Retention of Construction Teachers Engaged in Missouri's Secondary School System

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ABSTRACT

The purpose of this study was to investigate the reasons construction teachers in the CTE field left the teaching profession in their first five years of service. The study also sought to determine if there was a significant difference in the retention rate of two-year alternatively certified teachers and four-year teaching degreed teachers and if there was a significant difference in why two-year certified and four-year teaching degreed teachers had considered leaving the profession. This was done through the triangulation of 44 mixed-design surveys with open-ended questions and six semi-structured interviews.

Introduction

The dilemma of discovering, recruiting, and retaining teachers is not a new problem facing our educational system. Educators, education stakeholders, and policymakers have been challenged with the quandary of how to deal with the teacher shortage and retain the novice teacher in their profession for decades (Bartell, 2005; Berry, 2004; Billingsley, 2006; Bradley & Loadman, 2005; Cochran-Smith, 2004; Dove, 2004; Gray & Walter, 2001; Hull, 2003; Ingersoll, 2001; Woullard & Coats, 2004). Moreover this is not a localized problem because according to the National Commission on Teaching and America's Future (NCTAF), (2002), "an alarming and unsustainable number of teachers are leaving teaching during their first few years of teaching" (p. 3). Bartell acknowledged this when he stated "the need for well-qualified, highly competent teachers has never been greater" (p. 4) and furthermore buttressed by Ingersoll, (2001a) who argued "the failure to ensure that all classrooms are staffed with qualified teachers is one of the most important problems in U. S. education" (p. 42).

The Career and Technology Education (CTE) field has not been immune to the teacher shortage problem. According to Gray and Walter (2001), debates about CTE teacher preparation have been bolstered because of the declines in the number of CTE preparation programs and the shortages of CTE teachers. Teachers going into education and not staying in the field long enough to become an established, viable asset to the program is one of the problems facing CTE programs today (McCaslin & Parks, 2002; Osgood & Self, 2002). Furthermore McCaslin and Parks postulated that 50% of all newcomers to the CTE teaching field leave within the first five years of service. Research done by Gray and Walter (2001) reveals there is a general shortage of CTE teachers and "in some programs, such as technology education, the shortage is so severe that it threatens the program of study's very existence" (p. 15).

Statement of the Problem

The educational community understands there is a shortage of quality teachers in classrooms across America. NCTAF (2003) announced that teacher retention was a national

crisis (p. 8). Although some research has been done on the recruitment and retirement of the teacher workforce, new research suggests this is the wrong diagnosis for the more significant problem of retention and attrition (Ingersoll, 2002a; Ingersoll & Smith, 2003; Merrow, 1999). Few studies have been done on the retention and attrition of CTE teachers, especially in the high labor demand area of the construction industry. This is enforced by McCaslin and Parks (2002) who argued "There needs to be more research done for career and technical teacher education" (p. 10) and buttressed by Cohen and Besharov (2002) who pointed out "More research needs to be done on how schools… retain good CTE faculty" (p. 40).

Purpose of the Study

Therefore, using quantitative and qualitative data, the study examined the reasons construction teachers in the CTE field left the teaching profession in their first five years of service, or if they stayed, what were the dominant factors that caused them to consider leaving the profession. Also examined in this study was the effect mentoring had on the beginning construction CTE teacher.

Research Questions

Specifically, the following research questions guided this study:

1. Are there differences in the retention rates of construction CTE teachers receiving their four-year teaching degree from a college or university and construction CTE teachers coming directly out of industry with a two-year alternative certificate?

2. Are there differences in the reasons four-year teacher certified construction CTE educators are leaving the profession or have considered leaving the profession and those having a two-year alternative certification are leaving the teaching profession or have considered leaving the profession?

3. What are the widespread and dominant reasons why construction CTE teachers are leaving the profession during their critical first five years?

