

Developing High Quality Teachers Through Professional Pre-Service Teaching Opportunities

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ABSTRACT

Based on the reform movements over the past two decades, it is evident that while effective teachers are critical to student learning, not all teachers are coming to the profession highly qualified. Policy and research continue to highlight the need to reorganize and refocus teacher preparation programs to produce higher quality teachers ready to meet the demands of the classroom from day one of employment. This study focuses on the enhancement of traditional preparation programs in public Institutions of Higher Education (IHEs) as this continues to be the context for which most teacher candidates come to the profession. Using a six-group, four measure mixed-methods design, the objective of the study is to determine the impact California Teaching Fellows Foundation (CTFF), a pre-service teaching and learning opportunity for future teacher candidates, has on developing higher caliber teachers prepared in a traditional University-based teacher preparation setting. Through the use of an online survey, interviews, and focus groups, the relationship of CTFF participation to teacher efficacy before, during, and after traditional preparation participation is examined and explored from the perspective of teacher and supervisor. Unexpected findings show that CTFF participation has a relationship to decreased Teacher Efficacy for teacher candidates and CTFF is not creating a significant pipeline to teaching as proposed, leading to questions for further study.

Keywords: Teacher Quality; Traditional Teacher Preparation; Teacher Efficacy, Pre-Service Experience

INTRODUCTION

The literature has highlighted time and again the importance a teacher has on the eventual success or failure of students, making the preparing and developing of high quality teachers imperative for academic achievement in schools (e.g., CTQ, 2013; Darling-Hammond, 2010; Heck, 2009; Whitehurst, 2002). U.S. educational reform legislation has then, over time, underscored the need for high quality teachers, with continued debate, however, regarding what defines an effective teacher and how they are best prepared. Current U.S. legislation dovetails effective teaching with increased academic attainment, higher levels of certification, and innovative preparation programs (USDE, 2004), but studies on the correlation of these specific criteria and programs with teacher quality have shown mixed results (e.g., Boyd, Grossman, Lankford, Loeb, & Wyckoff, 2008; Buddin & Zamaro, 2009; Darling-Hammond, 2006; Heck, 2009; Rockoff, Jacob, Kane, & Staiger, 2011; Springer et al. 2007). Despite these inconsistencies, new routes to teaching beyond the traditional pathway are continuing to grow across the U.S., both at Institutions of Higher Education (IHEs) and through Alternative Route Pathways (ARPs), but these ARPs produce only a small fraction of teachers annually (USDE, 2013); thus, the need to research ways of enhancing traditional teacher preparation programs at IHEs remains critical to the work in preparing and developing high quality teachers.

PURPOSE OF THE STUDY

The study objective was to ascertain the relationship between a pre-service teaching opportunity and teacher quality as measured by teacher efficacy in the context of traditionally prepared teachers through an IHE. Using the California Teaching Fellows Foundation (CTFF) in connection to the traditional teacher preparation program at Fresno State as one such opportunity, participants receive on-going Saturday trainings in the areas of student management,

engagement and instructional strategies and then directly apply new learning with K-12 students in various school settings to gain upwards of 2,000 hr of experience in teaching as undergraduates. The expected findings were that, based on experiential learning theory (Kolb, 1984; Kolb, Boyatzis, & Mainemelis, 2001) and work in teacher efficacy (Tschannen-Moran, Hoy, & Hoy, 1998), teacher candidates and new teachers who had participated in CTFF would have higher levels of self-reported and supervisor reported of mean teacher efficacy than those without the experience. This also follows results of previous research suggesting that additional teaching experience, particularly events in which utilized strategies lead to student success, correlated with heightened sense of self-efficacy in those teachers (e.g., Skaalvik & Skaalvik, 2007; Tschannen-Moran & Woolfolk Hoy, 2001; 2007).

