

ANALYSIS OF NEW TEACHER MENTORING PROGRAMS WITH REGARD TO  
NEW CTE TEACHERS

A Dissertation

Presented to

The Faculty of the Education Department

Carson-Newman University

In Partial Fulfillment

Of the

Requirements for the Degree

Doctor of Education

By

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February 2016

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## **Abstract**

Analysis of New Teacher Mentoring Programs with Regard to CTE Teachers

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February 2016

New teacher mentoring has quickly become a tool used by districts across the United States. Career and Technical Education (CTE) is a portion of the K-12 educational system that is growing rapidly and experiencing teacher shortage. Teachers that enter the educational setting to teach CTE courses are typically coming into education from a field where they are considered experts, but often without any formal training in the field of education. The need for support and professional development that is applicable and efficient is substantial for these CTE teachers due to their lack of background knowledge about the educational system and their propensity for being the sole professional teaching their subject matter in their school. The study utilized the responses of three participants to determine the ways that the New Teacher Academy and New Teacher Mentoring in an East Tennessee School District can be improved to better support and prepare these new CTE teachers for the classroom.

## **Acknowledgements**

I would like to express my gratitude to my advisor, Dr. P. Mark Taylor, for his support, patience, and encouragement throughout this process. Thank you for taking the time to listen to the little problems and always reminding me to think about what I want to be when I grow up.

My thanks also go to the members of my committee, Dr. Peggy Hypes and Dr. Patricia Murphree for reading many drafts of this dissertation and providing valuable comments that improved the presentation and contents of both the dissertation and myself.

Special thanks goes to the faculty and staff of the CNU Department of Education and Counseling for allowing me to be a graduate assistant and learn from all of you. You have contributed to who I am as a person and for that I am eternally grateful.

Huge thanks goes to my mother-in-law, Peggy, for always having an encouraging word and reminding me that you are proud of me. That really meant a lot in times that I was struggling.

The support of my family has been tremendous, and I could not have gone through this process without them. My grandparents, aunt and uncle, cousins, siblings, and so many other friends that have listened to me talk about, complain about, cry about, and rant about this document are true gifts from God. I could not be where I am or who I am without all of you.

The friendships and support of various coworkers has been part of what has kept me going throughout the entire process, but none as much as the great people that I have the privilege of working with at CMA. Special thanks to Ryan and Hailey, my lunch

buddies, who were there on many late nights with random texts and funny pictures to make me forget I was writing a dissertation under some not fun circumstances of life, and to Kay and Mike, my CTE buddies that kept the faith when I was losing it.

Last, but certainly not least, huge thanks go out to my students at RSCC and CMA. You guys push me to become a better teacher and inspire in ways that you have no idea about. I know you will all continue to grow and become the people that will take over the world, and I could not be prouder of who you are.

## **Dedication**

I dedicate my dissertation work to my family and close friends.

To my husband, David Blevins, who has been my cheerleader throughout this entire process, especially when I had decided that there was no way I could complete this monumental task, I offer my utmost thanks and love, and the promise that when you go through this process I will try to be as good to you as you have been to me. To my children, Alyssa and Brayden, who have endured lots of nights at home with fast food meals to allow me to have quiet time to write, I promise that I will do my best to have fun weekends and evenings again.

To my parents, Susan and Jerry, who have watched the kids countless nights and afternoons so I could just spend a little more time writing and reminded me that I really could do this, just keep plugging away. I hope you know what great parents you are and realize that I truly could not have gotten any luckier. You guys have helped motivate me for a long time, and I finally managed to graduate with the 4.0 you always said I was capable of having. To my sister, Lindsay, who has listened to me fuss and talk through problems, when she really could have been doing so many other things, I thank you. You are a rock star.

To Darren, you give the best encouragement and still know when I really just need a shoulder to cry on. I could not have done this without you and the crazy stories you told me to keep my mind on other things.

I would not have started this journey without the encouragement/prodding I received from two people that I lost during the process. Jan Patterson, you became more than just my high school chemistry teacher from so long ago, you really became a friend.

The promise you made to be there when I finished may not be realized the way we planned, but I know you will be there in spirit. And to Jim Webb, my favorite trumpet player ever and candy maker extraordinaire, I can only say you were right, I did it. You saw something in me that I did not see all those years ago. I will always cherish the times we had together, and feel a moment of sadness when I am headed to the alumni pep band gigs without you, but I will also yell loudly and act crazily (more so now that I have slept) for as long as I go to games.

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## CHAPTER 1: Introduction

### Introduction

According to the National Center for Education Statistics (2014), 8% of teachers left their positions in 2012-2013. Fifty-three percent of those who left reported that their work conditions improved when they left teaching. New teacher mentoring involving good communication and collaboration has been shown to enhance the professional development and contribute to the success of both the mentor and mentee teacher, and help to retain new teachers (Cook, 2011). These teacher mentoring programs have shown enough promise to become mandated in over 45 states in the United States, however, they vary widely in the ways that they are developed and implemented, as well as the ways in which mentor/mentee partnerships are established and the requirements of each party (Goldrick, Osta, Barlin, & Burn, 2012; NCTQ, 2007). In the 1987-1988 school year, the typical teacher had 15 years of teaching experience. By 2007-2008, the typical teacher was a first year teacher. This disparity in experience has increased the need for the new teacher mentoring programs that effectively enhance teacher retention and self-perceived success. *Eliminating Barriers to Improving Teaching* found that a first year induction program including mentoring could reduce the attrition rate of new teachers by up to two-thirds (U.S. Department of Education, 2000)

In addition to the typical problems facing first year teachers, the scope and substance of the types of problems facing Career and Technical Education (CTE)

teachers and programs as a whole compounds the teacher retention problem (Conneely and Uy, 2009). For CTE teachers, in addition to being the new teachers in schools, there is the added problem of coming into teaching from another profession, oftentimes with no education in education. An added complication for most CTE teachers is finding themselves as the sole professional in their school teaching their subject area. When looking at the ways in which education can benefit cross-curricularly, CTE is often the proverbial wallflower at the dance. Due to the specific nature of the content and curricula, most normal professional development does not apply and new CTE teachers are often left feeling alone and overwhelmed.

### **Statement of the Problem**

New teacher mentoring programs are so vital that over 45 states have mandated them, but those mandates came with no direction of what makes a good program. With the rise in popularity and prevalence of CTE programs, the teacher shortage facing CTE is on the way to becoming a crippling problem for the educational system (Conneely and Uy, 2009). Although there are many alternative certification routes, most CTE teachers do not begin the process of alternative certification until they are already teaching. Adequate support and professional development are ways to make certain that new CTE teachers are succeeding and the students are being well served. Mentoring is one aspect of the support and professional development structure, but it must happen in a way that is valuable to the teachers involved in the process. The purpose of the study was to use feedback from CTE teachers who found themselves secluded due to their subject area to develop a set of best practices to address the uniqueness of entering teaching from a different field.

### **Significance of the Study**

The study was significant in that it contributed suggestions for development or enhancement of new teacher mentoring programs in the form of a proposed standardized framework that addresses mentoring for teachers that do not possess a background in teaching. With the rise in Career and Technical Education (CTE) programs, there is an increase in teachers, who have not had teaching experience, being hired because of their work or educational experience in a specialized field of study. These teachers are often the only teachers in their schools, or possibly even in their districts, teaching their subjects, and they face a very different set of circumstances from what occurs in a normal classroom. Suggestions were based on existing research, as well as feedback received from teachers who have been through existing mentoring programs. The proposed framework addressed existing issues with possible solutions and is in a format that could be implemented in a school district regardless of size or economic status.

### **Research Questions**

In order to assess effectiveness of new teacher mentoring programs on teacher retention and self-perceived success, the following questions guided the research:

1. What are the needs of teachers who are coming into education from a field due to their work and academic experiences in order to teach classes in Career and Technical Education?
2. How can Professional Learning Communities (PLCs) best be utilized, in conjunction with mentoring, to assist teachers in these secluded situations?
3. What is the most productive way for these teachers to gain knowledge about education?

4. What can be done to assist new CTE teachers in taking their prior knowledge about their subject area and fitting it into the K-12 educational model?

### **Rationale for the Study**

The field of CTE is becoming more prevalent each year, causing an increase in teachers stepping into their role of teaching straight from a different career because of the knowledge they bring to the school about a very specific topic. These teachers typically step into the classroom with little to no experience in education, but are experts in their fields. Currently, new CTE teachers are placed in the same new teacher mentoring programs as every other new teacher, with little thought being given to how to prepare them for what awaits in the classroom. One example of this difference is in classroom management. Most CTE classrooms have equipment that is used by students that makes classroom management much less about keeping the room quiet and orderly and much more about actual safety when using machinery.

### **The Researcher**

As a teacher new to a school district, the concepts and constructs of the new teacher mentoring program are of particular interest to the researcher. Stepping into the world of K-12 education from the world of post-secondary education has shown many differences in the ways that teachers are prepared for their positions and the support structures that are in place for teachers as they progress through their careers. Being a CTE teacher has shown the researcher that the needs in this type of teaching regarding mentoring are vastly different than the needs of the normal K-12 teacher.

**Definition of Terms**

*Mentor:* The experienced teacher from the school district.

*Mentee:* The teacher new to the school district.

*New Teacher Mentoring Program:* The program which all teachers new to a district must complete.

*Retention:* The act of maintaining employment of a teacher on a recurring basis.

*Self-perceived Success:* The accomplishment rate that teachers ascertain themselves as having achieved.