4. What effect has mentoring had on the beginning construction CTE teacher?

Review of Related Literature

This review of the literature was synthesized to demonstrate the low retention and high attrition rates facing the novice teacher in our nation today. With the recent studies that have been done linking quality teachers with a better school climate and improved student achievement (NCTAF, 2003; Wong, 2004), it is imperative good teachers are retained in our educational system. "Every year many school systems across the country struggle to fill vacancies left by teachers who move, quit, retire, or change jobs.…Just as the importance of teachers to student achievement has begun to be demonstrated through research, the number of teachers seem to be shrinking" (Hull, 2003, p. 1). Furthermore, Ingersoll (2002) calls teaching a revolving door occupation with relatively high flows in, through, and out of the school system.

Due to the "graying workforce" teacher retirement has been cited as being a major part of the shortage problem; but much more serious than retirement is the fact that the number of teachers leaving the profession for other reasons is almost three times larger than the number who are retiring (NCTAF, 2003) and student population increases, classroom policies, and attrition are also factors contributing to teacher shortages (Bradley & Loadman, 2005; Dove, 2004; Hull, 2003; Ingersoll, 2002a). As the educational community considers all of these issues, it is vital "to attract, support, and retain an equally large or larger influx of novice teachers to meet the growth of the school-age population" (Whisnant et al., p. 2).

Many researchers have placed retirement as one of the main reasons we are experiencing an attrition problem. However, "…it is not true that most teachers who leave teaching do so because of retirement..." (Cochran-Smith, 2004, p. 388) and "Contrary to conventional wisdom, retirement is not an especially prominent factor. It actually accounts for only a small part (12%) of total turnover" (Ingersoll, 2002a, p. 25). Therefore, retirement is among the least prominent reasons for teacher attrition (Ingersoll, 2001). "Researchers have consistently found that younger teachers have higher rates of departure…" (Ingersoll, 2002a, p.17) and the highest "attrition rates seen for teachers occurred in their first years of teaching" (Guarino et al., 2006, p.188). Some of the more prominent reasons the novice teacher leaves is due to personal reasons, the dissatisfaction of low salaries, lack of administration support, lack of student motivation and student discipline problems (Ingersoll; Wutke, 2004). In addition to the personal reasons and salary issues, Ingersoll & Smith, (2003) report that their "...data suggest that the roots of the teacher shortage largely reside in the working conditions within schools and districts (p. 32) and "research suggests that teachers are more likely to leave teaching or indicate intent to leave in the absence of adequate support from administrators and colleagues" (Billingsley, 2004, p. 45). However, the fact remains, "Our inability to support high-quality teaching in many of our schools is driven not by too few teachers coming in, but by too many going out, that is, by a staggering teacher turnover and attrition rate" (NCTAF, 2002, p. 3).

Many states respond to these deficits by creating back-door routes into teaching or short-term training programs that provide only a few weeks of preparation before entering a classroom (Darling-Hammond, 2000a). However, these alternative certification programs can exacerbate the problems of supply and demand because the attrition rate for those who enter through these "alternative" pathways can be as high as 60 percent (Darling-Hammond, Berry, & Thoreson, 2001). This is further supported by Berry, (2001) who stated these alternative entrants are less likely to remain in teaching and do not possess the knowledge and skills needed to reach all students. Whiting and Koltz (1999) argued that they are not against alternative programs, but these entrants need "appropriate preparation to ensure their success and not their demise" (p.8). They went on to say the educational community should not continue to "put novices into shark infested waters with the expectation that they will be able to navigate and survive, without harming either the students or themselves" (p. 7).

Many educational institutions have put induction programs in place to help these novice teachers attain the necessary knowledge and skills to be successful in the teaching profession. Successful induction programs have individualized teacher support such as mentoring, class observation, formative assessments, and new teacher institutes. They also include professional development activities such as collaborative networking, coursework, or conferences and

employer sponsored programs such as workshops and specific training (Olebe, 2005). It is through these successful induction programs, "we have begun to value and appreciate the advantage of viewing teaching as a more collaborative endeavor, and learning from each other" (Bartell, 2005, p. 57).

