    certificate
99. **Wright State** Dayton, OH
    BA/BS
100. **Kent State University** Kent, OH
    BA/BS
101. **Washington State Community College** Marietta, OH
    AA/AAS
102. **Cuyahoga Community College Western Campus** Parma, OH
    AA/AAS
103. **East Central University** Ada, OK
    BA/BS
104. **Oklahoma State University** Oklahoma City, OK
    AA/AAS
105. **Tulsa Community College NE Campus** Tulsa, OK
106. **Western Oregon University** Monmouth, OR
    BA/BS
107. **Portland Community College** Portland, OR
    AA/AAS
108. **Mount Aloysius College** Cresson, PA
    BA/BS
109. **Community College of Philadelphia** Philadelphia, PA
    AA/AAS
110. **Bloomsburg University** Bloomsburg, PA
    BA/BS
111. **Spartanburg Community College** Spartanburg, SC
    AA/AAS
112. **Augustana College** Sioux Falls, SD
    BA/BS
113. **Chattanooga State Tech Community College** Chattanooga, TN
    AA/AAS
114. **Tennessee Temple University** Chattanooga, TN

BA/BS

115. **University of Tennessee** Knoxville, TN
BA/BS
116. **Maryville College** Maryville, TN
BA/BS
117. **Nashville State Technical Community College** Nashville, TN
AA/AAS
118. **Austin Community College** Austin TX
AA/AAS
119. **Southwest Collegiate Institute for the Deaf (SWCID)** Big Spring TX
AA/AAS
120. **Del Mar College** Corpus Christi, TX
AA/AAS
121. **El Paso Community College** El Paso, TX
AA/AAS
122. **Houston Community College** Houston, TX
AA/AAS
123. **North Harris College** Houston, TX
AA/AAS
124. **Angelina Community College** Lufkin, TX
certificate
125. **Collin County Community College** Plano, TX
AA/AAS
126. **Tyler Junior College** Tyler, TX
AA/AAS
127. **McLennan Community College** Waco, TX
AA/AAS
128. **Tarrant County College** Fort Worth, TX
AA/AAS
129. **San Antonio College** San Antonio, TX
AA/AAS
130. **Utah Valley State College** Orem, UT
BA/BS
131. **Salt Lake City Community College** Salt Lake City, UT
AA/AAS
132. **Northern Virginia Community College** Annandale, VA
AA/AAS
133. **Tidewater Community College** Chesapeake, VA
AA/AAS
134. **New River Community College** Dublin, VA
AA/AAS
135. **J. Sargeant Reynolds Community College** Richmond, VA
AA/AAS
136. **Seattle Central Community College** Seattle, WA
AA/AAS
137. **Spokane Falls Community College** Spokane, WA

AA/AAS

138. **Wenatchee Valley College** Wenatchee, WA.
AA/AAS
139. **Fox Valley Technical College** Appleton, WI
AA/AAS
140. **Milwaukee Area Technical College** Milwaukee, WI
AA/AAS
141. **North Central Technical College** Wausau, WI
AA
142. **University of Wisconsin** Milwaukee, WI
BA/BS
143. **Fairmont State Community & Technical College** Fairmont, WV
AA/AAS
144. **Sheridan College** Sheridan, WY
certificate

Appendix E

Phase Two Invitation to Participate in the Study

Director of Sign Language Interpreting Program
Street Address
City, State, Zip:

Dear Director:

I am a doctoral student under the supervision of Dr. Ted Miller in the Graduate Studies Division at The University of Tennessee, Chattanooga. I am conducting a research study on effective interpreter education programs in the United States.

Your program was chosen because it represents one of the more effective interpreting programs in the United States. With your permission, I would to contact your institution to conduct research on your interpreting education program. I would like to conduct document analysis on the following documents: course syllabi; departmental scope and sequence; departmental goals; entrance requirements; exit requirements; and fieldwork manual. I would also like to conduct an interview with a program representative. The interview should take approximately one hour to complete the interview and it can be done in two thirty-minute segments.

