Utah State University

DigitalCommons@USU

All Graduate Theses and Dissertations, Spring 1920 to Summer 2023

Graduate Studies

5-2008

Predicting On-the-Job Teacher Success Based on a Group Assessment Procedure Used for Admission to Teacher Education

LaVaun Gene Faulk Utah State University

Follow this and additional works at: https://digitalcommons.usu.edu/etd



Part of the Curriculum and Instruction Commons

Recommended Citation

Faulk, LaVaun Gene, "Predicting On-the-Job Teacher Success Based on a Group Assessment Procedure Used for Admission to Teacher Education" (2008). All Graduate Theses and Dissertations, Spring 1920 to Summer 2023. 78.

https://digitalcommons.usu.edu/etd/78

This Dissertation is brought to you for free and open access by the Graduate Studies at DigitalCommons@USU. It has been accepted for inclusion in All Graduate Theses and Dissertations, Spring 1920 to Summer 2023 by an authorized administrator of DigitalCommons@USU. For more information, please contact digitalcommons@usu.edu.



PREDICTING ON-THE-JOB TEACHER SUCCESS BASED ON A GROUP

ASSESSMENT PROCEDURE USED FOR ADMISSION TO

TEACHER EDUCATION

by

LaVaun Gene Faulk

A dissertation submitted in partial fulfillment of the requirements for the degree

of

DOCTOR OF EDUCATION

In

Education (Curriculum and Instruction)

Approved:	
Deborah Byrnes, Ph.D. Major Professor	Gary Carlston, Ed.D. Committee Member
Jim Dorward, Ph.D. Committee Member	Ann M. Berghout Austin, Ph.D. Committee Member
Francine Johnson, Ph.D. Committee Member	Byron Burnham, Ed. D. Dean of Graduate Studies

UTAH STATE UNIVERSITY Logan, Utah

2008

Copyright © LaVaun Gene Faulk 2008 All Rights Reserved

iii

ABSTRACT

Predicting On-the-Job Teacher Success Based on a Group Assessment

Procedure Used for Admission to Teacher Education

by

LaVaun Gene Faulk, Doctor of Education

Utah State University, 2008

Major Professor: Deborah Byrnes, Ph.D.

Department: Elementary Education

The purpose of this study was to investigate the ability of a group assessment

procedure used as admission criteria into a teacher education program to predict future

teaching success. Information was sought from principals within the state of Utah

regarding the teaching success of 151 Utah State University graduates teaching in Utah

public schools. Interviewed principals used a self-anchoring scale (1 = unsuccessful to

10 = highly successful) to "anchor" their beliefs about successful and unsuccessful

teachers. Scores principals gave study participants when considering their success to

other teachers on faculty were compared to scores teachers were given earlier as students

by College of Education faculty during group assessment interviews prior to entering the

teacher education program.

Three ANOVAs using measures of teacher success obtained through principal

interviews as dependent variables and using overall group assessment scores as the

independent variable were run. Initially no relationship was found between group assessment scores and measures of teaching success. However, after high-academic achieving students who received average interview ratings were put into their own group, separate from lower-achieving average interviewees, statistically significant relationships between group assessment scores and teacher graduate success scores (p < .048) and comparative principal evaluation scores (p < .023) were found.

This study sought to determine if group assessment scores were a better predictor of teacher success than academic admission criteria (ACT and GPA at time of admission). No relationship was found between teacher success based on principal interview data and either GPA at time of admission or ACT scores. Group assessment scores (recoded) are the only admission variable associated with future teaching success.

Results from this study suggest teacher education programs may want to reexamine selection procedures that involve only measures of academic ability. Group interviews appear to be a better tool for identifying applicants who are more likely to succeed in the teaching profession.

Data from principal interviews generated categorical information describing successful and unsuccessful teacher characteristics are also provided in this study.

(107 pages)

DEDICATION

I would like to dedicate this work to my wife Jenny.

Her patience, love, and constant support

made this work possible.

ACKNOWLEDGMENTS

I would like to thank Dr. Deborah Byrnes, my committee chair, for her tireless efforts in my behalf. Her time, encouragement, and shared expertise are deeply appreciated. My success in completing this academic journey is due to her mentoring. She has been my most influential teacher.

I would also like to acknowledge and thank my other committee members: Dr. Jim Dorward for his much needed statistical advice; Dr. Gary Carlston for his influence with school district officials who would have otherwise denied study access; Dr. Ann Berghout Austin for her editing suggestions; and Dr. Francine Johnson for helping me gain access to databases at the Utah State Office of Education.

