# Assessing Student Teaching Experiences: Teacher Candidates' Perceptions of Preparedness

*Joohi Lee* *Kathleen Tice* *Denise Collins*
*Amber Brown* *Cleta Smith*
*University of Texas at Arlington*
*Jill Fox* *University of Houston at Victoria*

*The purpose of this study is to investigate the effectiveness of student teaching experiences by measuring teacher candidates' perceptions of their preparedness. The participants were 130 teacher candidates who had completed their student teaching as part of a program preparing them to teach children in pre-K through grade 4. Teacher candidates responded to the survey by recalling their before and after student teaching experiences. A paired t-test was calculated to determine statistical mean differences before and after student teaching on five categories: a) pedagogical content knowledge, b) planning and preparation for instruction, c) classroom management, d) promoting family involvement, and e) professionalism. Mean differences of all of the paired items between pre-and post survey were shown to be statistically significant on all five categories.*

## Introduction

All students deserve effective instruction, and students from low-income, minority populations especially rely upon excellent teachers. Although various factors play a role in fostering teacher quality, teacher preparation programs have a major responsibility and opportunity to make a difference in the quality of teaching. However, the literature on teacher preparation programs shows that different programs vary in learning experiences offered and in how well prepared graduates feel (Darling-Hammond, Chung, & Frelow, 2002). Darling-Hammond (2006) called for research on what is taking place within teacher preparation programs. The Education Policy Paper on Teacher Quality (Wilson, 2010), an initiative of the National Academy of Education, also

called for teacher preparation programs to examine their contributions to fostering effective teaching. Student teaching has been considered an important, if not the most important, facet of teacher preparation (Hollins & Guzman, 2005), and needed research includes studies that provide teacher candidates' perspectives (Clift & Brady, 2005). In this study, we aim to investigate how student teaching experiences impact teacher candidates' feelings of preparedness for teaching.

## Theoretical Framework

Findings of studies on teachers' perspectives, perceptions, or beliefs have provided valuable insights on assessing teaching practices linking teachers' perceptions (or beliefs) to positive instructional practices including classroom management as well as student school outcomes (Jones, 2006). Teaching efficacy, defined as "teachers' beliefs about their own effectiveness" (Yilmaz, 2011, p. 92), has been a critical construct in teacher education programs as they attempt to improve the quality of teacher candidates' skills, knowledge, and dispositions. Teacher efficacy is also an important construct for the purpose of this study.

A teacher's sense of efficacy in teaching, or his or her confidence about being able to influence students' learning, is one of the most well-documented aspects of effective teaching (Henson, Kogan, & Vacha-Haase, 2001). The concept of teacher efficacy is based on Bandura's (1977; 1986) theory that efficacy beliefs affect human agency in various ways; for example, people avoid tasks and do not put forth effort where they do not feel confident. Efficacy beliefs affect how teachers interact with students and the amount of effort teachers are willing to put forth in meeting educational outcomes. Darling-Hammond et al. (2002) reported significant correspondence between feelings of preparedness and sense of efficacy, a finding consistent with other research

on teacher efficacy. When teachers feel they are well prepared, they tend to have high self-efficacy in teaching.

Positive relationships between self-efficacy in teaching and its relationship with student outcomes have been well reported (Chacon, 2005; Gibson & Dembo, 1984; Goker, 2006). When one feels and believes about his capability, his/her feeling and belief affect likelihood of his/her behaviors similar to his/her feeling and belief. Ajzen (2011) also states that one's belief is the best predictor of one's own actions. Self-efficacy in teaching is also closely associated with student outcomes. Teachers with high self-efficacy tend to manage time and student behaviors more effectively, while teachers low in self-efficacy tend to spend more time in non-academic work and use less efficient ways to respond to their students, such as criticizing wrong answers (Chacon, 2005; Gibson & Dembo, 1984).

Goker (2006) emphasized the importance of student teaching experiences/teaching practica as mastery experiences which potentially benefit teacher candidates' self-efficacy in teaching. However, this area needs to be further investigated. Major studies on self-efficacy in teaching have been conducted focusing on in-service teachers, but more studies are necessary to understand how to better prepare future teachers in terms of self-efficacy in teaching since this is positively correlated with the quality of their teaching practice. In this study, we focused on teacher candidates to investigate whether they feel prepared given the relationship of preparedness to efficacy and the importance of efficacy in effective teaching.