Research Design and Procedure

Population

The population for this study included all construction CTE teachers in the Missouri public school system, both in the comprehensive High School and the Career and Technology Centers. Missouri institutions that had construction related teachers were identified from the Missouri Department of Elementary and Secondary Education (MODESE) Report of Trade and Industrial Teachers 2007-08. There were 22 current teachers identified in 22 comprehensive High Schools and 94 current teachers identified in 51 Career and Technology Centers in the 2007-08 school year. Each of these institutions were contacted for verification of contact information on existing construction CTE teachers and any construction CTE teachers who were teaching during the 2003-04 school year through the 2007-08 school year, but were not teaching at the beginning of the 2008-09 school year.

A study done by Heath-Camp and Camp (1990) reported that 15% of newly hired vocational education teachers leave after their first year and an astonishing 48% of trade and industrial arts teachers leave before their third year has ended. In addition, according to Inman and Marlow (2004), the teacher most likely to leave the profession is the male teaching in the high school setting who has been teaching for fewer than five years and they are communicating the professional prestige of the profession is not as good as they originally perceived it would be. Therefore, teachers who have been teaching for three or more consecutive years were considered stayers for the purpose of this study. There were 17 teachers that met the criteria for being an active teacher for less than three years. The teachers who taught and left before having three years of consecutive teaching experience were classified as leavers. The researcher identified five construction CTE teachers that would be considered leavers for the purpose of this study. The teachers who began teaching after the 2006 school year and were still teaching at the beginning of the 2008-09 school year were by definition neither stayers or leavers and therefore their data were not used for the purposes of this study. The researcher differentiated 12 existing construction CTE teachers that met these criteria.

In addition, as the researcher contacted all 74 of these teaching institutions, it should be noted that three of the schools had CTE teachers retire in the 2007-08 school year and did not find replacements for them in the 2008-09 school year and were no longer offering a construction CTE curriculum. Also, the administration from two school districts did not want their teachers being bothered with a research survey. Therefore, after removing the teachers that did not qualify, removing the teachers that had retired or were on extended medical leave, and removing the teachers that could not participate due to conflicts with their administration, it left a total of 92 potential stayer candidates and five leaver candidates for the purposes of this study. Out of the 92 stayer candidates, 18 were located in the comprehensive high school setting.

Instrumentation

The sampling was two-phased, using a quantitative/qualitative mixed-method design survey for phase one of the study. These two research paradigms, quantitative and qualitative, are at opposite ends of the spectrum in their methodology. The quantitative methodology uses numbers and data in a deductive approach and relies on absolutes and what they consider absolute truth. As researchers, they are detached from the project and use standardized, uniform procedures and fixed designs. The qualitative methodology, however, uses narratives, descriptions, and observations in an inductive approach which are more subjective in design. The researcher is close to and sometimes immersed in the research and they use holistic, emergent and flexible designs (Patton, 1997).

In recent years, a new research method has emerged that recognizes the attributes of both of these paradigm designs and it is called mixed methods research or mixed-design. According to Johnson and Onwuegbuzie (2004), the goal of this mixed method "is not to replace either of these approaches but rather to draw from the strengths and minimize the weaknesses of both in single research studies and across studies" (p.15). Mixed methods research attempts to "fit together the insights provided by qualitative and quantitative research into a workable solution" (Johnson & Onwuegbuzie, p.16). Qualitative research is known to produce thick, rich descriptive data and is usually applied to small, nonrandom samples (Merriam, 1998). Conversely, quantitative research bases statistical significance on large, representative, heterogeneous sampling methods using an appropriate number of participants to reduce biases in the data collected (Field, 2005; Heppner & Heppner, 2004; Merriam). A mixed-design takes advantage of both of these research methods and will be employed in this study.

The surveys were formulated electronically using Simple Form and Survey Builder v2.1. The literature review yielded information to help the researcher in the construction of the survey instrument. The researcher found 13 topics of interest (see Table 3), and the respondents were asked to rate the level of importance of these 13 themes on a five point Likert-type scale ranging from not at all important to extremely important. The respondents were then asked five open-ended qualitative questions on the leaver survey and six open-ended questions on the stayer survey to validate the quantitative theories that were discovered in the literature review while also providing the richer insight and additional information not discovered in the Likert-type scale quantitative survey (Johnson & Onwuegbuzie, 2004; Merriam, 1998). The surveys were pilot tested and the participants were asked to provide feedback on the clarity of the directions, clarity, format, and appropriateness of the questions, and length of the survey. After looking over the feedback, appropriate changes were made to the surveys before they were issued to the study population.