Several factors make the research embodying this dissertation regarding the impact of CTFF on teacher quality within traditionally prepared teachers at Fresno State both relevant and timely during the current wave of educational reform. First, a lack of literature exists on the impact of professional pre-service teaching opportunities prior to teacher preparation enrollment on teacher effectiveness. Additionally, traditional teacher preparation programs at IHEs continue to dominate in teacher production across the U.S. (USDE, 2013). Finally, and most recently, is the proclamation made by the U.S. Department of Education for increasing teacher quality through innovative teacher preparation (USDE, 2013). 127

RESEARCH QUESTIONS

The following research questions guided the study methods and analysis:

1. What is the relationship between teacher efficacy ratings of traditional university based pre-service teachers who participated in CTFF and those who did not before, during, or a year after teacher preparation?
 - a. What is the relationship between teacher efficacy and particular demographics (gender, age, ethnicity, credential-type) among those with CTFF experience before, during, or a year after teacher preparation?
 - b. What is the relationship between teacher efficacy and respective matched demographic groups with or without CTFF experience before, during, or a year after teacher preparation?
2. What is the relationship between perceived teacher efficacy by supervisors of traditional university based pre-service teachers who participated in CTFF and those who did not before, during, or a year after teacher preparation?
 - a. What is the relationship between perceived teacher efficacy by supervisors and particular demographics (gender, age, ethnicity, credential-type) among those with CTFF experience before, during, or a year after teacher preparation?
3. What are the perceptions of new teachers 1 year out from traditional university based pre-service program on the effectiveness of CTFF participation to develop self-efficacy in teaching?
4. What are the supervisors' perceptions of respective new teachers 1 year out from traditional university based pre-service program on the effectiveness of CTFF participation to develop higher quality teachers?

METHODS

This six-group, four-measure mixed-methods survey and interview research design attempted to answer the research questions to uncover innovative ways to positively affect teachers prepared in university based traditional pathways as the majority of candidates continue to be prepared in this way.

Participants were organized into three categories and two subsets within each category, collectively constituting six groups. The categories included before, during, and after traditional teacher preparation program student teaching participation, broken into pre-service and supervisors for the first two categories, and new-teacher and supervisor for the last category respectively.

The researcher first selected the categorical independent variable of CTFF participation and no CTFF participation prior to traditional teacher preparation program enrollment and the continuous dependent variable of Teacher Efficacy

for the first two participant categories and Teacher Quality for the third participant category to answer the first two research questions. Independent t-tests were used to analyze the data collected from the TSES (Tschannen-Moran & Woolfolk Hoy, 2001; 2007), a forced-choice semantic differential self-report scale by participation in CTFF by participant for the first two participant groups. For the third participant group, an independent t-test was to be used to analyze the data collected from the CSU TPE by participation in CTFF; however, sample sizes were too small for analysis.

To answer the respective sub-questions, 1a and 2a, the researcher selected the categorical independent variables of gender, age, ethnicity, and credential-type within CTFF participants prior to traditional teacher preparation enrollment and the continuous dependent variable of teacher efficacy for the first two participant categories and teacher quality for the third participant category. A one-way ANOVA analysis was used with the collected TSES (Tschannen-Moran & Woolfolk Hoy, 2001; 2007) data for respective time periods before and during traditional teacher preparation program enrollment. The same was to be used with the CSU TPE, but as previously mentioned, was abandoned due to the small size of the available sample for analysis.

For sub-question 1b, the same process as above was to be used; however, a two-way ANOVA was run for each demographic within CTFF participation and for each demographic without CTFF participation as separate categorical independent variables using mean teacher efficacy from the TSES ratings as the dependent continuous variable respective of time periods before and during traditional teacher preparation program participation. Again, the analysis of participant data for those in the last time period (after teacher preparation) would have followed the same process but was not employed due to the sample size.