To assess the student teaching experiences of candidates in a teacher preparation program, we examined their feelings of preparedness in having acquired knowledge and abilities deemed necessary for successful teaching as set forth in the standards of the National Association for the Education of Young Children (NAEYC). These standards are

consistent with the framework of core concepts and skills set forth by the National Academy of Education Committee on Teacher Education (Darling-Hammond & Bransford, 2005).

In this study, we investigated teacher candidates' student teaching experiences by measuring their perceptions of preparedness before and after student teaching. More specifically, we examined how prepared teacher candidates felt upon completing student teaching in regard to pedagogical content knowledge, planning and preparation for instruction, classroom management, promoting family involvement, and professionalism.

## Method

### Participants

The participants were 130 teacher candidates who had completed their student teaching as part of a program preparing them to teach children in pre-K through grade 4. Among these participants, 55% identified themselves as Caucasian and approximately 39% as other than Caucasian (9.2% African American, 16.7% Latino, and 7.5% Asian). Seven did not report their ethnic background. There were 126 female and 4 male participants. The student teaching experiences took place in an urban area where student populations of school districts include students from minority backgrounds, including English language learners.

### Research Design

We applied a pre-experimental study (one-group pretest-posttest design) in Fall 2010. One-group pretest-posttest design involves a single group that is exposed to a treatment whose effectiveness is measured by pre- and posttests (Gay, Mills, & Airasian, 2012). A survey was administered to the 130 teacher candidates which contained retrospective questions and present-oriented questions. They responded to survey items by reflecting on how well prepared they felt at

the beginning of their student teaching and at the end of their student teaching period. The retrospective pretest design was used in view of recommended procedures to avoid response-shift bias and to help ensure that their standard of assessing the knowledge, skills, or attitudes is consistent (e.g., Davis, 2003; Rockwell & Kohn, 1989).

Instrument

We designed a new instrument for this study to measure teacher candidates' perceptions of preparedness using items aligned with the NAEYC standards for teacher preparation. The instrument is composed of a total of 23 questions addressing the following NAEYC standard-based categories: a) pedagogical content for language arts, math, science, and social studies (e.g., "How prepared do you feel to teach math?"); b) planning and preparation for instruction (e.g., "How prepared do you feel to set classroom goals and objectives?"); c) classroom management (e.g., "How prepared do you feel to manage classroom procedures such as schedules and transitions?"); d) promoting family involvement (e.g., "How prepared do you feel to communicate with families about the instructional programs?"); and e) professionalism (e.g., "How prepared do you feel to deal with confidentiality issues?"). For each question, teacher candidates rated their perceptions of being prepared to teach before student teaching (the pretest) and after student teaching (the posttest) using a six-point Likert-type scale (1-extremely unprepared, 2-very unprepared, 3-somewhat unprepared, 4-somewhat prepared, 5-very prepared, and 6-extremely prepared).

According to Cox (1996), the term "reliability" is explained by the *internal consistency* of survey items. When an observed score is strongly consistent, the instrument has high reliability (Wiersma, 1995). To measure reliability of the instrument, we conducted a pilot study with teacher

candidates who were not in the current study and calculated Cronbach's alpha, which is commonly used to measure the reliability of questionnaire items (Cronk, 1999). The reliability score of the instrument using Cronbach's coefficient alpha was .79, which Cronk categorizes as in the range of good reliability.

To ensure the content validity of instrument, we used the NAEYC standards to design the instrument items. There are several threats to validity when administering a retrospective pre-test design, such as recall (inability to accurately recall their preparedness) and cognitive dissonance (when students might try to report their improvement to meet their own expectations even if this did not occur). To reduce these threats to validity, we reminded participants to complete the survey honestly. If they did not recall, they were to skip the question(s). We treated skipped questions as missing data by eliminating them. The only items that had both scores (before and after) were analyzed.

Data Analysis Procedures

We quantified six-point Likert ratings to points (extremely unprepared = 1, very unprepared = 2, somewhat unprepared = 3, somewhat prepared = 4, very prepared = 5, and extremely prepared = 6). Any items the participants did not respond to were treated as missing data and were eliminated. After quantifying the responses, we calculated a paired t-test on pre-and posttest items to measure if there were any statistically significant mean differences on each item. A statistically significant level was determined at $\alpha = .001$ level.