Phase two of the study involved a purposeful sampling of those participants who indicated they would be interested in participating in an interview. This purposeful sampling was based on the premise that to gain rich insights and have a full understanding of the data, a select sampling must be determined from which the most can be learned (Merriam, 1998; Seidman, 2006). The interview questions were based upon the quantitative and open-ended question findings of the survey, The researcher attempted to interview at least one teacher from each category that participated in the study.

Data Collection

The researcher asked the participating schools to verify the most resent addresses, telephone numbers, and email addresses for the 92 qualifying stayer teachers. The researcher contacted each of the participants by telephone, explaining the research effort and that their participation was important and their responses would be confidential. All participants were asked for their current email addresses and were provided an informed consent form before completing the mixed-design survey instrument. The researcher sent a second email out two weeks after the first to those teachers who had not responded. Of the 92 stayer surveys that were sent out for participation in this study, 42 were returned, yielding a return rate of 45.7%.

The researcher could only find contact information on three of the five leaver teachers. All three leavers were contacted and two filled out the survey and were interviewed. The third leaver was contacted three times and each time agreed to fill out the survey, but never complied and when contacted four additional times to try and get information over the telephone, would not acknowledge or return the researcher's call.

Findings

Demographics

Table 1
Demographic Information of All Construction CTE Teachers Responding to Survey

Demographic	Characteristic	Frequency	Percentage
Gender	Male	44 (6)	100.0%
	Female	0	0.0%
Age	20-30	1 (1)	2.3%
	30-40	7 (1)	15.9%
	40-50	15 (1)	34.1%
	50-55	10 (1)	22.7%
	55+	11 (2)	25.0%
Years of Experience	1-2 years	2 (2)	4.6%
	3-5 years	11 (1)	25.0%
	6-10 years	8	18.2%
	11-15 years	9 (1)	20.4%
	16+ years	14 (2)	31.8%
Average Number of Students in Class	10-15	28 (4)	63.6%
	16-20	16 (2)	36.4%

Note: Numbers in parentheses indicate number of interview participants in that category.

The average age of the respondents is 48 with an average of 13 years of teaching experience. It should also be noted that 25% of the teachers answering the survey are at least 55 years old and several stated they would be retiring in the next three years.

Table 2
Teaching Location and Certification Information of Teachers Responding to Survey

Demographic	Characteristic	Frequency	Percentage
Teaching Location	Comprehensive High School	10 (2)	22.7%
	Career and Technology Center	34 (4)	77.3%
Teaching Certification	4-Year Teaching Degree	12 (2)	27.3%
	4-Year BS and 2-Year Certification	4 (2)	9.1%
	2-Year Certificate	28 (2)	63.6%

Note: Numbers in parentheses indicate number of interview participants in that category.
In addition to a four-year Bachelor of Science degree in Industrial Technology, two respondents had advanced degrees in education, one with a Master's in Industrial Education and one with an Ed. Specialist in Industrial Education. The four degreed teachers who were two-year certified had degrees in Construction Management, Elementary Education, Forestry, and Environmental Design.

Research Questions: Analysis and Findings

Question 1: Are there differences in the retention rates of construction CTE teachers receiving their four-year teaching degree from a college or university and construction CTE teachers coming directly out of industry with a two-year alternative certificate?

The means were computed and incorporated in the Mann-Whitney test using SPSS to evaluate the differences between the retention rates of construction CTE teachers with their four-year teaching degree and construction CTE teachers with two-year alternative certification. According to Field (2005), the Mann-Whitney test is a non-parametric equivalent to the independent *t*-test and should be used when you want to test differences between two conditions and different participants have been used in each condition. The test showed two-year alternatively certified teachers differed significantly in the number of years they stayed in the teaching profession compared to four-year teaching degreed teachers. The four-year teaching degreed teacher had a better retention rate, $U = 102.000$, $p = .010$, $r = .387$.

