

DO FIRST AND SECOND YEAR TEACHERS FEEL PREPARED? AN
EVALUATION OF A STANDARDS BASED TEACHER PREPARATION PROGRAM

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The undersigned, appointed by the Dean of the Graduate School, have examined the thesis entitled

DO FIRST AND SECOND YEAR TEACHERS FEEL PREPARED? AN
EVALUATION OF A STANDARDS BASED TEACHER PREPARATION PROGRAM

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And hereby certify that in their opinion it is worthy of acceptance.

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TABLE OF CONTENTS

ACKNOWLEDGEMENTS	ii
LIST OF TABLES	iv
LIST OF FIGURES	v
Chapter	
1. INTRODUCTION	1
2. REVIEW OF LITERATURE	6
Teacher Quality and Preparation	
Standards-based Reform	
Levers for Improving Teacher Education Programs	
Program Evaluations	
3. METHOD	19
Design	
Participants	
Materials	
Procedures	
4. RESULTS	23
5. DISCUSSION	43
REFERENCES	48
APPENDIX	
A. EXAMPLE OF TEACHER SURVEY	50
B. COVER LETTER FOR TEACHER SURVEY	58
C. MOSTEP STANDARDS	60

LIST OF TABLES

Table	Page
1. Frequency of teacher response by survey year	20
2. Frequency of teacher response by certification level	20
3. Means and standard deviations for standards by teacher year	23
4. Means and standard deviations for standards by survey year	24
5. Mean average standard score as a function of survey year and teacher year	25
6. Between subjects effects of survey year	26
7. Between subjects effects of teacher year	27
8. Between subjects effects for survey year by teacher year	28
9. Means and standard deviations for standards by certification level	34
10. Mean average standard score as a function of certification level and teacher year....	35
11. Between subjects effects of teacher year	36
12. Between subjects effects of certification level	37
13. Mean average standard score as a function of certification level and teacher year ...	40

LIST OF FIGURES

Figure	Page
1. Interaction between survey year and teacher year, standard 7	29
2. Interaction between survey year and teacher year, standard 8	30
3. Interaction between survey year and teacher year, standard 9	31
4. Interaction between survey year and teacher year, standard 10	32
5. Interaction between survey year and teacher year, standard 11	33
6. Interaction between certification level and teacher year, standard 6	41
7. Interaction between certification level and teacher year, standard 8	42

Chapter 1: Introduction

Student achievement in public schools has long been of concern in the United States. In order to promote high achievement in all students, high quality teachers must be produced through high quality teacher preparation programs (Liston, Borko, & Whitcomb, 2008; Wilson, Floden, & Ferrini-Mundy, 2002; Dean, Lauer, & Urquhart 2005). In fact, many researchers and policy makers have looked at the relationship between teacher preparation and teacher effectiveness and have indeed found that teacher education directly impacts student achievement (Darling-Hammond, 2000; Darling-Hammond, Holtzman, Gatlin, & Heiling, 2005; Darling-Hammond & Youngs 2002). Therefore, it is imperative that teacher preparation programs be evaluated to ensure they are of high quality.

Historically the most common forms of formal evaluations of teacher education programs were those conducted by external agencies such as the National Council for the Accreditation of Teacher Education (NCATE), and state departments of education. According to Nelli & Nutter (1984), these formal external evaluations tended to be descriptive in nature, focusing on comparing course documents prepared by the institution, such as course syllabi, against standards set by the accrediting agencies. As a result of time constraints, accreditation evaluations were for the most part evaluations of programs as they existed on paper. While having a clear purpose, these evaluations could not supply all the feedback teacher educators needed. Consequently, teacher education programs began conducting internal program evaluations through questionnaires sent to recent graduates. However, these internal evaluations were loosely structured, often

seeking graduates' opinions regarding their preparation program rather than seeking to determine actual preparedness based on any commonly accepted national standards.

In 1992, the Interstate New Teacher Assessment and Support Consortium (INTASC) articulated a set of principles to be used as a basis for teacher licensing. These principles set a foundation for content specific standards which have been integrated by NCATE in review and accreditation processes of teacher education programs. These principles were derived from the standards-based reform movement, which held the belief that if high performance standards were set and monitored by external assessment, instructional practices would change and consequently raise student achievement (Delandshere & Arens, 2001).

Many state departments of education use professional teaching standards, based on the INTASC standards, as a framework for assessing teaching performances for licensure. While some teacher preparation programs implemented a standards-based system prior to their state departments issuing standards, other institutions have made the move to standards in conjunction with their state departments. Along with the standards-based reform movement, several teacher education consortiums were established to improve teacher education. Some of these consortiums include The Renaissance Group (founded in 1990), The Holmes Partnership, National Association for Professional Development Schools, and The National Network for Educational Renewal. Additionally, the Teacher Education Accreditation Council (TEAC) was founded in 1997 to improve academic degree programs for professional educators.

Despite these efforts to improve teacher quality through teacher preparation programs, critics of teacher preparation programs still have identified several weaknesses

of the programs. These weaknesses include low admission standards, curricular fragmentation, excessive requirements, disconnection with classroom worlds, and inadequate quality control mechanisms (Liston et al., 2008). Moreover, it has been found that public school reform has historically been unsuccessful due to the lack of adequate investment in teacher preparation programs (Darling-Hammond, 2000). Despite the lack of investment in teacher preparation programs, quality control can still be ensured through program evaluations, which allow for teacher educators to reflect on these weaknesses and play an integral role in the reform process. Teacher preparation programs, especially those which are nationally accredited, must demonstrate that teacher candidates have knowledge of subject matter in addition to a strong understanding of pedagogy, curriculum, technology, and assessment (Kern, Sherman, & Conte, 2004). Due to this, all teacher education programs must engage in the process of program evaluation.

Traditionally, teacher education programs have engaged in evaluations to meet one of five needs including: describing teacher education students and recent graduates, constructing institutional norms, researching program efficacy, comparing preparation efforts for improvement purposes, and meeting accreditation standards (Thomas & Loadman, 2001). One program evaluation study, conducted by Thomas & Loadman (2001) indicated that female teachers rated career satisfaction and skill significantly higher than did male respondents, elementary level respondents rated skill and knowledge significantly higher than did secondary level respondents, and overall, while graduates felt well prepared in basic teaching knowledge, they could use more training in specific specialization areas.

Delaney (1995) examined a teacher program evaluation and found that new teachers placed emphasis on pre-service teaching experiences and identified the three biggest challenges of teaching as maintaining discipline, teaching students of differing ability levels, and working with mainstreaming. Also found was a statistically significant relationship between perceptions of professional growth achieved through teacher preparation and the extent to which new teachers encountered difficulty in their relationships with students.

The Center for Teacher Quality (2007) at California State University (CSU) evaluated pre-service teacher candidates and concluded based on preliminary findings through hierarchical linear modeling that between 22 and 27 percent of student learning was statistically linked to teacher factors and consequently to the teacher preparation program. Moreover, a study by Conway (2002) looked at graduates from a music education program over the course of two years and had emergent themes from student data indicating program strengths, such as student teaching and pre-service field work, and weaknesses such as teacher education courses and early classroom observations.

This present study seeks to examine in depth one teacher preparation program evaluation at a large Midwestern University with a long standing history in teacher education. The research questions driving this study are: Are there significant differences in perceptions of preparedness across 1st and 2nd year teachers and certification levels in regards to Missouri Standards for Teacher Education Programs (MOSTEP)? Are there significant differences in perceptions of preparedness across 1st and 2nd year teachers and survey year?

This program evaluation differs from previously reported teacher preparation program evaluations in several ways. First, this study seeks to examine the relationship between factors contributing to teacher perceptions of preparedness rather than examining factors individually. Secondly, this study examines not only first year teachers, but also those teachers who are in their second year of teaching to reveal the ways in which perceptions of preparedness can change in regards to years of experience.

One of the limitations of this study is that it utilizes self report survey data of teacher perceptions of how well they are prepared. This data does not indicate actual performance. However, utilizing survey research as a means of data gathering and sharing findings in the education community is imperative in leading to overall improvement in teacher education (Thomas & Loadman, 2001; Holste & Matthews, 1993; Delaney, 1995). Thomas & Loadman (2001) and Delaney (1995) also implicated that survey data can provide quality information regarding program strengths and weaknesses, which is how this study sought to use the data.

Another limitation was there was little variability in the teacher responses to the standard questions, with the majority of respondents reporting feeling well prepared which indicates there might have been a response set. The data could have indicated positive feelings regarding the program in general rather than indicating actual perceptions of preparedness.

Chapter 2: Review of Literature

While reviewing the literature on teacher preparation programs and evaluations, it became necessary, for the sake of clarity, to discuss the studies in four different categories. These four categories include: teacher quality and preparation, standards-based reform, levers for improving teacher education programs, and program evaluations.

Teacher Quality and Preparation

Several studies have found that teacher certification and training have some effect on student achievement (Darling-Hammond et al., 2005; & Darling-Hammond & Young, 2002). Findings of this kind have led to a debate regarding teacher quality and the definition of a highly qualified teacher. The US Department of Education (2006) deems those teachers who have attained a bachelor's degree or better in a content area, obtained full state teacher certification, and demonstrated knowledge of subjects taught to be highly qualified.

The idea of full state teacher certification versus alternative certifications has been examined in regards to teacher quality. A study by Darling-Hammond et al. (2005), used a series of regression analyses to examine student achievement in relationship to teacher certification. This study was conducted over a seven year period, and looked specifically at students in grades 3-5. Student prior knowledge, student demographic characteristics, and teacher's years of experience and highest degree completed were controlled variables. Results of this study revealed that teachers' effectiveness strongly related to the preparation they had received. The study also looked at the Teach for America program, a nationally recognized teacher induction program. When compared with other

new, fully certified teachers, the students being taught by Teach for America teachers did significantly less well than those taught by state certified teachers. Furthermore, Teach for America teachers and uncertified teachers generally had negative effects on student achievement.

A review of research by Wilson et al. (2002) was commissioned by the Office of Educational Research and Improvement and the US Department of Education and examined five key questions surrounding teacher preparation. These key questions were: 1) What kind of subject matter preparation, and how much of it, do prospective teachers need? 2) What kinds of pedagogical preparation, and how much of it, do prospective teachers need? 3) What kinds, timing, and amount of clinical training best equip prospective teachers for classroom practice? 4) What policies and strategies have been used successfully by states, universities, school districts, and other organizations to improve and sustain the quality of pre-service teacher education? 5) What are the components and characteristics of high-quality alternative certification programs?

Results of this review revealed that in the area of subject matter preparation, there was a positive relationship between teacher subject matter knowledge and student achievement. However, coursework in education, outside the content area accounted for between 39 and 48 percent of the variance in teaching performance (Wilson et al., 2002). In regards to pedagogical preparation, while little research had been reported, it was suggested that prospective teachers' entering beliefs and knowledge were predictors of how much they learned in education coursework. Additionally, the review cited research showing that certified teachers generally produce higher student achievement scores than do uncertified teachers. In the area of clinical training, or student teaching, review of

research suggested that teachers completing a 5 year program, including a yearlong internship, were overall more satisfied with teaching, had a higher retention rate, and rated their teaching abilities higher than did those teachers completing a 4 year program. In terms of policies to improve teacher preparation quality, very little research was discovered (Wilson et al., 2002). However, one finding revealed a statistically significant correlation between the percentage of colleges in a state that were National Council for Accreditation of Teacher Education (NCATE) accredited and the percentage of teachers in the state who were fully certified and held a major in their field. Finally, in the area of alternative certification, review of the research revealed that while alternative certification programs have been successful in recruiting a more diverse group of teachers, there have been mixed results in terms of teacher quality. Overall, Wilson et al. (2002) concluded that several factors contributed to quality of alternative certification including high entrance standards, extensive mentoring and supervision, frequent and substantial evaluation, practice in lesson planning and teaching, high exit standards and extensive pedagogical training in instruction, management, curriculum, and working with diverse students.