**Summary**

Teachers are facing multiple changes in education and in the preparation they are receiving before beginning their careers in school systems. The study was an examination of the ways that preparation and support are continued through new teacher mentoring programs and the ways that PLCs could be utilized to assist stand-alone teachers with issues that would only appear in their particular classrooms.

## CHAPTER 2: Literature Review

### New Teacher Mentoring Programs

#### Defining Mentoring

To truly look at the research that has been completed, one must first understand what mentoring entails. The most concise definition of mentoring found by international literature review is “the one-to-one support of a novice or less experienced practitioner by a more experienced practitioner, designed primarily to assist the development of the new teacher/mentee’s expertise and to facilitate their introduction into the culture of the profession and into the specific local context” (Hobson, Ashby, Malderez, & Tomlinson, 2009). Translating this definition into practice has meant pairing a new, or new to the district, teacher with an experienced teacher from the district to provide various forms of support and professional development (Washburn-Moses, 2010). Support can come in various forms of critical conversations, responsive feedback, observation, team-building activities, and practical experiential activities (Cook, 2011; Edwards-Groves, 2014; Nevins Stanulis & Amers, 2009; Wepner, Krute, & Jacobs, 2009; Womack-Wynne, Dees, Leech, LaPlant, Brockmeier, & Gibson, 2011).

It is important to establish the different types of mentoring that can occur for the new teacher (Szumlas, 1999). Mentoring within the new teacher programs can occur in both formal and informal ways. Formal mentoring addresses the process of mentoring, which occurs when the mentor and new teacher/mentee participate in events or tasks set forth by the organization. (Edwards-Groves, 2014; Szumlas, 1999). Examples of the

formal mentoring activities would be scheduled meetings, professional development workshops, and discussions of pedagogical methods or discipline problems (Lataille, 2005). Informal mentoring addresses the relationship portion of mentoring and occurs when the mentor and new teacher/mentee take part in activities outside of the prescribed duties to grow the experiences and knowledge of the new teacher/mentee (Edwards-Groves, 2014; Szumlas, 1999). Informal mentoring activities tend to lean more to the relational side of mentoring, with focus on strengthening the trust between mentor and new teacher/mentee to allow for a more successful mentoring program (Edwards-Groves, 2014).

### **Focus of New Teacher Mentoring Programs**

New teacher mentoring programs have been developed based upon the issues that schools were having retaining new teachers and the issues that new teachers were having being successful (Ingersoll & Kralik, 2004; Pirkle, 2011). These issues can be summed up as several main concerns for the new teacher: concern about efficacy of teaching, concern about adapting to the institutional or district culture, and concern about self-adequacy (Wepner et al., 2009; Pirkle, 2011). The impetus behind new teacher mentoring programs is to utilize experienced teachers within the school or district to help the new teacher adjust to the school environment and culture by being responsive to beginning teacher needs and helping them to develop a framework for thinking about, planning, and analyzing the efficacy of their teaching (Nevins Stanulis & Ames, 2009). Achieving this goal requires the development of a shared vision of what effective teaching looks like between the mentor teacher and the new teacher.

The formal mentoring aspect of the program involves placing a focus on instructional skills and integrating the mentoring with the district's larger learning goals (Cook, 2011). This portion of the mentoring program should involve pedagogical practices, observations, practice architectures, and learning practice. These facets of the mentoring program help the new teachers further enhance the skills they were taught in their pre-service educational programs in real-world settings. Enhancement of the learned skills also allows the new teacher to have a point of contact when there are questions about the culture of the educational district or institution or about specific situations that are occurring within the classroom (Hobson et al., 2009; Womack-Wynne et al., 2011). Formal mentoring situations can also occur in the form of research and collaboration about educational methods and practices.

Informal mentoring situations tend to be designed in a manner to allow the new teacher and mentoring teacher to form a relational bond. The bond is imperative to building the trust that is required for the mentoring program to be successful (Washburn-Moses, 2010). Since the mentoring program requires a sharing of ideas and critiques, as well as collaboration and observation, trust is imperative for success of the program and the participants. It is important to distinguish that the informal mentoring situations and the relationship between the mentor teacher and the new teacher/mentee teacher are not meant to be a "buddy" situation, but rather a relationship in which there is a truthfulness in practice of helping the new teacher to hone the skills needed for success in the classroom, leading to retention in the system (Nevins Stanulis & Floden, 2009).

### **Factors To Be Considered In a New Teacher Mentoring Program**

There are several factors to be considered in the new teacher mentoring program. Due to the trust that must be established between mentor and new teacher/mentee, the process of pairing the mentor and new teacher/mentee must be very thoughtful (Cook, 2011). A new teacher needs to be paired with a mentoring teacher that is teaching on somewhat the same grade level and/or subject level. It is also important to take things like technological expertise, openness to new ideas, and personality into consideration when pairing the mentor and new teacher/mentee teachers (Gut, Beam, Henning, Cochran, & Talford Knight, 2014). The mentoring relationship can impact the overall effectiveness of the new teacher mentoring program and should therefore be taken into consideration as the pairings of mentors and new teachers/mentees are being made. A hindrance to the process of making matches between mentors and new teachers/mentees that are compatible is the lack of knowledge about the new teachers in terms of personality. The potential compatibility between mentor and mentee is why it is suggested to pair new teacher/mentees with someone that teaches their subject and grade level, or for the mentor and new teacher/mentee to be as close to teaching the same types of students as possible. Paying special attention to the ways in which the mentor and mentee are paired helps to give the mentor and new teacher/mentee a common ground upon which to begin building the relationship that is needed for the new teacher mentoring program to be successful.

Another key factor to be considered in a new teacher mentoring program is location. It is imperative, especially in large districts, that the mentor and new teacher/mentee not be located a far distance from each other (Cook, 2011). In some

school districts, it is possible to have the mentor and new teacher/mentee from the same school, but in situations where this is not a reality, efforts should be made to have the mentor and new teacher/mentee from schools as close together as possible. This helps to make certain that the mentor understands the culture of the school and/or area in which the new teacher/mentee is teaching (Gut et al., 2014). There are such large differences between the cultures of schools and the support that may be available to the teachers in different areas of a district that it forces location to become a factor when working in these programs (Nevins Stanulis & Floden, 2009). Another reason that location of both mentor and new teacher/mentee is so imperative is because it is asking the mentor teacher to put extra effort to participate in the program and requiring the new teacher to put in extra time. Trying to get mentor and new teacher/mentee teachers close together allows for more interaction to occur and increases the ease with which the mentor teacher could be available for observation of the new teacher/mentee teacher's class (Wepner et al., 2009).

A third key factor that must be considered is what is to be required of the mentors and new teacher/mentee teachers. As stated above, a new teacher mentoring program is requiring mentor teachers to increase their workload (Nevins Stanulis & Floden, 2009). For this reason, it is imperative that the requirements of the mentor teacher be laid out prior to beginning the new teacher mentoring program. Mentor teachers must understand what they will be required to do as mentor teachers, as well as how much time will be invested in the process (Lataille, 2005). Within the process of communicating what is expected to the mentoring teachers should also be the consideration of release time (Paris, 2013). Pirkle (2011) noted that giving mentor teachers release time to utilize for

observation contributes positively to the new teacher/mentee teacher's understanding of educational pedagogy and how to apply those skills, as well as increasing the depth of the relationship between mentor and new teacher/mentee. The new teacher/mentee teacher's confidence builds when the mentor teacher is able to praise the new teacher/mentee teacher for handling of certain situations in the classroom or for the new teacher/mentee teacher's teaching skills. This release time for observation can also increase the enthusiasm and willingness for veteran teachers to serve as mentors (Womack-Wynne et al., 2011).

The fourth key factor to be considered is the involvement of administration in the new teacher mentoring program (Cook, 2011; Lataille, 2005). While administration of the school or district definitely needs to play a role in the new teacher mentoring program, it is important that the evaluation process be separate from the mentoring process. This separation between administration and the mentoring program helps the new teacher/mentee understand that the mentor's role is not to evaluate, but to support the new teacher/mentee with knowledge and shared experiences to help establish the new teacher/mentee in a successful role in the classroom (Washburn-Moses, 2010). Another indication that the mentoring needs to be from a fellow teacher as opposed to administration can be seen in the easier acceptance of ideas that do not come from the top of the hierarchy to the bottom, but instead are ideas that are born in the middle of the hierarchy and can be demonstrated and replicated in the classroom setting.

New teacher mentoring programs also require careful consideration of non-personnel resources, such as fiscal resources and time (Washburn-Moses, 2010). These considerations must be made on a district or state level without increasing district or state

involvement in the actual mentoring process. The district or state mandating the new teacher mentoring program must be willing to commit fiscally to the support of the program. Fiscal support of the mentoring program could involve the ideas of release time for mentor teachers, compensation for the time spent outside of the normal day for new teacher/mentee teachers, and the costs associated with any activities that may be mandated as part of the program on the district or state level. Time support of the mentoring program could include the concept of release time and how much should be allotted to the mentor teacher, the scheduling of mandated activities so as not to interfere with other school responsibilities for the mentor or new teacher/mentee, as well as any administration that is required to attend, and the amount of time that will be expected for all stakeholders to be working with the new teacher mentoring program (Lataille, 2005; Rockoff, 2008).