Therefore, there was a significant difference in the retention rate of four-year teaching degreed teachers compared to their two-year alternative certified counterparts. The four-year degreed teachers had a higher retention rate. It should be noted that this is in agreement with the literature review. It should also be noted the two leavers who participated in the study were both alternatively certified and had attended the New Teacher Institute (NTI) which helps individuals receive preparation for teaching when coming directly out of the industry. However, one of the leavers who did attend NTI commented that was the only preparation for teaching he had, and he

did not enroll in any additional classes that are required to receive the two-year alternative teaching certificate.

Since over 70% of Missouri's construction CTE teachers are two-year alternatively certified, the NTI program and mentoring are having a positive effect on teacher retention. However, the data would suggest the alternatively certified teacher should be given as much training and support as possible their critical first years to help them through the transition between the workforce and the classroom.

Research Question 2: Are there differences in the reasons four-year teacher certified construction CTE educators are leaving the profession or have considered leaving the profession and those having a two-year alternative certification are leaving the teaching profession or have considered leaving the profession?

Only two leavers responded to the survey and were willing to be interviewed, therefore, the leaving aspect of this question could not be evaluated quantitatively. Both of the leavers interviewed had their four year degree, but they were not secondary teaching degrees; they were both alternatively certified. However, the means for the differences in importance of reasons why teachers were considering leaving the teaching profession between two-year certified and four-year teaching degreed teachers were assessed using a series of Mann-Whitney tests. Only one reason had a significant difference, "poor opportunities for professional advancement." The two-year alternatively certified teachers ranked this as a consideration for leaving significantly higher than the four-year teacher, $U = 104.50$, $p = .019$, $r = .363$. The following table illustrates no other significant differences were noted.

Table 3
Reasons Teachers Have Considered Leaving the Teaching Profession

Reason	*Z*	Sig. (2-tailed)
Poor salary	-.440	.660
Inadequate support from administration	-1.341	.180
Student discipline problems	-.897	.370
Lack of influence over school policies	-.281	.779
Lack of control over own classroom	-.371	.710
Challenges caused by special needs students	-.153	.878
Not given enough time	-.480	.631
Poor student motivation to learn	-.266	.790
Inadequate mentoring	-.786	.432
Poor opportunities for advancement	-2.350	.019
Class size too large	-.881	.378
Sometimes do not feel suited for teaching	-.334	.739
Preparation for teaching inadequate	-.145	.885

Note. N = 42

Therefore, it can be concluded from the data the four-year teaching degreed teacher believes they are in a better position for advancement than their two-year alternatively certified counterparts.

Research Question 3: What are the widespread and dominant reasons why construction CTE teachers are leaving the profession during their critical first five years?

One of the open-ended survey questions for the stayers addressed this issue. There were 42 stayer participants, and 29 of them gave responses to the open-ended questions. Of the 29 respondents, 21 or 72.4% stated they believed low pay and "salary that is not competitive with the industry setting" was the number one reason teachers were leaving the profession. However, the leavers surveyed stated that poor salary issues were "not at all important" when asked to indicate the level of importance salary had on their decision to leave the teaching profession.

The second reason current teachers thought CTE teachers were leaving the profession was due to student issues. Student discipline and attitude problems were cited by 55.2% of those responding to the open-ended questions. Five current teachers believed student discipline problems were a primary concern. One teacher stated that new teachers "do not realize the student discipline problem would be such an issue" and one remarked that the "frustration with the lack of discipline of students is a major concern." This is supported by the leavers because on the five point Likert scale, student discipline problems ranked the highest (4.5) for reasons why they had left the teaching profession. Another stayer comment was, "I spend more time teaching common courtesies and manners than sometimes I do subject material."