Standards-based reform

Over the course of the past decade, teacher education programs have become increasingly obligated to answer for the quality of their graduates. One way in which teacher education programs have chosen to assess the quality of their graduates is by implementing a standards-based reform. As more institutions of higher education become accredited each year, many have adopted the use of standards to guide the ways in which they collect and use data regarding their students (Olson, 2005).

Most of these institutions adopted standards based on the principles for teacher licensing set forth by the Interstate New Teacher Assessment and Support Consortium (INTASC). The principles also set a foundation for content specific standards which have been integrated by NCATE in review and accreditation processes of teacher education programs. NCATE was founded in 1954 to help establish high standards through the process of professional accreditation of schools of education. Similarly, TEAC was founded in 1997 to accredit undergraduate and graduate professional education programs.

In addition, several teacher education groups have been established to improve teacher education. The Renaissance Group was founded in 1990 as a national consortium of colleges and universities that have a commitment to teacher education. The primary purpose of the group is to address teacher education issues and to be a proactive force in national education reform. The Holmes Partnership is made up of universities, public school districts, teacher associations and other organizations. The purpose of this partnership is to aide in learning reform both at the public school level as well as in higher education. The National Network for Educational Renewal includes partnerships of university faculty in the arts, sciences, and education, and public school educators. The goal of this partnership is to improve not only public school education but also teacher quality.

A study by Delandshere & Arens (2001), examined two states as test cases in regards to professional teaching standards and standards-based reform. For this study, reform documents, policies and practices, as well as interviews with key participants in the reform were collected and analyzed using the frameworks established by national

organizations regarding standards-based reform. Results of the study found that the standards-based reform movement allowed, for the first time, professional teaching standards to be developed in conjunction with content standards. However, Delandshere & Arens (2001) also cautioned that standards-based reform answers questions by relying on implicit assumptions about schooling and education, and that some teacher preparation programs may conclude that they are forced to think about teaching in terms of standards because of the consequences of program accreditation.

In 1993, a college of education at a Midwestern state university redesigned its teacher education program to better prepare the next generation of educators. The new program was based on a clearly defined set of standards. Part of a case study that was performed on this program compared students who went through the new standards-based curriculum with students who went through a traditional course oriented program. Results of the significant t-test analysis revealed students in the standards-based curriculum reported feeling better prepared professionally than those taking the traditional curriculum (Kim, Andrews, & Carr, 2004).

Levers for Improving Teacher Education Programs

One review, conducted by Dean et al. (2005), examined the traits of award winning teacher education programs which served to set them apart from other preparation programs. In 2000, the US Department of Education established the National Awards Program for Effective Teacher Preparation to recognize teacher education programs which continually produce high quality teachers (Dean et al., 2005). Dean et al. (2005) looked at four award winning programs to determine which criteria these

programs had in common that made them outstanding institutions for teacher education. Upon examination of these programs, five criteria were outlined which can serve as levers for establishing effective teacher education programs including: licensure requirements, standards, accreditation, P-12 partnerships, and continuous improvements (Dean et al., 2005).

While all teacher education programs must heed the requirements for state licensure, award winning programs went a step further by consistently monitoring these requirements and systematically making changes in student experiences to meet these changes (Dean et al., 2005). In the area of standards, it is the goal of all programs to reflect state standards and some institutions have even adopted standards created by the National Council for Accreditation of Teacher Education (NCATE) or other bodies offering accreditation (Dean et al., 2005; Lynn, 2005). According to Dean et al. (2005) award winning programs used these standards as a set of program goals which served as a framework for program evaluation by guiding decisions regarding what data to collect and how often to collect it. Dean et al. (2005) went on to state that outstanding teacher preparation programs are accredited by NCATE or another national organization offering accreditation such as the Teacher Education Accreditation Council (TEAC). This type of accreditation requires a review process after a set amount of time. Due to this, programs must continually monitor and improve program effectiveness.

All award winning institutions in the Dean et al. (2005) study stressed the importance of developing strong partnerships with P-12 schools. These partnerships not only served as a source of program evaluation by providing feedback to the teacher education programs, but also provided pre-service teachers with opportunities for time in

the field which allowed for a higher quality preparation experience. The final criteria serving as a lever for effective teacher education and evaluation is that of continuous improvement. In this realm, award-winning programs view their work as ongoing and strive to not only help faculty members embrace the culture of change and improvements but also strive to network with other teacher preparation programs to learn more about effective practices and program evaluations (Dean et al., 2005).

One of the most recent and in-depth studies of teacher preparation is the “Educating School Teachers” report by Levine (2006). These findings suggest that a model programs are those that meet the following criteria: purpose, curricular coherence, curricular balance, faculty composition, admissions, degrees, research, finances, and assessment. The purpose of a program should be explicit and focused on teacher education. Curricular coherence is defined by a curriculum which mirrors the programs goals and is coherent and specific to teachers. Curriculum should also be balanced to integrate both the theory and practice of teaching. The faculty should be composed of both academics as well as practitioners who are experts in the field of teaching. Admission criteria should be designed to recruit highly motivated and capable students having the potential to become quality educators. Degrees should be appropriate to the profession and reflect high graduation standards. Research within the program should be high quality and purposeful. Financial resources of programs should be adequate to support the needs of the program. Finally, programs should practice continued self-assessment and evaluation to ensure quality.

Program Evaluations

Concern over teacher quality and preparation has been growing in this nation and some statistics have reported that as few as one in five teachers feels well prepared to work in a modern classroom (Thomas & Loadman, 2001; US Department of Education, 2004). Due to the increasing numbers of K-12 students and number of teachers retiring, the demand for teachers has continued to rise. While the need for teachers has increased exponentially, so has society's anxiety over producing poor teachers (Thomas & Loadman, 2001). Therefore, teacher education program evaluations are needed that are methodologically sound if teachers are to be well prepared in the future. As more rigorous standards for teachers are implemented at the state and national levels, program evaluation is also becoming increasingly important as programs must produce teacher candidates who meet those standards and possess a knowledge of subject matter, classroom practice, professional knowledge and knowledge of relationships (Kern et al., 2004). Traditionally, program evaluations have been developed to meet one of five needs. These needs include: describing teacher education students and recent graduates, constructing institutional norms, researching program efficacy, comparing preparation efforts for improvement purposes, and meeting accreditation standards (Thomas & Loadman, 2001).

It has been well established that good teachers are prepared through high quality programs. One way in which program quality can be established is through the process of evaluation. Teacher education follow up studies are components of program evaluations and serve to monitor program quality and help ensure that teacher preparation is changing to meet the needs of an ever evolving society (Holste & Matthews, 1993;

Delaney, 1995). Many educational researchers suggest that program evaluation utilizing survey research as a means of data gathering, and sharing findings in the education community is imperative in leading to overall improvement in teacher education (Thomas & Loadman, 2001; Holste & Matthews, 1993; Delaney, 1995). Thomas & Loadman (2001) and Delaney (1995) also stated that survey data can provide quality information regarding program strengths as well as areas in which improvement is needed. This type of data may be collected via surveys administered to current students, alumni, faculty, and school administration.

One program evaluation study, conducted by Thomas & Loadman (2001) at a Carnegie I research university, utilized the National Survey of Teacher Education Program Graduates instrument, modified by added institution specific items. This survey consisted of 130 items and measured perceptions of program graduates across 10 specific areas including demographics, teaching position information, teacher views of teaching, teacher career satisfaction, non-teacher views, ratings of pre-service program quality, teaching skills, knowledge, certification process satisfaction, and use of career services. Participants for the study included program graduates within a four quarter time frame that had been in the work force for a least a year . This study used a multivariate analysis of variance (MANOVA) to review the descriptive variables (gender, degree level, and teaching level) and their relationship with the dependent variables (career satisfaction, quality of program, skill, and knowledge). Thomas & Loadman (2001) found the results of the MANOVA revealed a significant effect for gender only and consequently initiated four 3-way ANOVAs for the dependent variables using gender, degree level, and teaching level as descriptive variables. These univariate tests indicated that female

teachers rated career satisfaction and skill significantly higher than did male respondents and that elementary level respondents rated skill and knowledge significantly higher than did secondary level respondents (Thomas & Loadman, 2001). Overall, the study found that graduates felt they could use more training in the areas of working with gifted and talented students, and special needs students. However, the graduates felt well prepared in the areas of basic teaching knowledge and skills, and knowledge of subject area.

Delaney (1995) examined a teacher program evaluation conducted at a large private university. This examination focused on how follow-up surveys can be designed and utilized to the benefit of teacher preparation programs. Data for this study came from follow-up surveys administered to recent graduates of a school of education and explored graduates' perceptions regarding how well their undergraduate training enhanced their skills and ultimately prepared them for their professional careers. After analyzing the previously collected data, Delaney (1995) found that new teachers placed emphasis on pre-service teaching experiences and thought these experiences should be expanded and diversified. New teachers also identified the three biggest challenges of teaching as maintaining discipline, teaching students of differing ability levels, and working with mainstreaming. The study also revealed a significantly higher percent of secondary education majors citing challenges such as motivation, self reflection, and student differences than students from other certification levels. Overall, results from this program evaluation suggested that teacher education focus more on application of methods to professional practice and intensified pre-service teaching experiences.

Kern et al. (2004) evaluated, using the qualitative method of case study, the standards-based School of Education of the College of New Jersey. Faculty and

administration at this institution developed five themes which served as a framework for program evaluation. These themes included: knowledge and inquiry, excellence in practice, multiple contexts and communities, leadership and advocacy, and multiculturalism, diversity and inclusion. Research was conducted via qualitative evaluation through case study. The study took place over several years and involved each of ten investigators producing a descriptive case study which was eventually combined to create one collective case through the process of triangulation. Of the five themes previously outlined, this study produced evidence of strong support for all themes except multiple contexts and communities. This theme was found to be implemented by teacher candidates at the junior and senior level, but was not evidenced in the data collected at the sophomore level.

A study conducted by the Center for Teacher Quality (2007) at California State University (CSU) investigated the ways in which the CSU teacher preparation program impacted K-12 student learning for those students taught by CSU prepared teachers. For this study, the Center for Teacher Quality collaborated with seven large, urban school districts in California which hired a large number of CSU graduates. This study sought to gather data in the areas of student achievement and instructional effects on students. The collaborating school districts were asked to provide the Center for Teacher Quality with evidence sets which included scores on standardized achievement examinations given statewide as well as data regarding student gain that was realized by comparing scores both before and after instruction in a subject tested on multiple occasions (Center for Teacher Quality, 2007). The Center for Teacher Quality analyzed the preliminary evidence sets using hierarchical linear modeling to estimate how much learning was

associated with student factors when teacher factors were statistically held constant, how much learning was associated with teacher factors when student factors were statistically held constant, and how much learning could not be explained by this procedure because of the limited numbers of student and teacher factors that were measured in the evidence sets. In the areas of reading, language, and mathematics, it was concluded that between 22 and 27 percent of student learning was statistically linked to teacher factors and consequently the teacher preparation program at CSU. The findings of this study led the Center for Teacher Quality and the CSU Chancellor to initiate a system-wide evaluation of teacher preparation as they recognized that teacher education has many outcomes including intrinsic qualities of each program, self reported effects of each programs on its graduates' teaching, effects of program on graduates' teaching as reported by job supervisors, effects on graduates' teaching measured by performance assessments, participation and persistence in the profession of teaching, and K-12 student learning outcomes that can be traced to teacher education.

