RETENTION OF EARLY CAREER TEACHERS ENGAGED IN MISSOURI'S CAREER EDUCATION MENTORING PROGRAM: A LONGITUDINAL STUDY

A Report

presented to

the Department of Elementary and Secondary Education

Division of Career Education

---

by

Larae Watkins, PhD
University of Central Missouri
Missouri Center for Career Education

and,

Donald G. Scott
University of Central Missouri
Missouri Center for Career Education

JULY 2008

EXECUTIVE SUMMARY

Introduction

The purpose of this study was to investigate novice career education teacher retention as it relates to participation in Missouri's CE Mentoring Program. Through the performance of this study, retention rates, both positive and negative precipitating factors, and the perceived impact the current program had on novice and returning career education teacher retention were identified.

Ongoing development, enhancement, and sustainability of the CE Mentoring Program are topics of interest for program framers, administrators and participants. While current research had identified key indicators that influence teacher satisfaction and teachers' decision to either stay or leave the teaching profession, little information regarding group retention rates and CE Mentoring Program participants' perceived experiences while engaged in the program were available. Prior to this research, the primary source of program protégé feedback regarding their experiences was gleaned through voluntary end of program surveys administered as part of the program structure. To gain a deeper insight into protégés' perceptions, personal interviews with program participants were conducted to identify connections made between program experiences and satisfaction with teaching as a career.

Methodology

To facilitate the development of quantitative and qualitative data, a multiple methods approach to research was applied to this study. The quantitative phase investigated two groups of career education teachers who participated in the CE Mentoring Program. Retention rates were established for the two groups of program

participants including those participating in the two-year program ending the spring of 2006 (Group 1) and the spring of 2007 (Group 2). Retention rates were also developed for non-Career Education teachers and career education teachers who did not participate in the CE Mentoring Program. Doing so allowed for comparisons between teachers who went through the program, and those who did not.

The qualitative phase of this study was conducted through personal interviews with 20 career education teachers who participated in the CE Mentoring Program (Groups 1 and 2). During qualitative data analysis and coding, categories and themes emerged regarding the perceived connections made by interviewed teachers between program participation and their decision to either stay or leave the teaching profession. Negative and positive precipitating factors were also discovered. The four primary categories identified included acculturation, conflicting values and beliefs, unclear expectations, and program pedagogy.

Findings and Discussion

Through quantitative data collection and analysis, the data revealed that participation in the CE Mentoring Program translated to increased new and returning career education teacher retention rates. The quantitative retention rates (percentages) for Groups 1 (95.1%) and 2 (96.8%) exceeded retention rates for both the baseline group (78.1%) and for career education teachers with first time teaching assignments for academic years 2004-2005 (62.6%) and 2005-2006 (64.4%) who did not chose the program as their option to meet state mentoring requirements. As a measure of program success, the retention rates clearly support the CE Mentoring Program as a viable means

of reducing new and returning career education teacher attrition while satisfying state mentoring requirements.

The qualitative phase of this study was conducted through personal interviews with 20 career education teachers who participated in the CE Mentoring Program (Groups 1 and 2). Through qualitative data analysis and coding, categories and themes emerged regarding the perceived connections made by interviewed teachers between program participation and their decision to either stay or leave the teaching profession. Negative and positive precipitating factors (e.g., financial considerations, childbearing, and age) were also discovered. Four primary categories emerged during analysis of the qualitative data included acculturation, conflicting values and beliefs, unclear expectations, and program pedagogy.

While mentors were identified as positive factors that assisted new career education teachers with their transition into teaching as a career (acculturation), indicators of needed program improvements were also revealed. Positive mentoring factors included a peer who provided content expertise to the mentorship experience, a peer outside of their district with whom they could confidentially confide in on sensitive issues without local repercussions, a peer who could help navigate the chasm between theory and practice, and a peer who could serve as a liaison between administrators, MODESE personnel, and student organization stakeholders. Mentoring program areas identified as needing the most improvement included measures of mentor accountability, modifications to program structure and content, and contact time with mentors.

In the conflict to reconcile new teachers' values and beliefs regarding the role they played in students' lives and teaching as a career, interviewees identified mentors as

important assets. The interview data identified needed support from mentors who could help new career education teachers understand their role in career education student organizations (CTSOs) and facilitate interaction with other teachers in their content area. Mentors also helped the interviewees create lasting relationships among state supervisors and administrators and facilitated the resolution of conflicting feelings and misperceptions. For those who also had in-district mentors, CE Mentoring Program mentors were conveyed as a primary instrument leading to success as a new teacher and were also positively connected to their decision to either stay or leave the career education teaching profession.

While unclear expectations were expressed by interviewees regarding teaching career education content, time was identified as the largest problem connected by study participants to the CE Mentoring Program. Reportedly, the required assignments and activities associated with program participation were additive to interviewees' stress levels. Reportedly, stress levels were increased when structured program requirements were combined with the perception of already being overloaded as a new teacher. Rather than adding to workloads, interviewed teachers suggested changing the emphasis of the program pedagogy from activities that require development of new materials, to a pedagogy in which exemplary examples of lesson plans, grant writing, and teaching strategies are provided. These concerns were strongly emphasized for new teachers engaged in their first year of teaching. Tangentially, more contact time with mentors was also suggested even though participants realized they were often unable to satisfy the minimum CE Mentoring Program contact visit requirements.

Overall, satisfaction with the program was high on measures of classroom usability of the information gleaned from participation. When posed with the prospect of not having the CE Mentoring Program available as an option to meet mentoring requirements, all 20 of the participants (100%) indicated a need for both the statewide and in-district programs to meet their needs as new teachers. While they indicated in-district programs were helpful with local issues, study participants identified the Missouri CE Mentoring Program as an essential provider of career education program content, expertise, and the mentorship support needed by new and returning teachers to be successful in the classroom.

Implications for Practice

The findings discovered through this research generated implications impacting the on-going administration and program structure of the Missouri CE Mentoring Program. The implications included:

1. In light of the margin of difference (over 30%) between CE Mentoring Program participant retention rates and non-participant retention rates (untouched), the findings from this study should be disseminated to all Missouri career education program stakeholders (e.g., principals, superintendents, career center directors, etc.).
2. As perceived by the protégés interviewed, steps needed to be taken to ensure mentor and protégé duties are clearly outlined, and accountability measures should be implemented for both mentors and protégés. While mentor and protégé duties and expectations are currently outlined in the *Career Education Mentoring Notebook*, no modes or measures of accountability for mentors are

delineated, leaving protégés frustrated when mentorship expectations were not met.

3. Based on the lack of clarity expressed by interviewees regarding their CE Mentoring Program expectations, a means of communicating the program structure and required activities needs to be developed and disseminated to new protégés in advance of their first statewide meeting. This information will better prepare upcoming program protégés for the time commitments and programmatic challenges they may face.
4. A need for additional mentor training based on specified objectives was strongly recommended by interviewees. Doing so would help to establish a cadre of quality mentors who possess grade level and content area expertise, and have demonstrated successful personal and teaching skills essential to the mentoring process.
5. The interview data provided support for more contact time (informal or formal) between mentors and protégés. While both *travel* and *time* were identified as factors influencing mentor and protégé availability, the data clearly indicated great value was placed on the socially interactive components of the mentoring relationship.
6. Protégé data indicated that statewide meetings are overwhelming and need to be separated by program year (first/second). Protégés expressed the greatest amount of dissatisfaction with the second year of the program due to the repetitive nature of the materials presented.

7. The data support the need for the CE Mentoring Program content at statewide meetings to be more inclusive of the specific needs of program content areas. While protégé data indicated study participants recognized the complexity of meeting the needs of *all*, interviewees asserted much of the information provided at statewide meetings had little or nothing to do with them.
8. The data suggested a need for more support versus performance during the first year of the program. Rather than having protégés *reinvent the wheel*, supplying concrete examples of approved classroom materials was identified as a better means of assisting already overwhelmed teachers in meeting classroom expectations.
9. Examples of quality program content assignments need to be collected as exemplars of best practices while establishing a resource for appropriate models of teaching and mentoring.

Recommendations for Further Research

Recommendations for future research include:

1. Retention rate comparisons clearly support the program's attempts to reduce the attrition of new and returning career education teachers. However, further research needs to be conducted to reveal specific factors contributing to a 30% difference in retention rates between CE Mentoring Program participants and non-participants.
2. Further investigation into the feasibility of expanding the scope of the CE Mentoring Program to include all new and returning CE teachers needs to be conducted. While the program may not currently be able to accommodate all

new protégés, the positive connections made between participation and retention support program expansion.

3. CE Mentoring Program retention rates and measures of program effectiveness need to be investigated longitudinally (five, seven, and ten years) to demonstrate a level of quality based on Missouri's mentoring program standards. Doing so will position the CE Mentoring Program as a viable option for future career education teachers as they satisfy state mentoring requirements.
4. Future CE Mentoring Program research should be conducted based on quantitative measures of program satisfaction delineated by traditionally and alternatively certified routes to teaching career education content.
5. Comparison data need to be collected on targeted Missouri mentoring program options based on measures of retention, program content, and program satisfaction. By identifying and reporting exemplars of program effectiveness, a potential for mentoring program improvement would be established for all programs.
6. Further comparisons should be made between the CE Mentoring Program and exemplary programs from other states (e.g., Florida, Oklahoma, North Carolina) on measures of retention, program content, and program satisfaction.
7. Additional CE Mentoring Program research differentiated by program content area should be conducted to identify unmet protégé needs and facilitate program improvement.

8. Further investigation needs to be conducted into the impact mentor quality and accountability has on protégés' satisfaction with induction programs and processes.

TABLE OF CONTENTS

Introduction

Policymakers, educators, and education stakeholders are increasingly being challenged to acknowledge staggering statistics related to teacher shortages and novice teacher retention (Berry, 2004; Billingsley, 2004; Bradley & Loadman, 2005; Brown, 2003; Dove, 2004; Hunter & Kiernan, 2005; Inman & Marlow, 2004; Johnson, Berg, & Donaldson, 2005; Johnson & Birkeland, 2003; Kajs, 2002; MCCE, 2006; Woullard & Coats, 2004). The consequences associated with these shortages may include "inadequate educational experiences for students, reduced student achievement levels, and insufficient competence levels of graduates" (Billingsley, p. 39).

While a lack of administrative support is often cited as a reason for leaving the teaching profession (Ingersoll, 2003; Johnson & Birkeland, 2003; Robertson, Hancock, & Allen, 2006), teacher retirement, student population increases, classroom policies, and attrition are also contributing to shortages (Bradley & Loadman, 2005; Darling-Hammond, 2003; Dove, 2004; Johnson et al., 2005; Kajs, 2002; Portner, 2005, Vail, 2005; Whisnant, Elliott, & Pynchon, 2005). These contributing factors bolster the perception that "in the decades to come it will be critical to attract, support, and retain an equally large or larger influx of novice teachers to meet the growth of the school-age population" (Whisnant et al., p. 2).

In light of the current emphasis on teacher attrition and shortages, teacher preparation is once again being scrutinized (Ogden, 2004). While research revealed that teacher preparation program depth positively influences teacher retention (Berry, 2004; Darling-Hammond, 2003; Dove, 2004), alternative certifications and certification by exam are being accepted in lieu of traditional college degree programs as a means of

putting bodies into classrooms (Dove). Alternatively certified teachers may bring years of experiential knowledge to the classroom; yet, Washer (2000) reported alternatively certified teachers who have not received formal teacher training may lack major skills such as “resource allocation, pedagogical skill development, and developing a peer network” (p. 133).