An additional student issue addressed was the challenges caused by special needs students. Three of the current teachers responded they believed dealing with behavior disorder (BD) students and students with individualized education plans (IEP) were major factors in teachers deciding to leave the profession. This ranked second on the leavers five point Likert scale with a 3.5 or falling between somewhat to very important as a reason for leaving the profession. One of the leavers interviewed stated:

> If the counselors had to spend a week in my class, that would change everything. You know, I tried to tell them, if you would be afraid to leave this kid alone that you've assigned to my class with a power tool or a blow torch or a framing hammer for 5 minutes would you put them, you know, if you're afraid to leave them alone, don't put them in my class.

However, one of the stayer interviewees said:

> I think they need to do a better job in placement. I don't think the IEP students are the problem because a lot of the IEP students are hands on type people. So they excel in these classes – more so than they do in a classroom setting.

A leaver interviewee agreed when he said, "I didn't mind a kid that was maybe not at the same level mentally as other kids. I had a kid like that and he was wonderful…it was just those kids that were, I don't know, behavioral kids."

The third student issue dealt with poor student motivation. Six current teachers believed this was a concern. One stayer said he believed teachers were leaving because they "had a hard time with students' lack of participation and effort" and another stated "the kids have a tendency to not have a good work ethic or care about how they do their work." Another current teacher believed the leavers were "not prepared to handle the poor student attitude and the poor student respect for the teacher". One teacher summarized it by stating "students are always looking for the easy way out and it's really easier to just go out and work for yourself." The leavers agreed with this because poor student motivation tied for second with a 3.5 on the five point Likert-type scale of reasons they decided to leave the teaching profession.

The last major dominant reason mentioned by the current teachers of reasons they believed teachers were leaving their profession were poor administrative support and too many extra duties not directly related to teaching. Nine current teachers mentioned poor administrative support as a reason why teachers were leaving the profession. One stated that "administrative support is terrible in some situations" and another said there is "too much stress from the administration". In addition, eight stayer teachers mentioned the paperwork and "jumping through the hoops" as reasons they thought teachers were leaving the profession. This was supported by the leavers who only ranked one other category with a 3 or higher on the Likert scale. Lack of influence over school policies was somewhat important in their decision to leave the CTE teaching profession.

Therefore, current construction CTE teachers believed salary was the number one issue in teachers' decision to leave the profession. However, the leavers contributing to this study revealed that salary issues were not at all important in their decision to change positions. The stayer teachers also noted student discipline issues and poor support from administration as major concerns for the leavers. This was confirmed by the leavers who ranked student discipline problems as their highest concern with challenges caused by special needs students and poor student motivation, closely following. The only other issue indicated by the leavers as being somewhat important was the issue of lack of influence over school policies. The data suggest the beginning CTE teacher is aware of the salary issues associated with the teaching field, but is unprepared for the complexity of student discipline and motivational problems.

Research Question 4: What effect has mentoring had on the beginning construction CTE teacher?

The data collected gave a wide divergence of responses. Many of the responding teachers were hired before the mentorship program was established. Of the 26 teachers who responded to the mentoring open-ended question, seven did not have an official mentor. Of the remaining 19 comments, 63% were positive and 37% were negative. Most of the positive comments were short and to the point. "It was excellent", "Very helpful and "It was very positive." One teacher wrote that his mentor "helped in many situations" and one stated "My mentor helped me stay calm when I was ready for a meltdown." The negative responses included comments such as "mentor

did nothing", state mentor had little affect", and "not much." One teacher wrote: I only saw my mentor twice the first year when he stuck his head in the door and asked me how I was doing and then just continued to walk down the hall before I could even give an answer. I do not even remember his name.

One of the leavers stated, "The one they assigned me was – didn't work out. He was, I don't even know how far away he was, three or four hours away. Hard to get hold of him, I was busy, he was busy, you know…" Another leaver teacher commented that his official mentor was too far away to really be of any benefit, but that the agriculture teacher down the hall from him had been a tremendous help.

The data would suggest that if the mentoring teacher took the position seriously and believed they had a part in the beginning teacher's success, then the experience was beneficial and positive for the mentee. If, however, the mentoring teacher did not take the time to properly guide and collaborate with the new teacher, it was perceived as a negative experience for the novice teacher. The data would also suggest that having a mentor in the building is more advantageous than having a mentor in the exact same CTE field if they are demographically too far away to be of any real assistance to the beginning teacher.