### **Benefits of New Teacher Mentoring Programs**

Quality new teacher mentoring programs have been shown to increase both student achievement and teacher retention for both mentor and new teacher/mentee educators (Rockoff, 2008; Smith, 2007). New teacher mentoring programs have also been shown to help new teachers adjust to their new school environment with fewer difficulties (Cook, 2011). New teachers report that the mentoring programs that provide support, opportunities for collaboration, and socialization help them to form a support system and bonds with fellow teachers that create an environment that facilitates student and teacher achievement (Womack-Wyne et al., 2011).

Individual mentoring characteristics that develop between the mentor and new teacher/mentee can also lead to a myriad of benefits that become more specific to the

setting of the teachers (Gut et al., 2014). Intensive mentoring has been shown to help new teachers not only increase student achievement, but also to develop systems of tracking that achievement for research (Nevins Stanulis & Floden, 2009). This helps the new teacher to begin to assimilate the data that are present within the classroom and to understand what the new teacher should be taking away from the compilation of that data.

The benefits of new teacher mentoring programs are not limited to new teachers. The mentor teachers also report experiencing a surge in enthusiasm for their craft due to the excitement that the new teacher brings to the mentoring relationship (Nevins Stanulis & Floden, 2009; Szumlas, 1999). In addition, mentoring teachers are often able to get a feel for newer educational theories and teaching techniques that are being taught in the post-secondary educational setting and to apply those theories and techniques to their classrooms (Cook, 2011). Due to the common occurrence of new teachers being recent graduates, mentor teachers also report getting a new outlook on the subject or discipline in which they are teaching from the new information that the new teacher/mentee teacher brings to the classroom (Pirkle, 2011).

### **Changing New Teacher Mentoring Programs**

In any facet of education, it is important to look at what is making positive strides for students and educators and determine ways that those activities or programs can be enhanced. There are several ways that new teacher mentoring programs can be enhanced to provide more support for mentors and new teacher/mentees and increase positive outcomes (LoCasale-Crouch, J., Davis, E., Wiens, P., & Pianta, R., 2012). The inclusion of appropriate training of mentors in what is expected of them and how they are to work

with the new teacher/mentees in a collaborative relationship to help with the transition to the classroom for the first year is one way in which new teacher mentoring programs can be enhanced (Cook, 2011). This would allow the mentors to have a better understanding of their role in the mentor/new teacher/mentee relationship, as well as give the mentors the opportunity to learn alternative approaches to sharing the knowledge and experiences that the mentors have accumulated throughout their teaching tenure (Paris, 2013).

Expansion of new teacher mentoring programs to include other school district personnel was given in answer to a survey about how to improve new teacher mentoring programs (Nevins Stanulis & Floden, 2009). The inclusion of other employees in the mentoring program is thought to lessen the feeling of isolation that new teachers may have. Inclusion of the other employees may also reinforce the thought that in these mentoring programs, everyone has something to learn from everyone else (Gut et al., 2014).

Placing more importance on the ways in which mentors and new teacher/mentees are paired for the program can also help to create a culture of success for the mentor and new teacher/mentee (Cook, 2011). Paying close attention to the disciplines and grade levels of both mentor and new teacher/mentee, as well as personality, can go a long way in helping the mentor and new teacher/mentee achieve the level of trust that is necessary for the new teacher/mentee to feel comfortable in sharing the concerns about any inadequacies that they feel they present in the classroom setting (Gut et al., 2014). The attention to this pairing also helps to guarantee that the bond created between the mentor and the new teacher/mentee is one that can be mutually beneficial and will help to facilitate student achievement (Womack-Wynne et al., 2011).

Another important aspect of the new teacher mentoring program that must be examined carefully is the inclusion of teachers that are new to the district and have multiple years of experience teaching their discipline and grade level (Szumlas, 1999). These teachers are in need of district level mentoring, but are not in need of the same types of mentoring that a brand new teacher straight out of college may need. It is detrimental to the experienced teacher who is just new to the district to be in a program with the same type of requirements that the brand new teacher/mentee is expected to fulfill (Cook, 2011). Experienced teachers are still in need of mentoring in the ways to navigate the requirements of the new district and should be given the opportunities within the mentoring program to develop the bonds that the new teacher/mentee is establishing with their mentor, but those bonds, and the activities required, should look slightly different than the ones for the new teacher/mentee. For experienced teachers, it is imperative that the district acknowledges the experiences and knowledge that they have gained over their years with other districts (Gut et al., 2014). Non-acknowledgement of the wealth of knowledge that experienced teachers bring to the mentoring program is detrimental to their morale and can cause them to begin questioning their levels of expertise (Edwards-Groves, 2014).

## **Career and Technical Education**

### **CTE Teacher Shortage**

Between the years of 2000 and 2007, there was an increase of almost 6 million students enrolled in CTE courses (Conneely and Uy, 2009). From 1990 – 2000, 11 percent of the CTE programs were cut due to funding. In 2009, the National Commission on Teaching and America's Future estimated that one-third of the current CTE teachers

would retire within the next 4 years. Each of these factors alone would contribute significantly to a teacher shortage, but combined they have led to a serious gap between the supply of qualified CTE teachers and the demand for qualified CTE teachers. When the shortage is coupled with the aforementioned increase in teachers that stay five years or less within the profession, the need to make a change in the way that CTE teachers are indoctrinated into the teaching profession and supported throughout their careers.

### **Professional Development Needs**

Career and technical education (CTE) teachers are a unique group of individuals. They are faced with staying current in the professional practices and content of the industry or vocation in which they are teaching, while at the same time attempting to stay current with professional practices and changes in the field of education (Duncan, Cannon, & Kitchel, 2013). Most CTE teachers come into the field of teaching after working in the vocation that they are to teach, as opposed to the traditional way of getting into teaching by going through a collegiate program designed to teach future teachers their craft (Boser and Daugherty, 1994). Professional development is something that is needed for all teachers. It takes on a special meaning when looking at CTE teachers. CTE teachers have a high interest in professional development around topics such as work-based learning, grant writing, and analyzing the information that comes through the typical professional development in education (Brown, 2003). CTE teachers are also typically dealing with organizations outside the normal PTO/PTA at the school. Due to requirements of the funding supplied by Perkins grants, the CTE teacher will be involved with an advisory committee for his or her field of study, comprised of local business and industry leaders, whose job is to offer advice and make recommendations about the

curriculum, textbooks, facilities and equipment (Rosencrans, 2003). For the new CTE teachers, the advisory committee is especially important to give a balance between the onslaught of educational knowledge they are expected to learn and the knowledge surrounding their field. Advisory committees can also serve as a place to create partnerships with local businesses to benefit the students and the program.

Professional development is one way that CTE teachers can have a chance to forge relationships with other CTE teachers in their field of study. Due to low funding and an emphasis on the academic core of education, CTE teachers are typically considered to be a sole professional, one who is the only person teaching their program of study. This can also be attributed to the cost of CTE programs, since they often require specialized equipment for their field (Stephens, 2011). When professional development is implemented in a way that CTE teachers are able to work together with peers in their same field, the exchange of ideas that tends to occur freely on the core academic side of education begins to become more prominent. The relationships that are formed can give new CTE teachers the opportunity to work with teachers that are more experienced and find solutions to problems they may be having in the classroom. While core academic teachers can be a wealth of knowledge on classroom management, there are additional complications that must be addressed in the CTE classroom (Stone, 2005).

Complications would include working with heavy machinery, the highly independent nature of the CTE classroom, and the attachment to not only educational, but also industry, standards that the CTE teachers and students must measure up to in order to be considered successful in their program.

## **Mentoring as Professional Development**

One reason that professional development plays such a key role in the success of the CTE teacher is due to his or her unique role of coach, mentor, facilitator, collaborator, and technology advocate, in addition to his or her traditional role of technical expert in the specified field (Sturko & Gregson, 2009). Due to an admitted lack of knowledge of the educational system when stepping into the role of teacher, the professional development that occurs at the beginning of the teaching career must be relevant to the field and to the students. This type of professional development is often not found within the traditional context of the one day of district-wide professional development. Lack of individualization to content and student type underlies the need for new teacher mentoring. Mentoring can provide an exceptional means for the new teacher to become better acquainted with the best practices of combining the requirements of the educational system with the requirements of each career cluster program within CTE. In order to improve teaching practices, teachers need to be able to explore their understanding of teaching and learning by experimenting, reflecting, discussing, and assessing their efforts as a part of the daily routine (Darling-Hammond & McLaughlin, 1995). This type of discussion and exploration can be achieved through mentoring relationships. One of the unique situations of the CTE teacher is their sole professional status within his or her school. It is suggested that CTE teachers experience mentoring with two different teachers, one within their school and one within their specialty (Finch, 1999).

Teachers learning from peers is a popular form of professional development when looking at integrated learning, and the same concepts can be applied to the professional development needed by first year CTE teachers, and even applied to CTE teachers in

general (Stasz, Kaganoff, & Eden, 1994). The peer learning environment can also assist in building camaraderie and cohesiveness within the team. Taking into consideration the separation of most CTE teachers, in terms of both location and content, this type of peer learning about the educational culture and expectations of the school can contribute drastically to decreasing the feeling of isolation that many CTE teachers feel within their schools (Sturko & Gregson, 2009). The concept of CTE teachers having a mentor within their school and a mentor within their field addresses the need for individualized instruction and feedback within both the realm of education and the realm of their specialty.