To answer the final two research questions, the researcher employed qualitative methods. For question 3, the researcher planned to follow a focus group protocol with a panel of 6-8 selected one-year out teacher participants; however, due to available sample size after cross referencing data, and scheduling conflicts between the 3 participant volunteers, one-on-one interviews were employed. For question 4, the researcher employed 4 one-on-one semi-structured phone interviews with selected principals as supervisors of first-year new teachers with CTFF experience hired at their respective school sites. Collected transcribed data from all interviews was Open and Axial Coded and then organized by themes for final analysis.

FINDINGS

A six-group, four-measure mixed-methods survey and interview design was used to determine the impact of participation in CTFF on teacher quality from the conceptual frameworks of experiential learning theory and teacher efficacy. This design attempted to answer four main research questions and three sub-questions based on the research problem of finding innovative ways to positively affect teachers prepared in university based traditional pathways as the majority of candidates continue to be prepared in this way.

Quantitative Results

The results regarding the quantitative research for this study are summarized in this section. The question number, variables, statistical analysis tool, and results for research questions 1 and 2 and the corresponding sub-questions are displayed in Table 1.

A *t*-test was conducted to explore the first research question, inquiring on the relationship between the mean teacher efficacy ratings of traditional university based pre-service teachers who participated in CTFF and those who did not before or during teacher preparation. The *t*-test showed a significant difference overall in mean Teacher Efficacy ratings between those who had participated in CTFF and those who had not, with past CTFF participant teacher candidates exhibiting lower teacher efficacy than their non-participant counterparts. This significance was further delineated to be found within the before teacher preparation group, but not significant for the during teacher preparation group.

The results contradicted the expected findings, based on experiential learning theory (Kolb, 1984; Kolb et al. 2001) and literature in self-efficacy (e.g., Skaalvik & Skaalvik, 2007; Tschannen-Moran & Woolfolk Hoy, 2001; 2007),

where increased experience in applied learning should have shown higher levels of teacher efficacy for the CTFF participants.

A one-way ANOVA was used to investigate sub-question 1a, probing into the relationship between the mean teacher efficacy ratings and particular demographics (gender, age, ethnicity, credential-type) among those with CTFF experience before and during teacher preparation. The findings of the one-way ANOVA were not significant for any demographic group within the CTFF participants, indicating that teacher efficacy ratings for the CTFF participants were similar across all groups.

For sub-question 1b, a two-way ANOVA was conducted to detect a possible relationship between mean teacher efficacy and respective matched demographic groups with or without CTFF experience before and during teacher preparation. The results revealed that there is a slight interaction between age and teacher efficacy by CTFF participation. Overall, teacher candidates between the ages of 30 and 35 with CTFF experience had lower teacher efficacy than those in the same age range without the experience. Among those ages 36 and older, the results were opposite. Those in this age range who had participated in CTFF had higher Teacher Efficacy ratings than those who had not participated in the program. The results showed the same significance and pattern within the before teacher preparation group as well, but the interaction was not significant within the during teacher preparation study participants. This partially reinforces findings in the literature, which indicate that more opportunities to apply learning in context increases self-efficacy in what is being learned (e.g., Skaalvik & Skaalvik, 2007; Tschannen-Moran & Woolfolk Hoy, 2001; 2007). Additionally, these findings reveal an interesting perspective about which ages may be most affected by the CTFF experience when entering the teacher preparation program.

In addition, the results of the two-way ANOVA also demonstrated an interaction between race and teacher efficacy by CTFF participation. Among those self-reporting as non-Hispanic, teacher candidates with CTFF experience exhibited lower levels of mean teacher efficacy as compared to the same demographic without CTFF experience. Analysis of all other demographics using the two-way ANOVA did not display significant interactions; thus, indicating teacher efficacy ratings for teacher candidates with and without CTFF experience were similar across all groups.