I also need to thank Larry Shumway, licensing coordinator at the Utah State

Office of Education, and his administrative secretary, Diane De Man, for allowing me to
locate potential study participants on Utah educator licensing databases. Their assistance
in locating currently employed teachers in Utah truly facilitated this study.

My two sons, Joseph and Daniel, helped me organize and table data. Thank you. Finally, special thanks to my wife and best friend, Jenny. Your constant love and support have made this academic journey we have shared together one of my life's greatest experiences.

LaVaun Gene Faulk

CONTENTS

		Page
ABST	RACT	iii
DEDIC	CATION	v
ACKN	NOWLEDGMENTS	vi
LIST (OF TABLES	ix
LIST (OF FIGURES	X
СНАР		
Ι.	INTRODUCTION	1
	Problem	
	Purpose	
	Research Questions	
	Study Significance	
II.	LITERATURE REVIEW	5
	Predicting Teacher Success	5
	Pre-Professional Skills Test.	
	Other Academic Measures Used for Admission: ACT and GPA	
	Biodata	
	Individual Interviews	
	Principals as Evaluators of Teacher Success	
	Group Interviews and Group Assessment Literature Review Summary	
III.	PROCEDURES	27
	Teacher Success	28
	District Participation	
	Study Participants	
	Setting	
	Steps in Data Collection	
	Definitions	
	Dependent and Independent Variables	38

		Page
	Instrumentation	39
	Pilot Study of Self-Anchoring Scale	
	Participant Demographics	
IV.	FINDINGS	48
	Self-Anchoring Interview Results	48
	Principals' Characterization of Successful Teachers	49
	Principals' Characterization of Unsuccessful Teachers	53
	Summary of Self-Anchoring Descriptors	56
	Descriptive Data on the Self-Anchoring Scale	57
	Research Question 1	57
	Research Question 2	
	Research Question 3	
	Conclusions	
V.	DISCUSSION	. 66
	Significance	74
	Limitations	. 76
	Delimitations	. 78
	Suggestions for Further Research	. 78
	Conclusions	80
REFER	ENCES	81
APPEN	IDICES	. 86
	Appendix A: Cover Letter for Teacher Participants	. 87
	Appendix B: Informed Consent	
	Appendix C: Self-Anchoring Scale	
CURRI	CULUM VITAE	96

LIST OF TABLES

Table		Page
1.	Mean Comparisons on School Demographics of Utah Teachers versus Study Participants	46
2.	Principals' Characterization of Excellent Teachers	51
3.	Principals' Characterization of Poor Teachers	54
4.	ANOVA Results: Differences in Graduate Success Scores by Group Assessment Scores	59
5.	ANOVA Results: Differences in Graduate Success Scores by Group Assessment Scores (recoded)	61
6.	Pearson Correlation Coefficient Values	62

LIST OF FIGURES

Figure		Page
1.	School demographics (community type)	. 43
2.	School demographics (percentage of low SES students)	. 44
3.	School demographics (percentage English language learners)	. 44
4.	School demographics (school ethnic diversity)	. 46
5.	Population description (years of teaching experience of study participants)	. 46

CHAPTER I

INTRODUCTION

Literature on effective teaching has characterized successful teachers as being student centered, effective classroom and behavior managers who are competent and ethical. Successful teachers are also described as enthusiastic about teaching, knowledgeable about subject matter, and professional (Minor & Onwuegbuzie, 2002). According to Wayne and Youngs (2003), policymakers describe successful teachers as those who can integrate knowledge of subject matter, students, and context in making instructional decisions, while engaging students in active learning and reflecting on practice. School administrators are known to describe teacher success based on personality traits: "Does she exhibit fairness and caring? Does he have a positive attitude about life? Does he have high expectations for himself and his students?" Additionally, administrators may describe a teacher's success based on how well he or she can manage the classroom, organize for instruction, implement instruction, and monitor student progress (Stronge & Hindman, 2003). Successful teachers in the field are not characterized by college grade point average (GPA) or standardized test scores.

Selection criteria into teacher education programs based solely on high-academic ability can eliminate from consideration student applicants whose nonacademic qualities would make them ideally suited to the teaching profession. Conversely, the same academic criteria may admit students into teacher education programs whose leadership skills, ability to communicate, and capacity to work within group settings, would suggest they may be more ideally suited to another profession.

Problem

Most student applicants are selected into teacher-education programs based on GPA and standardized test scores despite research that indicates GPA and standardized test scores are not strong predictors of which teachers will later be effective in the classroom (Byrnes, Kiger, & Shechtman, 2003). For example, a number of colleges have used the Pre-Professional Skills Test (PPST) or the National Teacher Education (NTE) exam (also referred to as Praxis I and Praxis II exams) for admission criteria (Mikitovics & Crehan, 2002). This is true despite research that suggests standardized tests such as the PPST have no predictive relationship to subsequent student teacher ratings (Mikitovics & Crehan).