## Results

According to the results of a paired t-test, mean differences of all of the paired items between pre- and posttest were shown to be statistically significant on all five categories (pedagogical content knowledge, planning and preparation

for instruction, classroom management, promoting family involvement, and professionalism).

Pedagogical Content Knowledge

As Table 1 shows, there were statistically significant mean differences between pre- and post-assessments on all items of pedagogical content knowledge on math ($t$ = -15.37, $p$ < .001), science ($t$ = -12.72, $p$ < .001), social studies ($t$ = -15.04, $p$ < .001), and language arts ($t$ = -13.32, $p$ < .001). Among these four content areas, participants rated highest on language arts on both pre- ($M$ = 3.55, $SD$ = 1.32) and posttest ($M$ = 5.11, $SD$ = .87) and lowest on social studies on both pre- and posttest.

**Table 1:** *Mean Scores for Pedagogical Content Knowledge*

| Items | *N* | Pre *M* (SD) | Post *M* (SD) | Mean Diff | *T* | *p* |
|---|---|---|---|---|---|---|
| Pair 1 | 118 | 3.18 | 4.68 | -1.50 | - | .00** |
| Pair 2 | 118 | (1.22) | (.99) | -1.45 | 15.37 | .00** |
| Pair 3 | 117 | 3.22 | 4.68 | -1.54 | - | .00** |
| Pair 4 | 117 | (1.14) | (.99) | -1.55 | 12.72 | .00** |
| | | 3.01 | 4.55 | | - | |
| | | (1.19) | (1.02) | | 15.04 | |
| | | 3.55 | 5.11 | | - | |
| | | (1.32) | (.87) | | 13.32 | |

***Note.*** **Pair 1: Math; Pair 2: Science; Pair 3: Social Studies; and Pair 4: Language Arts**
****Significant at α = .001 level**

Planning and Preparation for Instruction

Items addressing planning and preparation for instruction were found to be statistically significant (see Table 2), including setting up classroom goals and objectives ($t$ = -20.43, $p$ < .001), integrating curriculum ($t$ = -17.54, $p$ < .001),

planning lessons for culturally diverse students ($t$ = -4.92, $p$ < .001), planning lessons for children based upon their learning styles/needs ($t$ = -17.74, $p$ < .001), integrating technology in teaching ($t$ = -13.13, $p$ < .001), and planning for authentic assessment ($t$ = -17.56, $p$ < .001). As Table 2 shows, participants demonstrated highest mean differences ($M$ Diff = 1.87) on setting up classroom goals and objectives before and after their student teaching. On the posttest, participants rated planning for authentic assessment highest ($M$ = 5.36, $SD$ = 4.59) and planning lessons for children based on their learning style/needs lowest ($M$ = 4.86, $SD$ = .81).

**Table 2:** *Mean Scores for Planning and Preparation for Instruction*

| Items | *n* | Pre *M* (*SD*) | Post *M* (*SD*) | Mean Diff | *t* | *p* |
|---|---|---|---|---|---|---|
| Pair 5 | 118 | 3.14 | 5.01 | -1.87 | - | .00** |
| Pair 6 | 117 | (1.02) | (.81) | -1.72 | 20.34 | .00** |
| Pair 7 | 118 | 3.31 | 5.03 | -2.10 | - | .00** |
| Pair 8 | 117 | (1.01) | (.79) | -1.59 | 17.57 | .00** |
| Pair 9 | 118 | 3.26 | 5.36 | -1.26 | -4.92 | .00** |
| Pair 10 | 118 | (1.05) | (4.59) | -1.64 | - | .00** |
| | | 3.26 | 4.86 | | 17.74 | |
| | | (1.06) | (.81) | | - | |
| | | 3.70 | 4.97 | | 13.13 | |
| | | (1.04) | (.90) | | - | |
| | | 3.53 | 5.17 | | 17.56 | |
| | | (1.06) | (.78) | | | |

***Note.*** **Pair 5: setting up classroom goals and objectives; Pair 6: integrating curriculum; Pair 7: planning lessons for culturally diverse students; Pair 8: planning lessons for children based on their learning styles/needs; Pair 9: integrating technology in teaching; and Pair 10: planning for authentic assessment**

****Significant at α = .001 level.**

Classroom Management

All items on classroom management were statistically significant (see Table 3): grouping strategies ($t$ = -20.99, $p$ < .001), creating a supportive environment and establishing rapport with students ($t$ = -19.22, $p$ < .001), managing classroom procedures ($t$ = -18.88, $p$ < .001), performing non-instructional duties (e.g., lunch, recess) ($t$ = -17.87, $p$ < .001), managing student behaviors ($t$ = -19.62, $p$ < .001), and organizing physical classroom space ($t$ = -18.21, $p$ < .001).