Like research question one, a *t*-test was conducted to explore the second research question, inquiring on the relationship between the perceived mean teacher efficacy supervisor ratings of traditional university based pre-service teachers who participated in CTFF and those who did not before or during teacher preparation. The *t*-test showed no significant difference overall in mean Teacher Efficacy ratings between supervisors of those who had participated in CTFF and those who had not. The results contradicted the expected findings, based on experiential learning theory (Kolb, 1984; Kolb et al. 2001) and literature in self-efficacy (e.g., Skaalvik & Skaalvik, 2007; Tschannen-Moran & Woolfolk Hoy, 2001; 2007), where supervisors perceived higher levels of teacher efficacy when subordinates had increased experience in applied learning prior to on the job experience as is the case with CTFF participants.

Table 1. Summary of Research Variables, Statistical Analyses, and Results by Participant Group

Research Question	DV	IV		Analysis Tool	Results			
					Overall	Before	During	After
1	TE Rating	CTFF Participation/ No CTFF Participation		Indep. t-test	Significant $p = .034$	Significant $p = .035$	Not Significant $p = .413$	Abandoned due to sample size
1a	TE Rating	w/in CTFF Part.	Gender	One Way ANOVA by each	Not Significant $p = .334$	Not Significant $p = .211$	Not Significant $p = .775$	Abandoned due to sample size
			Age		Not Significant $p = .181$	Not Significant $p = .259$	Not Significant $p = .827$	
			Race		Not Significant $p = .379$	Not Significant $p = .921$	Not Significant $p = .827$	
			Ethnicity		Not Significant $p = .754$	Not Significant $p = .855$	Not Significant $p = .338$	
			Cred. Type		Not Significant $p = .094$	Not Significant $p = .061$	Not Significant $p = .619$	
1b	TE Rating	by CTFF Part./ No CTFF Part.	Gender	Two Way ANOVA by each	Not Significant $p = .895$	Not Significant $p = .695$	Not Significant $p = .456$	Abandoned due to sample size
			Age		Significant $p = .050$	Significant $p = .024$	Not Significant $p = .277$	
			Race		Not Significant $p = .782$	Not Significant $p = .395$	Significant $p = .034$	
			Ethnicity		Not Significant $p = .890$	Not Significant $p = .904$	Not Significant $p = .209$	
			Cred. Type		Not Significant $p = .477$	Not Significant $p = .366$	Not Significant $p = .717$	
2	TE Rating	CTFF Participation/ No CTFF Participation		Indep. t-test	Not Significant $p = .775$	Not Significant $p = .132$	Not Significant $p = .132$	Abandoned due to sample size
2b	TE Rating	w/in CTFF part.	Multiple Subject	One Way ANOVA by each	Abandoned due to sample size			
			Single Subject					

Due to a small sample size available to conduct statistical analyses, the one-way ANOVA to explore the relationship between perceived teacher efficacy by supervisors and credential-type among those with CTFF experience before and during teacher preparation was abandoned. In addition, the third piece to each of the two research questions and corresponding sub-questions inquiring into the mean teacher efficacy ratings and supervisor ratings for new teachers in the classroom after teacher preparation was abandoned due to an extremely small sample size after the data was cross referenced. Only 6 out of over 1300 respondents could be identified as past CTFF participants.

Qualitative Results

The results regarding the qualitative research for this study are summarized in this section. The question number, participants, methods, analysis tools, and results for research questions 3 and 4 are displayed in Table 2.

The third research question explored the perceptions of new teachers one year out from traditional university based pre-service program on the effectiveness of CTFF participation to develop self-efficacy in teaching. Interviews of three new first-year teachers revealed that CTFF participation was perceived to increase teacher efficacy by providing them opportunities to interact with kids, practice managing groups of students, and practice engaging students in learning before entering the profession. One participant, a female Single Subject middle school English teacher who had no desire to enter the teaching profession until after her experience as a Teaching Fellow explained, “It made me realize how important it is to have that management system down...” Another interviewee, a female multiple subject teacher in her first year with 5th grade students who had also not wanted to become a teacher prior to CTFF shared that as a participant in CTFF she “learned how to a lot of fun activities with kids...[and] one-on-one interaction and a lot of rapport building with [kids].”