When speaking to the needs of beginning vocational teachers who enter teaching with no formal training, Fedorchak (2001) asserted new teachers “need a strong foundation in the pedagogy of teaching that is already obtained by the new, traditionally trained teacher” (p. 2). Persistently, alternative routes to teaching continue to be touted as innovative and “grounded in wise business and recruitment practices” (Dove, 2004, p.11); although, content expertise alone “is in no way a guarantee of classroom competence” (Ogden, 2004, p. 473).

Formal teacher education training provides future teachers with pedagogical strategies and prepares them for standards based reforms (Berry, 2004). However, in some cases the difficulties being experienced by novice teachers may be explained by university-based teacher preparation programs’ inability to adequately prepare them for a wide variety of classroom specific challenges faced during first teaching assignments (Liston, Whitcomb, & Borko, 2006; Whisnant et al., 2005). As reported by Feiman-Nemser (2003), “beginning teachers have legitimate learning needs that cannot be grasped in advance or outside the contexts of teaching” (p. 26).

In response, current new teacher retention strategies continue to focus on “support, guidance, and orientation programs—collectively known as induction—for beginning elementary and secondary teachers during the transition into their first teaching jobs”

(Smith & Ingersoll, 2004, p. 681). Nevertheless, even a well developed induction program "cannot compensate for an unhealthy school climate, a competitive teacher culture, or an inappropriate teaching assignment" (Feiman-Nemser, 2003, p. 28).

Effective induction programs operate on the assumption that beginning teachers still have preparatory needs before they enter a classroom (Fletcher & Barrett, 2004; Whisnant et al., 2005) and often consist of varying components ranging from one-day orientation seminars to long-term structured programs (Portner, 2005). Gow (2006) believed "the more structured the program, the more easily tenets can be implemented" (p. 52). In practice, one of the most significant tenets, and the dominant form of induction positively influencing novice teacher retention, is an effective mentoring program (Brown, 2003; Gow; Shank, 2005; Pitton, 2006; Smith & Ingersoll, 2004). It is important to note the terms induction and mentoring are often used synonymously, however the terms have very different meanings and cannot be used interchangeably (Cornu, 2005; Portner; Wong, 2004); "mentors are important but they are only one component of the induction program" (Portner, p. 43). While mentoring may be an essential component of an induction program, it may not be effective as a stand-alone method of preparing and supporting novice teachers (Wong).

As a structural component of in-service teacher development for novice teachers, induction programs including mentoring constitute a primary instrument leading to increased job satisfaction and the retention of novice teachers (Musanti, 2004; Whisnant et al., 2005). Teacher retention data support the assertion that mentoring programs reduce the number of inexperienced teachers entering schools (Dove, 2004; Kajs, 2002), promote the development of skilled learning communities (Smith & Ingersoll, 2004), and

further the development of highly qualified teacher novices who are prepared for the challenges of first-time teacher assignments (Fletcher & Barrett, 2004; Hunter & Kiernan, 2005). Through effective mentoring programs, the novice teachers hired today may very well represent the next generation of teachers whose successes will influence the outcomes of a complete generation of students (Wong, 2004). Consequently, the inclusion of mentoring and collaboration as structured elements of an induction program are trends that continue to expand.

To help prevent career education (CE) teacher attrition, education policymakers in Missouri have initiated requirements including a two-year mentoring program that provides support and opportunities for novice teachers. The Missouri State Board of Education regulation 5 CSR 80-850.045 Mentoring Program Standards (Missouri Department of Education and Secondary Education [MODESE], 2006b) provides standards which address the criteria recognized by Missouri education stakeholders as essential to a successful mentoring program. By implementing a well structured mentoring program, the framers of the Missouri Division of Career Education Mentoring Program for New and Returning Teachers (CE Mentoring Program) are responding proactively to the needs of novice CE teachers through initiatives "likely to increase satisfaction, enthusiasm, and engagement in the classroom and schools" (Johnson et al., 2005, p. 97).

Statement of the Problem

Despite considerable efforts to curb novice secondary career education teacher attrition through the development of structured mentoring programs and the implementation of mentoring program certification requirements, new and returning

teachers continue to leave the profession at notable rates. According to Smith and Ingersoll (2004), "high rates of teacher turnover can inhibit the development and maintenance of a learning community; in turn, lack of community in a school may have a negative impact on teacher retention, thus creating a vicious cycle" (p. 687).

As reported by administrators through Missouri's core data system, during academic year 2006-2007, over fifty per-cent of teachers have less than 10 years of teaching experience (up .2% from 2006) and teacher shortages exist in Family and Consumer Sciences and Industrial Technology (MODESE, 2007), as well as many other traditional education classrooms. However, to date, neither MODESE nor MCCE have developed a database suitable for analysis and the establishment of retention rates for program participants.

Purpose of the Study

The purpose of this study was to investigate novice career education teacher retention as it relates to participation in Missouri's CE Mentoring Program. Through the performance of this study, retention rates, both positive and negative precipitating factors, and the perceived impact the current program had on novice and returning career education teacher retention were identified.

Research Questions

The research questions for this study were designed to reveal descriptive quantitative comparison data regarding participation in the Missouri CE Mentoring Program and phenomenological qualitative data based on participants' perceptions of the CE Mentoring Program, how they made sense of their program experiences, and what

meaning they made of the experiences. The following research questions guided this study.

1. What are the program completion rates for Missouri's novice career education teachers who participated in the two-year CE Mentoring Program(s) ending the spring of 2006, and the spring of 2007?
2. How do retention rates for Missouri's CE Mentoring Program participants (completers and non-completers) for programs ending the spring of 2006 and 2007 compare with third-year retention rates for all non-Career Education teachers?
3. How do retention rates for Missouri's CE Mentoring Program completers compare with retention rates for program non-completers for the academic years 2004-05 through 2005-06 and 2005-06 through 2006-07?
4. How do retention rates for Missouri's CE Mentoring Program participants (completers and non-completers) compare with the retention rates for career education teachers who did not participate in the program (untouched) during the academic years 2004-05 through 2005-06 and 2005-06 through 2006-07?
5. What connections do Missouri CE Mentoring Program completers make between program participation and their decision to stay or leave the teaching profession?
6. What connections do Missouri CE Mentoring Program non-completers make between program participation and their decision to stay or leave the teaching profession?

7. What precipitating factors interacted with Missouri's novice career education teachers' decision to either stay or leave the teaching profession?

Limitations of the Study

This study had the following two limitations.

1. The CE Mentoring Program participation and completion data sought for this study were only available for the two-year mentoring programs ending the spring of 2006 and the spring of 2007, limiting the pool of potential study participants..
2. Protégé databases have not been updated since original entry. As a consequence, the contact information and current status of the protégés who participated in CE Mentoring Program(s) for academic years 2004-2005 through 2005-2006 and 2005-2006 through 2006-2007 was not 100 percent reliable.

Delimitation to the Study

During the course of this study, the following delimitation was discovered. Prior to conducting the study, it was proposed that completer and non-completer status would have been equally represented as qualitative research subjects. However, of the possible subjects identified by existing data as non-completers prior to conducting the study, only three subjects verified their non-completer status. Thus, making supportable comparisons between completers and non-completers was not viable.

Definition of Terms

The following terms were used throughout this study. Where appropriate, these operational definitions have been paraphrased from dictionaries, textbooks, and peer-reviewed resources.

Acculturation. For the purpose of this study, the term acculturation was operationally defined as a relative measure of the way new and returning teachers adapt to individual educational environments and come to embrace a variety of views on teaching while maintaining their own personal values.

Axial coding. For the purpose of this study, the term axial coding was operationally defined as the clustering of initial categories and themes discovered through open data coding based on causes, consequences, conditions, interactions, and strategies and processes.

Completer. For the purpose of this study, the term completer is operationally defined as a Missouri CE Mentoring Program protégé who attended all of the required meetings and completed all of the assigned program tasks.

First-year teacher. Teachers who are currently engaged in their first-year of teaching elementary and/or secondary education (Smith & Ingersoll, 2004).

Induction. A comprehensive, coherent, and sustained professional development process organized to train, support, and retain novice teachers while seamlessly guiding them into a lifelong learning process (Portner, 2005).

Mentor. For the purpose of this study, mentor was operationally defined as an experienced teacher from the profession who communicates, collaborates, exchanges

ideas/strategies, provides encouragement to protégés, and consults with content experts when additional expertise is needed to buttress the mentor/protégé relationship.

Mentoring. A formal process whereby a more experienced person (mentor) is able to provide support and give advice to a less experienced colleague (mentee/protégé) for the purpose of professional growth (Cornu, 2005).

Missouri School Improvement Program (MSIP). For the purpose of this study, MSIP was operationally defined as the agency responsible for reviewing and accrediting the 524 school districts in Missouri within a five-year review cycle which is mandated by state law.

New teacher. For the purpose of this study, new teacher was operationally defined as a new secondary education teacher engaged in the first, second, or third year of teaching.

Non-career education teacher. For the purpose of this study, the term non-career education teacher was operationally defined as any teacher in Missouri who does not teach career education program content.

Non-completer. For the purpose of this study, the term non-completer was operationally defined as a Missouri CE Mentoring Program protégé who has not met all of the programs assigned tasks and requirements.

Professional development. "Teachers working together over time to deepen their knowledge, improve their craft and transform schooling for their students and themselves" (Lieberman & Miller, 2001, p. viii).

Qualified teacher. For the purpose of this study, the term qualified teacher was operationally defined as a teacher who possesses the content knowledge and full certification in a given subject area.

Retention. For the purpose of this study, the term retention was defined as those teachers who participated in the two-year CE Mentoring Program and held a current teaching assignment the year following the programs' end during academic years 2005-2006 and 2006-2007.

Turnover. The departure of teachers from their professional teaching jobs (Ingersoll, 2001).

Untouched. For the purpose of this study, untouched was operationally defined as all career education teachers who did not select the Missouri CE Mentoring Program as their preferred option to meet state mentoring requirements.

Zone of Proximal Development (ZPD). "Distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978, p. 86).

Methodology

Researching the influence mentoring programs has on the retention of novice career education teachers is possible through a variety of methodologies. Consistent with Johnson and Onwuegbuzie (2004), a multiple methods approach to research (inclusion of a quantitative phase and a qualitative phase in an overall research process) was selected as the best mode to thoroughly investigate different phases of this study.

The multiple methods approach to research allowed for comparisons between mentoring program participation, program completion and non-completion, and retention rates, while conducting a qualitative inquiry into factors underpinning novice teachers' decisions to either stay or leave the profession. To address ethical considerations prior to data collection, the research proposal for this study was submitted to, and approved by, the University of Missouri Institutional Review Board (IRB). All study participants were informed of their rights as human subject participants in research and required to sign informed consent forms (see Appendix A) which were retained by the researcher.

Population and Sample

This study focused on two distinct populations of Missouri teachers. Populations included: (a) all Missouri career education teachers, and (b) all Missouri non-Career Education teachers in a given year. For the quantitative phase of this study, the retention rate for all third-year non-Career Education teachers in Missouri who entered the profession in academic year 2005-06 (n=1,328) and returned to teaching for academic year 2007-08 was used as a comparison group to which other career education teacher populations were compared.

Sampled group retention rates for the Missouri career education teacher population were developed based on three groups. Group 1 consisted of career education teachers who participated in and met all of the mentoring program requirements (completers), and career education teachers who participated in but left the mentoring program prior to completion (non-completers) during academic years 2004-05 through 2005-06. Group 2 consisted of career education teachers who participated in and met all of the mentoring program requirements (completers), and career education teachers who

participated in but left the mentoring program prior to completion (non-completers) during academic years 2005-06 through 2006-07. Group 3 consisted of all career education teachers for the academic years 2004-05 through 2005-06 and 2005-06 through 2006-07 who did not participate (untouched) in the CE Mentoring Program.