Another study, conducted by Conway (2002), specifically evaluated the pre-service music teacher preparation program at a Big Ten University. Three research questions were set forth, these included: 1) What were the perceptions of beginning teacher participants regarding the most valuable and the least valuable parts of their teacher preparation? 2) What were the perceptions of building administrators and assigned mentors regarding the pre-service preparation provided by the program? 3) What suggestions did participants have for the music teacher preparation program? This study looked at program graduates over the course of two years and collected data via individual interviews and classroom observations. Interviews were conducted both with

focus groups of beginning teachers as well as with administrators. Beginning teachers were also asked to keep a journal of their first year experiences and an end-of-year questionnaire was administered to gain insight into the perceptions and reflections beginning teachers had regarding their pre-service preparation. Interview transcripts, teacher journals, and researcher observation logs were reviewed and coded with respect to the three research questions. Themes emerged from student data indicating program strengths as pre-service fieldwork and applied lessons; program weaknesses were identified as specific courses outside of the content area as well as the lack of consistency between some methods courses which included a junior level general teaching methods course and two senior level music methods courses. Administrator data suggested a need for an extended student teaching experience instead of a traditional one semester, nine credit student teaching segment, as well as more training regarding the administrative aspect of teaching.

Differing from previous studies, the present one seeks to examine the relationship between factors contributing to teacher perceptions of preparedness rather than examining factors individually. Additionally, this study seeks to examine whether or not perceptions of preparedness change over time by having not only first year, but also second year teachers respond to the self-report survey.

Chapter 3: Method

Design

The research designs for this study were 2 x 4 factorial analyses and 2 x 5 factorial analyses. Factors for the 2 x 4 analysis were teacher year (1st or 2nd) and survey year (2004, 2005, 2006, and 2007). Factors for the 2 x 5 analysis were teacher year (1st or 2nd) and certification level (early childhood, elementary, K-12, middle school, and secondary). The dependent variables for all analyses were mean levels of perceived preparedness for each of eleven standards. Due to the multiple ANOVA's, a Bonferroni type adjustment was made for the possibility of inflated Type I error rates (Tabachnick & Fidell, 1996).

Participants

Participants for this study included 640 1st and 2nd year teachers surveyed over a four year period, from 2004-2007. All 1st and 2nd year teachers were graduates of the teacher preparation program of a large Midwestern university. The teacher education program at this university offers a variety of standards-based programs that lead to both initial and advanced teacher certification. All courses in the program are aligned with the four components of the Design Model of the Teacher Development Program: problems of practice, emphasizing the role of reflection in professional development, evaluation through performance assessment, and organization around state and national program standards.

Participants were all certified at one of five levels: early childhood, elementary, K-12, middle school, or secondary and were teaching in many different districts

throughout the state. The majority of all participants were certified at the elementary or secondary level with the fewest certified at the middle school and K-12 levels. Table 1 shows the frequency of 1st and 2nd year teachers across survey years while Table 2 shows the frequency of 1st and 2nd year teachers by certification level.

Table 1.

Frequency of Teacher Response by Survey Year

	<u>Survey year</u>				<u>Total</u>
	2004	2005	2006	2007	
1 st yr. teachers	53	86	96	103	338
2 nd yr. teachers	60	68	87	87	302
Total	113	154	183	190	640

Table 2.

Frequency of Teacher Response by Certification Level

	<u>Certification level</u>					<u>Total</u>
	Early		Middle			
	childhood	Elementary	K-12	school	Secondary	
1 st yr. teachers	58	116	34	23	107	338
2 nd yr. teachers	51	106	32	20	93	302
Total	109	222	66	43	200	640

Materials

Data for this study were collected via self-report survey (see Appendix A). The survey asked participants to respond to questions regarding demographic information such as year graduated, primary certification area (art, science, math, elementary etc), and certification level (early childhood, elementary, K-12, middle school, and secondary). The survey also asked participants to respond to questions regarding current employment and demographic information about their district of employment (such as student population and location). Finally, the survey asked participants to give their perceptions regarding their own pre-service teacher preparation in regards to state standards. Teachers were asked to respond to a series of items relating to each of 11 state standards (see Appendix C) on a 4 point Likert scale in which 1=strongly agree, 2=agree, 3=disagree, and 4=strongly disagree. For each of the 11 state standards, a minimum of 2 and maximum of 6 sub-questions were rated by participants.

For the first 2 years (2004 and 2005) and last 2 years (2006 and 2007) the teacher surveys remained the same. However, a change was made in the survey between the years of 2005 and 2006. At this time the list of certification areas was altered and reduced from 28 certification areas in 2004-2005 to 20 areas in 2006-2007. This change was made as a few categories such as behaviorally disordered, learning disabled and cross categorical etc. were collapsed into one certification area labeled special education/cross categorical. While this change is noted, it did not affect data analyses of this study as the N for some certification areas was too small to compare means and certification area was not a factor used in analysis.

Procedures

In April of each year (2004-2007), surveys were sent to 1st and 2nd year alumni of a teacher education program at a large Midwestern university. A letter (see Appendix B) was attached to the survey which told participants the goal of the survey was to assess the strengths and weaknesses of the teacher preparation program at which they had been trained. The survey was designed to take approximately 10 minutes to complete. Each survey was accompanied by a postage paid envelope for returning the survey. Additionally, respondents had the choice of entering a drawing for two football tickets to the homecoming game by filling out a short entry form and enclosing it in a separate provided envelope inside the returned survey package.

To accommodate the changes made between surveys regarding certification area, these sections were recoded so that all survey years could be combined and variables were consistent. Additionally, scores for the sub-questions relating to each of the 11 state standards were averaged into one main score for each standard. The result of this was that each participant had 11 mean scores, one for each of the state standards, which were used in data analyses.

Chapter 4: Results

Perceptions of teachers regarding their level of preparedness in relation to 11 state standards (Appendix C) were analyzed with 2 x 4 (Teacher year x Survey year) analyses of variance. An alpha level of .05 was used for all statistical tests. Table 3 describes means and standard deviations of perceived preparedness by teacher year for each standard.

Table 3.

Means and Standard Deviations for Standards by Teacher Year

Standard	<u>Teacher Year</u>			
	<u>1ST Year</u>		<u>2nd Year</u>	
	N = 338		N = 302	
	M	SD	M	SD
1 (content knowledge)	1.73	.49	1.77	.49
2 (development/learning theory)	1.73	.49	1.81	.48
3 (learner differences)	1.93	.58	1.96	.54
4 (curriculum development/planning)	1.72	.50	1.76	.52
5 (instructional strategies)	1.79	.57	1.79	.56
6 (behavior/classroom management)	1.76	.57	1.79	.59
7 (communication)	1.74	.52	1.71	.52
8 (assessment)	1.84	.57	1.83	.56
9 (reflection)	1.69	.55	1.72	.53
10 (relationships)	1.84	.57	1.87	.58
11 (technology)	1.88	.58	1.82	.58

Table 4 describes means and standard deviations of perceived preparedness by year surveyed. Table 5 describes means and standard deviations of perceived preparedness by year surveyed and teacher year.

Table 4.

Means and Standard Deviations for Standards by Survey Year

Standard	<u>Survey Year</u>							
	<u>2004</u>		<u>2005</u>		<u>2006</u>		<u>2007</u>	
	N = 113		N = 154		N = 183		N = 190	
	M	SD	M	SD	M	SD	M	SD
1 (content knowledge)	1.66	.51	1.75	.53	1.76	.45	1.79	.48
2 (development/learning theory)	1.78	.55	1.75	.49	1.79	.48	1.76	.46
3 (learner differences)	1.89	.57	1.97	.60	1.93	.49	1.97	.59
4 (curriculum development/planning)	1.69	.54	1.77	.54	1.71	.45	1.76	.53
5 (instructional strategies)	1.76	.61	1.78	.55	1.79	.53	1.81	.58
6 (behavior/classroom management)	1.76	.62	1.73	.55	1.77	.58	1.78	.58
7 (communication)	1.74	.56	1.67	.48	1.73	.51	1.78	.54
8 (assessment)	1.81	.60	1.84	.56	1.86	.55	1.84	.58
9 (reflection)	1.69	.59	1.64	.50	1.72	.50	1.76	.58
10 (relationships)	1.78	.61	1.87	.58	1.86	.52	1.88	.61
11 (technology)	1.81	.62	1.87	.56	1.82	.55	1.89	.59

Table 5.

Mean Average Standard Score as a Function of Survey Year and Teacher Year

Standard	Survey Year							
	2004		2005		2006		2007	
	1 st yr N=53	2 nd yr N=60	1 st yr N=86	2 nd yr N=68	1 st yr N=96	2 nd yr N=87	1 st yr N=103	2 nd yr N=87
1 (content knowledge)	1.59	1.73	1.71	1.80	1.81	1.69	1.74	1.84
2 (development/learning theory)	1.66	1.88	1.70	1.81	1.83	1.75	1.70	1.83
3 (learner differences)	1.82	1.96	1.95	2.01	1.97	1.90	1.95	1.99
4 (curriculum development/planning)	1.67	1.72	1.73	1.81	1.75	1.67	1.71	1.83
5 (instructional strategies)	1.69	1.83	1.80	1.76	1.87	1.70	1.77	1.87
6 (behavior/classroom management)	1.76	1.83	1.72	1.75	1.83	1.71	1.72	1.85
7 (communication)	1.70	1.70	1.60	1.77	1.83	1.61	1.79	1.77
8 (assessment)	1.86	1.77	1.78	1.91	1.94	1.77	1.80	1.89
9 (reflection)	1.69	1.69	1.54	1.77	1.81	1.62	1.71	1.82
10 (relationships)	1.76	1.80	1.79	1.97	1.95	1.76	1.83	1.94
11 (technology)	1.77	1.84	1.86	1.89	1.95	1.67	1.89	1.90

Table 6 describes the between subjects main effects for the variable survey year.

As can be seen, there were no significant main effects for this variable.

Table 6.

Between Subjects Effects of Survey Year

Standard	Type III			
	Sum of Squares	Mean Square	F	Sig.
1 (content knowledge)	1.255	.418	1.753	.155
2 (development/learning theory)	.099	.033	.141	.935
3 (learner differences)	.649	.216	.687	.560
4 (curriculum development/planning)	.711	.237	.906	.438
5 (instructional strategies)	.301	.100	.315	.815
6 (behavior/classroom management)	.291	.097	.291	.832
7 (communication)	.841	.280	1.052	.369
8 (assessment)	.144	.048	.150	.930
9 (reflection)	1.106	.369	1.286	.278
10 (relationships)	.881	.294	.888	.447
11 (technology)	.952	.317	.960	.411

Note. df = 3

Table 7 describes the between subjects main effects for the variable teacher year. The only main effect that was found was for standard 2, $F(1, 640) = 5.82, p < .05$. First year teachers ($M = 1.73$) felt significantly more prepared than did second year teachers ($M = 1.81$).

Table 7.

Between Subjects Effects of Teacher Year

Standard	Type III			
	Sum of Squares	Mean Square	F	Sig.
1 (content knowledge)	.382	.382	1.601	.206
2 (development/learning theory)	1.363	1.363	5.821	.016
3 (learner differences)	.322	.322	1.025	.312
4 (curriculum development/planning)	.255	.255	.974	.324
5 (instructional strategies)	.010	.010	.031	.860
6 (behavior/classroom management)	.149	.149	.446	.505
7 (communication)	.044	.044	.165	.685
8 (assessment)	.019	.019	.059	.809
9 (reflection)	.220	.220	.769	.381
10 (relationships)	.199	.199	.602	.438
11 (technology)	.312	.312	.944	.332

Note. df = 1

Table 8 shows the tests of between subjects effects for survey year by teacher year.

Table 8.