Table 2. Summary of Participant Groups, Methods, Analysis tools and Results by Research Question

Research Question	Participants	Method	Analysis Tool	Results
3	New Teachers One-year Out from Teacher Preparation Program with CTFF Experience	One-on-One Interviews	Open and Axial Coding; Selective Thematic Coding	<p>CTFF participation was perceived by new teachers as increasing teacher efficacy by providing an:</p> <ul style="list-style-type: none"> • Opportunity to interact with kids • Opportunity to practice managing students • Opportunity to practice engaging students in learning <p>However, experience dependent on school placement and role in CTFF</p>
4	Supervisors of New Teachers with CTFF Experience	One-on-One Interviews	Open and Axial Coding; Selective Thematic Coding	<p>Compared to other new teachers, CTFF participation was perceived as developing new teachers who:</p> <ul style="list-style-type: none"> • Were instructionally the same • Were more coachable • Had higher comfort levels with kids <p>Classroom management was perceived to be linked to the individual new teacher and not CTFF participation</p> <p>All were unaware of CTFF experience of new teachers prior to interview</p> <p>All felt CTFF participation provides positive exposure for possible new teachers</p>

It was also expressed in various ways that the experience CTFF participants received was dependent on school placement and their role in CTFF. For example, a female first year second grade multiple subject teacher who had worked as a Teaching Fellow in the Literacy Day Program for two and a half years during her undergraduate degree explained, “I was able to see different teachers take different approaches to reading and take little bits of what I thought would work in my classroom... I think my experience may have been different from other people because I did the morning intervention program and you probably know a lot of people in the after school program.”

The fourth research question explored the supervisors’ perceptions of respective new teachers one-year out from traditional university based pre-service program on the effectiveness of CTFF participation to develop higher quality teachers. Interviews of four principals of new first-year teachers with CTFF experience revealed that CTFF participation was perceived to increase teacher quality because it provided a valuable experience for undergraduates thinking of entering the teaching field to work with and be responsible for students in a school setting. The supervisors believed that participation in CTFF allowed possible teacher candidates an opportunity to see if they truly enjoyed working with kids before entering the credential program.

One participant, a male principal at the middle school level explained that CTFF participation “is a great way to [potential teachers] to get exposed to what it’s like...to be around kids in general and decide if dealing with them on

a day-in, day-out basis...is going to be something that you can do...” Another male principal also at the middle school level added that he believed CTFF “give[s] the young college student with an interest in going into the educational field opportunities to become engaged and interact and learn what it is like to be on a campus to work with students.”

It was also expressed by a majority of the participants that they were unaware, until our interview session, that they currently had a new teacher on staff with CTFF experience. For example, a female elementary school principal explained that she was “not aware” her new teacher “had participated in the program.”

All of the interviewees mentioned that there were no instructional differences overall between their new teachers who had participated in CTFF and those who had not, but they did feel that their new teachers with CTFF experience had higher comfort levels with children and were overall more coachable and adaptable than those without the same experience.

One interviewee, a female middle school principal shared that her new teacher with CTFF experience was “coachable” and “a little more easy-going” and “adaptable” than her other new teachers without the same experience. Classroom management, on the other hand, was viewed as being completely dependent on the individual new teacher regardless of CTFF participation as they all reported a variety of observations in this area of teacher quality, from “better at multi-tasking” and to “probably the weakest of them all.”

INTERPRETATION OF THE FINDINGS

The outcomes of this research provide insight into the impact of CTFF participation on university-based traditionally prepared teacher candidates and new teachers in the form of teacher efficacy as a measure of teacher quality from the perspective of the teacher and their supervisors. Overall, the expected relationships of the study were not supported.