### **CTE Teacher Internships**

One of the experiences that CTE teachers tend to miss out on by not going through the traditional collegiate educational focused experience is the concept of the teacher internship, or student teaching, portion of the program (Stephens, 2011). Due to coming into the world of teaching through an alternative route, it is not uncommon for CTE teachers to experience their first time teaching in a classroom as their first day on the job. While most teachers are experiencing that first classroom under the watchful eyes of university mentors, practicum teachers, and supervising principals, CTE teachers typically step into their first class with the only knowledge about how to run a classroom being a list of what not to do developed when they were in school themselves. Many of these CTE teachers report feeling unusually frustrated in their first 2-5 years because of the abrupt initiation, often without much explanation, they receive into the world of education. With a whole new language, mountains of paperwork, and a stigma that CTE classes are not “real classes,” they are just for kids that are not going to make it anywhere

else, the burnout and turnover rate for CTE teachers remains high (Wilkin and Nwoke, 2011). When asked about the reasons behind leaving the field of CTE, most teachers responded that they felt inadequately prepared for the complications that came with public education. While they felt very capable in their field of study, they did not feel capable in their abilities to meet the deadlines and special requests of the educational system as a whole.

### **Developing Linkages to Education and the School Environment**

With the surge in CTE programs, as well as the revitalized movement toward teaching “soft skills” and “employability without college,” the need for CTE teachers is growing. Curriculum integration between CTE and the core academic subjects is vital to the success of the students that are graduating every year. Integration is made much easier and more enjoyable when there is continuity among the staff of both the CTE world and the core academic world (Stone, 2005). Continuity among staff working with integration of curricula is imperative for successful integration to occur. True integration requires planning, doing, reflecting, revising, redoing, reflecting, revising, and redoing again. Without continuity between the parties involved, true integration is hard to achieve. Continuity among staff is helped along when the staff have developed strong linkages to the workplace (Stone, 2005). For the CTE teacher who is often isolated in location due to the special needs of his or her classroom and isolated in content area due to being the only teacher in the school with that specialized area, linkages to the workplace can be difficult to cultivate. The use of a local, or school level, mentor can assist with the cultivation of these linkages. A unique aspect of CTE programs is that the teacher is often able to create relationships with the students in a way that can be closer

than that of other teachers and is seen as someone who has achieved a level of success in the field by their students. This allows the CTE teacher to influence the behaviors and academics of his or her students in most cases. The linkages between core academic and CTE teachers can prove beneficial to the students because the CTE teacher is able to show the real world application of things that high school students are typically questioning the need for taking. The cross-departmental communication and collaboration can also provide a way for teachers to collaborate about student issues that they may be having that could become more manageable to deal with when looked at from more than one perspective (Workman & Stubbs, 2011).

### **Professional Learning Communities**

A professional learning community (PLC) is a group of people with a shared mission, vision, and values that comes together to share experiences, inquiry, ideas, and reflections to help the group move collectively towards the intended result (Owens & Valesky, 2015). PLCs can be made up of any combination of teachers, administrators, coaches, and students depending upon the mission of the group.

### **Professional Learning Communities in First Year Teacher Experiences**

For many first year teachers, the transition from being a student to being the teacher is a hard one to make. The thought of being placed in charge of children and being the one responsible for making certain that they know what they are supposed to know can be daunting and is often lonely for any teacher, much less the sole professional CTE teacher that has not had educational training prior to beginning tenure as a teacher (Stone, 2005). PLCs are often used in a grade level (elementary school) or subject area (high school) formation, but are beginning to be incorporated in new teacher training.

One of the benefits of having new teachers work not only with a mentor, or two, but also giving those new teachers a chance to work in a PLC where everyone is experiencing some version of the same experiences is increased linkages to the school environment and increased congeniality among new teachers (Owen, 2014). Not only does a PLC give a chance for increased congeniality among participants, it creates a sense of community that addresses the feelings of loneliness that many first year teachers experience. In terms of teacher retention, this combination of PLC with new teacher mentoring programs can increase both the confidence levels of the teachers and their desire to continue in this profession. While confidence and retention are both great side effects of a PLC for new teachers, they should not be the focus of the PLC. Successful PLCs focus on student learning, sharing experiences and expertise, and reflective dialogue moving toward the common goal of the PLC.

### **Structure of the PLC**

As with anything that is implemented, if a PLC is lacking in structure or organization, it tends to be very unsuccessful. There are several attributes and effective practices that help a PLC to be successful (Hellner, 2008). Attributes include shared and supportive leadership, shared values and vision, collective learning and collaboration, teachers sharing personal practice, and supportive condition.

#### **Shared and Supportive Leadership**

Egalitarianism is often touted as the basis of the PLC (Haberman, 2004). While true egalitarianism does not happen very often, there is a necessity for the concept of egalitarianism to surface within the realm of the PLC in the manner of being able to nurture leadership among staff by distributing the power, authority, and decision making

capabilities within the PLC. The leader in a PLC must be able to lead by example and step in as needed while at the same time allowing the members of the PLC to own their group and determine what is most needed to achieve their common goal. School administration should be involved in the PLC to show support of the goal and clarify any questions that the PLC members may have about what is allowable or what proper procedure and protocol may be to have something done. They should also participate as a group member within the PLC because they will have experiences that can help with the realization of the PLC goal. However, administration should not participate in the PLC as an overlord of all that goes on (Padwad & Dixit, 2008). School administration can utilize the PLC as a way to show appreciation and confidence in the staff of the school and how much the experiences and suggestions of the teachers and staff are welcomed within the school environment.

### **Shared Values and Vision**

The second attribute, shared values and vision, begins with the staff and can lead to building or even district level change. It has been shown multiple times in education that collaboration is not simply an idea that is talked about, but a practice that should be implemented frequently (Carver, 2004; Haberman, 2004). In the world of the PLC, collaboration becomes something that is imperative due to the shared values and vision. If a PLC does not share the same values and vision, then the efficacy of the PLC will be compromised. Shared values and vision lead to more potential buy-in from the participants and from the school culture as a whole when changes begin to be implemented. Shared values and vision also lead to more ownership of the situation at

hand and an increased desire for the proposed changes to accomplish what the PLC is setting out to accomplish (Padwad & Dixit, 2008).

### **Collective Learning and Collaboration**

Collective learning and collaboration could be the most central attribute to the way a successful PLC operates. The PLC should have a sense of community where teachers seek new knowledge, skills, strategies, and information to work together to solve problems and improve the learning opportunities for them and their students to address the challenges that are present in the shared vision of the PLC (Owen, 2014). The concept of collective learning and collaboration is what the concept of the PLC is based upon when looking at it through the lens of social constructivism. Collaborative inquiry begins with a current situation, then proceeds to a collaboration of efforts to determine a potential solution to the situation. In the PLC, these potential solutions are attempted, then reflected upon within the PLC group to determine their efficacy. This is the basis of social constructivism and is deeply rooted in the concepts of collective learning and collaboration (Jackson & Street, 2005).

### **Teachers Sharing Personal Practice**

Within the collaborative environment of the PLC, the sharing of personal practice becomes an attribute that should come naturally. With the PLC being based upon shared vision and values, the sharing of personal practice is important not only in the reflection regarding the attempted solutions, but also in the development of the solutions which will be attempted (Owen, 2014). With the rise of the PLC being utilized as professional development documented for school systems, the sharing of personal practice becomes not only an attribute or best practice, but also a mandated event. Without sharing of

personal practice, members of the PLC have the potential to lose efficacy of their PLC by continuing to work with solutions that have been tried in the past and found to be lacking (Jianping & Poppink, 2007). Sharing of personal practice also leads to the candid conversations and opportunities for reflection and discussion that are paramount to the success of the PLC in achieving progress towards the shared goal of the PLC.

### **Supportive Conditions**

In order for a PLC to function as desired, there must be certain conditions within the PLC. These conditions are considered to be supportive conditions and include school structures and resources, open channels of communication, respectful relationships, and the knowledge and trust that exist between PLC members (Hord, 1997). Without supportive conditions existing within the PLC, it is almost guaranteed that nothing will get accomplished and movement toward the shared goal will not be made (Owen, 2014).

### **Improving Teacher Effectiveness through PLCs vs. Traditional Professional Development Models**

The use of any type of educational grouping is only as useful as the participants within the group. In PLCs, this same concept holds true. However, one difference that has been shown in studies of PLCs and their effectiveness is that the inclusion of someone who is struggling in a PLC can improve effectiveness both in and out of the classroom when the PLC functions as a cohesive unity and works towards a common goal with efficiency and drive (Graham, 2007). In fact, there is a body of research that suggests daily, classroom-level curricular and instructional decision-making PLCs and interaction have more impact on student achievement than salaries, educational levels,

and standardized tests (Joyce & Showers, 2002; Stigler & Hiebert, 1999; Wenglinsky, 2000, 2002).

Six features of high-quality typical professional development that cross over into the world of PLCs are activity type, activity duration, collective participation, focus on content, promotion of active learning, and fostering of coherence and relevance (Graham, 2007).

### **Activity Types**

Traditional professional development tends to feature workshops designed to fit a possible need across a large span of people that may or may not have much in common when it comes to curriculum, grade level taught, or content area. In the realm of the PLC, the type of activity is normally a reform model involving study groups, interest groups, peer mentoring, or other group activities with a shared vision that binds each participant to the goal of the entire group (Graham, 2007). These types of activities require that the participants are more engaged with the topic and situation being discussed. These activities also lead to a better buy-in of potential solutions (Owens & Valesky, 2015).

### **Activity Duration**

A normal professional development workshop may be broken up into daily sessions, but is often shorter in length and covering a time span of 1-2 days at most (Graham, 2007). A PLC will often cover an entire grading period, semester, or year and focuses on attempting solutions and then reflecting upon the efficacy of those solutions. This length of time requires the teachers involved to actively participate to have something to bring back to the group as that is what is expected in the group norms. Use

of reflection and extended duration of the activity leads to increased teacher engagement when combined with the activity type that directly relates to the teachers involved.