Between Subjects Effects for Survey Year by Teacher Year

Standard	Type III			
	Sum of Squares	Mean Square	F	Sig.
1 (content knowledge)	1.685	.562	2.354	.071
2 (development/learning theory)	1.745	.582	2.484	.060
3 (learner differences)	.925	.308	.980	.402
4 (curriculum development/planning)	1.019	.340	1.298	.274
5 (instructional strategies)	2.330	.777	2.439	.063
6 (behavior/classroom management)	1.521	.507	1.519	.208
7 (communication)	3.262	1.087	4.083	.007
8 (assessment)	2.580	.860	2.672	.047
9 (reflection)	4.039	1.346	4.695	.003
10 (relationships)	3.344	1.115	3.372	.018
11 (technology)	3.392	1.131	3.420	.017

Note. df = 3

Results for standard 7 (communication), revealed a significant interaction $F(3, 640) = 4.08, p < .01$, between teacher year and survey year (see Figure 1). In 2005, 1st year teachers felt better prepared ($M = 1.60$) in the area of communication than did 2nd year teachers ($M = 1.77$), however; in 2006, the opposite was true with second year teachers feeling better prepared.

Estimated Marginal Means of S7Avg

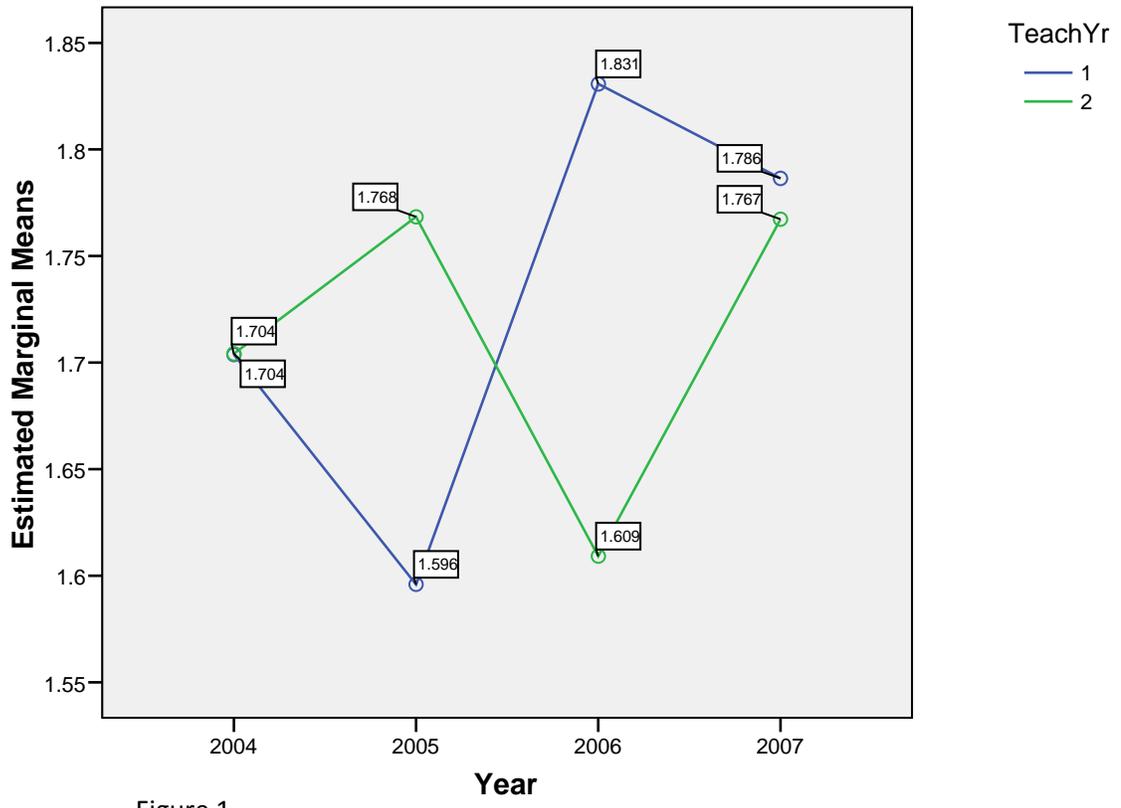


Figure 1

A significant interaction was found for standard 8 (assessment) between teacher year and year surveyed $F(3, 640) = 2.67, p < .05$. In the area of assessment, in 2004 and 2006, second year teachers felt better prepared while in years 2005 and 2007, first year teachers felt better prepared (see Figure 2)

Estimated Marginal Means of S8Avg

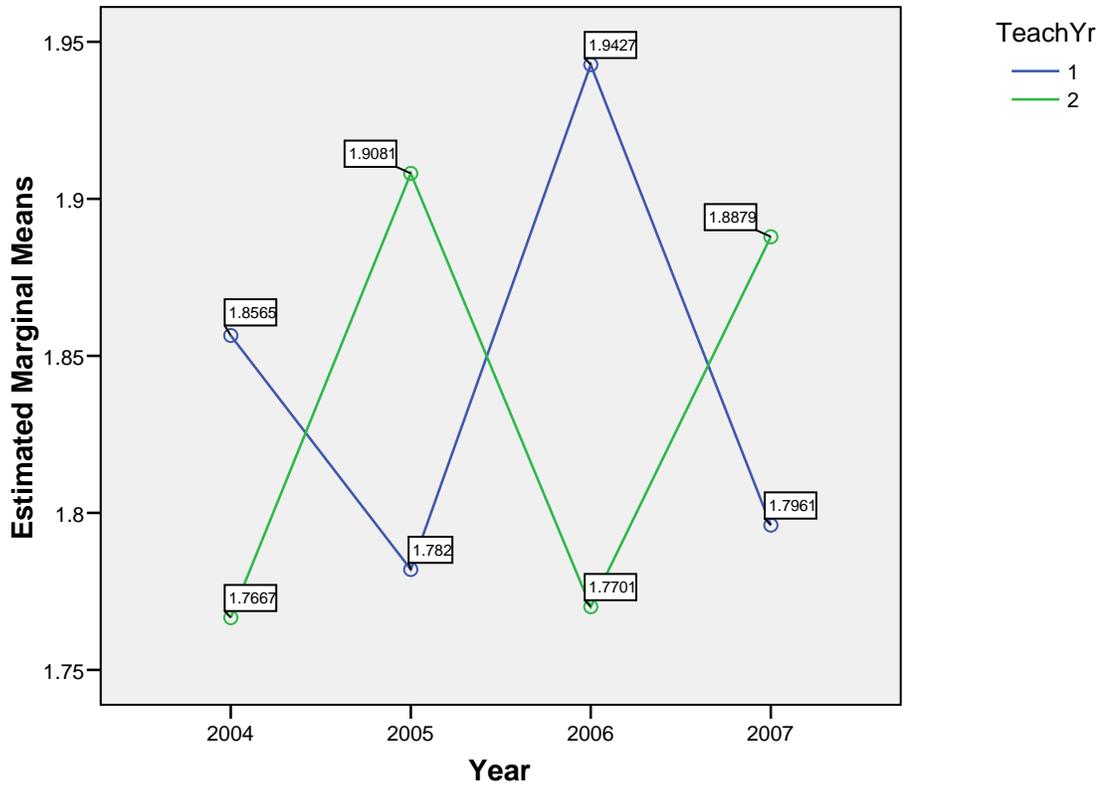


Figure 2

For standard 9 (reflection), a significant interaction was found between teacher year and year surveyed, $F(3, 640) = 4.70, p < .01$. Figure 3 shows differences in perceptions of preparedness in the area of reflection in 2005-2007 with first year teachers feeling more prepared in 2005 and 2007.

Estimated Marginal Means of S9Avg

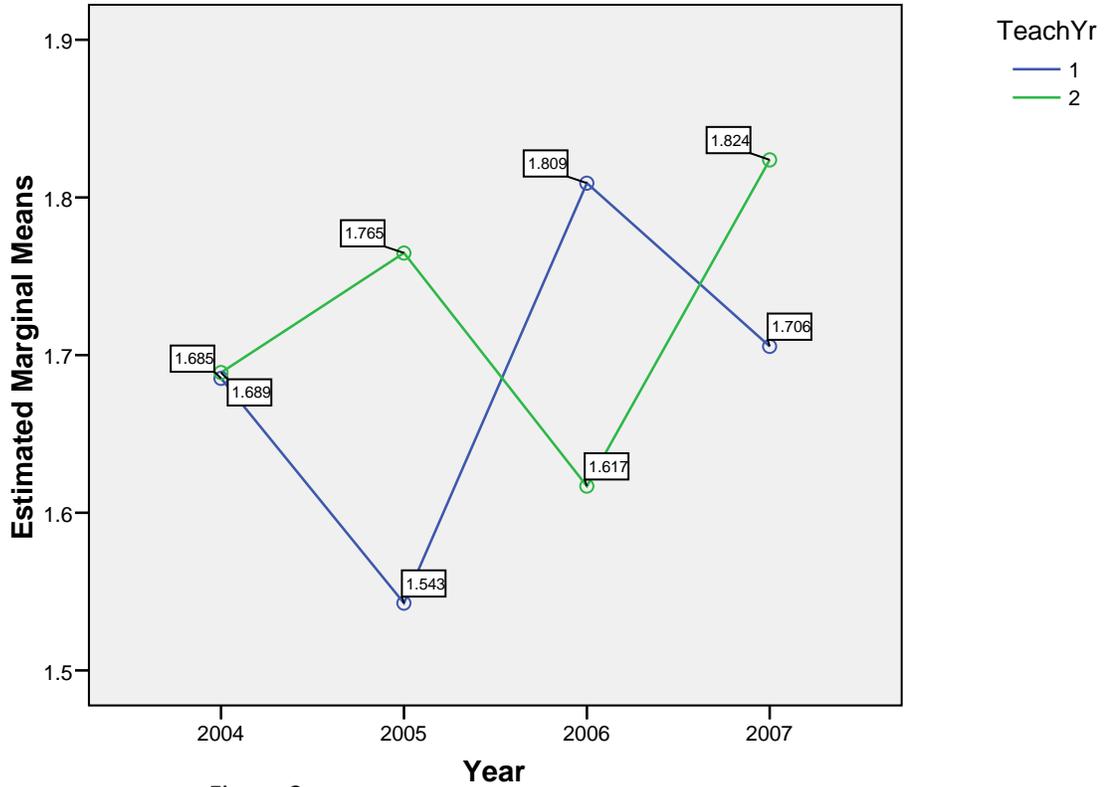


Figure 3

A significant interaction was also found between teacher year and survey year in standard 10 (relationships), $F(3, 640) = 3.37, p < .05$. Figure 4 shows a significant difference between 1st and 2nd year teachers with 2nd year teachers reporting being better prepared than 1st year teachers in the area of relationships in the 2006 survey only.