Quantitative Results Unexpected

The quantitative findings indicate that teacher efficacy of teacher candidates with prior CTFF experience is significantly lower than that of their non-CTFF peers. In addition, there is an indication that CTFF participation has relationship to ages above 30 years and race, particularly non-Hispanic teacher candidates. The qualitative findings illustrate that while there is perceived value in past CTFF participation by new teachers and supervisors of new teachers with that experience, there are factors of teacher efficacy and quality that either cannot directly be attributed to CTFF or are dependent upon which area of CTFF the new teacher participated. The most intriguing finding, however, was one that emerged from what could not be studied, as indicated with the small sample sizes or lack of available participants in all components of the study.

Lower Teacher Efficacy in CTFF Participants

Contradictory to experiential learning theory where increased time in opportunities to develop understanding through application in context (Kolb, 1984; Kolb et al. 2001) which should also increase teacher efficacy in that new learning (e.g., Skaalvik & Skaalvik, 2007; Tschannen-Moran & Woolfolk Hoy, 2001; 2007), teacher candidates in this study with CTFF experience reported lower levels of self-efficacy in teaching than non-CTFF participant candidates. As highlighted in the supervisor interviews, however, CTFF experience was viewed as a positive one that “definitely didn’t hurt them...if anything, it helped a bit.” Thus, the significantly lower level of teacher efficacy for those candidates with CTFF experience could be due to the gained insight from working in schools with students. The results for this participant group might reflect a better understanding of the questions in the context of teaching as compared to others who may have an unrealistic view of what is required of them to make a difference in the classroom with children. This interpretation is also related to study results where this significant difference in teacher efficacy was evident between those who had just started the teacher preparation program but was not significant between those who had already participated in student teaching coming to the end of the program. In the first-time period, CTFF participants showed lower teacher efficacy overall based on the context of their understanding through their past experiences at school sites. This leveled off at the second-time period seemingly because all participants now had an opportunity to work in a classroom with children, not just those with CTFF experience.

Age as a Factor

In regards to age, CTFF participation showed a significant interaction, particularly for those above 30 years of age. Teacher candidates between the ages of 30 and 35 who had participated in CTFF reported lower levels of teacher efficacy, but, on the contrary, those ages 36 and older with the same experience perceived higher levels of self-efficacy in teaching. In this case, it is difficult to discuss an interpretation for this relationship as teacher preparation programs cannot control age of candidates and the sample size for these groups in the study was small which could have impacted these results.

Non-Hispanic CTFF Participants

Likewise, participants in the study with CTFF experience reporting as non-Hispanic showed significantly lower self-efficacy in teaching as compared to their non-Hispanic non-CTFF participant peers. This significant difference was not, however, found between the Hispanic reporting participants with and without CTFF experience. Interestingly, one mission of CTFF is to enrich potential teacher candidates culturally beyond the requirements of the traditional teacher preparation program through regular professional development and community-based teaching opportunities (CTFF, 2014b, 2014c); however, results from this study do not support a program impact for non-Hispanic participants in their sense of self-efficacy to be successful with the culturally diverse populations in their classrooms. Again, as reported in *The Ninth Report* (USDE, 2013), the majority of teachers coming to the profession are non-Hispanic white females; thus, CTFF participation did seem to impact a subset of this majority with non-Hispanic CTFF participant teacher candidates entering the teacher preparation program showing a more realistic understanding of what they can have an effect on in teaching at their level as opposed to those without the experience at the same time period in the preparation program.

Qualitative Relationships Reinforce the Quantitative Results

The qualitative findings of both the supervisors of new teachers with CTFF experience and the respective teachers themselves supported the quantitative results.

Supervisors value CTFF experience

Principals interviewed expressed that CTFF was valuable because it provides real-life experiences with students at school sites prior to entering teacher preparation. Participation in CTFF was not, however, perceived by the principal supervisors as making a difference in the specific areas of teacher efficacy – classroom management, instruction, and student engagement – which is consistent with findings above.