These three skill areas, are viewed as essential characteristics to successful teacher hiring practices are not unlike the verbal, interpersonal, and leadership characteristics of successful teachers (Dunkin & Barnes, 1986; Shechtman, 1991; Westbrook, 1998) often cited in classroom research. Many of the qualities described by teachers, policymakers, and administrators alike are found in verbal, interpersonal, and leadership characteristics of a successful teacher. A teacher's ability to effectively communicate with students, understand their social and emotional needs, and provide leadership that can motivate and inspire students, are generally accepted critical skills for classroom success. Unfortunately, these characteristics can be challenging to assess in students applying for teacher education programs.

One tool that has been developed to assess these qualities is Shechtman's (1989a) group assessment interview. The group assessment interview does not look at academic

ability. This tool was designed to help selection committee members assess teacher applicant's verbal skills, interpersonal skills, and leadership skills so these qualities can be factored into the decision as to whether or not an applicant should be admitted into the teacher education program. Past studies (Byrnes et al., 2003; Shechtman, 1991) indicate group assessment interviews, when used in conjunction with a minimal expected academic score; produce an overall student rating that has been shown to be a stronger predictor of student teaching success than either the student's GPA or standardized test scores. In Israel, group assessment scores have been shown to be a good predictor of onthe-job teaching success (Shechtman, 1992a). However, studies in the United States have not been conducted to ascertain whether or not group assessment has long-term predictive validity of teacher success. Given the time and resources needed to prepare teacher applicants for a career in the teaching profession, the study of group assessment scores as a tool for predicting teacher success in the field is important.

Purpose

The primary purpose of this study was to determine if the group assessment procedure used at Utah State University (USU) can better predict teacher success in the classroom 2 to 5 years after graduation than measures of academic achievement alone. The intent of this study was to further our understanding of the effectiveness of using group assessment as an admission tool for teacher education programs. The research questions for this study are listed below.

Research Questions

- 1. Is group assessment a predictor of future teacher success?
- 2. Is group assessment a better predictor of future teacher success than academic admission criteria?
- 3 Are student teaching evaluations associated with group assessment admission scores or future teacher success?

To answer these questions, information about the success of USU graduates after the gained employment as educators was obtained. Having received permission to interview the participants' supervisors, the investigator conducted telephone interviews with all principals willing to participate in the study that supervised one or more teachers who were study participants. Cantril's self-anchoring scale (Kilpatrick & Cantril, 1960) was used to obtain a numerical representation of the principals' perceptions ranking of each study participant's success in the classroom.

Study Significance

This study provides insight into the effectiveness of group assessment scores to predict future teacher success. If teacher preparation programs are to prepare the most capable teachers for our nation's children, insights into how various admission criteria relate to future teacher performance are essential. This study investigates a teacher candidate selection procedure that reflects effort to choose individuals who will be most successful in the classroom rather than selecting students solely on academic qualifications.

CHAPTER II

LITERATURE REVIEW

In an era of educational reform, colleges across the country are interested in selecting better candidates for teacher education programs. How can institutions of higher learning know that the students ultimately selected into teacher education programs will be the most successful teachers in the classroom? Can instruments used for candidate selection into teacher education programs actually generate predictive validity regarding future teaching success in the classroom? This review of literature discusses both traditional and innovative instruments and measures used by teacher education selection committees to admit students into teacher education programs relative to the instrument's ability to predict future teacher success in the classroom. Teacher selection instruments and measures reviewed in this literature included American College Test scores (ACT), Pre-Professional Skills Test (PPST), college GPA, Biodata, individual interviews, and group assessment. The literature on group assessment will be reviewed in depth since it is an assessment device central to this study.

Predicting Teacher Success

Many colleges of education have made attempts to raise the standards and quality of students admitted into teacher training programs (Petersen & Speaker 1996).

Institutions have increased minimum GPA and standardized test score requirements.

Many institutions now require competency testing such as the PPST, which is believed to add rigor to the admissions process for student applicants and selection committee

members alike. An underlying assumption is additional requirements will somehow result in the selection of students who will become more successful teachers in the classroom. However, research indicates that most academic measures used by teacher selection committees are poor predictors of teacher success (Baskin, Ross, & Smith, 1996).

Tests of academic ability are reported to be the most common criteria used for admission into teacher education programs. A survey study conducted by Petersen and Speaker (1996) examined the admissions criteria of teacher education programs at 50 accredited universities representing geographical regions across the United States. Thirty-two universities responded to the study on university admission policies.