Estimated Marginal Means of S10Avg

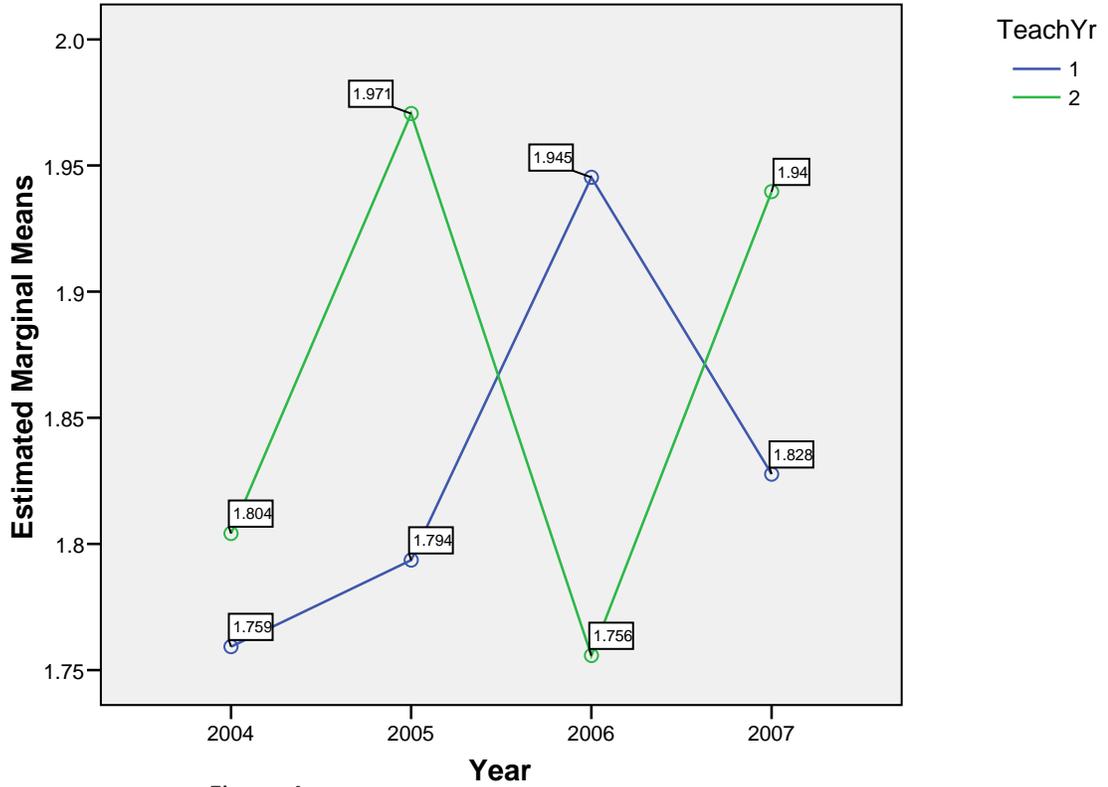


Figure 4

Finally, a significant interaction was found between teacher year and survey year on standard 11 (technology), $F(3, 640) = 3.42, p < .05$. Results showed that in the area of technology, 1st and 2nd year teachers felt about the same amount of preparedness in each survey year except 2006 in which 2nd year teachers felt significantly more prepared (see Figure 5).

Estimated Marginal Means of S11Avg

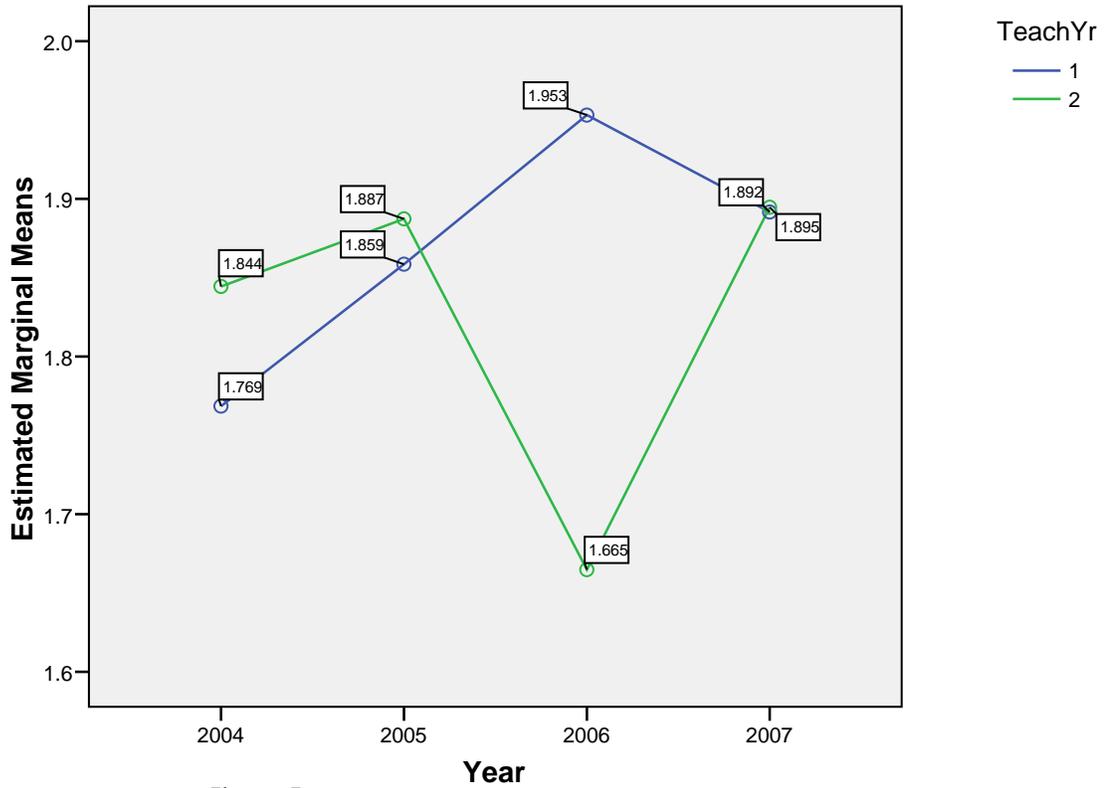


Figure 5

Perceptions of teachers regarding their level of preparedness in relation to 11 state standards were also analyzed with 2 x 5 (Teacher year x Certification level) analyses of variance. As previously described, means and standard deviations of perceived preparedness by standard by teacher year are found in Table 3. Table 9 describes means and standard deviations of perceived preparedness by certification level.

Table 9.

Means and Standard Deviations for Standards by Certification Level

Standard	<u>Certification level</u>									
	<u>Early</u>				<u>Middle</u>					
	<u>childhood</u>		<u>Elementary</u>		<u>K-12</u>		<u>school</u>		<u>Secondary</u>	
	N = 109		N = 222		N = 66		N = 43		N = 200	
	M	SD	M	SD	M	SD	M	SD	M	SD
1 (content knowledge)	1.62	.44	1.68	.49	1.71	.51	1.77	.43	1.90	.49
2 (dev/learning theory)	1.50	.44	1.76	.48	1.73	.50	1.82	.40	1.94	.46
3 (learner differences)	1.73	.47	1.94	.59	1.81	.63	2.10	.49	2.10	.52
4 (curriculum)	1.61	.47	1.72	.51	1.63	.50	1.86	.50	1.84	.52
5 (instructional strategies)	1.66	.50	1.80	.55	1.75	.60	1.83	.54	1.86	.60
6 (behavior/classroom mgt)	1.53	.50	1.74	.57	1.75	.56	1.92	.53	1.91	.59
7 (communication)	1.63	.50	1.67	.51	1.67	.55	1.82	.47	1.83	.53
8 (assessment)	1.70	.47	1.80	.56	1.74	.59	1.83	.46	2.00	.61
9 (reflection)	1.62	.51	1.68	.52	1.70	.57	1.60	.46	1.81	.57
10 (relationships)	1.65	.47	1.78	.56	1.76	.59	1.97	.52	2.05	.60
11 (technology)	1.91	.58	1.82	.55	1.87	.66	1.87	.60	1.85	.57

Table 10 describes means of perceived preparedness for each standard by certification level and teacher year.

Table 10.

Mean Average Standard Score as a Function of Certification Level and Teacher Year

Standard	<u>Certification level</u>									
	<u>Early</u>				<u>Middle</u>					
	<u>childhood</u>		<u>Elementary</u>		<u>K-12</u>		<u>school</u>		<u>Secondary</u>	
	1 st yr N=58	2 nd yr N=51	1 st yr N=116	2 nd yr N=106	1 st yr N=34	2 nd yr N=32	1 st yr N=23	2 nd yr N=20	1 st yr N=107	2 nd yr N=93
1 (con. knowledge)	1.65	1.59	1.67	1.70	1.65	1.77	1.68	1.87	1.88	1.91
2 (dev/learn. theory)	1.48	1.51	1.69	1.83	1.65	1.81	1.80	1.84	1.92	1.96
3 (learner diff.)	1.72	1.73	1.87	2.02	1.80	1.83	2.05	2.15	2.13	2.03
4 (curriculum)	1.62	1.59	1.65	1.79	1.56	1.70	1.79	1.94	1.89	1.79
5 (inst. strategies)	1.66	1.65	1.78	1.81	1.70	1.80	1.78	1.88	1.90	1.81
6 (beh./clssrm mgt)	1.56	1.50	1.65	1.84	1.65	1.85	1.87	1.98	1.99	1.82
7 (comm..)	1.67	1.59	1.63	1.71	1.64	1.71	1.82	1.83	1.91	1.75
8 (assessment)	1.78	1.62	1.74	1.86	1.65	1.84	1.78	1.88	2.08	1.91
9 (reflection)	1.64	1.58	1.64	1.72	1.74	1.65	1.49	1.72	1.79	1.83
10 (relationships)	1.71	1.58	1.74	1.84	1.71	1.81	1.88	2.06	2.06	2.04
11 (technology)	1.95	1.87	1.85	1.78	1.82	1.93	1.82	1.93	1.91	1.77

Table 11 shows the between subjects main effects for the variable year.

Table 11.

Between Subjects Effects of Teacher Year

Standard	Type III			
	Sum of Squares	Mean Square	F	Sig.
1 (content knowledge)	.435	.435	1.881	.171
2 (development/learning theory)	.684	.684	3.184	.075
3 (learner differences)	.148	.148	1.497	.481
4 (curriculum development/planning)	.384	.384	1.515	.219
5 (instructional strategies)	.057	.057	.178	.673
6 (behavior/classroom management)	.327	.327	1.046	.307
7 (communication)	.023	.023	.088	.766
8 (assessment)	.034	.034	.109	.742
9 (reflection)	.150	.150	.518	.472
10 (relationships)	.225	.225	.718	.397
11 (technology)	.028	.028	.083	.774

Note. df = 1

As shown in Table 11, there were no main effects for teacher year. Table 12 shows between subjects main effects for the variable certification level.

Table 12.

Between Subjects Effects of Certification Level

Standard	Type III			
	Sum of Squares	Mean Square	F	Sig.
1 (content knowledge)	7.271	1.818	7.855	.000
2 (development/learning theory)	14.034	3.508	16.335	.000
3 (learner differences)	10.965	2.741	9.207	.000
4 (curriculum development/planning)	5.345	1.336	5.277	.000
5 (instructional strategies)	3.040	.760	2.395	.049
6 (behavior/classroom management)	10.992	2.748	8.781	.000
7 (communication)	4.357	1.089	4.127	.003
8 (assessment)	7.838	1.960	6.350	.000
9 (reflection)	3.716	.929	3.220	.012
10 (relationships)	14.315	3.579	11.427	.000
11 (technology)	.779	.195	.581	.677

Note. $df = 4$

No main effects were found for standard 11 (technology); however, all other standards yielded significant findings. For standard 1 (content knowledge), a main effect revealed a significant difference among perceptions of preparedness across certification levels, $F(4, 640) = 7.86, p < .01$. Results indicated that early childhood ($M = 1.62$) and elementary ($M = 1.68$) certified teachers felt more prepared in the area of content knowledge than did secondary teachers ($M = 1.90$).

A main effect was also found for certification level in standard 2 (development/learning theory), $F(4, 640) = 16.34, p < .01$. Teachers certified at the early

childhood level reported a significantly higher perception ($M = 1.50$) of being prepared in development and learning theory than did elementary ($M = 1.76$), K-12 ($M = 1.73$), middle school ($M = 1.82$), and secondary ($M = 1.94$) certified teachers. Additionally, a significant difference was found between elementary ($M = 1.76$) and secondary ($M = 1.94$) certified teachers, with elementary level teachers reporting a higher level of preparedness.

For standard 3 (learner differences), a main effect was also found for certification level $F(4, 640) = 9.21, p < .01$. Early childhood certified teachers reported a significantly higher perception of preparation regarding learner differences ($M = 1.73$) than did elementary ($M = 1.94$), middle school ($M = 2.10$), and secondary ($M = 2.10$) certified teachers.