Supervisors Unaware of Past Participants on Staff

The majority of supervisors were unaware of that they had hired a new teacher with CTFF experience prior to the interview, which seems to indicate that a significant difference was not noted by the supervisors to inquire nor was the experience important enough to the new teachers to make that fact directly known to their supervisors. This finding was outside of the study providing implications for future research to be discussed later in this chapter.

New Teachers Value Experience in Relation to Specific CTFF Assignment

The new teachers all felt the program overall was vital in providing an opportunity to practice classroom management and engaging students, but they also indicated both directly and indirectly that the quality of their experiences was dependent on the schools in which they were placed and the teaching assignment they were associated with while participating in CTFF. As supported by experiential learning theory (Kolb, 1984; Kolb et al. 2001), the quality of the context for learning impacts learning; thus, there are implications for future research on the differences of influence by CTFF program on new teachers which will also be further discussed below.

Unanticipated Findings Emerge from Study Limitations

The most critical finding of this study, however, was unexpected. As subsequently noted, several parts to this study were either limited or abandoned due to available sample sizes of past CTFF participants within the teacher preparation program or as new teachers evident through archived data or current new teachers for focus groups/interviews. This is considered a critical finding because CTFF has been highlighted as a pipeline to teaching, particularly within the sponsoring university intending to foster the development of future teacher leaders who desire to make a positive impact for a diverse set of K-12 learners committed to using innovative teaching strategies and to remaining in the profession long-term (CTFF, 2014b, 2014c), but the lack of available participants seems to indicate otherwise. Since this finding uncovered information outside of the study objective, implications for future research will be discussed in the noted section below.

IMPACT ON RESEARCH

The findings of this study could impact research in experiential learning theory, the assessment of teacher efficacy, and the continuation of research into professional preservice program opportunities aiming to develop higher quality teachers. As the study results indicate, teachers' sense of self-efficacy in teaching was significantly lower among those with CTFF experience. This is contrary to what experiential learning theory suggests, where more practice in context should lead to a higher sense of self-efficacy (Kolb, 1984; Kolb et al. 2001). However, the results are similar with the findings of Hoy and Spero (2005), where teacher efficacy of new teachers declined as their experience increased through the first year of teaching. Due to this result, teacher efficacy may not be the best indicator of teacher quality in studies where experience is a critical variable, such as is the case with many professional preservice teaching opportunities like CTFF. Instead, it may be an indicator that teacher candidates with this type of increased experience have a heightened awareness to the context of teaching that provides a more accurate reality reflected in their perception of teacher efficacy as compared to those without upon entering the teacher preparation program.

Implications for Future Research

This study examined a professional preservice teaching opportunity, CTFF, as a means of developing higher quality teachers as demonstrated through the construct of teacher efficacy. The literature supported the need to determine creative ways of recruiting high quality teachers to the profession, particularly for university-based traditional teacher preparation programs as they continue to produce the majority of teachers throughout the U.S. (USDE, 2013). In addition, the study was based on implications for future research of CTFF as a "program to watch" in teacher recruitment and development (Price, 2014; Princiotta & Fortune, 2009) raising important considerations for further research on similar programs.

Supervisor Unawareness

One topic for future research is based on the finding that principals were unaware of new teachers with CTFF experience, implying further research be conducted on the reasons for this lack of knowledge. It is evident, based on principals being ignorant to the fact that they hired new teachers with this experience, these new teachers either did not significantly stand out among their colleagues or these same new teachers did not make an effort to educate supervisors on their experience with CTFF. If CTFF participation is perceived as worthwhile to both new teachers and supervisors, as indicated in the study, why is it that respective supervisors are unaware of the participation in the program? Hiring supervisors had both knowledge of and some first-hand exposure with CTFF, but what are the reasons for the disconnect between the past CTFF participation of respective newly hired teachers and their awareness of that fact? Lastly, is CTFF as an organization educating new teachers on self-advocating their pre-service experience to potential employers as a way of gaining an edge on other candidates? If so, a deeper look into how it is being expressed would be critical in order to increase awareness overall.