### **Collective Participation**

Collective participation refers to the ways in which the participants are grouped. For a traditional professional development workshop, participants may be grouped based upon school, but are most often offered many different choices of workshops that all teachers are to attend. In the instances where teachers are grouped another way, it is typically done where all high school teachers are grouped together, all middle school teachers grouped together, and all elementary school teachers grouped together (Garet, Porter, Desimone, Birman, & Yoon, 2001). This does not lead to much collaboration and can often lead to disinterest in the topic due to lack of cohesiveness among the group. In a PLC, the members share a common vision and values, leading to increased engagement with the topic or situation at hand (Graham, 2007). Because the participants share a common vision, they are better able to work cohesively and collaborate on a possible solution.

### **Focus on Content**

Many teachers, when asked about professional development, will lean toward the answer that it does not apply to their content (Owens & Valesky, 2015). One of the unique aspects of the PLC is that it is directly related to the content area that the teacher deals with on a daily basis (Graham, 2007). For many teachers, relevance to their content allows them to become better collaborators and to determine better possible solutions for the problem at hand. Relevance to content area also allows the teachers to feel as if the PLC relates directly to what they are teaching and allows for less speculation about what

else they should be doing or could be doing to stay caught up with their teaching duties. Creating buy-in by the teachers leads to increased production within the PLC and increased retention of the material learned.

### **Promoting Active Learning**

Professional development has a tendency to be very lecture oriented. This is in direct contrast to the active learning that is promoted through PLCs (Graham, 2007). PLCs are designed in a manner that the teachers are active participants within the learning process. Active learning can take the form of observation of other classrooms, planning classroom implementations, reviewing student work, working through possible solutions, and many other formats. What is important is that the teacher is actively participating in solving the problem. In an era where many educational reforms are dictated, the PLC gives teachers an opportunity to strategize and problem solve in a more active manner (Peskin, Katz, & Lazare, 2009).

### **Fostering Coherence**

Fostering coherence is the area in which PLCs tend to vary the most from normal professional development workshops. This is due, in part, to the previous five features. It is also due to the ways in which the teachers are able to align the PLCs with the individual, school, and district goals and needs (Graham, 2007). Because the PLC is oriented around that shared vision, it automatically aligns to the individual or school goals and needs. PLCs are often used to allow for teacher input toward district goals and needs. Shared vision allows the teachers to feel more connected to the process and more included in the decisions being made, and also tends to allow for better decision making

regarding matters such as curricula, policies regarding students, and rewards for students (Peskin, Katz, & Lazare, 2009).

The concept and construct of the PLC has been studied multiple times over the past several years. It has been shown in multiple studies to increase teacher effectiveness when operated as a true PLC and not as a staff meeting or normal professional development workshop (Garet, et. al, 2001). The overall efficacy of a PLC is based upon the participants and the leadership within the PLC, as well as the structure of when and how the PLC will meet (Graham, 2007). Common planning time has been shown to be the easiest and most effective way to allow for PLC interaction. This allows teachers to come together during a break, without having to fit extra meetings into the normal school day. The PLC then begins to show effectiveness by the ways in which disagreements are mediated, community is developed, and collaboration is facilitated.

### **Online and Hybrid PLCs**

PLCs can be developed in any number of ways, and the rise in digital technology is leading to a rise in online and hybrid PLCs (Blitz, 2013). Online PLCs exist to create a group of people that interact totally online to determine the best solutions for possible situations or to determine best practices. These groups may get together, but are most often only collaborators online toward their common goal. Online PLCs can prove especially useful in highly specialized content or to mimic the ways in which a program from another area is succeeding. Hybrid PLCs exist in a manner that allows for online collaboration, but also includes some face-to-face collaboration and communication. This can happen across district lines, but is not typically seen to cross state boundaries.

There are many positive influences that an online or hybrid PLC can have on a teacher or program. However, as with any PLC, the success and efficacy of the PLC depends upon the participants. Some of the best practices regarding online and hybrid PLCs mirror those regarding face-to-face PLCs. The mission and general working structure tend to be the same, but the big difference comes in the ways in which the group members communicate and the ways that deadlines are set. In a traditional PLC, it is easy to set very general deadlines, but in the online or hybrid PLC it is important to set very definite deadlines and for those deadlines to measure shorter outcomes and outputs than those in the traditional PLC (Feger & Arruda, 2008). Because of the online aspect in online or hybrid PLCs, there is a smaller time constraint and teachers are able to collaborate with more individuals than may be available just within their district. This online or hybrid PLC model is typically suggested for use in mentoring, for teachers that teach highly specialized content that may be isolated within their school or district, or for those that are interested in applying novel curricula or pedagogies that are being applied in very sparse amounts across a great area (Vavasseur & MacGregor, 2008).

### **Summary**

There are many difficulties that face new teachers, especially new CTE teachers, with regard to preparation, confidence, and retention. There is a nationwide teacher shortage that is manifesting with even more clarity within CTE programs. While there are several solutions that could be proposed for this problem, retaining good teachers is one of the most obvious ways to help with the CTE teacher shortage. Utilizing the PLC model in both a face-to-face and online or hybrid format to facilitate new teacher mentoring, while at the same time making the new teacher mentoring more meaningful to

the new teacher, could provide a solution that school districts could utilize to assist in the retention of CTE teachers.

## **CHAPTER 3: Research Methodology**

### **Research Design**

The study utilized the qualitative method of interviews. The interview included questions on a Likert Scale asking whether the participants were involved in a mentoring program, aspects regarding the mentoring experience, and how the mentoring experience contributed to their knowledge and confidence in ability. The interview also included a set of questions where respondents can give feedback on their mentoring experience in their own words and give a brief overview of the mentoring program in which they participated. The questions focused on issues facing the stand-alone or isolated CTE teachers chosen for the study. This design allowed the researcher to utilize feedback from participants in mentoring programs to develop the proposed framework.

### **Participants and Setting for the Study**

1. The participants in the survey were three teachers in the Knox County school system within Tennessee. The interviews were conducted in a combination of emails and face-to-face conversations.
2. The process of selecting the sample was based upon teachers that were in their first year of teaching in a CTE classroom. These three teachers covered three different disciplines at three different schools to give a better picture as to how the case studies can reflect on the system as a whole.

### **Data Collection Procedures**

The data was collected utilizing personal interviews and emails. The data collected from the interviews was a combination of analysis, diagnosis, and description presented through written, visual, or aural forms of communication and focused on the quality of the new teacher experience as a CTE teacher.

### **Proposed Data Analysis**

The data gathered in the Likert Scale was analyzed using frequency and mean. Frequency and mean gave data as to how the experiences of the case study subjects were similar, and also allowed the researcher to begin to determine if trends could emerge given a larger sample size.

The data gathered in the interviews was analyzed based upon an inductive approach geared to identifying patterns in the data by means of thematic codes using the constant comparative method in the multiple case study design. This data was analyzed to find similarities between the experiences of teachers regardless of specialty or school and to determine best practices regarding the new teacher mentoring program for CTE teachers by looking at the background of each participant and how those backgrounds play into the field of education. Themes salient across all cases were kept, as well as those that are extremely different. For the thematic analysis, the researcher followed step-by-step guidelines (Stake, 1995). The authors used the word guidelines to highlight the flexibility of the qualitative analytic method. These guidelines are (1) familiarizing yourself with your data, (2) generating initial codes, (3) reading throughout each transcript to immerse in the data, (4) reviewing themes, (5) defining and naming themes, and (6) producing the report. Stake (1995) describes three different cross case procedures

for a multiple case study. For this qualitative study, the researcher followed merging findings procedure. According to Stake, the researcher whose priority is to merge the findings across cases should use this particular method. The method also allowed the researcher to make generalizations about the cases.

Using the “critique checklist”, the researcher assessed the quality of the report (Stake, 1995). A twenty criteria checklist was used to assess the quality of case study reports and they are:

1. Is the report easy to read?
2. Does it fit together, each sentence contributing to the whole?
3. Does the report have a conceptual structure (for example, themes or issues?)
4. Are its issues developed in a serious and scholarly way?
5. Is the case adequately defined?
6. Is there a sense of story to the presentation?
7. Is the reader provided with some vicarious experience?
8. Have quotations been used effectively?
9. Are headings, figures, artifacts, appendixes, and indexes used effectively?
10. Was it edited well, then again with a last minute polish?
11. Has the writer made sound assertions, neither over-nor under-interpreting?
12. Has adequate attention being paid to various contexts?
13. Were sufficient raw data presented?
14. Were the data resources well chosen and in sufficient number?

15. Do observations and interpretations appear to have been triangulated?
16. Are the role and point of view of the researcher nicely apparent?
17. Is the nature of the intended audience apparent?
18. Is empathy shown for all sides?
19. Are personal intentions examined?
20. Does it appear that individuals were put at risk?

### **Organizing Theoretical/Conceptual Framework**

The Theoretical Framework, attributed to Laurent Daloz, for the study is based upon the theories surrounding mentoring. For the purposes of looking at new teacher mentoring programs, the underlying theoretical framework was looked at in traditional mentoring, team mentoring, and network mentoring theories (Scandura & Pellegrini, 2007). Traditional mentoring theory gives a description of the mentor as a guide or counselor who has advanced experience and knowledge that they use to help provide support to the careers of others. Traditional mentoring made one of the first differentiations between a mentor and a supervisor and placed importance on the relationship that was to develop between mentor and mentee.