A main effect was found for certification level in standard 4 (curriculum development/planning), $F(4, 640) = 5.28, p < .01$. Once again, early childhood certified teachers reported a perception of being better prepared ($M = 1.61$) in the area of curriculum development and planning than did teachers certified at the secondary level ($M = 1.84$).

In the area of instructional strategies (standard 5), a main effect was reported between certification levels, $F(4, 640) = 2.40, p < .05$. Secondary teachers reported being significantly less prepared ($M = 1.86$) than did early childhood teachers ($M = 1.66$).

For standard 6 (behavior/classroom management), a main effect was found, $F(4, 640) = 8.78, p < .01$, early childhood teachers reported being better prepared ($M = 1.53$) than did elementary ($M = 1.74$), middle school ($M = 1.92$), and secondary ($M = 1.91$) teachers. A significant difference was also found between elementary and secondary

teachers with elementary teachers reporting being better prepared ($M = 1.74$) than secondary teachers ($M = 1.91$).

A main effect was also found in standard 7 (communication) for certification level, $F(4, 640) = 4.13$, $p < .01$. Early childhood ($M = 1.63$) and elementary ($M = 1.67$) reported being better prepared in the area of communication, both verbal and non-verbal, than did secondary ($M = 1.83$) teachers.

For standard 8 (assessment), a main effect was also found, $F(4, 640) = 6.35$, $p < .01$. In the area of formal and informal assessment, teachers certified at the secondary level reported a much lower perception of preparedness ($M = 2.00$) than did early childhood ($M = 1.70$), elementary ($M = 1.80$), and K-12 ($M = 1.74$) certified teachers.

In the area of reflection (standard 9), a significant main effect was found, $F(4, 640) = 3.22$, $p < .05$. In the arena of reflection, early childhood teachers reported a slightly higher level of preparedness ($M = 1.62$) than did secondary teachers ($M = 1.81$).

Finally, a main effect was also reported in standard 10 (relationships) between certification levels, $F(4, 640) = 11.43$, $p < .01$. A significant difference was found between early childhood certified teachers who reported a higher level of preparedness in the area of relationships ($M = 1.65$) than did middle school ($M = 1.97$) and secondary ($M = 2.05$) certified teachers. A difference was also found between elementary and secondary teachers with elementary teachers reporting being better prepared ($M = 1.78$) than secondary teachers ($M = 2.05$).

Table 13 shows tests of between subjects effects for teacher year by certification area.

Table 13.

Mean Average Standard Score as a Function of Certification Level and Teacher Year

Type III				
Standard	Sum of Squares	Mean Square	F	Sig.
1 (content knowledge)	.610	.152	.658	.621
2 (development/learning theory)	.481	.120	.560	.692
3 (learner differences)	1.599	.400	1.343	.253
4 (curriculum development/planning)	1.947	.487	1.922	.105
5 (instructional strategies)	.711	.178	.560	.692
6 (behavior/classroom management)	4.262	1.066	3.405	.009
7 (communication)	1.716	.429	1.625	.166
8 (assessment)	3.506	.876	2.840	.024
9 (reflection)	1.040	.260	.901	.463
10 (relationships)	1.427	.357	1.139	.337
11 (technology)	1.101	.275	.821	.512

Note. $df = 4$

A significant interaction effect was found for Standard 6 between teacher year and certification level, $F(4, 640) = 3.40$, $p < .01$ (see Figure 6). In terms of behavior and classroom management, 1st year teachers at the elementary, K-12, and middle school levels felt more prepared while at the early childhood and secondary levels, 2nd year teachers perceived a higher level of preparedness.

Estimated Marginal Means of S6Avg

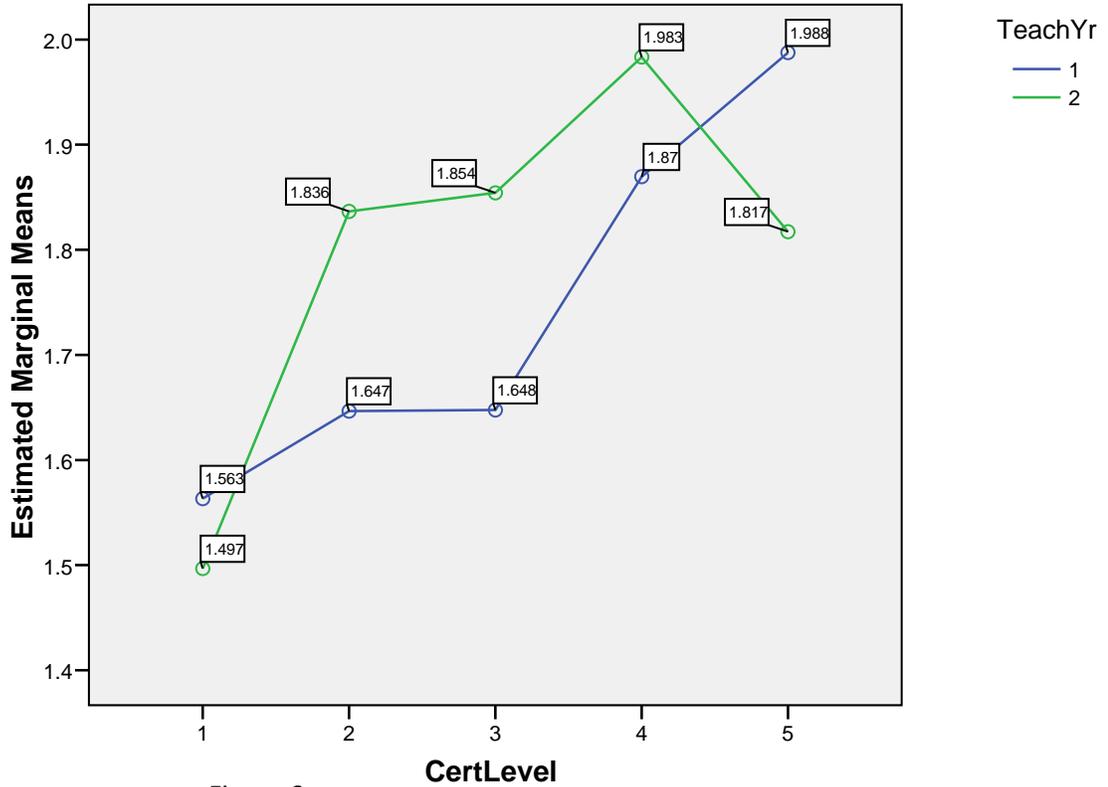


Figure 6

A significant interaction effect was also found for Standard 8, $F(4, 640) = 3.40$, $p < .01$ (see Figure 7). Second year early childhood and secondary educators felt more prepared in assessment than did 1st year early childhood and secondary educators. On the other hand, for the other certification levels, it was the 1st year teachers who felt more prepared.

Estimated Marginal Means of S8Avg

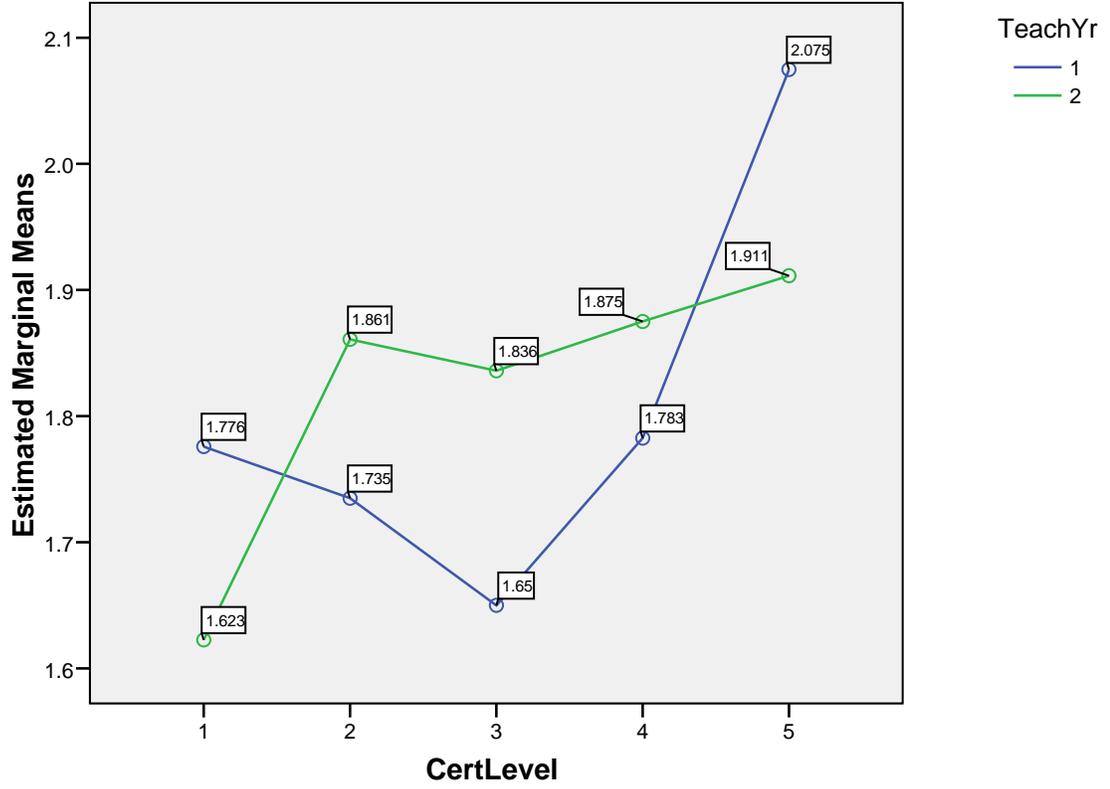


Figure 7

Chapter 5: Discussion

As there have been very few publications regarding teacher preparation program evaluations, the purpose of this study was to examine closely the many factors of a pre-service teacher preparation program and to investigate the areas in which differences occur regarding perceived level of preparedness in meeting state standards. Specifically, this study looked at the differences in perceptions between certification levels as well as changes over time.

Results of this study provided an answer to the research questions posed at the beginning. The first research question was: Are there significant differences in perceptions of preparedness across 1st and 2nd year teachers and certification levels in regards to Missouri Standards for Teacher Education Programs (MOSTEP)? Findings indicated there were differences in perceptions of preparedness as a function of certification level for standards 1-10. Post hoc tests showed that for these standards (1-10), teachers certified in early childhood reported a higher level of perceived preparedness than did those teachers certified at the secondary level. In addition, those certified in elementary education felt more prepared for standards 1, 2, 6, 7, 8, and 10 than did secondary teachers. These results were similar to the Thomas & Loadman (2001) study which found that elementary level respondents rated their skill and knowledge significantly higher than did secondary level respondents. Moreover, the results of this study were similar to the Delaney (1995) teacher program evaluation where secondary education majors cited more challenges, such as motivation (MOSTEP standard 6), self-reflection (MOSTEP standard 9), and student differences (MOSTEP standard 3) than those participants from other certification levels. It was also found that

for standard 6, the perception of preparedness according to certification was dependent upon whether or not teachers were in their first or second year of teaching. First year teachers at the elementary, K-12, and middle school levels felt more prepared while at the early childhood and secondary levels, it was the second year teachers who reported higher levels of perceived preparedness.

The second research question posed was: Are there significant differences in perceptions of preparedness across 1st and 2nd year teachers and survey year? It was found that statistically significant differences did occur between specified groups. There was only one significant finding between 1st and 2nd year teachers across all 11 standards. For standard 2, first year teachers felt more prepared than did second year teachers. There were no significant differences between the responses of participants across the four survey years. However, there were differences in survey year depending upon whether participants were 1st or 2nd year teachers for standards 7-11. For standard 7, in 2005, first year teachers felt better prepared, however in 2006 the opposite was true. For standard 8, in 2004 and 2006, second year teachers felt better prepared while in 2005 and 2007, first year teachers felt better prepared. For standard 9, in years 2005 and 2007, first year teachers felt more prepared than did second year teachers. For standard 10, second year teachers felt better prepared in 2006. For standard 11, in 2006, second year teachers felt more prepared.