Role of CTFF Assignment

The second area for future research is in regards to the indication, based on new teacher interviews, that the impact of CTFF participation may be related to the program assignment within CTFF and the school site in which the CTFF

participants were placed. The supervisors reported that classroom management was dependent upon individual teacher personalities and skill rather than CTFF experience and that all of the new teachers, regardless of CTFF experience, were similar in instructional ability. They perceived a relationship between CTFF experience and an ease working with children one-on-one and in groups as well as with being coached as compared to other new teachers, but not much more was reported. The new teachers, on the other hand, felt that their experience as a Teaching Fellow allowed them more time than others with classroom management, engagement, and instructional strategies, which should have been evident for supervisors. However, the new teachers indicated that their experiences directly related to the situation they were in at a given school site or with a particular program and not necessarily reflective of CTFF in general. Also, no mention was made by any participant regarding Saturday Academy as a source of learning within CTFF, which is noted as a key component of CTFF participation (CTFF, 2014a). Based on these relationships, possible future research should include exploration into the following:

- Correlation between participation in each sub-program within CTFF and the quality of new teachers
- Relationship between CTFF participation by respective sub-programs within CTFF across sites and new teacher quality and a comparison of program implementation by school site
- Association between Saturday Academy participation and new teacher quality along with the perceptions on the impact of Saturday Academy on future and new teachers

Where Are the Teaching Fellows Going?

The third and most pressing implication for future research is regarding CTFF as a promoted pipeline to teaching at the sponsoring university (CTFF, 2014b, 2014c). Available participants with CTFF experience continued to decline at each time interval of the study, so much so that data analysis and qualitative protocols involving new teachers with CTFF experience had to be abandoned and/or dramatically modified for completion. While this limited the current study findings, it also raised new questions for further research. The most obvious are regarding where CTFF participants are going if not into the teaching profession and why they participated in CTFF if they were not planning on a career in teaching. Additionally, if these CTFF participants are in fact going into the profession, why are they not necessarily continuing in a traditional pathway at the sponsoring university? It would be pertinent to explore, 1) which routes to teaching CTFF participants are selecting, whether alternatively within the university or with other programs outside of the sponsoring university; and 2) why they have chosen another means or, perhaps, another credential granting institution outside of the university.

CONCLUSION

The quantitative results of this study suggest that one such professional preservice teaching opportunity, California Teaching Fellows Foundation, has a relationship to a higher awareness of self-efficacy in teaching, particularly for teacher candidates initially entering a traditional teacher preparation program as compared to those without the same preservice opportunity. The qualitative results of this study suggest CTFF participation is perceived by supervisors and new teachers as a valuable experience and may develop higher quality teachers under specific circumstances that imply further research. Despite this belief, supervisors reported they were unaware that their newly hired teachers had past experience with CTFF. Furthermore, new teachers who had participated in CTFF as undergraduates felt that the quality of CTFF experience was dependent on the sub-program of involvement and the site in which a Teaching Fellow was placed. These findings raised questions for further research. Another area of interest is the finding that the unexpected study limitations provided. Parts of the study were abandoned or modified due to the lack of previous CTFF participants either currently in the teacher preparation program or reported as 1st-year teachers in the archived data from the sponsoring university which raises questions for further research on CTFF as a pipeline to teaching through the sponsoring university as previously documented (CTFF, 2014b, 2014c). Research shows that teachers with more experience have higher teacher efficacy, believing that they can have a positive impact on student learning, which is one indicator of teacher quality (e.g., Darling-Hammond, 2014; Skaalvik & Skaalvik, 2007; Tschannen-Moran & Woolfolk Hoy, 2001; 2007). The premise of this study was to find the impact of a professional preservice program opportunity that provided increased experience to potential teachers on new teacher quality. While a slight relationship was found, the power of the findings is in the implications for future research.

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