Sample selection criteria. The sample(s) for the quantitative phase of this study included all CE Mentoring Program participants (completers and non-completers) who participated in the CE Mentoring program during academic years 2004-05 through 2005-06 (n=102), and 2005-06 through 2006-07 (n=126). The actual sample size for each Group was determined by the overall size of the CE Mentoring Program participating population.

Group 1 completers and non-completers participated in the CE Mentoring Program during academic years 2004-05 and 2005-06. Retention rates for Group 1 were based on their return to teaching for academic year 2006-07, following conclusion of the mentoring program ending the spring of 2006. Group 2 completers and non-completers participated in the mentoring program during academic years 2005-06 and 2006-07. Retention rates for Group 2 were based on their return to teaching for academic year 2007-08, following conclusion of the mentoring program ending the spring of 2007. Retention rates for those career education teachers who did not participate in the mentoring program (Group 3) were also analyzed for the academic years 2004-05 through 2005-06 and 2005-06 through 2006-07 to make comparisons between CE Mentoring Program participants and non-participants.

For the qualitative phase of the study, a purposeful sample of program completers and non-completers were selected for personal interviews to meet practical study

requirements. The sample was purposeful in that the pool of potential candidates represented the range of people and sites who reflect the widest variation of the larger population under study (Seidman, 2006).

Purposeful sample participants were identified, located, and selected from the data pool provided by MODESE based on: (a) participation in either the CE Mentoring Program ending the spring of 2006, or the program ending the spring of 2007; (b) state regional representation; (c) career education program area (e.g., Health Sciences Education, Agriculture Education, Trade & Industrial Education, Technology Education, Business Education, Marketing Education, and Family and Consumer Sciences Education); and (d) the ability to participate in interviews within established timelines.

To create the pool of interview participants upon which study participants were drawn, an electronic call for participation letter (see Appendix B) was sent to all potential candidates. MODESE core data personnel provided email addresses and phone numbers for potential study subjects. The electronic call for participation letter was distributed to all career education teachers who participated in the CE Mentoring Program during the academic years 2004-05 through 2005-06 and 2005-06 through 2006-07. The letter contained a short background of the study, an explanation regarding the participant selection process that would be applied, a description of the potential benefits incurred by participating in the study, and a link for candidates to use to indicate they wished to be added to the pool of interview participants.

Accessing the link guided potential candidates to a Web-page that asked for updated contact information, their career education program area, and provided more information about the study (see Appendix C). Once the updated information was

submitted, the candidate was added to the pool of potential interview participants. As appropriate, additional measures (i.e., personal phone calls) were made to ensure adequate program area and study participant status (i.e., completer, non-completer) representation in the pool of potential interview participants.

Achieving an acceptable measure of program content area representation required the aggregate pool of study volunteers be divided into subsets based on CE program area. Once divided into subsets, a purposive sample of twenty (n=20) research subjects were selected as participants to ensure program content area and statewide regional representation.

Research Design

The overall approach to this study was multiple methods. Quantitative data were used to develop a baseline retention rate for all Missouri non-Career Education teachers engaged in their third year of teaching. The baseline retention rate was then compared to Groups 1, 2, and 3. Through the quantitative data collection and analysis process, this study also identified whether program participant retention rates were comparable to the retention rates for non-Career Education teachers, and those CE teachers who did not select the CE Mentoring Program as their option to meet state mentoring requirements.

The qualitative phase of this study explored how participation in Missouri's Division of Career Education Mentoring Program for New and Returning Teachers impacted program participants' decisions to either stay in or leave the teaching profession. The data analysis and subsequent findings revealed by this study helped identify substantive theories and integrated frameworks (Merriam, 1998).

Applying a multiple methods approach to research that incorporated quantitative modes of inquiry used to produce the empirical and descriptive data (quantitative phase), and qualitative data collection and analysis methods based on sociocultural theory (qualitative phase), was determined the most suitable approach to producing the phenomenological data sought by this investigation. While the quantitative phase of this study established the basis for this study, it was the qualitative methods that revealed the primary tenets of successful mentoring programs that influence teacher job satisfaction.

Multiple Methods Overview

Consistent with Patton (1997), at the design stage, a multiple methods approach to research was applied to this study to "fit together the insights provided by qualitative and quantitative research into a workable solution" (Johnson & Onwuegbuzie, 2004, p. 16). Applying quantitative and qualitative research methods allowed for comparisons between program participant and non-program participant retention rates while revealing factors that influenced novice teachers' decision to continue in the profession.

The qualitative aspects of this study were designed to reveal the CE Mentoring Program's effectiveness regarding the retention of program participants. Conducting this study allowed for comparisons between various participant samples (i.e., completers, non-completers, untouched) in reference to program participation and increases in new teacher job satisfaction indicators. Through comparison of document reviews, survey self-report data, and personal conversations with protégés, this research provided a lens leading to a deeper understanding of the "descriptive accounts, category construction, and theory building" (Merriam, 1998, p. 178). By allowing study participants to tell their *stories* through interviews, they revealed details about their personal mentoring program

experiences though a “meaning-making process” (Seidman, 2006, p. 7). Analysis of the qualitative phase data provided by new and returning career education teachers helped to validate substantive theories while promoting dialogue, discussion, and additional mentoring program research (Heppner & Heppner, 2004).

Quantitative Data Collection and Analysis

The primary emphasis of the quantitative phase of the study was to develop descriptive statistics based on the analysis of historical data (Field, 2005; Heppner & Heppner, 2004). Conducting this phase required the investigation of Missouri’s career education teachers retention rates through methods designed to answer research questions one through four, quantitative data collection and analysis methods were used to develop retention rate data (percentages) and make comparisons between CE Mentoring Program participation (completers and non-completers), and career education teachers who did not participate in the program (untouched).

To make comparisons, MODESE core data personnel provided a longitudinal dataset that revealed the current status of career education teachers who participated in the program during the years 2004-05 through 2005-06 and 2005-06 through 2006-07. Program participant retention rates and how those rates compared with rates for non-Career Education teachers entering their third year of teaching (baseline) were then calculated.

Quantitative Data Analysis

The quantitative phase of this research required investigation of retention rates through methods suitable for the production of precise deductive data. To make comparisons between CE Mentoring Program participation and retention, the data

collected were disaggregated by program participation (completers and non-completers), and those career education teachers who did not participate in the program (untouched). Teachers who participated in the program were considered retained if they were identified as having a current education assignment in MODESE core data the year following the two-year mentoring program's end.

Qualitative Data Collection and Analysis

To answer questions five through seven of this study, the qualitative phase included collecting self-response data developed through personal interviews. Personal interviews were selected as the most appropriate means of "understanding the lived experience of other people and the meaning they make of that experience" (Seidman, 2006, p. 9), while building theories applicable to the social learning process.

Personal interviews were conducted with career education teachers (completers and non-completers) who participated in the two-year CE Mentoring Program. While interviewing only completers may have provided valuable feedback, without similar outcome data collected from both completers and non-completers, unambiguous conclusions about the value added by the program, or a lack thereof, would have been difficult to make (Smith & Ingersoll, 2004).

Program participants' backgrounds, perceptions of teaching, reasons for selecting the CE Mentoring Program as their mode of meeting state mentoring requirements, and perceptual evidence of program effectiveness were revealed by collecting participant level data. Consistent with Kruger and Casey (2000), the personal interviews were scheduled to last no more than one hour and interview scheduling was based on participant convenience. Interviews were conducted at locations identified by each

participant including unoccupied classrooms, personal residences, unused office spaces, and the researcher's private office.

The personal interviews (n = 20) were conducted between April 4 and April 22, 2008. The career education teachers interviewed (15 females and 5 males) were selected from a list of 53 career education teachers who voluntarily registered as potential study participants. The CE program areas represented included: Agriculture Education (n = 3), Business Education (n = 4), Family and Consumer Sciences Education (n = 3), Health Sciences Education (n = 2), Marketing Education (n = 3), Trade and Industrial Education (n = 4), and Technology Education (n = 1) (See Table 1).

Table 1

Program Content Areas Represented (n=20)

Content Area	Count
Agriculture Education	3
Business Education	4
Family and Consumer Sciences Education	3
Health Sciences Education	2
Marketing Education	3
Trade and Industrial education	4
Technology Education	1

Ten of the participants entered teaching though traditional teacher education and certification routes while the remaining ten participants were alternatively certified. Seventeen of the participants indicated they had completed all requirements of the CE Mentoring Program (completers), while three identified themselves as non-completers. The interviewed participants represented five major regions of Missouri: (a) northwestern

(*n* =3); (b) northeastern (*n* = 4); (c) central (*n* = 5); (d) southwestern (*n* = 4); and (e) southeastern (*n* = 4) (See Table 2).

Table 2

Participant Demographics (*n*=20)

Characteristics	Count
Alternative Certification Route	10
Traditional Certification Route	10
Program Completers	17
Program Non-Completers	3
Northwestern Region	3
Northeastern Region	4
Central Region	5
Southwestern Region	4
Southeastern Region	4

Prior to beginning each interview, all study participants were informed of their rights as a human subject in research and provided time to review and ask questions regarding the informed consent form. For each interview, the researcher retained a paper copy of the informed consent form, and recorded verbal consent for the interview process to be recorded. Digital audio files were collected, professionally transcribed, and converted to Microsoft Word® files suitable for analysis.

The interview process was guided by a semi-structured interview protocol (See Appendix D). The protocol consisted of general questions that identified participant demographics (e.g., years teaching, content area, courses taught, etc.), and was designed to reveal a deeper understanding of the participants personal thoughts, perceptions, and CE Mentoring Program experiences. While the protocol provided a guide for the interview process, it did not restrict the participants from deviating from the questions

and providing information they felt needed to be included in the data. Given the freedom for participants to engage in open conversation, interview times varied between 38 and 77 minutes.

Qualitative Data Analysis

The Word files were uploaded into commercially available software (WordStat 5.1 and QDA Miner) for data coding and further analysis to identify emergent categories and themes. Ensuring credibility of the data required a two-part coding system, open and axial, which were used to sort and assign unique identifiers to the data making them easily manageable during the analysis process (Merriam, 1998). Open coding involved the examination of minute sections of text made up of individual words, phrases, and sentences that allowed for the identification of categories, properties, and dimensional locations (Strauss & Corbin, 1990).

Once the aggregate data were broken out through the open coding process, identified categories and themes were labeled and then reassembled to connect emerging themes while conceptualizing the phenomena they represented (Heppner & Heppner, 2004). This paradigm provided an organizing mechanism to connect identified data subcategories to a central phenomenon while helping the researcher systematically analyze data and pose questions about relationships between data categories and subcategories (Heppner & Heppner). To further ensure the trustworthiness of the themes identified, the data were triangulated using historical CE Mentoring Program protégé survey response data.

Summary of Findings and Recommendations

As a baseline for comparison, raw data were collected from MODESE's core data division regarding the retention of all non-Career Education teachers who began their teaching career in academic year 2004-2005 (n = 1328). Of the 1328 non-Career Education teachers identified, 1037 had an education assignment for academic year 2006-2007, equating to a retention rate of 78.1% (Baseline).

Retention for the CE Mentoring Program participant groups was calculated from data indicating they possessed at least a part-time educational assignment the year following completion of the CE Mentoring Program. While the focus of this study was career education teachers, individuals with administrative educational assignments were also considered retained. The quantitative phase of this study provided answers for research questions one through four.

Summary of quantitative findings. With regards to CE Mentoring Program completion (Research Question 1), 95 of the 102 CE Mentoring Program participants for the program ending the spring of 2006 were considered program completers (93.1%). One hundred and seventeen of 126 CE Mentoring Program participants for the program ending the spring of 2007 were considered program completers (92.9%). When compared, the margin of difference between program completers for the two groups was .2%.