Similar to the study conducted by Thomas & Loadman (2001), this study found that while beginning teachers in the field reported an overall high level of preparedness, some graduates felt they could have been more prepared in the area of learner differences (standard 3). Additionally, this study revealed results similar to those of the study by

Delaney (1995). Delaney (1995) and this study both found that, overall, secondary level certified teachers reported a lower level of perceived preparedness than did early childhood and elementary certified teachers. A possible reason for this pattern could be the underlying structure of the teacher development program. At the institution studied, the elementary certification is more rigidly structured than the secondary certification. The courses for elementary certification are scheduled in blocks in which students have little choice regarding which education courses are taken in any given semester. Students pursuing secondary certification do not take education courses in blocks and have more freedom when scheduling courses. Moreover, pre-service teachers pursuing certification at the secondary level may feel more content oriented than those pre-service teachers in other certification levels. If a pre-service teacher is strictly content-focused, they may not gain as much from general pedagogy courses as from courses in content pedagogy.

Additionally, instructor effects are not taken into account in this study. The teacher preparation program studied here has separate faculty at each certification level. For the most part, all students seeking elementary certification will have a mix of the same faculty members teaching courses, as will students seeking secondary certification with a different group of faculty. It is possible that these differences in faculty members contribute to the perceptions of teachers regarding preparedness in relation to state standards. Elementary majors in this program are taught more by K-12 teachers than university professors. On the other hand, secondary majors are taught more by university professors. This could suggest that students will report feeling more prepared when taught by practitioners in the field.

Regardless of teacher year, the participants of this study felt less prepared in the areas of learner differences, assessment, and technology. These findings suggest that the institution needs to re-evaluate how the content in these areas is delivered. Additionally, these results might suggest school districts would benefit by offering professional development opportunities in these areas for beginning teachers.

In this complex world, it is imperative to have high quality teachers. To produce high quality teachers, we need high quality teacher education programs. However, teacher education programs have come under attack from the public and policy makers for failure to adequately prepare educators to work within the current educational system (Levine, 2006). Currently, there are two types of quality control in teacher education which are aimed at ensuring high quality teacher preparation. First, states have established program approval and accountability procedures. Secondly, accreditation organizations have been created as self-policing entities. According to Levine (2006), even with these quality control mechanisms in place, too many weak programs have achieved state approval and been granted accreditation. A third type of quality control that teacher preparation programs should engage in is the act of program evaluation, like the current study.

Future studies regarding teacher program evaluation could seek to examine the instructor influence on teacher perceptions or effectiveness. Additionally, this study was only able to look at a very small number of the factors influencing teacher preparation. It would be prudent for future research to specifically examine other factors of teacher preparation across which differences may occur such as content area, and demographic information regarding student gender and age. In addition to information from teacher

preparation candidates themselves, additional important information can be gained from surveying principles who hire the institutions' graduates to get their perceptions of teacher preparedness. Combined analyses and mixed method design will lead to better insights for programmatic change.

REFERENCES

- Center for Teacher Quality, (2007). Teacher preparation program evaluation based on K-12 student learning and performance assessments by school principals. California State University.
- Central Michigan University, (2002). Teacher preparation program evaluation. Education and Human Services.
- Conway, C. (2002). Perceptions of beginning teachers, their mentors, and administrators regarding pre-service music preparation. *Journal of Research in Music Education*, 50, 20-36.
- Darling-Hammond, L. (2000). Reforming teacher preparation and licensing: Debating the evidence. *The Teachers College Record*, 102, 28-56.
- Darling-Hammond, L., Holtzman, D.J., Gatlin, S.J., & Heilig, V. (2005). Does teacher preparation matter? Evidence about teacher certification, Teach for America, and teacher effectiveness. *Education Policy Analysis Archives*, 13 (42), 1-32.
- Darling-Hammond, L., & Youngs, P. (2002). Defining “Highly Qualified Teachers”: What does “Scientifically-Based Research” actually tell us? *Educational Researcher*, 31 (9), 13-25.
- Dean, C., Lauer, P., & Urquhart, V. (2005, December). Outstanding teacher education programs: What do they have that the others don't? *Phi Delta Kappan*, 284-289.
- Delandshere, G., & Arens, S.A. (2001). Representations of teaching and standards-based reform: Are we closing the debate about teacher education? *Teaching and Teacher Education*, 17, 547-566.
- Delaney, A.M. (1995). *Promoting responsive teacher education through effective follow-up studies*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA. (ERIC Document Reproduction Service No. ED 388 659)
- Kern, S.M., Sherman, S.J., & Conte, A.E. (2004). Evaluation of a standards-based teacher-preparation program. *The Educational Forum*, 68 (4), 358-369.
- Kim, M.M., Andrews, R.L., & Carr, D.L. (2004). Traditional versus integrated pre-service teacher educational curriculum: A case study. *Journal of Teacher Education*, 55, 341-356.
- Levine, A. (2006). Educating school teachers. The Education Schools Project.

- National Council for Accreditation of Teacher Education (2008). About NCATE. Retrieved June 2008, from <http://www.ncate.org/public/aboutNCATE.asp>
- National Network for Educational Renewal (2008). NNER. Retrieved June 2008, from <http://www.nnerpartnerships.org/>
- Nelli, E. & Nutter, N. (1984). A model for evaluating teacher education programs. ERIC Clearinghouse on Teacher Education document No. 400-83-0022..
- Olson, L. (2005). Education schools use performance standards to improve graduates. *Education Week*, 24 (36), 1-19.
- Sands, D.I., Duffield, J.A., & Parsons, B.A. (2007). Evaluating infused content in a merged special education and general education teacher preparation program. *Action in Teacher Education*, 28, 92-103.
- Tabachnick, B.G., & Fidell, L.S. (2006). *Using Multivariate Statistics*. New York, NY: HarperCollings College Publishers.
- Teacher Education Accreditation Council (2006). About TEAC. Retrieved June 2008, from <http://www.teach.org/about/index.asp>
- The Holmes Partnership (2008). About the Holmes Partnership. Retrieved June 2008, from <http://www.holmespartnership.org/about.html>
- The Renaissance Group (2005). The Renaissance Group's Purpose. Retrieved June 2008, from <http://edeucation.csufresno.edu/rengroup/>
- Thomas, A.M., & Loadman, W.E. (2001). Evaluating teacher education programs using a national survey. *The Journal of Educational Research*, 94, 195-206.
- U.S. Department of Education (2008). No Child Left Behind. Retrieved March 2008, from <http://www.ed.gov/nclb/landing.jhtml?src=pb>
- U.S. Department of Education (2004). Fact Sheet: New No Child Left Behind Flexibility: Highly Qualified Teachers. Retrieved March 2008, from <http://www.ed.gov/nclb/methods/teachers/hqtflexibility.pdf>
- Wilson, S.M., Floden, R.E., & Ferrini-Mundy, J. (2002). Teacher preparation research: An insider's view from the outside. *Journal of Teacher Education*, 53 (3), 190-204.

EXAMPLE OF TEACHER SURVEY (Appendix A)

2004 Follow-Up Survey for 1st Year Teachers



University of Missouri - Columbia
College of Education

Directions: Please fill in the appropriate circles of each section with a pen or pencil. A scanner will be used to read responses. **Please do not make any marks outside or between the circles except in designated areas.**

Part I: Basic Information

1. I graduated from the College of Education at MU with my B.S. in Education:

- | | |
|----------------------------|--------------------------------|
| <input type="radio"/> 2001 | <input type="radio"/> August |
| <input type="radio"/> 2002 | <input type="radio"/> December |
| <input type="radio"/> 2003 | <input type="radio"/> May |

2. My primary **certification** area is: (please choose one)

- | | | |
|---|---|--------------------------------------|
| <input type="radio"/> Agriculture | <input type="radio"/> Educ Mental Ret | <input type="radio"/> Math |
| <input type="radio"/> Art | <input type="radio"/> Elementary | <input type="radio"/> Music |
| <input type="radio"/> Behav Disordered | <input type="radio"/> Family Cons Sci | <input type="radio"/> Physics |
| <input type="radio"/> Biology | <input type="radio"/> French | <input type="radio"/> Science |
| <input type="radio"/> Business | <input type="radio"/> German | <input type="radio"/> Social Studies |
| <input type="radio"/> Business / Market | <input type="radio"/> Industrial Arts | <input type="radio"/> Spanish |
| <input type="radio"/> Chemistry | <input type="radio"/> Language Arts | <input type="radio"/> Speech |
| <input type="radio"/> Cross Categorical | <input type="radio"/> Latin | <input type="radio"/> Technical Educ |
| <input type="radio"/> Early Childhood | <input type="radio"/> Learning Disabled | |
| <input type="radio"/> Earth Science | <input type="radio"/> Marketing | |

3. My primary **certification** level is: (please choose one)

- | | |
|---------------------------------------|-------------------------------------|
| <input type="radio"/> Early Childhood | <input type="radio"/> Middle School |
| <input type="radio"/> Elementary | <input type="radio"/> Secondary |
| <input type="radio"/> K-12 | |

4. I am currently employed as a classroom teacher on a full-time basis:

- Yes No

5. If your answer to question 4 was "No," please select one of the following that best suits your current situation:

- currently employed as a Teacher Aide/Substitute Teacher/Teacher Intern
- currently employed outside the field of education
- currently attending graduate school full-time in the field of education
- currently attending graduate school full-time outside field of education
- currently not employed and not seeking employment at this time
- currently not employed but actively seeking employment

If your answer to question 4 was "Yes," please also answer questions 6-9. If your answer was "No" please go to Part II.

6. The total student enrollment of the district where I teach is:

- less than 300
- 300 - 699
- 700 - 999
- 1,000 - 3,999
- 4,000 - 14,999
- 15,000 +

7. The location of the district where I teach is:

- Central Mo
- Kansas City
- Kansas City Metro
- North Central Mo
- Northeast Mo
- Northwest Mo
- South Central Mo
- Southeast Mo
- Southwest Mo
- St. Louis City
- St. Louis County

8. My primary **teaching** area is: (please choose one)

- Agriculture
- Art
- Behav Disordered
- Biology
- Business
- Business / Market
- Chemistry
- Cross Categorical
- Early Childhood
- Earth Science
- Educ Mental Ret
- Elementary
- Family Cons Sci
- French
- German
- Industrial Arts
- Language Arts
- Latin
- Learning Disabled
- Marketing
- Math
- Music
- Physics
- Science
- Social Studies
- Spanish
- Speech
- Technical Educ

9. My primary **teaching** level is: (please choose one)

- Early Childhood
- Elementary
- Middle School
- Secondary
- K-12

10. After completing my Bachelor of Science degree in Education...(please choose one)

- I have taken no further coursework at this time
- I have taken some coursework toward an advanced degree but have not yet enrolled in an official degree program
- I have enrolled in an advanced degree program related to the field of education
- I have enrolled in an advanced degree program not related to the field of education

Part II. Admission

11. I entered the College of Education program as a...

- Freshman
- Transfer student from community college
- Transfer student from another MU division
- Transfer student from another college or university

12. I entered the College of Education program...

- | | |
|------------------------------|-------------------------------------|
| <input type="radio"/> Fall | <input type="radio"/> Prior to 1999 |
| <input type="radio"/> Spring | <input type="radio"/> 1999 |
| <input type="radio"/> Summer | <input type="radio"/> 2000 |
| | <input type="radio"/> 2001 |
| | <input type="radio"/> 2002 |

Part III. Career Decision: Please indicate your level of agreement by blackening in the appropriate circle. A scanner will be used to read responses. Please do not make any marks outside or between the circles except in designated areas.