As Table 3 shows, the highest score differences ($M$ Diff = 1.92) between pre- and posttest were found for managing student behaviors. Participants reported the highest rating on "grouping strategies" ($M$ = 5.38, $SD$ = .69) and the lowest rating on "managing student behaviors" ($M$ = 4.98, $SD$ = .96).

Promoting Family Involvement

Items related to promoting family involvement were statistically significant (Table 4, pg. 14). These items are communicating with families about the instructional program ($t$ = -18.21, $p$ < .001), engaging families in the instructional program ($t$ = -16.92, $p$ < .001), and communication with families about their child ($t$ = -17.77, $p$ < .001).

Professionalism

All items related to professionalism were found to be significant (Table 5, pg. 14): dealing with confidentiality issues ($t$ = -11.28, $p$ < .001), establishing collaborative relationships with colleagues ($t$ = -12.14, $p$ < .001), conducting oneself professionally based on state code of ethics ($t$ = -9.98, $p$ < .001), and advocating for students ($t$ = -10.42, $p$ < .001).

**Table 3:** *Mean Scores for Classroom Management*

| Items | *n* | Pre *M* (*SD*) | Post *M* (SD) | Mean Diff | *t* | *p* |
|---|---|---|---|---|---|---|
| Pair 11 | 118 | 3.47 | 5.38 | -1.91 | - | .00** |
| Pair 12 | 118 | (.97) | (.69) | -1.64 | 20.99 | .00** |
| Pair 13 | 118 | 3.75 | 5.39 | -1.74 | - | .00** |
| Pair 14 | 117 | (.87) | (.74) | -1.67 | 19.22 | .00** |
| Pair 15 | 117 | 3.45 | 5.19 | -1.92 | - | .00** |
| Pair 16 | 118 | (1.12) | (.83) | -1.53 | 18.88 | .00** |
| | | 3.64 | 5.31 | | - | |
| | | (1.15) | (.81) | | 17.87 | |
| | | 2.97 | 4.90 | | - | |
| | | (1.10) | (.83) | | 19.63 | |
| | | 3.46 | 4.98 | | - | |
| | | (1.06) | (.96) | | 17.13 | |

***Note.*** **Pair 11: grouping strategies; Pair 12: creating supportive environment and establishing rapport with students; Pair 13: managing classroom procedures; Pair 14: performaing non-instructional duties; Pair 15: managing student behaviors; and Pair 16: organizing physical classroom space**

****Significant at α = .001 level**

## Discussion

Findings of this study are encouraging in documenting potential benefits of student teaching in terms of teacher candidates' perceptions of their preparedness and self-efficacy in teaching. With student teaching experiences, teacher candidates reported that they felt better prepared in regard to having acquired knowledge and abilities deemed necessary for successful teaching as set forth by standards for early childhood educators, which are consistent with the framework of core concepts and skills set forth by the NAEYC and National Academy of Education Committee on Teacher Education (Darling-Hammond & Bransford, 2005).

More specifically, all of the paired items tested on pre- and post-assessment (pedagogical content knowledge, planning and preparation for instruction, classroom management, promoting family involvement, and professionalism) were shown to be statistically significant on all five categories before and after student teaching experiences. This indicates how important student teaching experiences are to future teachers in terms of their feelings of preparedness.

Nevertheless, teacher candidates rated their preparedness lowest on "promoting family involvement" and also rated comparatively lower than other components. Though they reported that they felt more prepared to engage in activities to promote family involvement after their student teaching, they rated it lowest even though they felt more prepared. Because teacher candidates are practicing their teaching in working teachers' classrooms, it is reasonable to assume that most teacher candidates might have fewer opportunities to participate to activities associated with family involvement. According to Bandura (1997), self-efficacy can be built by observing an expert's successful performance/implementation of targeted work. Considering the results of this study, teacher preparation programs should consider how to better assist teacher candidates to be prepared to work with families. Kaskaya et al. (2011) and Tan (2006) suggest that integrating movies with effective teaching themes would benefit teacher candidates' self-efficacy in teaching. These types of visual aids would help teacher candidates to indirectly experience successful family involvement projects, conferences, or regular family communications. It is also recommended that cooperating teachers involve or have their teacher candidate(s) observe any family associated events or conferences if possible.