The decision to participate in this research project is voluntary. You do not have to participate and you can refuse to answer any questions. Even if you begin the interview process, you can stop at any time. There are no foreseeable risks or discomforts to you for taking part in this study. There are no direct benefits to you from participating in this study. However, your responses may help us learn more about the impact of effective approaches to interpreter education.

Although I will ask for your institution's name, your institution will not be identified in the final report.

Upon completion of this study, if you wish, I will be happy to furnish you with a copy of my findings.

Please feel free to contact me if you have any concerns or questions. My contact information can be found below.

Sincerely,

Lisa Godfrey
2847 West Nickajack Road
Ringgold, GA 30736
Email: lisa-godfrey@utc.edu
Home: 1-866-957-5685 (vp) /Work: 423-493-4439 (v)/Cell: 423-315-0169 (v)

Appendix F

Phase Two Interview Questions

1. In your opinion, what are the three greatest contributors to your students' success?
2. What does the average student look like?
3. What are the average class sizes and set up?
4. What types of assignments do you have in each class? (follow up to the syllabus analysis)
5. What are the Entrance Requirements of the program? (Follow up to document analysis)
6. What are the Exit Requirements of the program? (Follow up to document analysis)
7. What are the assessment milestones into, through, and at the end of the program?
8. Does the program consider the CIT Standards and if so, to what extent? (this is a follow up to the information from the Needs Assessment)
9. What is the deaf population around the institution and to what extent do the students interact with the deaf population?
10. To what extent does the local interpreting community "adopt" the IEP students?
11. What technology is available to the instructors and students? (In the classroom, and/or lab facilities)
12. What kinds of on campus activities are provided that foster language acquisition?
13. What kinds of on campus activities are provided that foster interpreting?
14. How does the program operate across the curriculum? (Processing model, evaluation techniques, demand/control schema, discourse mapping)
15. How are skills courses conducted? Is there a coherent plan from translation to consecutive to simultaneous interpreting?
16. How are skills assessed? (written, f2f, taped – How often?)

17. To what extend does the program incorporate portfolios, mentoring, fieldwork and service learning? (Follow up to document analysis)
18. What is the independence of adjunct instructors (do they follow prescribed structure?)
19. Is there an observed difference between students who begin in the program and those who transfer into the program?
20. Is there a difference between any groups of students (for example traditional versus non-traditional students)?
21. To what extent are interpreting instructors still involved in the field of interpreting as practitioners?
22. To what extent are the faculty involved in and qualified as educators? (Adult education, mentoring, teaching interpreting?) Do you feel this is important? Why or Why Not?
23. To what extent are the interpreting instructors involved with the local, state or national RID?
24. To what extent are the ASL instructors involved with ASLTA?
25. To what extent are the interpreting instructors involved with CIT?
26. Are the IEP faculty engaged in research related to ASL, Deaf Culture or Interpreting?
27. What areas of the program do you wish you could have improved to reduce the school to credential gap? What prohibits you from doing so?

Appendix G
Phase Three Survey

What is the name of your academic Institution?

What's your role in the program?

What is your education level?

Associate Level
Baccalaureate Level
Masters Level
Doctorate Level

How would you classify the student body in your IEP?
All Traditional Students (18 – 25 yrs old)
Mostly Traditional Students
Equal Balance of Traditional and Non Traditional Students
Mostly Non Traditional Students
All Non-Traditional Students

What is the average amount of time it takes your graduates to earn state credentials?
They have them Upon Graduation
Less than 6 Months
6 – 12 Months
13 – 18 Months
19 – 24 Months
More than 2 Years
We do not Track

What is the average amount of time it take your graduates to earn an EIPA rating of 3.5 – 3.9?
They have them Upon Graduation
Less than 6 Months
6 – 12 Months
13 – 18 Months
19 – 24 Months
More than 2 Years
We do not Track

What is the average amount of time it takes your graduates to earn an EIPA rating of 4.0 or Higher?
They have them Upon Graduation
Less than 6 Months
6 – 12 Months
13 – 18 Months