Survey results indicated that almost 97% of universities surveyed had a minimum GPA requirement for teacher education programs. Standardized tests such as the National Teachers Exam or PRAXIS1/PPST exam were required by 67% of the institutions surveyed. Only 44% of the institutions surveyed required letters of recommendation. Thirty-eight percent of the institutions in the study indicated individual interviews were a required part of the admissions process. Petersen and Speaker (1996) concluded that while most institutions have academic criteria for admission (low as they may be), there is very little attention given to assessing nonacademic predictors of success.

Pre-Professional Skills Test

How well do standardized tests used to select students into teacher education

programs actually predict future teaching success? One academic instrument used by college selection committees is the PPST. In a study by Lawrence and Crehan (2001), the PPST scores of 372 graduates were compared with their ACT scores, undergraduate GPA, and student teaching ratings in a southwestern urban teacher education program. The study found no predictive validity between PPST scores and student teaching ratings. The lack of correlation regarding PPST scores and student teaching grades are supported by earlier findings (Hicken, 1992; Riggs & Riggs, 1990).

Lawrence and Crehan (2001) indicated that, "PPST subtests as college of education admission tests, similarly to the ACT subtests, are used to distinguish students who might successfully complete their studies in teacher education programs, from those who might not" (p. 5). PPST tests were not necessarily designed to be used as a predictor of a preservice teacher's future success in the classroom. Lawrence and Crehan suggested students with subtest scores over 22 on the ACT could be exempted from taking the more expensive PPST. The lack of ability PPST scores can generate for predicting teacher success is supported by Sentz (1991) as well as a study by Dybdahl, Shaw, and Edwards (1997). Summarizing analysis of 375 baccalaureate graduates in medium sized urban university teacher education program, Dybdahl and colleagues concluded that "after more than a decade of teacher testing, research has failed to demonstrate any significant relationship between basic competency tests and...measures of program success, including success in teaching" (p. 252). The authors' suggested "the arguments for testing, that assumed increased teacher quality need to be revisited" (p. 252).

In regard to using PPST scores for teacher candidate selection, Shepard (1997) suggested "there is a theory underlying...test uses which connects test scores and outcomes that must be investigated" (p. 7). Sheppard asserts that if a test is used for placement decisions, "more evidence is needed to establish the appropriateness of cut scores and predictive validity for subsequent performance, and verification of the assumed skill hierarchy" (p. 7). Sheppard suggests that when PPST scores are used as a tool to select applicants into teacher training programs there may be an assumption that PPST scores are predictive of future teaching performance. Sheppard asserts that the connection between PPST scores and a predictive relationship to teaching success has not been established.

Concerns about the use of PPST scores for selecting teacher candidates are also referenced by Hambleton and Rogers (1990), who suggested that test score validity "depends most especially (upon) the intended use of the scores..." (p. 27). The use of PPST test scores as a predictor of students who might successfully complete their teacher education courses should not be confused with the potential misuse of the same test scores when attempting to predict which individuals will be most successful in the classroom.

Other Academic Measures Used for Admission: ACT and GPA

The predictive validity of other academic measures commonly used to select future teachers into colleges of education; the ACT and college GPA is also problematic.

Colleges and universities have continued the tradition of using past achievements

(college GPA) and aptitude test scores (ACT) as tools to select applicants into teacher training programs, despite research that demonstrates these selection criteria to be ineffective predictors of future teaching success.

In a study by Byrnes and colleagues (2003) involving 68 student teachers who were part of a study on admission criteria into the College of Education at USU, a student's GPA did not demonstrate predictive validity when compared to university supervisor and cooperating teacher ratings. Interestingly, high ACT scores were found to have a negative association to student teacher ratings. In the authors' words, "the higher one's ACT score, the poorer one is likely to do in student-teaching when evaluated by a university supervisor...our findings show that academic criteria are not positive predictors of future student-teaching performance" (p. 170). Findings are supported by Demetrulias, Chiodo, and Diekman (1990), Freeman, Martin, Brousseau, and West (1989), and Shechtman (1989b) who have also indicated a poor relationship between academic admission criteria and teaching success.

A more recent study at the University of Toronto by Casey (2005) also looked at admission criteria and teacher candidate success in practice teaching. In study results, Casey indicated, "Incoming GPA, student profiles, and a combination of the two are not strong predictors of Teacher Candidate success in practice teaching," which confirms the results of earlier studies suggesting GPA has a poor predictive relationship with teacher success.