Our findings indicate needed future research. Although pre-service teachers generally felt more prepared to plan lessons

for culturally diverse students upon completing student teaching, there is a notable lack of consistency. Variance was

**Table 4:** *Mean Scores for Promoting Family Involvement*

| Items | *N* | Pre *M* (*SD*) | Post *M* (*SD*) | Mean Diff | *T* | *p* |
|---|---|---|---|---|---|---|
| Pair 17 | 118 | 2.85 (1.12) | 4.61(.92) | -1.76 | -18.21 | .00** |
| Pair 18 | 117 | 2.95 (1.14) | 4.56 (.99) | -1.62 | -16.92 | .00** |
| Pair 19 | 118 | 3.03(1.22) | 4.83 (.92) | -1.80 | -17.00 | .00** |

***Note.*** **Pair 17: communicating with families about the instructional program; Pair 18: engaging families in instructional program; and Pair 19: communication with families about their child.**
****Significant at α = .001 level**

**Table 5:** *Mean Scores for Professionalism*

| Items | *N* | Pre *M* (*SD*) | Post *M* (*SD*) | Mean Diff | *T* | *P* |
|---|---|---|---|---|---|---|
| Pair 20 | 118 | 3.92 (1.52) | 5.47 (.74) | -1.55 | -11.28 | .00** |
| Pair 21 | 118 | 4.00 (1.38) | 5.60 (.59) | -1.60 | -12.14 | .00** |
| Pair 22 | 118 | 4.24(1.53) | 5.58 (.67) | -1.34 | -9.98 | .00** |
| Pair 23 | 118 | 4.04 (1.53) | 5.46 (.75) | -1.42 | -10.42 | .00** |

***Note.*** **Pair 20: dealing with confidentiality issues; Pair 21: establishing collaborative relationships with colleagues; Pair 22: conducting oneself professionally based on state code of ethics; and Pair 23: advocating for students**
****Significant at α = .001 level**

shown on the post-assessment, with a comparatively large standard deviation (*SD* = 4.59, SD Error = .43) indicating less consistency among students' responses. In other words, some students reported that they felt extremely prepared to plan for culturally diverse students, while others reported that they felt extremely unprepared. Silvernail (1998) found that beginning teachers did not feel well prepared to teach new English language learners. However, Cook and Van Cleaf (2000) found that student teaching experiences in urban schools as compared to suburban schools fostered greater feelings of preparedness to understand the needs of students from diverse backgrounds. Although each district where the student teaching experiences of this study took place has a diverse student population, differences exist among schools. Perhaps some students felt less prepared because of the student population they worked with during student teaching, the modeling provided by mentor teachers, or the participants' own individual beliefs. In their review of research on preparing teachers for diverse settings, Hollins and Guzman (2005) suggest that the type of support and guidance student teachers receive can play a role along with individual commitment and persistence, but more research is needed to determine which elements in student teaching support teacher candidates' learning in this area.

In future studies, we will complement the quantitative findings of the survey items with interviews to understand more fully the perceptions of pre-service teachers. The current research, however, has paved the way through documenting benefits of student teaching experiences while also providing questions that warrant research. It is well documented that teacher candidates' perceptions of preparedness and sense of efficacy in teaching are closely related to their teaching practice, so it is necessary for educators to consider how to promote these two affective

domains throughout their teacher preparation programs, including student teaching experiences.

According to Bandura's social cognitive theoretical framework (1977; 1997), most of one's self-efficacy originates from mastery experiences and vicarious experiences. Mastery experiences are successful experiences to achieve desired actions, while vicarious experiences include observation of successful practices performed by others. In order to make teacher candidates' student teaching more successful and to promote their self-efficacy in teaching, teacher education programs/institutes should be cautious in supervising the learning process of student teaching and assist candidates to have successful experiences throughout their student teaching. Providing a clear guideline and benchmarks over a period of time (weekly or bi-weekly benchmarks, monthly benchmarks, etc.) will assist teacher candidates to be able to see and to evaluate what they are doing and where they have to go.