	Strongly Agree	Agree	Disagree	Strongly Disagree
13. I decided on a teaching career prior to enrolling in college.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. I chose teaching as a career because it is what I always wanted to do with my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. I chose teaching as a career after exploring other career choices.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. I based my career choice, at least in part, on the supply and demand of teachers in the various fields of education.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. I feel I have made the right career choice at this point in my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. I do/would recommend the teaching profession to others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Part IV: Overall Assessment: Please indicate your level of agreement by blackening in one circle for each question.

	Strongly Agree	Agree	Disagree	Strongly Disagree
19. The College of Education at MU has a high quality education program.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. The Education program at MU adequately prepared me for my first teaching position.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. The field experiences prior to my student internship were valuable to my training.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. I do/would recommend the education program at MU to others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Part V: Detailed Assessment: Please indicate your level of agreement by blackening in one circle for each question.

The College of Education program at MU effectively assisted me in learning... (Standard 1.2.1)

23. how to make the subject matter meaningful to students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. how to present information to students in multiple ways.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. how to use students' prior knowledge.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. methods to engage students in inquiry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. to create interdisciplinary experiences.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The College of Education program at MU effectively assisted me in understanding... (Standard 1.2.2)

28. child/adolescent development.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29. how to strengthen students' prior knowledge with new ideas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30. how to encourage student responsibility.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31. different theories of learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The College of Education program at MU effectively assisted me in learning... (Standard 1.2.3)

32. how to identify prior experience, learning styles, and needs of students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33. design and implementation of individualized instruction based on prior experience, learning styles, and needs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34. about specialized services available to students and how or when to access them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35. how to connect instruction to experiences, family, culture and community.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly Agree	Agree	Disagree	Strongly Disagree
The College of Education program at MU effectively assisted me in understanding...				(Standard 1.2.4)
36. how to create learning experiences that are appropriate, relevant to learners, and based upon principles of effective instruction.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
37. the Show Me Standards in my area.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38. how to create lessons and activities that recognize individual needs of diverse learners.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
39. how to evaluate instruction and adjust to meet student needs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The College of Education program at MU effectively assisted me in learning...				(Standard 1.2.5)
40. alternative teaching strategies, materials, and technology to achieve instruction and meet student needs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
41. how to engage students in activities that promotes the development of critical thinking and problem solving.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The College of Education program at MU effectively assisted me in understanding...				(Standard 1.2.6)
42. different theories of motivation and behavior management strategies.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
43. how to create positive learning environments.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
44. how to engage students in decision making.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The College of Education program at MU effectively assisted me in learning...				(Standard 1.2.7)
45. effective verbal/non-verbal communication skills.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
46. ways to demonstrate sensitivity to cultural, gender, intellectual, and physical ability differences in the classroom.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
47. strategies to develop learner expression in speaking, writing, listening and other media.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
48. a variety of media communication tools.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly Agree	Agree	Disagree	Strongly Disagree
The College of Education program at MU effectively assisted me in learning...				(Standard 1.2.8)
49. a variety of formal and informal assessment techniques	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
50. how to involve learners in self-assessment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
51. how to evaluate the effectiveness of class activities on both the individual learner and the class as a whole.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
52. methods of maintaining records of student work and performance, and communicating student progress to students, parents and other colleagues.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The College of Education program at MU effectively assisted me in learning...				(Standard 1.2.9)
53. how to reflect on instructional practices and their influence on students' growth and learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
54. about resources available for professional development.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
55. ethical standards for my profession.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The College of Education program at MU effectively assisted me in understanding...				(Standard 1.2.10)
56. the importance of collegial activities designed to make school a productive learning environment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
57. the importance of sensitivity and responsiveness to signs of distress in students and to seek appropriate help as needed to solve students' problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
58. how to develop relationships with parents, guardians, school and community to support student learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
59. and identifying school personnel and community resources to help students reach their full potential.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly Agree	Agree	Disagree	Strongly Disagree
The College of Education program at MU effectively assisted me in learning...				(Standard 1.2.11)
60. how to understand technology operations and concepts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
61. to plan and design effective learning environments and experiences supported by technology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
62. how to implement curriculum plans that include methods and strategies for applying technology to maximize student learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
63. to use technology to facilitate a variety of effective assessment and evaluation strategies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
64. how to use technology to enhance personal productivity and professional practice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
65. to understand the social, ethical, legal and human issues surrounding the use of technology and apply that understanding in practice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

THANK YOU!

Please feel free to include any written comments on a separate sheet of paper. A postage paid envelope is included for return of this survey as well as your separate **entry for two free football tickets** to MU's Homecoming football game against Oklahoma State on October 23rd. All responses and comments will be kept anonymous. Thank you again for your assistance!



April 2004

COVER LETTER FOR TEACHER SURVEY (Appendix B)

April, 2004

Dear MU Graduate:

Each year, we send follow-up surveys to our first- and second-year alumni to assess the strengths and weaknesses of our teacher preparation program. This information is crucial to the success of our college. In the past, the feedback gained from these surveys has contributed to significant changes to coursework, content, and methods of preparing teachers.

As a recent graduate of our education program, your input is very valuable. The enclosed survey looks long, but it will only take approximately **10 minutes** to complete. Be assured your comments and responses will be kept confidential. We respect your time and included only questions important to the development of our college and the education of future teachers. All responses will be electronically scanned. Compiled results will be reported to departments and other official agencies for accreditation or review.

As a small token of gratitude, we are offering each respondent the opportunity to enter a drawing for two free tickets to MU's Homecoming football game against Oklahoma State on October 23rd. Just complete the Homecoming entry form, place it in the small white envelope provided and return with your completed survey.

A postage paid envelope is provided for the return of the survey and football ticket drawing. Thank you for your generous time and assistance. Feel free to call on us if we can be of assistance to you in your endeavors.

Sincerely,

Deborah Carr

Associate Dean for Undergraduate Studies and

Co-Director, Missouri Partnership for Educational Renewal

MOSTEP STANDARDS (Appendix C)

Quality Indicator 1.2.1: The pre-service teacher understands the central concepts, tools of inquiry and structures of the discipline(s) within the context of a global society and creates learning experiences that make these aspects of subject matter meaningful for students.

- 1.2.1.1 knows the discipline applicable to the certification area(s);
- 1.2.1.2 presents the subject matter in multiple ways;
- 1.2.1.3 uses students' prior knowledge;
- 1.2.1.4 engages students in the methods of inquiry used in the discipline; creates interdisciplinary learning.

Quality Indicator 1.2.2: The pre-service teacher understands how students learn and develop, and provides learning opportunities that support the intellectual, social, and personal development of all students.

- 1.2.2.1 knows and identifies child/adolescent development;
- 1.2.2.2 strengthens prior knowledge with new ideas;
- 1.2.2.3 encourages student responsibility;
- 1.2.2.4 knows theories of learning.

Quality Indicator 1.2.3: The pre-service teacher understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to diverse learners.

- 1.2.3.1 identifies prior experience, learning styles, strengths, and needs;
- 1.2.3.2 designs and implements individualized instruction based on prior experience, learning styles, strengths, and needs;
- 1.2.3.3 knows when and how to access specialized services to meet students' needs;
- 1.2.3.4 connects instruction to students' prior experiences and family, culture, and community.

Quality Indicator 1.2.4: The pre-service teacher recognizes the importance of long-range planning and curriculum development and develops, implements, and evaluates curriculum based upon student, district, and state performance standards.

- 1.2.4.1 selects and creates learning experiences that are appropriate for curriculum goals, relevant to learners, and based upon principles of effective instruction (e.g., encourages exploration and problem solving, building new skills from those previously acquired);
- 1.2.4.2 creates lessons and activities that recognize individual needs of diverse learners and variations in learning styles and performance;
- 1.2.4.3 evaluates plans relative to long and short-term goals and adjusts them to meet student needs and to enhance learning.

Quality Indicator 1.2.5: The pre-service teacher uses a variety of instructional strategies to encourage students' development and critical thinking, problem solving, and performance skills.

- 1.2.5.1 selects alternative teaching strategies, materials, and technology to achieve multiple instructional purposes and to meet student needs;
- 1.2.5.2 engages students in active learning that promotes the development of critical thinking, problem solving, and performance capabilities.

Quality Indicator 1.2.6: The pre-service teacher uses an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement in learning, and self-motivation.

- 1.2.6.1 knows motivation theories and behavior management strategies and techniques;
- 1.2.6.2 manages time, space, transitions, and activities effectively; (lesson)
- 1.2.6.3 engages students in decision making.

Quality Indicator 1.2.7: The pre-service teacher models effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom.

- 1.2.7.1 models effective verbal/non-verbal communication skills;
- 1.2.7.2 demonstrates sensitivity to cultural, gender, intellectual, and physical ability differences in classroom communication and in responses to students' communications;
- 1.2.7.3 supports and expands learner expression in speaking, writing, listening, and other media;
- 1.2.7.4 uses a variety of media communication tools.

Quality Indicator 1.2.8: The pre-service teacher understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social, and physical development of the learner.

- 1.2.8.1 employs a variety of formal and informal assessment techniques (e.g., observation, portfolios of student work, teacher-made tests, performance tasks, projects, student self-assessments, authentic assessments, and standardized tests) to enhance and monitor her or his knowledge of learning, to evaluate student progress and performances, and to modify instructional approaches and learning strategies;
- 1.2.8.2 uses assessment strategies to involve learners in self-assessment activities, to help them become aware of their learning behaviors, strengths, needs and progress, and to encourage them to set personal goals for learning;
- 1.2.8.3 evaluates the effect of class activities on both individual and the class as a whole, collecting information through observation of classroom interactions, questioning, and analysis of student work;
- 1.2.8.4 maintains useful records of student work and performances and can communicate student progress knowledgeably and responsibly, based on appropriate indicators, to student, parents, and other colleagues.

Quality Indicator 1.2.9: The pre-service teacher is a reflective practitioner who continually assesses the effects of choices and actions on others. This reflective practitioner actively seeks out opportunities to grow professionally and utilizes the assessment and professional growth to generate more learning for more students.

- 1.2.9.1 applies a variety of self-assessment and problem-solving strategies for reflecting on practice, their influences on students' growth and learning, and the complex interactions between them;
- 1.2.9.2 uses resources available for professional development;
- 1.2.9.3 practices professional ethical standards.

Quality Indicator 1.2.10: The pre-service teacher fosters relationships with school colleagues, parents, and educational partners in the larger community to support student learning and well-being.

- 1.2.10.1 participates in collegial activities designed to make the entire school a productive learning environment;
- 1.2.10.2 talks with and listens to students, is sensitive and responsive to signs of distress, and seeks appropriate help as needed to solve students' problems;
- 1.2.10.3 seeks opportunities to develop relationships with the parents and guardians of students, and seeks to develop cooperative partnerships in support of student learning and well-being;
- 1.2.10.4 identifies and uses the appropriate school personnel and community resources to help students reach their full potential.

Quality Indicator 1.2.11: The pre-service teacher understands the theory and application of technology in educational settings and has adequate technological skills to create meaningful learning opportunities for all students.

- 1.2.11.1 demonstrates an understanding of technology operations and concepts.
- 1.2.11.2 plans and designs effective learning environments and experiences supported by informational and instructional technology.
- 1.2.11.3 implements curriculum plans that include methods and strategies for applying informational and instructional technology to maximize student learning.
- 1.2.11.4 applies technology to facilitate a variety of effective assessment and evaluation strategies.
- 1.2.11.5 uses technology to enhance personal productivity and professional practice.
- 1.2.11.6 demonstrates an understanding of the social, ethical, legal and human issues surrounding the use of technology in PK-12 schools and applies that understanding in practice.