With regards to making comparisons between CE Mentoring Program participant retention rates and non-Career Education teacher (baseline) retention rates (Research Question 2), the program completers retention rate for the CE Mentoring Program ending the spring of 2006 (95.1%) revealed a 17.0% increase above baseline (78.1%). The

retention rate for the CE Mentoring Program ending the spring of 2007 (96.8%) revealed an 18.7% increase above baseline.

With regards to comparisons between retention rates for program completers and non-completers (Research Question 3), 89 of the 95 program completers for the CE Mentoring Program ending the spring of 2006 were identified as having an educational assignment the year following completion of the program (93.7%). One hundred thirteen of the 117 program completers for the CE Mentoring Program ending the spring of 2007 were identified as having an educational assignment the year following completion of the program (96.6%). One-hundred percent (100%) of program non-completers for Groups 1 (7) and 2 (9) had an educational assignment the year following the end of the program in which they were a participant.

With regards to comparisons between CE Mentoring Program participants and CE teacher non-participants (Research Question 4), 82 of the 131 Missouri first year CE teachers (62.6%) during academic year 2004-2005 who opted not to go to the CE Mentoring Program (untouched) were retained through academic year 2006-2007. This represents a difference of 15.5% below baseline (78.1%) and a difference of 32.5% below CE Mentoring Program participants (95.1%). Ninety-seven of the 146 Missouri first year CE teachers (66.4%) during academic year 2005-2006, who opted not to go to the CE Mentoring Program, were retained through 2007-2008. This represents a difference of 13.7% below baseline and a difference of 32.4% below CE Mentoring program participants (96.8%). Interestingly, the difference between rates for the 2006 group and those untouched for 2006 (32.5%), and the difference noted between groups for 2007 (32.4), was only .1% (See Table 3).

Notably, all of the career education teachers who did not complete the program requirements (non-completers) for Groups 1 and 2 went on to satisfy state mentoring requirements through other options and had teaching assignments at the time of this investigation. Despite differing variables (number of attendees, program areas represented, structured activities, etc.), the difference between participant retention rates and non-participant retention rates for Group 1 (32.5%) and Group 2 (32.4%) remained relatively constant (.1%) over the two-year period.

Table 3

Retention Rate Comparison

Groups	Retention	Comparison
*Baseline	78.1%	0.0%
**Spring 2006	95.1%	+17.0%
**Spring 2007	96.8%	+18.7%
Completers 2006	93.7%	+15.6%
Completers 2007	96.6%	+18.5%
Non-completers 2006	100%	+21.9%
Non-completers 2007	100%	+21.9%
Untouched 2006	62.6%	-15.5%
Untouched 2007	64.4%	-13.7%

**Baseline is 2004-2005 first-year Missouri non-Career Education teachers.*
***Includes all program participants (completers and non-completers)*

Summary of qualitative findings. With regards to the connections made by program completers between program participation and their decision to either stay or leave the teaching profession (Research Question 5), interviewed CE Mentoring Program completers (n =17) asserted that program participation helped them become acculturated to the teaching environment while easing their feelings of isolation. Consistent with Berry (2004), Darling-Hammond (2003), and Dove, (2004), interview data revealed the

depth of the mentoring program did provide needed insight into teaching career education course content while helping those interviewed make the transition from academia and industry to professional teaching environments.

As proposed by Smith and Ingersoll (2004), having a mentor from the same program content area had a notable impact on career education teacher turnover. While time, workload, extracurricular activities, and administrative support were pointed out as workplace stressors, the interview data identified mentor support as an essential element in addressing these interpersonal and environmental challenges. Thus, through reinforcement of cultural values and the creation of an environment of collegiality and professionalism (Hunter & Kiernan, 2005; Whisnant et al., 2005), CE Mentoring Program participation was positively connected by interviewees to being further prepared for their first time teaching assignments (Fletcher & Barrett, 2004; Hunter & Kiernan), while increasing levels of satisfaction with teaching as a career. These factors are central to the difference between CE Mentoring Program participant rates which exceeded non-program participant rates by over thirty percent (30%).

With regards to the connections made by program non-completers between program participation and their decision to either stay or leave the teaching profession (Research Question 6), from the limited number of non-completers who participated in the CE Mentoring Program (Group 1 and 2) and volunteered as study participants (n =3), those interviewed revealed no notable variations from the responses provided by program participants. Consistent with Darling-Hammond (2003) and Ingersoll (2001) the interview data identified commonly recognized factors contributing to teachers' decision to leave the profession as emotional turbulence, migration, and family related decisions.

Ideally, completers and non-completers would have been equally represented during this study. However, as acknowledged in the study delimitations, the ability to identify and contact an appropriate number of non-completer subjects was confounded by conflicting and invalid data. The interview data developed through this research did reveal that non-completers for Groups 1 and 2 made no substantive connections to the CE Mentoring Program regarding their satisfaction, or lack thereof, with teaching as a career. The interviewees who had left the teaching profession reportedly did so out of personal motivations (i.e., childbearing and relocation), that were in no way a reflection of their CE Mentoring Program experience.

With regards to how precipitating factors interacted with career education teachers' decision to stay or leave the teaching profession (Research Question 7), factors most often connected by interviewees included initial teacher education preparation, personal images of teaching as a profession, intrinsic motivations, financial concerns, time management, and work overload. The interview data supported assertions by Liston et al. (2006) and Woullard and Coates (2004) in that study participants expressed unclear expectations as to what teaching career education program content would entail. Their preconceived notions of what being a teacher would be like (workload, time commitments, and required extracurricular activities) often conflicted with the realities they experienced once they were in the classroom.

As with Nieto (2003), the interview data revealed career education teachers enter the profession for a wide variety of reasons (e.g., divine intervention, accident, and unexpected events). The interviewed teachers recognized their need for additional training and overwhelmingly supported continuation of the content specific help being

provided by CE Mentoring Program mentors. Despite the additive components of the program (i.e., required assignments, travel, and meetings) and misconceptions as to program content (interviewed teachers really didn't know what to expect) the interview data clearly established a need for the program, especially when posed with the possibility of losing the program in lieu of having only in-district mentoring programs.

Consistent with Wong (2004), by discovering the factors that were instrumental to interviewees satisfaction and connected to retention, successful CE Mentoring Program structures were identified and may be further developed as a means of helping new career education teachers to continue teaching and improving. The findings also provided needed insight into the CE Mentoring Program structure mentorship practices as they attempt to adhere to new regulatory mandates. Further details of the perceived impact participation in the CE Mentoring Program had on participants are presented by categories (acculturation, conflicting values and beliefs, unclear expectations, and program pedagogy) and themes (program satisfaction, mentor pairing, and program structure) as follows.

Acculturation

Whether traditionally or alternatively certified, becoming acculturated to the teaching environment offered a wide variety of diverse challenges for the career education teachers interviewed for this study. The interview data produced were consistent with the literature reviewed (Greene & Puetzer, 2002; Inman & Marlow, 2004; Robertson et al., 2006) in that perceptions of the amount of time required to effectively manage a new teacher's workload were identified by 19 of the 20 teachers interviewed (95%) as one of their greatest challenges. Since classroom responsibilities are a factor

often connected to novice teachers' time commitments (Ennis-Cole & Lawhon, 2004), becoming acculturated to their workload often translated to accommodating unexpected and required extracurricular activities for the teachers interviewed.

Consistent with prior research (Ingersoll & Smith, 2003; Kilburg & Hancock, 2006; Van Houtte, 2006), 16 of the 20 teachers interviewed (80%) connected emotional and administrative support with their ability to become acculturated to teaching environments. Specifically, administrative support emerged as an issue for three of the alternatively certified teachers (30%) and one traditionally certified teacher (5%) who participated in the study. While the overall perception of administrative support was positive, the emotional support needed by some participants was reportedly lacking.

As proposed by Eraut (2004), Pitton (2006), the mentorship experiences reported by interviewees revealed that much of their learning as new teachers emerged from reflective dialogue and conversation with mentors. It was the socially constructed aspects of the CE Mentoring Program that contributed to the acculturation of new teachers to the profession by providing them with the information and support needed to improve their teaching skills and understanding of pedagogical practices.

The interview data identified the social aspects of mentorship through negotiated meaning as an important part of the program (Carroll, 2006). Reportedly, participation in the CE Mentoring Program helped new career education teachers acculturate themselves to the teaching environment and guided them during this period of identity formation (Shank, 2005). Since social interaction is the basis for development and learning (Van Huizen, Van Oers, & Wubbels, 2005; Thorne, 2005; Walqui, 2006), these elements of the

CE Mentoring Program structure provided instrumental opportunities for interaction between mentors and protégés connected by interviewed teachers to retention.

As with Clarke, Power, & Hine (2002), and Rix & Gold (2000), the language used during conversations between mentors and protégés was identified by the interviewed teachers as instrumental to the acculturation process. This level of support was a key factor in helping new teachers learn the *language* of education, developing program content, and achieving more confidence in the classroom. Consistent with Thorne (2005), the CE Mentoring Program structure constituted a framework through which social contexts including program participants' values and beliefs were investigated during this research.

Conflicting Values and Beliefs

Conflicting values and beliefs emerged as a category primarily through the personal visions of teaching expressed by participants and their reasons for staying in teaching despite considerable challenges. Fifty percent (50%) of the teachers interviewed were traditionally certified; yet, only 25% of the teachers interviewed indicated they had an informed concept of teaching prior to beginning their first year. Thus, both traditionally and alternatively certified teachers alluded to the potential for misplaced beliefs about teaching as a profession.

While new teachers entering the profession have expectations their judgment will be respected and they will be treated as professionals (Inman & Marlow, 2004; Vail, 2005), the data produced by this study revealed the interviewed teachers believed the "teaching profession doesn't get the respect deserved" (Case 4), or the recognition warranted by their efforts. Since data supported the assertion that personal views of

teaching as a profession influenced new teachers' motives for entering the profession (Van Huizen et al., 2005), the visions expressed by interviewees were instrumental to identifying the intrinsic rewards that motivated them while leading to a better understanding of the support needed by new career education teachers.

As with Billingsley (2004), study participants also made connections between personal finances and their perceptions of teaching as a career. The data were also consistent with Johnson et al. (2005) who believed that intrinsic rewards were of more importance to teachers than extrinsic rewards. During this study, in the interaction between extrinsic and intrinsic rewards experienced through teaching, teachers identified intrinsic rewards most often as the factor that tipped the scales in the conflict between career and financial needs, "I know in a *hokey* way, I think I really make a difference" (Case 9). Personal visions of the role they would play in students' lives was also identified as a precipitating factor positively connected to retention. Yet, the intrinsic values associated with working with students did not always supersede extrinsic factors (e.g., financial, administrative support and parental support), "I am married with two kids and now work more time for less pay because I spend my weekends at the school or grading papers at home" (Case 1).

Consistent with Inman and Marlow (2004), in their struggle to reconcile the realities of teaching with preconceived beliefs, the interview data indicated that mentors played an important role in helping new career education teachers interpret their feelings. During the first years of teaching, the new teachers interviewed expressed conflicting feelings regarding their ability to teach and being overwhelmed by what they were expected to know and be able to do in the classroom. As proposed by Erickson (2004),

these unresolved conflicts led to expressions of frustration and hurt feelings from the teachers interviewed.

Reportedly, mentors were able to assist protégés by providing strategies and materials that helped them manage workloads in the form of extracurricular activities, classroom prep-time, and additional professional development requirements (hoops), which were all factors cited by interviewees as primary contributors to added stress. Consistent with Lach and Goodwin (2002), the interview data supported the assertion that assistance in this form helped them reconcile what was being expected of them. By supporting protégés as they address interpersonal and environmental challenges, the data indicated the majority of interviewees were satisfied with the CE Mentoring Program and their mentor's assistance as they helped to create an environment of professionalism through the reinforcement of cultural values (Hunter & Kiernan, 2005; Whisnant et al., 2005).