A study at California State University, Stanislaus, of 74 students admitted into a teacher training program who had not met one or more admission requirements were

compared with 74 students that met all program admission requirements. Study results suggested although the exceptional admission group had lower GPAs, lower evaluations on subject matter competency, and higher failure rates on the National Teachers Exam, there were no significant differences between the two groups in completing program requirements or securing teacher credentials (Demetrulias et al., 1990).

The study did suggest the only significant difference found between the two groups was in the assessment of elementary education student teachers by their cooperating Kindergarten through sixth-grade classroom teachers. Classroom teachers assessed a larger number of exceptional admission students as being below average in areas of speech, subject matter comprehension, attitude toward class work, and independent thinking. However, classroom teachers did not consider the deficiencies to be of sufficient concern to fail the students during their student teaching experience. University supervisors' evaluations of the two student groups did not reflect any difference.

Research conducted at Michigan State University (Freeman et al., 1989) looked at a quota system implemented at the university in 1987, which restricted the number of students that could enter teacher education programs in a given semester by ranking applicants. The quota system largely used the applicant's GPA at time of application, with adjustments for post baccalaureate degrees, transfer students, and minorities. The study sought to determine if the quota system influenced the characteristics of students that entered the teacher education program by surveying individuals admitted or denied entry into the program.

Results suggested that while increased GPA requirements did produce teacher candidates with greater academic achievement, the quota system did not produce students more committed to the teaching profession. GPA was not seen as a strong predictor of teacher performance. The study suggested that empirical links between admission criteria and teaching performance should be addressed.

Biodata

Biodata has a long history of being used to select employees and predict job performance in a range of professions. Biodata is information about the life experiences of a person, particularly those experiences presumed to be related to the type of behaviors and work required in a given profession. Biodata may include demographic and verifiable life-history events (such as what would be found on a vita) as well as more private and personal information about motivations and interests. In 1984, Queen's University in Canada began using biodata in addition to academic criteria for selecting students into teacher education programs (Smith & Pratt, 1996). The procedure gave equal weight to an applicant's academic accomplishments and his/her self-reported personal characteristics and life experience. Upon application to the teaching program the candidate is given a two-page document asking him/her to respond to a number of questions such as the candidate's life experiences that he/she feels would be relevant to teaching in the classroom, community service experience, languages spoken, and leadership experience. The document is reviewed by two trained evaluators who each score the biodata form on a scale of 1 to 10 points (10 being a life very rich with

experience). The two evaluators' scores are combined for the 20 points possible on an applicant's biodata form. The biodata score is then given equal consideration with the applicant's academic score, which also has a possible score of 20 points.

Criteria used to obtain an academic score of 20 points are based on an applicant's total undergraduate average (up to 12 points). Four points are also given for an applicant who has already obtained an undergraduate degree. An additional four points are given to an applicant's academic score for a graduate degree. Applicants are then selected into the program based on an equal weighting of biodata (20 points) and academic criteria (20 points).

The decision by Queen's University to use a biodata method for selecting student applicants was influenced by several factors; research that suggested a weak association between academic performance and success in teacher education programs, an unwillingness of faculty members to abandon academic selection criteria completely, and concern regarding the real benefits of interviewing several thousand candidates each year (Smith & Pratt, 1996). Smith and Pratt's research on biodata from 1986-1990 as admission criteria at the Queen's University examined concerns about applicant truthfulness in reporting biodata, interrater reliability of biodata evaluators as well as gender influence of evaluator scoring. One study on biodata in 1990 looked at a list of the 297 candidates who would be admitted into the teacher training program based on academic criteria alone, how the list would appear if selection were based on the unequal weighting 75% academic to 25% personal experience, and finally how the list would look under the existing policy of equally weighting selection based on 50% academic and 50%

personal experience. Personal experience obtained from biodata had a profound effect on who would be admitted into the teacher education program. Of the 297 applicants who would have been admitted into the program based on academic background alone, only 71% of the 297 applicants would have been admitted under the unequal weighting policy, and only 56% of students who would have gained admission on academic qualifications alone were actually admitted when considered for admission under the existing policy of equal weighting academic and personal experience.

The use of biodata at Queen's University has effectively influenced who is selected into teacher training programs in Canada. A procedure is in place that gives personal experience equal consideration with academic criteria when selecting teacher applicants. According to Smith and Pratt (1996) other researchers have underscored the important role biodata can play in predicting future job performance (Cappelli, 1991; Crafts, 1991; Dye, 1990; Porter, Lipson, Butler, & Andrade, 1992).