Team mentoring takes traditional mentoring and alters the mechanism of the mentor/mentee relationship. In team mentoring, there is one team leader that is mentoring team members at the same time that team members are mentoring each other (Williams, 2000). This creates a setting for the new teachers in which they are being mentored by multiple mentors at the same time and are able to gain knowledge from a variety of different backgrounds and experiences.

Network mentoring can present in many different types of mentor relationships, with a focus being on sustaining relationships through electronic means (Hamilton & Scandura, 2003). This type of mentoring can be especially useful for those educators who may be the only person in their district teaching a specific subject because it allows them to develop relationships with others who are facing some of the same challenges that may be discipline specific.

The Conceptual Framework, attributed to Albert Bandura, for the study is self-efficacy, in relation to social cognitive theory and behavior theory. With a definition of success being how successful each individual teacher feels he or she is and how that success relates to the new teacher mentoring program in which he or she participated, the ability to reflect on one's beliefs of self-efficacy, as well as how the mentoring process has played a part in those beliefs will be imperative (Artino, 2012). Self-reflection will also allow the teachers to look at how the confidence and belief in one's own ability are affected by the people that they are working with.

### **Limitations and Delimitations**

The limitation to the survey is the sample population. This affected the research by changing the type of data that is received due to the varied experiences that will be presented. A secondary limitation to the research is the type of experience that the participants have had with new teacher mentoring programs.

Delimitations to the research are that the population only included three public school teachers in the field of CTE from Knox County School systems. The delimitation is being imposed to control the sample size and to allow for a framework to be developed

that will be specifically applicable to the population of CTE teachers that are new teachers.

### **Ethical Issues**

Ethical issues that arose during the study were corrected utilizing the legislation on human rights and data protection while maintaining good quality research. Research participants' names were changed to protect their anonymity and to allow for more freedom to gain truthful and accurate data from which to draw conclusions and develop the best practices that were suggested due to the study.

## CHAPTER 4: Presentation of the Findings

The purpose of the study was to determine if the needs of new CTE teachers are being met through traditional methods of new teacher mentoring programs. Ten research questions, as well as five Likert Scale questions, investigated whether traditional new teacher mentoring, beginning with the new teacher academy setting, met the unique needs of new CTE teachers in adequately preparing those teachers for the classroom. Data were gathered through personal interviews utilizing open-ended questions and Likert Scale ratings. Three candidates were chosen, based upon qualification of being a first year CTE teacher within the school district, with emphasis made upon the teachers not coming from the same school setting.

Results reported in chapter four are in both a narrative and tabular form. The findings section includes a narrative presenting the results from each interview, followed by a report by question according to common themes. From the list of common themes, the researcher presents the emerging themes. Data from the Likert Scale questionnaire are presented in tabular format. Finally, the summary section concludes the report of findings and previews Chapter Five: Conclusion.

### **Findings**

The three candidates for the study represented varying levels of teaching and work experience, and included high school level teachers. The results for each question are reported in a narrative format.

1. What teaching experience did you have prior to this academic year?

All three participants had prior teaching experience in the form of either training others in their initial field or teaching in a different setting. Participant 1 stated, “I had experience in teaching, but at a different level.” Participant 3 had experience in working with curriculum development and instructor training, but all of that experience was in the military setting. During follow-up questions in the personal interview, all three participants expressed that while they had instructional experience, they did not feel the experience prepared them for the rigors of teaching their subject in the high school setting in TN.

2. What field experience did you have prior to this academic year?

All three participants had over 4 years of experience working in their field of study prior to becoming a teacher. Participant 1 had 4 years of experience, participant 2 had over ten years of experience, and participant 3 had over twenty years of experience. All three participants were considered by the State of Tennessee Department of Education to be qualified to teach courses in their field of experience in the high school setting.

3. Were you trained through a traditional education program prior to beginning this academic year?

None of the three participants had received training through a traditional teacher education program prior to this year. Participant 2 had been through a provisional teaching license program in another state 6 years prior to beginning his or her current position. Participants 1 and 3 hold TN Teaching Licenses under the occupational licensure program.

4. What concerns did you have before the New Teacher Academy about the upcoming academic year?

All three participants had concerns about the upcoming academic year.

Participant 1 was concerned with adapting to the different educational setting and collaborating with the other academic disciplines. Participant 2 was concerned about pacing of the objectives throughout the grading period. Participant 3 alluded to having concerns about what the responsibilities as a teacher were. Participant 3 did not feel that the New Teacher Academy addressed those concerns. All of the concerns related directly to working the knowledge the CTE teachers were bringing from their field into the high school classroom setting in the best way possible for the students.

5. What concerns did you have after the New Teacher Academy about the upcoming academic year?

All shared that they had the same concerns after leaving the New Teacher Academy that they had before attending the New Teacher Academy. Participant 3 stated, “Most of my concerns were the same after I left the academies. However, I was set up with a mentor both in my department and within the school (a senior level teacher) which help me out tremendously and allowed me to understand what I needed to do, one to get started and two how to move forward as the school year progressed.” Participant 1 stated, “New Teacher Academy did not address my concerns at all. It was more of a human resources led day of how to get fired and who you should know in the district than an actual learning experience.”

6. What knowledge did you gain at the New Teacher Academy that prepared you for the first day of classes?

The three participants gave answers indicating the lack of relevance of New Teacher Academy to the preparation for the first day of classes. Participant 1 reiterated the feeling of not feeling as if the New Teacher Academy addressed teaching, but instead was more of a parade of faces that the district wanted the new teachers to learn. Participant 2 gained more knowledge about evaluations than teaching. Participant 3 discussed learning who to talk to in order to get additional questions answered.

7. What has been your experience with continued mentoring since the New Teacher Academy?

Each participant shared his or her experiences with regard to continued mentoring. While all three of them are under the umbrella of CTE, each is at a different school. The experiences by the three participants varied greatly. Participant 1 had no formal mentor, but had people in the building who could answer questions. Participant 2 also had no official mentor assigned due to the prior experience in teaching in another state, however, this participant also had designated help available if it was needed. Participant 3 summed up the mentoring experience with the word, “AWESOME!!!!” This participant had been assigned 2 mentors, one a senior level teacher in the school and another mentor within the field. Participant 3’s experiences with mentors led to the participant not feeling overwhelmed by the transition to teaching.

8. What are the needs of teachers who are coming into education from a field due to their work and academic experiences in order to teach classes in Career and Technical Education?

Participant 1 felt like a closer sense of community was needed for new CTE teachers. This participant stated, “I don’t think I would have felt so alone if I had other teachers within my subject to discuss curriculum ideas with. Right now I feel stranded on an island where the academic teachers think I am teaching fluff and the other CTE teachers don’t understand my field of study.” Participant 2 felt that pacing guides are essential, especially for someone who has no experience in education at all. Participant 3 emphasized the importance of knowing how to get to the resources for the subject being taught and how to present the subject to the students. Participant 3 felt his experiences instructing adults did not prepare him for teaching high school students and emphasized learning how to approach teenagers to best reach them for the information to be retained.

9. What can be done to assist new CTE teachers in taking their prior knowledge about their subject area and helping it fit into the K-12 educational model?

All three participants referred to answers to previous questions when answering this question. Participant 1 re-emphasized that communication with other teachers within the subject area would be extremely helpful, especially in the arena of project based learning and assessment. Participant 2 referred back to a pacing guide and also included sample lesson plans. This participant also referenced a move by the CTE department to help develop a bank of higher order thinking questions for each CTE subject area. Participant 3 referred to the concept of taking very complex information and breaking it

down to the high school level as a potential training that would have a major impact upon new CTE teachers. All three teachers referenced activities that would include collaboration with other teachers in their subject area.

10. What changes would you make to the way the new CTE teachers are prepared and supported throughout their first academic year?

Each participant had his or her own ideas to make things better, but all of the ideas dealt with concepts of collaboration and mentoring. Participant 1 felt like a regularly scheduled time, in the form of a PLC, where teachers of the same subject matter could collaborate and bounce around ideas having to do with curriculum would be a way to show improvement. This participant acknowledged that getting everyone together in one place would be difficult, but made the suggestion to use online meeting type software to allow the teachers to collaborate from their own classrooms. Participant 2 made the suggestion to “Pair each new CTE teacher directly with a current CTE teacher that teaches the program he or she is teaching.” Participant 3 suggested a program to work through different issues that may occur during the course of the academic year. The third participant also acknowledged the possibilities of scheduling or time issues and suggested having experienced teachers in each subject create webinars that the new teachers could watch at home or during a break in the day.

### **Common Themes**

Table 4.1 presents common themes that emerged from the responses to the interview questions. Two or more responses to a question identified a common theme. The table contains three columns. Column one presents the question, column two

identifies the common theme, and column 3 identifies how many times that theme was referenced in the interview responses.