Unclear Expectations

As a category, nearly all of the study participants expressed unclear expectations regarding the CE Mentoring Program. When asked what they expected the CE Mentoring Program to be, ten of 20 study participants (50%) indicated they did not know what to expect. "At the beginning, I wasn't really quite sure what to expect" (Case 5). Since well-structured mentoring programs are considered crucial to addressing attrition (Ingersoll & Smith; Greene & Puetzer, 2002), aligning the mentoring program with new teachers' expectations helps to convey a concept of professionalism through reinforcement of cultural values (Hunter & Kiernan, 2005; Whisnant et al., 2005). When asked whether the program met their mentorship expectations, 19 of 20 interviewees (95%) indicated they

had no preconceived idea of what to expect from the program. Despite indications that program expectations were unclear, six of 20 study participants (30%) reported that program expectations were unmet; “I really didn't get the kind of depth and content support I was hoping for” (Case 8).

The findings from this study align with Robertson et al. (2006), who proposed that many new teachers formulate theories about teaching based on false expectations. Consistent with Whisnant et al. (2005), who believed beginning teachers are often greeted by a “world of keen expectations and challenging conditions” (p. 24), the career education teachers interviewed expected recognition and acknowledgment from co-workers, administrators, and parents. When these expectations were not met, value conflicts (Marshall & Gerstl-Pepin, 2005), whether covert or overt (Bolman & Deal, 2003; Morgan, 1997), arose which were reported as sources of frustration and stress:

> I don't want to do an advisory committee and all these other things. I have no intentions of being a program director. I don't want to be principal or superintendent of a school someday. I have no desire to do that. I don't want to coach four sports. I want to be in the classroom and I want to go home. (Case 4)

Since the expectations for novice teachers who may be performing in isolation (Cornu, 2005; Giles & Wilson, 2004; Vail, 2005) may equal or exceed the expectations for experienced teachers (Fletcher & Barrett, 2004), the support provided through participation in the CE Mentoring Program was clearly indicated by interviewees as a factor connected to the retention of new career education teachers:

> Because of the mentoring program, [teachers] go over what is due all the time. We are told what contests are coming up, what meetings we had to go to, why it's important to get involved in extracurricular things like that. I think that extra level of support is crucial to the success of new teachers because there are not a lot of new teachers coming out in our program area

> anyway. If our numbers drop even more, it's going to really impact us in a negative way. (Case 7)

Program Pedagogy

Fundamental questions exist as to the value of mentoring program content (Ingersoll & Smith, 2004) and the additive value of mentoring programs as perceived by policymakers whose focus is the retention of new and returning teachers. The findings revealed by this study indicated the CE Mentoring Program framers have created a supportive environment in which increases in retention have been achieved. As a primary instrument leading to increased job-satisfaction and retention (Musanti, 2004; Whisnant et al., 2005), the structural components of the CE Mentoring Program were designed to provide positive activities and support for new career education teachers. Yet, the data revealed that interviewees expressed both positive and negative comments regarding their experiences at the statewide meetings. Thirteen of 19 study participants (68%) expressed they benefited from the meetings while one program participant (5%) reportedly did not attend either of the required statewide meetings.

Consistent with Gow (2006), Missouri's CE Mentoring Program framework was developed to provide the skills, content, and habits of mind that are essential to being a successful teacher. Despite initial indications that interviewees thought the program and their mentors helped them to achieve a greater level of teaching expertise, they also expressed dissatisfaction with the statewide meetings. "I guess I felt the meetings were a waste of my time" (Case 1); "The way the meetings were run was very upsetting" (Case 11).

When asked about the additive value of the CE Mentoring Program, 16 of 20 interviewed teachers (80%) expressed satisfaction with their program experience.

However dissatisfaction emerged in several forms. Interviewed teachers indicated they needed help with getting students into their programs, they felt that mentor pairing was not appropriate, and the program content was not meaningful. While the inherent flexibility of the program content was noted as a positive; for some, “The assignments seemed like a paperwork exercise to me” (Case 8), and “the things we did seemed like and may have been busywork” (Case 13).

Since beginning teachers need appropriate information about their profession (Harrison, Lawson, & Wortley, 2005; Musanti, 2004; Rix & Gold, 2000), pairing novice teachers with qualified content specific mentors constitutes a major structural component of mentoring programs (Fletcher & Barrett; 2004; Kajs, 2002; Portner, 2005). Thus, appropriately pairing mentors and protégés by content area is essential to creating a successful learning team (MCCE, 2006) that meets the unique challenges posed by teaching career education courses.

The efforts taken by CE Mentoring Program administrators to appropriately pair mentors and protégés was reported as successful by seventeen (17) of the twenty (20) teachers interviewed (85%). The three (3) participants who indicated dissatisfaction reported “I really didn’t get the kind of content depth and support from my mentor that I was hoping for” (Case 19); “Instead of my [CE] mentoring being helpful, I found it a stressful situation and actually found the other seasoned teachers [in my building] much more helpful” (Case 15), and “[mentor pairing] was not that effective” (Case 18).

Carroll (2006) believed the accountability of mentors is a by-product of negotiating mentorship in practice, while the multiple responsibilities required of mentors necessitate appropriate training to prepare them to engage in reflective practices

(Harrison et al., 2005; Shulman & Sato, 2006). The CE Mentoring Program *Mentoring Notebook* specifies the expected responsibilities to be fulfilled by all program administrators and participants. Yet, seven of 20 interviewees (35%) expressed concerns with measures of mentor accountability. Primarily, concerns were expressed in the form of mentor training and meeting required contact requirements. “There needs to be more accountability…neither of my mentors ever came here” (Case 16). “I don’t think the mentors are even told what the expectations are” (Case 4). “I never had my one-on-one meetings” (Case 1). “If you say you are going to be a mentor, then be a mentor and make sure that you are living up to what you are supposed to do” (Case 17).

The structured mentoring experiences built into the two-year CE Mentoring Program are based on content area program standards, individual classroom situations, and the needs, strengths, and prior experiences of protégés (MCCE, 2006). However, due to the inherent diversity in content area (e.g., Agriculture Education, Trade and Industrial Education, Health Sciences Education, etc.) and varied routes to teaching (traditional and alternatively certified), framing a program to meet the needs of all protégés is complex. The interview data revealed that through cooperative interactions and the negotiation of shared meanings in social contexts (Musanti, 2004) through mentorship, CE Mentoring Program mentors continue to provide information instrumental to developing the skills identified as essential for protégés. Yet, measures of program improvement were also recommended.

Program Connections

Ingersoll (2004) believed the development and maintenance of learning communities positively impacts new teacher retention. As part of a learning community

organized around the CE Mentoring Program, participants were afforded structured experiences that included reflective dialogue and conversation with mentors. Through these experiences, protégés were exposed to a wider network of teachers from their content area from throughout Missouri. “I found I had support from people all over Missouri that taught the same subjects as I did” (Case 1).

Consistent with Walqui (2006), acculturation to teaching was enhanced by engaging protégés in the apprenticeship process provided by the CE Mentoring Program. The program content and pedagogical practices contributed to their skills and understanding of teaching career education program content. “I think I would have felt more overwhelmed with teaching and education terminology if not for the program (Case 19). Networking beyond their mentor was also identified as a major benefit garnered through program participation. “I think just knowing how and who to talk to helped immensely and especially if I was a new teacher, having somebody at DESE to help me sift through all of that helped a lot” (Case 17).

Interview data also indicated CE Mentoring Program participation helped new career education teachers acculturate themselves to the teaching environment and guided them during a critical period of identity formation as they struggled to find their place in the classroom. “If I wouldn't have had a mentor that knew my content area and understood the vocational side of things, I don't think I would have lasted the first year” (Case 16). As revealed by the interview data, this process of experiential learning conducted within the structure of the CE Mentoring Program context was evidenced by participants’ active engagement in a learning process based on reflective dialogue and conversation (Eraut, 2004; Pitton, 2006; Rix & Gold, 2000).

Through the personal interviews, the role mentors played in the process of reconciling the realities of teaching career education program content with preconceived beliefs and values were determined important. Since many of the interviewed teachers were first generation college graduates (Ogden, 2004), or were entering teaching from alternative routes, their theories about teaching were often based on visions of supportive environments (Robertson et al., 2006). As part of this reconciliation process, the data indicated career education mentors were an asset to new teachers as they attempted to address legislative mandates and meet standards that added to the complexity of teaching. “My mentor kept telling me to be patient and things would work out; you just wait!” (Case 2). “When I was at the point where I was ready to quit [teaching], I think it was my mentor’s encouragement not to give up that kept me in the classroom to this day” (Case 3).

As proposed by Bruffee (1999), through collaboration with their career education peers, mentoring programs opened doors to interdependency that helped assign meaning to teaching by vocalizing issues and resolving conflicts (Clarke et al., 2002; Kilburg & Hancock; 2006; Van Huizen et al., 2005) without negatively impacting their local work environment. “You don't always want to say everything to someone in your district, so yeah it's nice to have somebody outside…that’s not directly involved” (Case 13). “I discovered classroom management skills that showed me how to keep multiple people busy doing different tasks, and not lose your mind at the same time” (Case 1).

New career education teachers may be arriving at their first teaching assignments underprepared for the challenges they face (Fletcher & Barrett, 2004; Fedorchak, 2001; Washer, 200) “I don't care if you go to college for 40 years, nothing prepares you for

walking into that classroom on day one" (Case 12). To assist new teachers who may be underprepared, mentors were identified though this research as being instrumental to furthering the professional development and ultimately the success of new career education teachers. "I can't think of any area of my teaching that hasn't been touched" (Case 10). Thus, engagement in mentorship as a social construct facilitates the exchange of knowledge through participatory activities (Clarke et al.,2002; Greene & Puetzer, 2002; Rix & Gold, 2000) leading to increased levels of teacher satisfaction. "When I was at the point where I was ready to quit [teaching], I think it was my mentor's encouragement not to give up that kept me in the classroom to this day" (Case 3).

Data Triangulation

Data triangulation was accomplished through the collection and comparison of survey self-report data provided by program participants. As a part of CE Mentoring Program framework, program participants (mentors and protégés) are to fill out an end-of-program survey (MCCE, 2006) that possess closed- and open-ended questions regarding their perceptions and individual program experiences. Historically, between 60- and 70-percent of program protégés access the survey instrument and provide response data.

To help create a greater understanding of the phenomenon under investigation (Heppner & Heppner, 2004), the self-report survey data for programs ending the spring of 2006 and the spring of 2007 were collected and organized using WordStat 5.1 to convert raw data into documents suitable for further analysis. On measures of program beneficence for programs ending 2006 and 2007, survey response data were similar to personal interview data in that the majority of program participants (80%) indicated

satisfaction with their mentor experience. Thirty-three of 191 survey respondents (17%) for the program ending 2006 and 51 of the 249 survey respondents for 2007 (20%), either disagreed or strongly disagreed that they benefited from program participation.

The personal interview data revealed fifteen percent (15%) of the career education teachers believed their mentor pairing was inappropriate. On measures of mentor pairing, the survey self-report data for the program ending the spring of 2006 indicated 18 of the 191 survey respondents (9.5%) did not think they were appropriately paired. For the program ending the spring of 2007, 21 of the 249 survey respondents (8.4%) did not think they were properly paired.

The interview data identified inadequate mentor training and accountability as issues of concern that prompted recommendations for improvement. On measures of mentor training, 38 of the 191 survey respondents (20%) for the program ending the spring of 2006 believed initial mentor training was inadequate. For the program ending the spring of 2007, 25 of 249 survey respondents (10%) believed mentor training was inadequate. These facts contributed to a greater understanding of how accountability and the need for mentor training led to the category construction for program pedagogy (Merriam, 1998) as one of the four primary categories that emerged during this study.