A limitation of biodata as selection criteria into teacher training programs is the lack of opportunity for an evaluator to gain insight into an applicant's personal skills that a face to face interview procedure can provide. If personal characteristics of individuals seeking admission into teacher training programs are to be considered, biodata is a move in the right direction. Selection based on academic qualification alone is less than adequate. This is supported by Smith and Pratt (1996), who concluded that "the use of biodata mitigates the more extreme effects of admissions based on academic background alone" (p. 50). The authors also suggested that "the most important and perhaps most obvious investigations remaining to be done are the large-scale and longitudinal studies

required to link preadmission factors and criteria with later teaching success" (p. 50).

A two-stage mixed methods study by Brown (2007) conducted at the University of Toronto (Canada), used preexisting biodata kept on file at the university's Registrar's office on 347 students selected for the study. Biodata information was used when interviewing 11 student cohort coordinators who were asked to rank students from 1 (struggled or failed) to 4 (highly successful). The second stage of the study reviewed biodata on 129 students who had been ranked as 4s (75 students) or they were ranked as 1s (54 students) during their practicum teaching experience. Biodata on students who had described themselves as having "certain predispositions such as; commitment, enthusiasm, flexibility, creativity, and being organized" had a positive relationship with practicum teacher success (Brown, p. 218). These character traits are sought after in prospective teachers, and procedures that can help identify successful teacher character traits as part of admission criteria need further investigation.

Individual Interviews

Some educational reformers have asked for selection criteria that address desired traits in preservice teachers that are not so closely tied to academic skills. Examples are sensitivity, enthusiasm, a sense of responsibility, and communication skills (Malvern, 1991) along with humaneness, energy, perseverance, self-confidence, the ability to work well with people, and a sense of humor (Roose, Mitchell, & Rudman, 1985). Literature supports the wisdom in using selection criteria that go beyond a review of an applicant's academic credentials Pratt (1977). In his follow-up study, Pratt (1987) found a

preadmission interview discriminated significantly between teaching survivors and dropouts 4 years and 14 years after graduation, when their undergraduate and student teaching grades did not.

Individual interviews would seem a likely choice as a criterion used in selecting teacher education candidates. However, individual interviews have some significant drawbacks. For example, in 1990 at the Queen's University in Canada, there were 19,802 teacher applicants at 10 1-year teacher education programs (Smith & Pratt, 1996). Queen's University had only 5,072 available placements. An attempt to individually interview all 19,802 applicants was considered cost prohibitive. A second concern with conducting individual interviews for teacher candidate selection is the procedure may not stand empirical scrutiny. The selection opinion of one committee member is not held to that of another committee member unless two interviewers are utilized. Using two interviewers was deemed too costly. The result has been no interrater reliability for the procedure. If a committee member does not give an applicant high ratings, no supportive rating exists for the committee member's assessment or for the applicant's process of appeal. While well conducted individual interviews may provide important data to consider in the selection process, individual interviews are expensive.

Principals as Evaluators of Teacher Success

While there is controversy over using the views of principals to judge the merit of teachers, mainly because they are perceived as subjective judgments, many researchers still believe that principals provide a valuable perspective on teacher effectiveness

(Beerens, 2000; Cuban, 1988; Frase & Hetzel, 1990; Peterson, 2000). Specific reasons supported by the literature for utilizing principals judgments are shared below. Principals are required to assess and evaluate teacher performance and often have personal experience in teaching many of the classroom activities they evaluate (Cuban; Danielson & McGreal, 2000). Principals have access to standardized-test data on student performance (Torff & Sessions, 2005). According to Torff and Sessions in their review of the literature on principal perceptions, "Principals observe teachers' classroom performance, gaining first-hand knowledge of teachers' work with students including review of lesson materials, observation of lesson plan implementation, and evaluation of teacher's classroom management skills and rapport with students" (p. 532). Principals are in a unique position to receive feedback about teacher performance from students, parents, teachers, and administrators (Allen & Shaw, 1990). Most school districts give principals autonomy to hire, retain and tenure their own faculty. Thus, given the authority of their position, principals' perceptions of teacher effectiveness are considered significant (Machell, 1995).

In a study based on principal perceptions of teachers, Torff and Sessions (2005) support the claim that pedagogical skills individuals obtain in a teacher training program have more to do with teacher success in the classroom than content knowledge from a given field of study. The Torff and Sessions study looked at 242 principals' perceptions of the causes of teacher ineffectiveness and determined that lack of content knowledge had less to do with teacher ineffectiveness than a lack of pedagogical skills. Five dimensions selected from the teaching guides for 20 school districts were used to identify

teacher quality. According to Torf and Sessions, the dimensions most characteristic of teacher quality are:

- 1. Content knowledge (suitable expertise in the subject being taught);
- 2. Lesson-planning skills (preparation of appropriate learning experiences prior to an instructional period);
- 3. Lesson-implementation skills (effective execution of planned learning experiences during an instructional period);
- 4. Ability to establish rapport with students (adequate human relations and communications skills); and
- 5. Classroom-management skills (ability to successfully keep students on task and attentive). p. 532

Of these five dimensions used to identify teacher quality, content knowledge was separated out as a dimension by itself. The other four dimensions were classified together as pedagogical knowledge. According to this survey of principals, the strongest threats to teacher quality were in order of importance, classroom management skills, lesson implementation skills, rapport with students, lesson planning skills, and lastly, deficiencies in content knowledge.