19 – 24 Months
More than 2 Years
We do not Track

What is the average amount of time it takes your graduates to earn national level (RID) credentials?
They have them Upon Graduation
Less than 6 Months
6 – 12 Months
13 – 18 Months
19 – 24 Months
More than 2 Years
We do not Track

To what extent do you include a discourse based approach in your IEP Instruction?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- We do Not Include It

To what extent do you believe that a discourse based approach benefits your instruction and contributes to a low graduation to credential gap?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- It does not impact the graduation to credential gap

To what extent do you include discourse analysis approach in your IEP Instruction?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- We do Not Include It

To what extent do you believe that discourse Analysis approach benefits your instruction and contributes to a low graduation to credential gap?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- It does not impact the graduation to credential gap

To what extent do you include consecutive interpreting instruction in your IEP Instruction?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- We do Not Include It

To what extent do you believe that consecutive interpreting instruction benefits your instruction and contributes to a low graduation to credential gap?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- It does not impact the graduation to credential gap

To what extent do you include transcription in your IEP Instruction?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- We do Not Include It

To what extent do you believe that transcription benefits your instruction and contributes to a low graduation to credential gap?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- It does not impact the graduation to credential gap

To what extent do you include translation in your IEP Instruction?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- We do Not Include It

To what extent do you believe that translation benefits your instruction and contributes to a low graduation to credential gap?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- It does not impact the graduation to credential gap

To what extent do you include Demand Control Schema in your IEP Instruction?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- We do Not Include It

To what extent do you believe that Demand Control Schema benefits your instruction and contributes to a low graduation to credential gap?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- It does not impact the graduation to credential gap

To what extent does your program focus on critical thinking and decision making?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- We do Not Include It

To what extent do you believe that focus on critical thinking and decision making benefits your instruction and contributes to a low graduation to credential gap?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- It does not impact the graduation to credential gap

To what extent does your program use self analysis techniques?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- We do Not Include It

What self analysis approach do you use?
To what extent do you believe that student analysis benefits your instruction and contributes to a low graduation to credential gap?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- It does not impact the graduation to credential gap

To what extent are your IEP students supported by and interact with the local interpreting community?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- We do Not Include It

To what extent do you believe support and interaction with the local interpreting community benefits your IEP instruction and contributes to a low graduation to credential gap?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- It does not impact the graduation to credential gap

Does your program have exit exams?
Yes
No
If yes, what?
To what extent do you believe that the requirement of exit requirements benefit your IEP instruction and contribute to a low graduation to credential gap?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- We do Not Include It

Does your program have entrance requirements?
Yes
No
If yes, what?
To what extent do you believe that entrance requirements benefit your IEP instruction and contribute to a low graduation to credential gap?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- We do Not Include It

What is the local deaf population in your area?
What is the deaf population at your school?
To what extent to you believe that a large local deaf population benefits your IEP instruction and contributes to a low graduation to credential gap?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- We do Not Include It

To what extent do your students have interaction with native users of ASL?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- We do Not Include It

To what extent do you believe interaction with native users of ASL benefits your IEP instruction and contributes to a low graduation to credential gap?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- It does not impact the graduation to credential gap

To what extent to you include specific instructions on preparing for state and/or national credentialing?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- We do Not Include It

To what extent do you believe that specific instruction on preparing for the state and/or national credentials benefits your IEP instruction and contributes to a low graduation to credential gap?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- It does not impact the graduation to credential gap

How would you rank the classroom facilities of your IEP?

- Excellent
- Above Average
- Adequate
- Insufficient

To what extent do you believe that the classroom facilities of your IEP benefit your IEP instruction and contribute to a low graduation to credential gap?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- It does not impact the graduation to credential gap

How would you rank the resources (books, journals, DVDs, CD ROMs, etc.) of your IEP

- Excellent
- Above Average
- Adequate
- Insufficient

To what extend do you believe that the resources (books, journals, DVDs, CD ROMs, etc.) of your IEP benefit your IEP instruction and contribute to a low graduation to credential gap?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- It does not impact the graduation to credential gap

How would you rank the interpreting laboratory facilities of your IEP?