Recommendations and Implications for Practice

The study's findings have direct implications for administrators, counselors, school boards, state departments of education, post-secondary institutions, and the construction industry. Since 72.7% of the teachers responding had their two-year alternative teaching certificate, it is safe to say, alternative certification is not going away in the near future. In fact, if it were not for these teachers, construction CTE as we know it would not exist. Therefore, state departments of education should continue to strive to give these individuals the very best training possible in the short time available to prepare them for their first year teaching experience. Since the review of literature and this study both indicate higher attrition rates for two-year certified teachers, it is imperative the educational system does everything it can to ensure the success of these individuals. This training can begin with classroom management, student discipline preparation, and grounding in the areas of handling IEP and BD students. These beginning teachers need to be prepared for students' lack of motivation and lack of respect. One teacher said he thought teachers were leaving because the "instructors were thrown to the wolves by administration." The school counselors can also play an important role in making sure the students enrolling in the CTE programs are interested in the area they are being placed and that the program is not used as a "dumping ground" for unwanted students. As noted earlier, the percentage of IEP students is not the major concern, many of these students prove to be exceptional in these programs; however, when an IEP or BD student is placed by the counselor simply because they do not know what else to do with them, it can become a detriment to the entire program. As one teacher pointed out, "[I am] frustrated over a single student occupying a majority of my time." Therefore, the counselors should be educated in the construction CTE program and what basic skills are necessary to make a successful student in that program so they can be placed accordingly.

In addition, because student discipline is such a major factor in the retention of construction CTE teachers, administrators need to take an active role in classroom and student discipline and support the teacher so the teacher does not feel like they are fighting the discipline battle alone. The educational community should also encourage CTE teachers who have a good understanding of CTE protocol to further their education and become administrators who have been in the CTE field and have empathy for the discipline issue. The Administrators can show tremendous support by taking the appropriate action with problem students and actively reinforce the concept that the teacher is not in this profession alone. One teacher commented "teaching is a lonely profession for some people" and this is reinforced by Erickson (2004) who stated teachers "often feel they are thrown into the classroom and are left alone" (p. 1).

Administrators can also take an active role in communicating why school policies are necessary that are not directly related to teaching. Several stayer teachers commented they were tired of jumping through the hoops and one succinctly wrote "There are too many hoops to jump through without proper support." Another stayer commented "There's too much paperwork that means nothing and nobody looks at." Therefore, administrators need to do a better job conveying the importance and reasoning behind federal and state paperwork and competency requirements. The teachers need to have a better understanding of why the extra work needs to be completed and the usefulness it will serve. Teachers need to be able to openly communicate with their administrator and believe that their voice is heard. Earlier research revealed that teachers who perceive themselves having high levels of autonomy report lower levels of intent to leave the teaching profession (Dee, 2004) and teachers "...are happiest when they have some control over their work environment" (Vail, 2005, p. 7).Administrators, school boards, and the surrounding community and industry can also bolster the retention of construction CTE teachers by giving them positive reinforcement at every opportunity. Many of these teachers have left prominent, high paying jobs because they wanted to become teachers. The data suggest that many of these alternatively certified teachers are thinking about leaving because of the pay and there is no opportunity for advancement in their field. Inman and Marlow (2004) stated that the teacher most likely to leave the profession is the secondary male who has not been teaching very long and they communicate the professional prestige of the profession is not as good as they originally perceived it would be. Therefore, these teachers need to be encouraged at every opportunity and shown they are needed and supplying a valuable service to the student, the school, and the community.

Along with the additional encouragement of other teachers, the new teacher's mentor needs to give encouragement and support. This is very difficult to do if the mentor is not in the same building or school district. If at all possible, mentoring teachers should be physically accessible and the department of education needs to be diligent in hiring mentoring teachers who have a heartfelt commitment to share insights with the new teacher and see the beginning teacher succeed.

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