As to unclear expectations, the comments presented as a part of this study were primarily related to participants' expectations before attending the first statewide meeting and misconceptions of teaching career education program content in general. By program completion, 30 of 191 survey respondents (16%) for 2006 still indicated the program goals and objectives of the program were not well designed and/or clearly presented. For the program ending the spring of 2007, 11 of the 249 survey respondents (4.4%) thought

the program goals and objectives of were not well designed and/or clearly presented, a marked improvement over 2006.

Theoretical Framework Applied to this Study

Throughout the course of this study, interviewed teachers identified collaboration with content specific mentors as an essential component of their in-service development. Through these socially constructed activities, new CE teachers were challenged to interact with their mentors, and with one another, through innovative methods (Cornu; Gilles & Wilson; Musanti). Analysis of these phenoms required the bridging of concepts related to individual functioning and personal development (Van Huizen et al., (2004). Thus, Sociocultural Theory (SCT) was selected as the theoretical framework most suitable explore the practice of teaching and the development of profession identity.

Consistent with Merriam (1998), applying SCT as a framework for analysis of the data produced through this research constituted an effective mode of discovering descriptive phenomenological categories and themes. By viewing the qualitative data through an SCT lens, the findings buttressed the assertion that the CE Mentoring Program provided support for new career education teachers through socially constructed activities driven by learning in the context of negotiated meaning (Carroll, 2006). Consistent with Van Huizen et al. (2005), interviewee data identified that program participants believed the program pedagogy was instrumental in making connections between their individual needs and the socially constructed activities embedded within the program structure.

When viewing the personal interview data through an SCT lens, it became apparent the provisions of Missouri 5 CSR 80-850.045, and the structure provided by the *Missouri Professional Guidelines for Student Success* (MODESE, 2006a), were key

elements in creating a learning environment in which new career education teachers were engaged in activities within a Zone of Proximal Development (ZPD). Specifically, the CE Mentoring Program structure successfully brought new teachers into an environment where language and conversation between mentor and protégé constituted the primary basis of learning and development. Thus, a bridge between concepts of individual functioning, personal development, and the sociocultural process (Van Huizen, Van Oers, & Wubbels, 2005) was created through the apprenticeship process.

Consistent with Marshall and Gerstl-Pepin (2004), the SCT framework facilitated a systematic method of understanding complex components of the CE Mentoring Program, and the variable processes in which new and returning career education teachers were participating through culturally organized activities. By analyzing the CE Mentoring Program through SCT, the conversations and time spent with mentors in the CE Mentoring Program emerged as the primary mode of meaning making for the new career education teachers interviewed. The interview data revealed this form of social constructionism helped interviewed teachers go beyond observable behaviors (Perry & Power, 2004) while making accommodations that met the needs of administrators, peer teachers, and students; thus, uniting the ontogeny of the individual career education teacher with participation in the CE Mentoring Program.

Implications for Practice

The findings discovered through this research have generated several implications impacting the on-going administration and program structure of the Missouri CE Mentoring Program. The implications include:

1. In light of the margin of difference (over 30%) between CE Mentoring Program participant retention rates and non-participant retention rates (untouched), the findings from this study should be disseminated to all Missouri career education program stakeholders (e.g., principals, superintendents, career center directors, etc.).
2. As perceived by the protégés interviewed, accountability needs to be an important component of the CE Mentoring Program for both protégés and mentors. While mentor and protégé duties and expectations are clearly outlined in the *Career Education Mentoring Notebook*, no modes or measures of accountability for mentors are delineated, leaving protégés frustrated when mentorship expectations were unmet.
3. Based on the lack of clarity expressed by interviewees regarding their CE Mentoring Program expectations, a means of communicating the program structure and required activities needs to be developed and disseminated to new protégés in advance of their first statewide meeting. This information will better prepare upcoming program protégés for the time commitments and programmatic challenges they may face.
4. A need for additional mentor training based on specified objectives was strongly recommended by interviewees. Doing so would help to establish a cadre of quality mentors who possess grade level and content area expertise, and who can demonstrate successful personal and teaching skills essential to the mentoring process.

5. The interview data provide support for more contact time (informal or formal) between mentors and protégés. While both *travel* and *time* were identified as factors influencing mentor and protégé availability, the data clearly indicate great value was placed on the socially interactive components of the mentoring relationship.
6. Protégé data indicate that statewide meetings are overwhelming and need to be separated by program year (first/second). Protégés expressed the greatest amount of dissatisfaction with the second year of the program due to the repetitive nature of the materials presented.
7. The data support the need for the CE Mentoring Program content at statewide meetings to be more inclusive of the specific needs of program content areas. While protégé data indicate study participants recognize the complexity of meeting the needs of *all*, interviewees assert much of the information provided at statewide meetings had little or nothing to do with them.
8. The data suggests a need for more support versus performance during the first year of the program. Rather than having protégés reinvent the wheel, concrete examples of approved classroom materials were identified as a better means of assisting already overwhelmed teachers in meeting classroom expectations.
9. Examples of quality program content assignments need to be collected as exemplars of best practices while establishing a resource for appropriate models of teaching and mentoring.

Recommendations for Further Research

Recommendations for future research include:

1. Retention rate comparisons clearly support the program's attempts to reduce the attrition of new and returning career education teachers. However, additional research needs to be conducted to further delineate the additive benefits afforded through CE Mentoring Program participation as compared to non-participation.
2. Further investigation into the feasibility of expanding the capability of the CE Mentoring Program to include additional participants needs to be conducted. While the program may not currently be able to accommodate all new protégés, the positive connections made between participation and retention support program expansion.
3. CE Mentoring Program retention rates and measures of program effectiveness need to be investigated longitudinally (five and seven years) to demonstrate a level of quality based on Missouri's new mentoring program standards. Doing so will position the CE Mentoring Program as a viable option for future career education teachers as they satisfy state mentoring requirements.
4. Future CE Mentoring Program research should be conducted based on quantitative measures of program satisfaction delineated by traditionally and alternatively certified routes to teaching career education content.
5. Comparison data need to be collected on targeted Missouri mentoring program options based on measures of retention, program content, and program satisfaction. By identifying and reporting exemplars of program

effectiveness, a potential for mentoring program improvement would be established for all programs.

6. Further comparisons should be made between the CE Mentoring Program and exemplary programs from other states (e.g., Florida, Oklahoma, North Carolina) on measures of retention, program content, and program satisfaction.
7. Additional CE Mentoring Program research differentiated by program content area should be conducted to identify unmet protégé needs and facilitate program improvement.
8. Further investigation needs to be conducted into the impact mentor quality and accountability has on protégés' satisfaction with induction programs and processes.

References

Berry, B. (2004). Recruiting and retaining "highly qualified teachers" for hard-to-staff schools. *NASSP Bulletin 88*(638), 5-27.

Billingsley, B. S. (2004). Special education teacher retention and attrition: A critical analysis. *The Journal of Special Education, 38*(1), 39-55.

Bolman, L. G., & Deal, T. E. (2003). *Reframing organizations: Artistry, choice, and leadership.* San Francisco, CA: Jossey-Bass.

Bradley, K. D., & Loadman, W. E. (2005). Urban secondary educators' views of teacher recruitment and retention. *NASSP Bulletin, 89*(644), 2-28.

Brown, S. (2003, May). Why mentoring programs may be the key to teacher retention. *Techniques, 62,* 18-21.

Bruffee, K. A. (1999). *Collaborative learning: Higher education, interdependence, and the authority of knowledge* (2nd ed.). Baltimore: John Hopkins University Press.

Carroll, D. M. (2006). Developing joint accountability in university—school teacher education partnerships. *Action in Teacher Education, 27*(4), 3-11.

Clarke, M., Power, A., & Hine, A. (2002, July). Mentoring conversations and narratives from the tertiary experience. *Paper presented at the Higher Education Research and Development Society of Australia.* Perth, Western Australia. Retrieved August 2, 2006, from http://www.ecu.edu.au/conferences/herdsa/main/papers/

Cornu, R. L. (2005). Peer mentoring: Engaging pre-service teachers in mentoring one another. *Mentoring and Tutoring, (13)*3, 355-366.

Darling-Hammond, L. (2003). Teachers: What leaders can do. *Educational Leadership, 60*(8), 7-13.

Dove, M. K. (2004). Teacher attrition: A critical American and International education issue. *Delta Kappa Gamma Bulletin, 71*(1), 8-30.

Ennis-Cole, D. L., & Lawhon, T. (2004). Teaching, technology, and support in the new millennium: A guide for new community college teachers. *Community College Journal of Research and Practice, 28.* 583-592.

Eraut, M. (2004). Informal learning in the workplace. *Studies in Continuing Education, 26*(4), 247-273.

Erickson, T. (2004, September 21). Mentoring teachers: Davis district is taking measures to turbo-charge new teachers. *Deseret News.* Retrieved August 31, 2006, from http://deseretnews.com/dn/view/0,1249,595092712,00.html

Fedorchak, N. E. (2001). *Perceived importance of new teacher training topics for trade and industry and health occupations career and technical education teachers.* Unpublished doctoral dissertation, University of Missouri, Columbia.

Feiman-Nemser, S. (2003, May). What new teachers need to learn. *Educational Leadership,* 25-29.

Field, A. (2005). *Discovering statistics using SPSS* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Fletcher, S. H., & Barrett, A. (2004). Developing effective beginning teachers through mentor-based induction. *Mentoring and Tutoring, 12*(3), 321-333.

Gow, P. (2006). Mentoring: Helping new teachers chart the independent school waters. *Independent School, 65*(4) 50-54.

Greene, M. T., & Puetzer, M. (2002). The value of mentoring: A strategic approach to retention and recruitment. *Journal of Nursing Care Quality, 17*(1), 63-70.

Harrison, J., Lawson, T., & Wortley, A. (2005). Facilitating the professional learning of new teachers through critical reflection on practice during mentoring meetings. *European Journal of Teacher Education, 28*(3), 267-792.

Heppner, P. P., & Heppner, M. J. (2004). *Writing and publishing your thesis, dissertation & research: A guide for students in the helping professions.* Belmont, CA: Thomson Brooks/Cole.

Hunter, A., & Kiernan, H. G. (2005). *The reflective mentor: Case studies in creating learning partnerships*. Norwood, MA: Christopher-Gordon Publishers, Inc.

Ingersoll, R. (2001). Teacher turnover and teaching shortages: An organizational analysis. *American Educational Research Journal, 38*(3), 499-534.

Ingersoll, R. M. (2003, Spring). The teacher shortage: Myth or reality? *Education Horizons*. 146-152.

Ingersoll, R. M., & Smith, T. M. (2003). The wrong solution to the teacher shortage. *Educational Leadership, 60*(8), 30-33.

Inman, D., & Marlow, L. (2004, Summer). Teacher retention: Why do beginning teachers remain in the profession. *Education 124*(4), 605-614.

Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher, 33*(7), 14-26.

Johnson, S. M., Berg, J. H., Donaldson, M. L., & The Project on the Next generation of Teachers (2005, February). Who stays in teaching and why: A review of the literature on teacher retention. *Harvard Graduate School of Education.* Retrieved August 30, 2006 from http://www.aarp.org/about_aarp/nrta/livelearn/archive/

Johnson, S. M., & Birkeland, S. E. (2003). Pursuing a "sense of success:" New teachers explain their career decisions. *American Educational Research Journal, 40*(3), 581-617.

Kajs, L. T. (2002). Framework for designing a mentoring program for novice teachers. *Mentoring and Tutoring, 10*(1), 57-69.

Kilburg, G. M., & Hancock, T. (2006). Addressing sources of collateral damage in four mentoring programs. *Teachers College Record, 108*(7), 1321-1338.