- Excellent
- Above Average
- Adequate
- Insufficient

To what extent do you believe that the interpreting laboratory facilities of your IEP benefit your IEP instruction and contribute to a low graduation to credential gap?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- It does not impact the graduation to credential gap

How would you rank the technology of your IEP?

- Excellent
- Above Average
- Adequate

- Insufficient

To what extent do you believe that the technology of your IEP benefit your IEP instruction and contribute to a low graduation to credential gap?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- It does not impact the graduation to credential gap

To what extent do you include service learning in your IEP?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- We do Not Include It

To what extent does service learning benefit your IEP instruction and contribute to a low graduation to credential gap?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- It does not impact the graduation to credential gap

To what extent do you depend on grant funding to supplement the IEP services that you provide? (Support of personnel, technology, or resources)

- We could not survive without it
- It is very important to the program
- It is nice, but we could live without it
- We do not receive any additional grant funding

What is the minimum requirement to interpret in the community in your state? (Select all that apply)

- License – Based on academic coursework
- License – Based on credential
- State Quality Assurance
- EIPA 3.0 or higher
- EIPA 3.5 or higher
- EIPA 4.0 or higher
- National Credential – RID
- There is no minimum requirement
- Others – Please specify

What is the minimum requirement to interpret in the public school system in your state? (Select all that apply)

- License – Based on academic coursework
- License – Based on credential
- State Quality Assurance
- EIPA 3.0 or higher
- EIPA 3.5 or higher
- EIPA 4.0 or higher
- National Credential – RID
- There is no minimum requirement
- Others – Please specify

If your state has requirements for provision of interpreting services, to what extent do you feel that this benefits your IEP instruction and contributes to a low graduation to credential gap?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- It does not impact the graduation to credential gap

To what extent do you follow-up with or track your students?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- We do not track them

To what extent do you believe like follow-up or tracking of your students benefits your IEP instruction and contributes to a low graduation to credential gap?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- It does not impact the graduation to credential gap

How?

How do you stay current in the field of interpreter education? (select all that apply)

- Attend National CIT Conferences
- Attend National RID Conferences
- Attend Regional Conferences

- Attend State and Local RID Conferences
- Read Books
- Read Journals
- Other, Please Specify

Does your program have a Cohort System?

No
Yes, but by default, not by design
Yes, by design

If you have a cohort system, to what extent do you believe that a cohort system benefits your IEP instruction and contributes to a low graduation to credential gap?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- It does not impact the graduation to credential gap
- We do not have a cohort system

How?
To What extent do you include the use of portfolios in your IEP Instruction?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- We do Not Include It

To what extent do you believe the use of portfolios benefits your IEP instruction and contributes to a low graduation to credential gap?

- A Great Extent
- A Moderate Extent
- A Minimal Extent
- It does not impact the graduation to credential gap

How do you assess interpreting skills?

Are there assessments that regulate passing from year 1 to year two, or entry into practicum?

Please identify the 3 most important texts or materials used in your program:

May we contact you for more information about your program?

Your Contact Information:

Any additional contact information?

Appendix H

Phase Three Invitation to Participate in the Study

(Date)

Dear Director:

I am a doctoral student under the supervision of Dr. Ted Miller in the Graduate Studies Division at The University of Tennessee, Chattanooga. As part of my dissertation research, I am investigating effective interpreting education programs in the United States. The purpose of the study is to identify characteristics that impact the readiness to credential gap.

I am requesting your participation in a web-based survey. The estimated time to complete the survey is 15 - 20 minutes. To participate in the survey, please connect to this link.

(Link)

If the link does not automatically take you to the survey, please cut and past the link in your internet browser.

The survey closes (Date).

The decision to participate in this research project is voluntary. You do not have to participate and you can refuse to answer any questions. Even if you begin the web-based online survey you can stop at any time. There are no foreseeable risks or discomforts to you for taking part in this study. There are no direct benefits to you from participating in this study. However, your responses may help us learn more about the impact of effective approaches to interpreter education.