Table 4.1

*Common Themes by Question*

1. What teaching experience did you have prior to this academic year?	Multiple years of instructional experience	n=3
2. What field experience did you have prior to this academic year?	More field experience than instructional experience	n=3
3. Were you trained through a traditional education program prior to beginning this academic year?	No formal training in education	n=2
4. What concerns did you have before the New Teacher Academy about the upcoming academic year?	Delivering subject matter to students to meet expectations	n=3
5. What concerns did you have after the New Teacher Academy about the upcoming academic year?	There was no change in concerns after attending New Teacher Academy	n=3
6. What knowledge did you gain at the New Teacher Academy that prepared you for the first day of classes?	New Teacher Academy did not prepare the participants for the first day of classes	n=3
7. What has been your experience with continued mentoring since the New Teacher Academy?	Help is available, but no formal mentor relationship exists	n=2
8. What are the needs of teachers who are coming into education from a field	Having resources available to help with the process of imparting knowledge to the	n=2

due to their work and academic experiences in order to teach classes in Career and Technical Education?	students.	
9. What can be done to assist new CTE teachers in taking their prior knowledge about their subject area and helping it fit into the K-12 educational model?	Training to help make the transition from the field to the classroom smoother.	n=2
10. What changes would you make to the way that new CTE teachers are prepared for and supported throughout their first academic year?	Mentoring with experienced teachers in the same subject area.	n=3

### Emerging Themes

For the purposes of the study, the researcher defined emerging themes as those common themes that are mentioned by all three participants. The emerging themes include previous experience in teaching, more field experience than teaching experience, concerns about ability to reach students effectively, lack of perceived effectiveness of new teacher academy, and desire for mentoring within the subject area being taught.

Experience levels were discussed in questions 1 and 2. These questions served to give a baseline for the level of training and instruction that the participants had been exposed to prior to beginning their positions with Knox County schools. Concern about the ability to reach students effectively was discussed in question 4. This particular question asked the participants to reflect on their self-perceived weaknesses prior to the first day of school. While all three participants had different answers to the question, it is

the researcher's observation that all of the answers given related to the ability of the teacher to teach the content on a level and in a structure that would work within the parameters of the state standards, county expectations, and student abilities. Another emerging theme was a general lack of perceived effectiveness of the new teacher academy. None of the participants felt as if the new teacher academy prepared them for the first day of school. The last emerging theme was the desire for mentoring within the subject area being taught. This need for mentoring was mentioned by all three participants as the change they would make to the way new CTE teachers are prepared and supported throughout their first academic year.

### **Likert Scale Ratings**

The Likert Scale ratings were utilized to rate different aspects regarding new teacher academy. Participants were asked to mark the category that correlated with their thoughts about the question most closely. Column one contains the statements about the new teacher academy. Columns 2-6 contain the options that each participant had to choose from when rating their level of correlation between their feelings about new teacher academy and the statements about new teacher academy.

Table 4.2

#### *New Teacher Academy Effectiveness*

	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
1. The New Teacher Academy that I attended was a good experience for me.	0	0	2	1	0
2. I was able to gain valuable information at the New Teacher Academy that I needed for my classroom.	0	2	0	1	0
3. I was able to make connections to other teachers in my subject	0	0	0	3	0

area at New Teacher Academy.					
4. I felt more prepared to step into my classroom on the first day of school and teach my students due to the information that I received at New Teacher Academy.	0	1	2	0	0
5. New Teacher Academy was a valuable experience that addressed my concerns as a new CTE teacher.	0	1	2	0	0

The Likert Scale ratings show the emerging theme of making connections as the take away that all three participants experienced. Making connections is the data point witnessed by the researcher as being related to the emerging theme of mentoring from the interviews. All three participants placed emphasis on the relational aspect of teaching and growing those relationships to create collaboration within the subject area.

### **Summary**

Chapter Four presented the results of the research conducted with three different participants. This was followed by the presentation of common themes in tabular form by question, with emerging themes presented in narrative form. Additional data from the Likert Scale ratings were presented in tabular form, with the emerging theme from that data and the theme continuation from the interviews presented in narrative form.

Chapter Five will include a summary of the study, as well as the study conclusions, recommendations, and reflections. The conclusion section will present an analysis of the findings presented in Chapter Four as they relate to answering the research questions, followed by the researcher's recommendations and reflections.

## CHAPTER 5: Conclusion

Chapter Five presents a summary of the study, followed by the findings and the recommendations from an analysis of the data detailed in Chapter Four. The summary, findings, and recommendations are followed by the researcher's recommendations for future study and her personal reflections.

### Summary

The purpose of the study was to determine whether new CTE teachers were being adequately prepared for their first day of school and supported through their first year of teaching through traditional new teacher academy and mentoring methods. A qualitative case study design was selected to gather data through interviews and surveys. Interviews were completed with three participants with various backgrounds prior to this first year of teaching a CTE subject. The three participants selected were from different schools within the same school system and teach different subjects within the realm of CTE to provide a better sample of the ways in which different schools within the same district approach new teacher mentoring.

Findings have been presented as they relate to each of the four research questions in order of significance. The research questions that guided the study include: (1) What are the needs of teachers who are coming into education from a field due to their work and academic experiences in order to teach classes in Career and Technical Education? (2) How can we best utilize Professional Learning Communities (PLCs), in conjunction with mentoring to assist teachers in these secluded situations? (3) What is the most

productive way for these teachers to gain knowledge about education? (4) What can be done to assist new CTE teachers in taking their prior knowledge about their subject area and helping it fit into the K-12 educational model? The research questions were developed to look at the issues specific to new CTE teachers and how the new teacher academy and new teacher mentoring helped support them in those issues. Data gathered in this research were analyzed using the theoretical framework attributed by Laurent Daloz surrounding mentoring along with conceptual framework attributed to Albert Bandura in self-efficacy.

### **Findings**

**Finding 1:** CTE teachers' most expressed need was directly related to student learning.

All the participants in the study expressed a need for guidance in how to get the knowledge that they had spent a lifetime accruing condensed into a format that is digestible by high school students in the time frame they are given and meeting the standards set forth by the State of Tennessee. The condensation of knowledge is something that teachers in general have to deal with, but with a lack of background and knowledge in educational practices, CTE teachers are oftentimes left learning to teach through trial and error (Conneely and Uy, 2009). Pacing, condensing required information into a format that high school students can understand, and assessing within the rubric were all mentioned as things that the participants were concerned about, as well as how to relate to students. This finding began to answer research question number 1 about the needs of teachers coming into education from another field with no educational background.

**Finding 2:** The participants in the study mentioned contact time for collaboration and mentoring with other teachers in their subject and with other teachers in their school.

The use of mentoring is something that has become extremely commonplace in education, without much discussion about what makes that mentoring successful. The participants in the study all expressed that they would have welcomed more of a mentoring relationship with the other teachers teaching their subject across the district. It was also suggested to develop some type of training/educational tool that could be utilized for CTE teachers to develop more of an understanding of the terms and ideas that were being discussed in the new teacher academy. Both requests fit into the model of the PLC.

Also mentioned with regard to research question number two was the issue of these teachers being very secluded from their peers. Some of the CTE teachers are the only person in their building teaching their subject. And many of them are not close to the other academic teachers in their schools. Due to this seclusion, a PLC would allow participants to communicate and collaborate, not only with other teachers in the district that are teaching the same subject, but also with other regular academic teachers to allow the new CTE teachers to better understand some of the concepts and theories regarding education.

**Finding 3:** The suggestion was made for the teachers to be allowed to utilize the webinars and other non-structured training time to begin to learn more about the field of education and the expectations that administrators and school districts have.

Teachers are very familiar with the concept of professional development. It is something that they experience on a regular basis. However, the need for professional

development and support in the academic area of simply teaching is something that is not often looked at when designing professional development. Much of the existing professional development and the professional development that is being planned relates more to changes in the educational system or in the standards that are being taught. Most of these CTE teachers have no background in education (Conneely and UY, 2009). They have come to teaching from a field where they were considered experts. Due to a lack of background knowledge the participants each stated a fear of how to manage a classroom. Included in that fear were concerns not only about general classroom behavior, but also concerns about safety in within the classroom. For the CTE teachers that participated in the study, and many other CTE teachers worldwide, simply managing the classroom becomes a larger than normal issue due to the equipment and materials that the CTE teachers utilize within their class to teach a concept. One participant mentioned lesson and unit pacing that could also be taken care of with continued professional development. Research question three was what is the most productive way for the teachers to gain knowledge about education. Looking at the data from the three participants, as well as the literature regarding CTE teachers, the suggestion was made repeatedly to form a PLC type group, as well as giving all new teachers the opportunity to learn more about education by utilizing webinars and observations.

**Finding 4:** The participants in the study are considered to be experts in their field, however, that does not mean they are experts at how to teach their subject matter to high school students.

For these three participants, as well as many other CTE teachers, the struggle to take a lifetime worth of work in knowledge and turn that knowledge into something that

is digestible by high school students is a common problem. Research question four asked what could be done to assist new CTE teachers in taking their prior knowledge and making it fit into the K-12 educational model. The participants themselves had suggestions on how to better teach their concepts. Participant 2 spoke quite often about pacing guides and the benefit that the development of such pacing guides would have been to her classes. Participant 3 spoke about how to take the knowledge that he had gained in over 20 years in the field and make it relatable for high school students. He said that that was a very large concern of his. Participant 1 stated that making the knowledge accessible to the high school students and also making it work with some of their other academic courses was very important to her and a very big concern prior to beginning the school year. The use of both mentoring and PLCs creates an outlet for these teachers to receive an opportunity for collaboration, as well as allowing for the development of ideas, assignments, and assessments that could be created in order to help make the knowledge become more understandable for high school students. All three participants stated an interest in working not only with other teachers in their subject area but also with teachers in the core academic areas to develop ways that the CTE curriculum for their subject and the state standards for the core subjects to enhance each other and help the students not only understand the knowledge but also apply that knowledge.