Furthermore, assigning teacher candidates to highly qualified in-service teachers should be an integral part to promote their self-efficacy in teaching. The best model of student teaching is helping teacher candidates fulfill their student teaching experiences successfully while observing the performance of their cooperating teachers who are expert in teaching. This promotes teacher candidates' self-efficacy in teaching and eventually helps them to be successful in teaching.

## References

Ajzen, I. (2011). The theory of planned behavior: Reactions and reflections. *Psychology & Health, 26*(9), 1113-1127.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*, 191-215.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. (1997). S*elf-efficacy: The exercise of control.* New York: Freeman.

Chacon, C. T. (2005). Teachers' perceived efficacy among English as a foreign language teachers in muddle schools in Venezuela. *Teaching and Teacher Education, 21*(3), 257-272. .

Clift, R., & Brady, P. (2005). Research on methods courses and field experiences. In M. Cochran-Smith and K. M. Zeichner (Eds.) *Studying teacher education: The report of the AERA panel on research and teacher education* (pp. 477-548). Mahwah, NJ: Lawrence Erlbaum Associates.

Cook, D. W., & Van Cleaf, D. W. (2000). Multicultural perceptions of 1st-year elementary teachers' urban, suburban, and rural placements. *Urban Education*, *35* (2), 165-174.

Cox, J. (1996). *Your opinion, please! How to build the best questionnaire in the field of education*. Thousand Oaks, CA: Corwin.

Cronk, B. C. (1999). *How to use SPSS*. Los Angeles, CA: Pyrezk Publishing.

Darling-Hammond, L. (2006). Constructing 21st-century teacher education. *Journal of Teacher Education, 57*(3), 300-314.

Darling-Hammond, L., Chung, R., & Frelow, F. (2002). Variation in teacher preparation: How well do different pathways prepare teachers to teach? *Journal of Teacher Education*, *53*(4), 286-302.

Darling-Hammond, L.& Bransford, J. (with LePage, P., Hammerness, K. &Duffy, H.). (2005). *Preparing teachers for a changing world: What teachers should learn and be able to do.* San Francisco: Jossey-Bass.

Davis, G. (2003). Using retrospective pre-post questionnaire to determine program impact. *Journal of Extension, 41*(4). Retrieved July 6, 2010 from http://www.joe.org/joe/2003august/tt4.php.

Gay, L. R., Mills, P., & Airasian, P. (2012). *Educational research: Competencies for analysis and application.* Upper Saddle River, NJ: Pearson

Gibson, S., & Dembo, M. (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology, 76*(4). 569-582.

Henson, R., Kogan, L., & Vacha-Haase, T. (2001). A reliability generalization study of the teacher efficacy scale and related instruments. *Educational and Psychological Measurement*, *61*(3),

Hollins, E. & Guzman, M. T. (2005). Research on preparing teachers for diverse populations. In M. Cochran-Smith and K. M. Zeichner (Eds.) *Studying teacher education: The report of the AERA panel on research and teacher education* (pp. 477-548). Mahwah, NJ: Lawrence Erlbaum Associates.

Jones, V. (2006). How do teachers learn to be effective classroom managers? In C. M. Evertson, & C. S. Weinstein (Eds.), *Handbook of classroom management. Research, practice, and contemporary issues* (pp. 887-908) Mahwah, NJ: Lawrence Erlbaum.

Kaskaya, A., Onlo, I., Akar, M. S., & Savirli, M. O. (2011). The effects of school and teacher themed movies on preservice teachers' professional attitudes and perceived self-efficacy. *Educational Science: Theory & Practice, 11*(4), 1178-1783.

Rockwell, S. & Kohn, H. (1989). Post-then-pre evaluation. *Journal of Extension, 27*(2). Retrieved July 6, 2010 from http://www.joe.org/joe/1989summer/a5.php.

Silvernail, D. L. (1998). *Findings from the initial analysis of the New York City Teacher Survey*. New York: New Visions for Public Schools.

Tan, C. (2006). Philosophical reflections from the silver screen: Using films to promote reflection in pre-service teachers. *Reflective Practice, 7*(4), 483-497.

Wiersma, W. (1995). *Research methods in education.* Boston, MA: Allyn and Bacon.

Wilson, S. (Ed.) (2010). *Teacher Quality Education Policy White Paper*. Washington, DC.: National Academy of Education.

Yilmaz, C. (2011). Teachers' perceptions of self-efficacy, English proficiency, and instructional strategies. *Social Behavior and Personality, 39*(1), 91-100.