Your part in this study is confidential. Be assured that any reports or publications based on this research will use only group data and will not identify you or any individual as being affiliated with this project.

This research has been approved by the UTC Institutional Review Board (IRB). If you have any questions concerning the UTC IRB policies or procedures or your rights as a human subject, please contact Dr. M. D. Roblyer, IRB Committee Chair, at (423) 425-5567 or email instrb@utc.edu. If you have any questions about this study or problems with the survey, please feel free to contact Lisa Godfrey at lisa-godfrey@utc.edu, the person responsible for this research and the Principal Investigator.

By clicking on the survey link listed above you are indicating that you consent to participate in this study. Please print out a copy of this consent letter for your records.

I would like to thank you in advance for taking time out of your busy day to complete this important survey. Upon completion of this study, if you wish, I will be happy to furnish you with a copy of my findings.

Sincerely,

Lisa Godfrey

Appendix I

IRB Approval Letter

THE UNIVERSITY of TENNESSEE CHATTANOOGA

Institutional Review Board
Dept. 4905
615 McCallie Avenue
Chattanooga, TN 37403-2598
Phone: (423) 425-4443

MEMORANDUM

TO: Lisa Godfrey
Dr. Ted Miller

IRB # 10-039

FROM: Lindsay Pardue, Director of Research Integrity
M. D. Roblyer, IRB Committee Chair

DATE: March 4, 2010

SUBJECT: IRB # 10-039: Characteristics of Effective Interpreter Education Programs in the United States

The Institutional Review Board has reviewed and approved your application and assigned you the IRB number listed above. You must include the following approval statement on research materials seen by participants and used in research reports:

The Institutional Review Board of the University of Tennessee at Chattanooga (FWA00004149) has approved this research project # 10-039.

Please remember that you must complete Form C when the project is completed or provide an annual report if the project takes over one year to complete. The IRB Committee will make every effort to remind you prior to your anniversary date; however, it is your responsibility to ensure that this additional step is satisfied.

Please remember to contact the IRB Committee immediately and submit a new project proposal for review if significant changes occur in your research design or in any instruments used in conducting the study. You should also contact the IRB Committee immediately if you encounter any adverse effects during your project that pose a risk to your subjects.

For any additional information, please consult our web page http://www.utc.edu/irb or email instrb@utc.edu

Best wishes for a successful research project.

Vita

Lisa Godfrey

Education:

Ed.D.	Learning and Leadership, University of Tennessee at Chattanooga, 2010 Dissertation: Effective Practices of Interpreter Education Programs in the United States
M.S.	Career/Technical Education, Ferris State University, 1997 Thesis: A Post-Graduate Study of the Interpreting Training Program at Mott Community College 1991-1995
B.A.	English/History, University of Michigan – Flint, 1995
A.A.S.	Deaf Studies/Sign Language Interpreting, C. S. Mott Community College, 1992

Special Endorsements:

Certified Master Mentor for English and ASL Interpreters, Northeastern University, 2006
Certificate in Teaching ASL and Interpreting, University of Colorado – Boulder, 2001

Professional Certifications:

- Certificate of Transliteration – Registry of Interpreters for the Deaf
- Certificate of Interpretation – Registry of Interpreters for the Deaf
- Educational Interpreter Performance Assessment – 4.4
- Certified Instructor of American Sign Language – Qualified Level – American Sign Language Teachers Association

Professional Experience:

Tennessee Temple University – Chattanooga, TN
Chairman of Sign Language Interpreting Department - Coordinated the four-year interpreting education program, chose and developed curriculum, taught classes, advised (Residential and Distance Education Programs) – taught general education courses such as Success Orientation and English Fundamentals
1997 – 2010

Sorenson Communications – Chattanooga, TN
Video Relay Interpreter – Interpret for deaf and hard of hearing consumers in a variety of settings via video relay interpreting
2008 - Present

Mott Community College – Flint, MI
Staff Sign Language Interpreter – Interpreted classes for deaf and hard of hearing students
1993 – 1996