### **Applying the Theoretical and Conceptual Frameworks to the Findings**

The theoretical framework utilized for the study is attributed to Laurent Daloz and involves three theories surrounding mentoring. When looking at the findings from the research, the word mentoring is mentioned multiple times. Three types of mentoring are

traditional mentoring, team mentoring, and network mentoring. The traditional mentoring theory is the type of mentoring where the mentor is looked at as a guide or a counselor that has advanced experience and knowledge that they can use to help support the careers of their mentees. In this particular case, the use of a mentor in the traditional mentoring theory could happen through the assignment of a mentor within the school that is a master level teacher and is available to help the new CTE teacher with an understanding of how that particular school operates and the expectations of both the mentee and the students at that school. In the traditional mentoring theory, the mentor would serve as a guide to help the new CTE teacher better understand his or her job in relation to his or her unique school and also the culture, both educational and social, of the school.

Traditional mentoring is only one aspect of the mentoring theories that is applicable in this situation. Network mentoring would also be something that could be utilized for the new CTE teachers. Network mentoring is when the mentor has the traditional mentoring role, however the relationship between mentor and mentee is sustained mainly through electronic means (Hamilton and Scandura, 2003). Network mentoring would be extremely useful in situations where the new CTE teacher is the only person teaching his or her subject matter in his or her school. For these network mentoring instances, utilization of web based software to create a mentor experience would allow the new CTE teacher to have a mentor that understands their subject matter as well as the ability to connect with that mentor regardless of distance between their schools or locations.

The third theory under mentoring theory is that of team mentoring. Team mentoring is where there is one team leader that mentors multiple team members. At the same time the leader is mentoring, the team members also mentor each other. This is the setting for PLCs to occur. When working under team mentoring theory, the new CTE teacher is able to collaborate with other educators in the same school. Team mentoring allows the new CTE teacher to better understand the educational culture of the school by developing relationships with his or her colleagues, as well as giving the new CTE teacher the opportunity to contribute ideas and get feedback on things that they are doing in their classrooms. One aspect of team mentoring under the PLC model that makes it extremely effective for CTE teachers is the ability for the CTE teachers to work collaboratively with teachers who have the same students in different subjects. This also allows the CTE teachers to develop new ideas and take suggestions of how to work with certain situations that may be occurring within the classroom and gain the knowledge of whether student issues that the new CTE teachers maybe having are only happening in their classroom or if it is a schoolwide issue.

The conceptual framework for the study is attributed to Albert Bandura. The framework of self-efficacy in relation to social cognitive theory and behavioral theory played a role in the study due to the effect on the way in which people learn and achieve. Within the conceptual framework of self-efficacy, the new CTE teachers must have the ability to reflect upon their own belief of how efficient and effective they are in their classroom. Throughout the interview, the researcher asked the participants to reflect on what they had accomplished and how they felt prior to the first day of the school year. Allowing time for self-reflection gave the participants a chance to not only evaluate their

self-efficacy, but also time to evaluate the things that they believe would have made them more effective. When looking at self-efficacy using social cognitive theory, observation of others is one of the ways in which self-efficacy can be improved. Being given the opportunity to observe others is one of the things that the participants continued to mention throughout the interviews. When looking at self efficacy through behavior theory, the concept utilizes traditional mentoring theory, with the mentor being a master level teacher in the same building creates an opportunity for the new CTE teacher to learn behaviors through the observance of others and interaction with colleagues.

### **Recommendations**

The following recommendations are presented by the researcher based on each of the aforementioned study findings.

**Recommendation 1:** Dedicate a portion of the new teacher academy to be used specifically for new CTE teachers to meet with master level academic teachers from their own schools to begin to develop a mentoring relationship where the CTE teachers begin to learn educational terms and expectations. The mentoring relationship would need to be formalized within the school and continue throughout the first year of teaching. At that point, it would no longer need to be mandated as a mentoring relationship, but encouraged as a collegial relationship in which both parties continue to collaborate on ways in which CTE and core academics can be utilized together. The mentoring relationship would serve to help the new CTE teacher with the educational culture of the school as well as helping them to better understand the terms and theories related to education.

**Recommendation 2:** Assign each new CTE teacher a CTE mentor that teaches the same subject in another school. This mentor should be a teacher with experience teaching in the school district. Special attention should be paid to location of both the mentor and the mentee when the assignment is made to allow for ease of communication. The mentoring relationship will also need to be slightly more flexible by allowing for some of the mentoring to happen through network mentoring. This will allow the mentor and mentee to communicate, as well as observe each other without having to arrange for substitute teachers so they can travel to the observation location. The mentoring relationship also becomes more economical since most of the schools in the district already have some type of access to the technology needed to sustain this type of mentoring relationship. Having a mentor within the same subject will also allow the new CTE teacher to develop a camaraderie that will help to combat the feelings of seclusion that most new CTE teachers experience at some point in their teaching experiences.

**Recommendation 3:** Create a virtual library of webinars that new CTE teachers can watch on their own time regarding policies and procedures specific to CTE teachers. The virtual library would allow the new CTE teachers to not only have access to professional development materials on their own time, but also the ability to review any information that they need to review as the years progressed. This would be something that would have to be updated as policies, standards, and expectations change, however, short 5 to 10 minute webinars that are catalogued based upon topic would allow all CTE teachers, including master level teachers, to go back to the videos and make certain that the requirements from the state and district of what the teachers are required to do regarding policies, procedures, and paperwork was being done correctly. It would also allow CTE

teachers to contribute in an area where they felt strong, and grow in areas that they do not feel strong.

**Recommendation 4:** CTE teachers have the unique experience of typically being the only person within their subject matter in their building. For this reason, recommendation number four is to create a network online where CTE teachers are able to communicate, share lesson plans, and develop ideas for their classrooms. This will operate much like a professional learning community, in that the CTE teachers for each subject area would have their own area within the electronic PLC to allow them to work together. It would differ from a traditional PLC because of the electronic means of communication and the lack of face-to-face contact. It would be very similar in content to the departmental meetings that most of the core academic subjects have where they are able to collaborate and share ideas. The recommendation could be set up utilizing minimal budget requirements due to the many free websites where forums can be created.

**Recommendation 5:** The topic should continue to be researched on a broader scale. This particular research was done using three CTE teachers in the same district. The findings from the research show that the ways in which CTE teachers are being supported are lacking. Further research including more CTE teachers from different school districts would determine whether the data derived was a phenomenon in one school district or if it was a wider spread occurrence. Continuing research could not only impact the new CTE teachers, but also have an impact on core academic teachers and students.

## Reflections

CTE teachers share many similarities with other K-12 teachers. However, they also have their own very distinct characteristics that make what they do very different from what others are doing. They tend to be isolated in the building, have different types of standards, work with shop or lab equipment, and come from fields in their backgrounds other than education. For these reasons, it is very important that there be orientation and mentoring specifically for CTE teachers. One of the common requests of the participants in the study was for mentoring by both another teacher in their subject area and a core academic teacher. It is important that a new professional CTE teacher be paired with a core academic teacher to help him or her understand some of the basic language that is used in the field of education, as well as some of the procedures that he or she will be expected to follow. It is also important that new CTE teachers are given the opportunity to collaborate with peers in their same subject area.

CTE teachers often feel alone within their schools. It is important that they are included not only with the core academic teachers, but also within the overall CTE department of the district to network with others who are doing what they are doing. With the emphasis being placed on the success rates of students that are involved in CTE classes or that choose CTE concentrations, it will continue to become even more imperative that new CTE teachers receive a higher level of support throughout their teaching careers. This will not only impact those CTE teachers, but also impact the students taking their classes.

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**Appendix A – Interview Protocol**

## **Appendix A**

### Interview Protocol

1. All interviews will be conducted separately.
2. The interviews will last one to two hours and will be conducted in a setting that is convenient for the interviewee.
3. Each interviewee will be asked 10 open-ended questions, in addition to ranking his or her experiences with the New Teacher Academy model on a Likert Scale.
4. Each interview will be recorded and transcribed.
5. The researcher will create Microsoft Word files for the interviews, and those files will be protected by password.

**Appendix B - Likert Scale Survey**

## Appendix B

### *Likert Scale Survey*

	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
1. The New Teacher Academy that I attended was a good experience for me.	SD	D	N	A	SA
2. I was able to gain valuable information at the New Teacher Academy that I needed for my classroom.	SD	D	N	A	SA
3. I was able to make connections to other teachers in my subject area at New Teacher Academy.	SD	D	N	A	SA
4. I felt more prepared to step into my classroom on the first day of school and teach my students due to the information that I received at New Teacher Academy.	SD	D	N	A	SA
5. New Teacher Academy was a valuable experience that addressed my concerns as a new CTE teacher.	SD	D	N	A	SA

**Appendix C – Interview Questions**

## Appendix C

### Interview Questions

1. What teaching experience did you have prior to this academic year?
2. What field experience did you have prior to this academic year?
3. Were you trained through a traditional education program prior to beginning this academic year?
4. What concerns did you have before the New Teacher Academy about the upcoming academic year?
5. What concerns did you have after the New Teacher Academy about the upcoming academic year?
6. What knowledge did you gain at the New Teacher Academy that prepared you for the first day of classes?
7. What has been your experience with continued mentoring since the New Teacher Academy?
8. What are the needs of teachers who are coming into education from a field due to their work and academic experiences in order to teach classes in Career and Technical Education?
9. What can be done to assist new CTE teachers in taking their prior knowledge about their subject area and helping it fit into the K-12 educational model?
10. What changes would you make to the way that new CTE teachers are prepared for and supported throughout their first academic year?