A study by Marrow, Gilvey, Russell, and Strope (1985) found content knowledge to also be low on the list of most important teacher qualities. In their study of 209 principals, included 93 elementary-, 56 middle-, and 60 secondary-level principals, they found that of the top 10 instructional teaching problems principals perceived at their schools, knowledge of subject matter to be taught ranked near the bottom at ninth. Only the instructional teaching problem of teachers selecting appropriate subject matter ranked lower than knowledge of subject matter.

Another study by Ralph, Kesten, Lang, and Smith (1998) surveyed 69 administrators who identified three broad areas valued in ideal teacher candidates interviewed during the hiring process. They indicated," The three broad areas that the directors valued were good interpersonal communication skills; good classroom management/discipline/instructional skills; and good university-related background and experiences." The study is supportive of the significant role principals can play in selecting and identifying successful teachers.

While the judgments of principals have the potential to be subjective, as shown in the studies above, they provide valuable insights into characteristics associated with teacher effectiveness and ineffectiveness. The studies above support the claim that pedagogical skills individuals obtain in a teacher training program, as well as human relation and communication skills, are more often associated with teacher success in the classroom than content knowledge from a given field of study.

Group Interviews and Group Assessment

Assessment centers that utilize group interviews have provided business and industry an effective procedure for selecting candidates for potential managerial success for many years (McEvoy & Beatty, 1989). In business, a managerial candidate can spend 2-3 days at an assessment center undergoing simulated working conditions in groups while evaluators subjectively and objectively evaluate the candidate's potential. Group assessment, as formulated by Shechtman (1989b), is an abbreviated group interview technique drawn from the business oriented group interview model and adapted for use in

teacher education programs.

Description of a Group Assessment Procedure

Group assessment is a procedure for selecting teacher candidates based on the applicant's personal characteristics rather than relying solely on academic credentials. Group assessment has the added benefits of generating predictive validity and interrater reliability. The group assessment procedure includes five activities involving eight applicants and two trained faculty members. The five activities include: (a) a nondirective group introduction of self; (b) two directive group discussions focusing on attitudes and values; (c) a leaderless group discussion that focuses on a committee approach to solving a given problem; (d) oral feedback among participants; and (e) a discussion of the group experience by the applicants (Shechtman, 1989b). These activities were completed within a 90-minute group session. In Shechtman's most current version of group assessment, each participant is judged on his or her oral communication, human interaction, and leadership skills as well as receiving an overall assessment score. Evaluation of each group member by two trained faculty members is based on a 6-point scale; 1 = weak to 6 = excellent.

Evolution and History of Group Assessment

The first study on group assessment was published by Shechtman (1989b). Her study sample included 143 students selected into a teacher education program at the Gordon Teacher-Training College in Israel during 1979 and 1980. Ninety-seven students were selected by use of a group interview and 46 students were selected through

individual interviewing procedures combined with Cattell's 16 PF personality test, an intelligence test, and a composite of two matriculation scores. Results of the study indicted group assessment was the best available predictor of teacher success. Group assessment interviews had better predictive ability of teaching success than did a student's intelligence quotient (IQ) scores or GPA. Additionally, eight scales used in the study from Cattell's 16 PF were not able to better predict teaching success than group assessment (Shechtman, 1989a).

At that time, group assessment consisted of nine dimensions: verbal expression, thinking, motivation, self-confidence, human relationships, leadership, flexibility, creativity, and an overall dimension. Seven of the nine dimensions of group assessment correlated as predictor variables of students' practice teaching and GPA. The *Overall Impression* score in group assessment held a stronger correlation than any other dimension of the procedure. The only other predictor correlation was between matriculation scores and college GPA. The study found no correlation between intelligence test scores and practice teaching success. The study suggested the importance of the interpersonal as well as the cognitive dimension when considering teacher candidate selection.