Lach, M. & Goodwin, D. (2002). Everyone needs a mentor: Guiding first-year teachers toward success. *The Science Teacher, 69*(6), 50-52.

Lieberman, A. & Miller, L. (2001). *Teachers caught in the action: Professional development that matters*. New York: Teachers College Press.

Liston, D., Whitcomb, J., & Borko, H. (2006). Too little or too much: Teacher preparation and the first years of teaching. *Journal of Teacher Education, 57*(4), 351-358.

Marshall, C., & Gerstl-Pepin, C. (2005). *Re-framing educational politics for social justice*. New York: Allyn & Bacon.

Merriam, S. B. (1998). *Qualitative research and case study applications in education.* San Francisco, CA: Josey-Bass.

Missouri Department of Education and Secondary Education (MODESE) (2007). *Recruitment and retention of teachers in Missouri public schools: A report to the Missouri public assembly*. Retrieved March 21, 2007 from http://www.dese.mo.gov/divteachqual/teachrecruit/Recruit_report.pdf

Missouri Department of Education and Secondary Education (MODESE) (2006a). *Missouri professional development guidelines for student success*. Jefferson City, MO: Department of Elementary and Secondary Education.

Missouri Department of Education and Secondary Education (MODESE) (2006b). *5 CSR 80-850.045 mentoring program standards.* Retrieved August 29, 2007 from http://www.dese.mo.gov/schoollaw/rulesregs/80850045.htm

Morgan, G. (1997). *Images of organizations.* Thousand Oaks, CA: Sage Publications.

Musanti, S. I. (2004). Balancing mentoring and collaboration: Midcareer teachers constructing a new role. *Curriculum and Teaching Dialogue*, *6*(1), 13-23.

Ogden, W. R. (2004). When enough is enough. *Education, 124*(3), 467-474.

Patton, M. Q. (1997). *Utilization-focused evaluation: The new century text.* Thousand Oaks, CA: Sage.

Pitton, D. E. (2006). *Mentoring novice teachers: Fostering a dialogue process* (2nd ed.). Thousand Oaks, CA: Corwin Press.

Portner, H. (2005). *Teacher Mentoring and induction: The state of the art and beyond.* Thousand Oaks, CA: Corwin Press.

Rix, M. & Gold, J. (2000). With a little help from my academic friend: mentoring change agents. *Mentoring and Tutoring, 8*(1), 47-61.

Robertson, M., Hancock, D., & Allen, L. A. (2006). Why novice teachers leave. *Principal Leadership*, *6*(8), 33-36.

Shulman, J. H., & Sato, M. (2006). *Mentoring teachers toward excellence*. San Francisco, CA: Jossey-Bass.

Shank, M. J., (2005). Mentoring among high school teachers: A dynamic and reciprocal group process. *Mentoring and Tutoring, 13*(1), 73-82.

Smith, T.M., and Ingersoll, R.M. (2004, Fall). What are the effects of induction and mentoring on beginning teacher turnover? *American Educational Research Journal, 41*(3), 681-714.

Strauss, A. L., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques.* Newberry Park, CA: Sage.

Thorne, S. L. (2005). Epistemology, politics, and ethics in sociocultural theory. *The Modern Language Journal, 89*(3), 393-409.

Vail, K. (2005). Create great school climate. *Education Digest, 71*(4), 4-11.

Van Huizen, P., Van Oers, B., & Wubbels, T. (2005). A Vygotskian perspective on teacher education. *Journal of Curriculum Studies 37*(3), 267-290.

Van Houtte, M. (2006). Tracking and teacher satisfaction: Role of study culture and trust. *The Journal of Educational Research.* 247-254

Vygotsky, L. S. (1978). *Mind in Society*. Cambridge, MA: Harvard University Press.

Walqui, A. (2006). Scaffolding instruction for English language learners: A conceptual framework. *The International Journal of Bilingual Education and Bilingualism, 9*(2), 159-180.

Washer, B. A. (2000). *The effectiveness of Missouri's new vocational teacher institute.* Unpublished doctoral dissertation, University of Missouri, Columbia.

Whisnant, E., Elliott, K., & Pynchon, S. (2005, July). A review of literature on beginning teacher induction. *Center for Strengthening the Teaching Profession*. Retrieved

on March 15, 2007, from http://cstp-wa.org/Navigational/Policies_practices/Teacher_induction/A_Review_of_Literature.pdf

Wong, H. K. (2004). Induction programs that keep new teachers teaching and working. *NASSP Bulletin, 88*(638), 41-58.

Woullard, R., & Coats, L. T. (2004). The community college role in preparing future teachers: The impact of a mentoring program for preservice teachers. *Community College Journal of Research and Practice, 28,* 609-624.

APPENDIX A

Informed Consent Form

Informed Consent Form

Identification of Researchers: This research is being conducted by Donald Scott, University of Central Missouri (UCMO), Department of Career and Technology Education, Missouri Center for Career Education. I am an Educational Leadership & Policy Analysis doctoral candidate at the University of Missouri.

Purpose of the Study: The purpose of this study is to investigate novice career education teacher retention as it relates to participation in Missouri's Career Education Mentoring Program. Through the performance of this study, retention rates, both positive and negative precipitating factors, and the impact the current program has on novice and returning career education teacher retention will be identified.

Request for Participation: I am inviting you to participate in this study dealing with the impact the Missouri Career Education Mentoring program is having on the retention of novice and returning career education teachers. Participation in the study is voluntary. If you decide not to participate, you will not be penalized in any way. You can also decide to stop the interview at any time without penalty. If you do not wish to answer any of the questions asked by the interviewer, you may simply indicate you do not wish to respond. You may withdraw your consent to have your interview responses included in the study at the end interview. If you wish to do so, please tell inform the interviewer at any time during the interview.

Exclusions: You must be at least 18 years of age to participate in this study. All non-Career Education teachers will be excluded from interviews.

Description of Research Method: The qualitative phase of this research involves personal interviews regarding participants' perceptions and experiences while engaged in the Missouri Career Education Mentoring Program. Interviews are being limited to approximately one-hour and will be conducted at a time and location identified by the study participant. With informed consent of the interviewee, interviews will be digitally recorded in a format suitable for analysis. Digital recordings of interviews will be assigned codes to protect anonymity and professionally transcribed to ensure trustworthiness of the data. Analysis of transcripts will be conducted using commercially available software (WordStat 5.1 & QDA Miner) to identify emerging themes and categories.

Privacy: All of the information collected will be confidential. Pseudonym codes will be used to protect participant's identity. Individual response data and findings will not be linked to individual participants. Transcripts will be kept in a locked file cabinet in the researcher's office and digital recordings will be destroyed at the end of this study.

Explanation of Risks: The risks associated with participating in this study are similar to the risks of everyday life.

Explanation of Benefits: Study participants will benefit by gaining a deeper understanding of the influence, or lack thereof, Missouri's Career Education Mentoring Program had on their decision to either stay or leave the teaching profession while contributing to the professional development of future new and returning career education teachers.

Data Use: The data produced by this study will be included in a final report to the Missouri Department of Elementary and Secondary Education, Division of Career Education, presented at state and national conferences, and potentially published in a peer-reviewed journal. By signing this form, you are giving permission to the researcher to use the information you provide during this interview as described. Remuneration for use of the data produced is explicitly limited to the $100.00 stipend offered for participation in this study.

Questions: If you have any questions your rights as a participant in this study, please contact the University of Missouri, Campus Institutional Review Board, 483 McReynolds Hall, Columbia, MO, 65211 (573-882-9585). If you agree to participate, please sign two copies of this form prior to the beginning of the interview. The interviewer will retain one copy; the other copy is for you to keep.

I have read this letter and agree to participate.

Signature:_____Date:_____

APPENDIX B

Call for Participation Letter

Call for Participation Letter

Subject: Career Education Mentoring Program Study

Dear Mentoring Program Participants,

In cooperation with the MODESE Division of Career Education, the MCCE is conducting personal interviews with a sample of career education teachers who participated in the two-year statewide Career Education Mentoring Program during academic years 2004-05 through 2005-06, and 2005-06 through 2007-08. From these interviews, the MCCE staff hopes to develop a better understanding of the benefits realized and/or improvements needed to better serve future novice and returning career education teachers. The perceptions and reflections of former mentoring program participants are crucial to the success of this process. Interviews will be limited to approximately one hour and conducted at locations and times to accommodate your schedule should you be selected. The source of all responses to the interview questions will be kept confidential. A monetary stipend is also being offered to those who complete the interview.

The link provided below will take you to a Web page containing more information about the interviews. If you wish to be included in the pool of potential interviewees, please go to this Web page, review the information, enter the required information, and submit your request to be added to the pool.

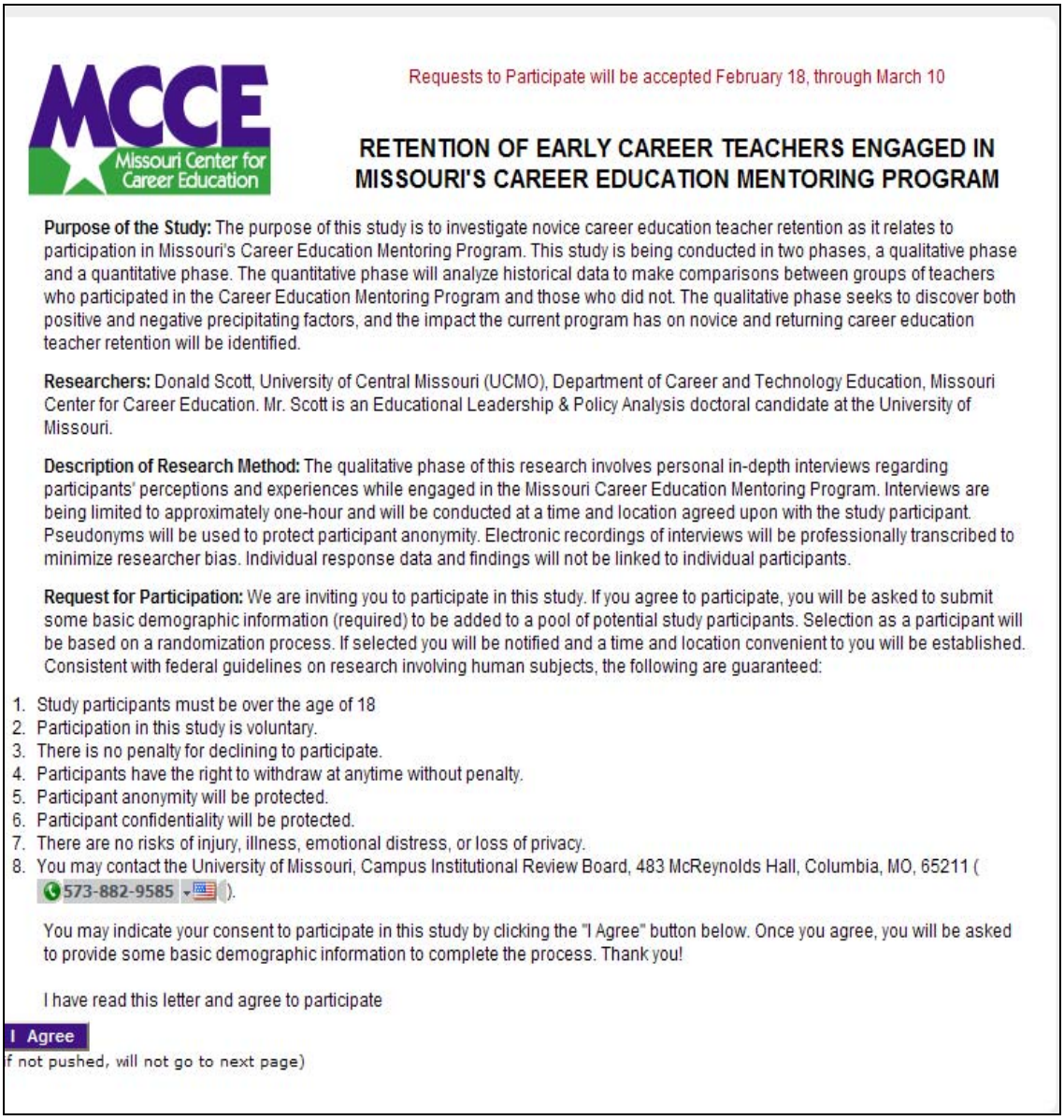
Link: http://missouricareereducation.org/pd/study.php

APPENDIX C

Web-page Information and Request to Participate

Participant Registration Web-page

Page 1



MCCE
Missouri Center for Career Education

Requests to Participate will be accepted February 18, through March 10

RETENTION OF EARLY CAREER TEACHERS ENGAGED IN MISSOURI'S CAREER EDUCATION MENTORING PROGRAM

Purpose of the Study: The purpose of this study is to investigate novice career education teacher retention as it relates to participation in Missouri's Career Education Mentoring Program. This study is being conducted in two phases, a qualitative phase and a quantitative phase. The quantitative phase will analyze historical data to make comparisons between groups of teachers who participated in the Career Education Mentoring Program and those who did not. The qualitative phase seeks to discover both positive and negative precipitating factors, and the impact the current program has on novice and returning career education teacher retention will be identified.

Researchers: Donald Scott, University of Central Missouri (UCMO), Department of Career and Technology Education, Missouri Center for Career Education. Mr. Scott is an Educational Leadership & Policy Analysis doctoral candidate at the University of Missouri.

Description of Research Method: The qualitative phase of this research involves personal in-depth interviews regarding participants' perceptions and experiences while engaged in the Missouri Career Education Mentoring Program. Interviews are being limited to approximately one-hour and will be conducted at a time and location agreed upon with the study participant. Pseudonyms will be used to protect participant anonymity. Electronic recordings of interviews will be professionally transcribed to minimize researcher bias. Individual response data and findings will not be linked to individual participants.

Request for Participation: We are inviting you to participate in this study. If you agree to participate, you will be asked to submit some basic demographic information (required) to be added to a pool of potential study participants. Selection as a participant will be based on a randomization process. If selected you will be notified and a time and location convenient to you will be established. Consistent with federal guidelines on research involving human subjects, the following are guaranteed:

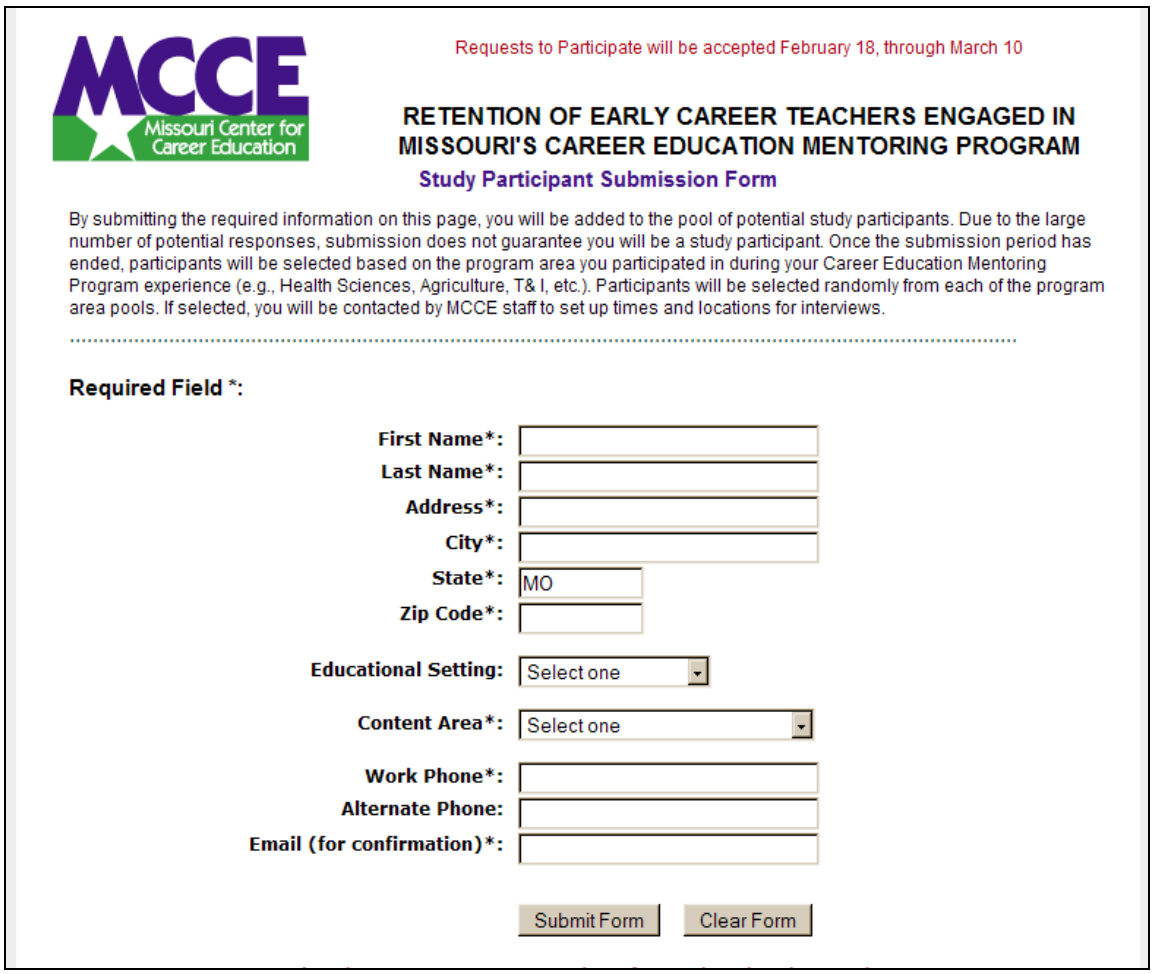
1. Study participants must be over the age of 18
2. Participation in this study is voluntary.
3. There is no penalty for declining to participate.
4. Participants have the right to withdraw at anytime without penalty.
5. Participant anonymity will be protected.
6. Participant confidentiality will be protected.
7. There are no risks of injury, illness, emotional distress, or loss of privacy.
8. You may contact the University of Missouri, Campus Institutional Review Board, 483 McReynolds Hall, Columbia, MO, 65211 (573-882-9585).

You may indicate your consent to participate in this study by clicking the "I Agree" button below. Once you agree, you will be asked to provide some basic demographic information to complete the process. Thank you!

I have read this letter and agree to participate

I Agree

f not pushed, will not go to next page)



Requests to Participate will be accepted February 18, through March 10

RETENTION OF EARLY CAREER TEACHERS ENGAGED IN MISSOURI'S CAREER EDUCATION MENTORING PROGRAM

Study Participant Submission Form

By submitting the required information on this page, you will be added to the pool of potential study participants. Due to the large number of potential responses, submission does not guarantee you will be a study participant. Once the submission period has ended, participants will be selected based on the program area you participated in during your Career Education Mentoring Program experience (e.g., Health Sciences, Agriculture, T& I, etc.). Participants will be selected randomly from each of the program area pools. If selected, you will be contacted by MCCE staff to set up times and locations for interviews.

Required Field *:

First Name*:
Last Name*:
Address*:
City*:
State*: MO
Zip Code*:

Educational Setting: Select one

Content Area*: Select one

Work Phone*:
Alternate Phone:
Email (for confirmation)*:

Submit Form Clear Form

APPENDIX D

Semi-Structured Interview Protocol

Interview Protocol and Questions

Thank you for participating in my study today. The purpose of this study is to investigate novice career education teacher retention as it relates to participation in Missouri's Career Education Mentoring Program. Through the performance of this study, I hope to establish retention rates, both positive and negative precipitating factors influencing novice teachers' decision to either stay or leave the profession, and reveal the impact the current program has on novice and returning career education teacher retention.

Before we go any further, I want you to know your rights as a participant in my study. You are not required to answer any questions you are uncomfortable with and you may leave the interview at any time. We will protect your confidentiality by using false names (pseudonym codes). Your personal identity will not be linked to individual responses or used in any future manuscripts or publications. Given these understandings, are you willing to sign an informed consent form to participate in this study and consent to electronic tape recordings of this interview to be used as data for this research?

Informed Consent: Allow participant time to read, discuss, and sign consent form.

The findings revealed by this research will be submitted to the Missouri Department of Elementary and Secondary Education, Division of Career Education and potentially included in a manuscript suitable for publication in a peer-reviewed journal.

The research questions driving this phase of my study include:

5. How did the Missouri CE Mentoring Program influence program completers' decision to stay or leave the teaching profession?
6. How did the Missouri CE Mentoring Program influence program non-completers' decision to stay or leave the teaching profession?
7. What precipitating factors influenced Missouri's novice career education teachers' decision-making process to either stay or leave the teaching profession?

First we have a short demographics form to confirm the personal contact information I have and I would like to know how you prefer to be addressed during this interview.

How would you like to be addressed during this interview_____?

To begin, I am going to ask some general questions about you; then I would like to talk about your thoughts, perceptions, and experiences regarding the mentoring program.

Completers:

1. Would you please tell me a little about yourself and what courses you have taught?
2. What was it about this study that motivated you to volunteer as a participant?

3. Are you still teaching: If so, at what institution are you currently teaching?
4. How long have you been teaching?
5. As a new teacher, what were your personal perceptions of teaching as a career?
6. In what career education program area are you teaching (e.g., HS, AG, T&I)—is your current program area the same as during your mentoring program participation?
7. Did you participate in the Career Education Mentoring Program during your first-year of teaching? (probe-was it first year of teaching period, first year out of industry, first year in career education).
8. When you entered the program, what key did you hope to gain from the program?
9. During your time in the program, were your mentoring experience expectations met?
10. What aspects/components of the program were most useful?
11. What aspects/components of the program were most significant for you?
12. What additional program aspects/components would make the program more effective for future program participants (what was it about those aspects that are important)?
13. What non-program factors have influenced your decision to either stay or leave the teaching profession?
14. What impact did program participation have on your feelings of satisfaction with teaching as a career?
15. Are you currently satisfied with teaching as a career (why/why not)?

Thank you…ask participant if they would like to add any comments that have not been discussed…closure.

Non-Completers:

1. Would you please tell me a little about yourself and what courses you have taught?
2. What was it about this study that motivated you to volunteer as a participant?
3. Are you still teaching: If so, at what institution are you currently teaching?
4. How long have you been teaching?
5. As a new teacher, what were your personal perceptions of teaching as a career?
6. In what career education program area are you teaching (e.g., HS, AG, T&I)—is your current program area the same as during your mentoring program participation?
7. Did you participate in the Career Education Mentoring Program during your first-year of teaching? (probe-was it first year of teaching period, first year out of industry, first year in career education).
8. When you entered the program, what did you hope to gain from the program?
9. During your time in the program, were your mentoring experience expectations met?
10. At what point in the program (first/second year/when) did you leave the program (why)?

11. Was there something (yes/no) about the program that influenced your decision to leave prior to completion (what was it)?
12. What incentives (non-monetary) may have convinced you to stay in the program (e.g., program content, mentor pairing, program timing, workload)?
13. Based on your time in the program, what additional program aspects/components do you think would make the program more effective for future program participants (useful/significant)?
14. What non-program factors may have influenced your decision to either stay or leave the teaching profession?
15. Did your participation in the program influence your feelings of satisfaction with teaching as a career?
16. Are you currently satisfied with teaching as a career (are they still a teacher, why/why not, etc.)?

Thank you…ask participant if they would like to add any comments that have not been discussed…closure.