Further Israeli research to refine the group assessment process was conducted by Shechtman (1991). This work involved 247 graduates, 119 (1980-1983) who were selected through the use of the nine-dimension model of the group assessment procedure and 128 (1984-1986) who were selected into the program based on scores obtained using a revised 4 dimension group assessment procedure. The revised four-dimensions model

included oral communication, human interaction, leadership, and an overall rating.

Results suggested the revised four-dimension model of group assessment was as strong a predictor of practice teaching success as the earlier nine-dimension model of group assessment. The study supports earlier findings (Shechtman 1989a) that suggested group assessment is a good predictor of practice teaching success.

After the ability of group assessment to predict practice teaching success was established Shechtman (1992a) sought to determine if group assessment procedures could predict teacher performance after graduation in the workplace setting. In this study, 231 graduates that were selected into the teacher college with group assessment procedures were again evaluated by college faculty as well as principals 2 to 5 years after graduation. Of the 231 graduates (all women) in the study, 122 were located after graduation, and of that group 78 were employed as teachers. Correlations were made between group assessment and college faculty evaluations, principal average evaluation scores, as well as with GPA and practice teaching ratings from earlier studies. The correlation between group assessment and principal evaluations was significant (r = .27, p < .01). Results suggested the ability of group assessment to predict not only practice teaching success as earlier demonstrated, but based on principal evaluations, the group assessment procedure was shown to predict future teacher success 2 to 5 years after graduation.

Further research by Shechtman (1992b) was conducted to establish the group assessment procedure's interrater reliability in differing educational settings. The procedure required that paired evaluators score candidates using group assessment.

Three different committee groups utilizing group assessment to rate candidates were

studied. Thirteen pairs of professors rated 109 school counseling program candidates, 11 pairs of teacher trainers assessed 94 teacher college candidates, and nine pairs of army recruiters evaluated 69 applicants for teaching positions in the military. Raters in the three environments significantly differed in educational background. Professors held doctoral degrees, teacher trainers held master's degrees from a variety of fields, and the army recruiters were 18-year-old high school graduates with 1-year military experience. The overall dimension of group assessment had the highest level of agreement (r = .79, .81, and .80 for professors, teacher trainers and recruiters, respectively; p < .01). The lowest level of agreement was between army recruiter raters on the subject of leadership, but the level of agreement was still significant at the .05 level of significance. The study supported the claim that in additional to predictive validity, group assessment can also produce high levels of interrater reliability as a tool for selecting candidates in a variety of educational settings.

Group Assessment and Predicting Future Teaching Success

Both construct and concurrent validity concerns regarding the use of group assessment are addressed in another Shechtman and Godfried (1993) study that examined the correlation of scores between group assessment ratings, practice teaching scores, and faculty evaluations in Israel. High correlations between group assessment ratings and faculty evaluations established convergent validity. High correlations between group assessment ratings are measuring dimensions and faculty evaluations also suggest group assessment ratings are measuring dimensions it was designed to measure. The faculty evaluations and group

assessment dimensions measured the same four dimensions (oral communication, human interaction, leadership, and overall). Practice teaching scores and college faculty evaluation scores were also highly correlated in this study. However, the overall rating of group assessment held the highest correlation with Practice Teaching Success (r = .88 at a correlation level of p < .001). The use of Fisher Z transformation tests suggested that correlation coefficients were significantly greater when matching dimensions of group assessment (oral communication, human interaction or leadership, overall) with non-dimension variables such as college faculty evaluations and practice teaching scores than when matching nondimensional variables to each other. Results suggest that the relatively short group assessment procedure can accurately identify personal characteristics in teacher applicants similar to those identified by faculty members after long-term acquaintance with the student.

Both discriminate validity and convergent validity issues necessary to establishing construct validity were addressed. This high correlation between group assessment scores, practice teaching scores and college faculty evaluation (CFE) scores particularly at the three levels of teaching success (low, medium, and high) served to establish concurrent validity. Group assessment was shown to predict teaching success as scores from group assessment were used to predict students' level of teaching success based on CFE scores and practice teaching scores (PTS). Most misclassifications of group assessment in predicting teacher success were in the middle success group. Few errors in group assessment scores predicting teacher success were made at the low and high levels of success.

Previous research in Israel suggests Shechtman's (1992b) group assessment procedure can be used to predict future teaching performance, has interrater reliability and concurrent and construct validity, and is a better predictor of student-teaching performance than academic criteria. A study by Byrnes and colleagues (2003) was intent on determining if those same findings would come as a result of evaluating a group assessment procedure used at USU. Research conducted at USU regarding the ability of group assessment to select teacher candidates that will be successful in student teaching supports research conducted in Israel. As previously discussed, these studies not only supported findings on group assessment in Israel regarding the procedure's ability to select future successful teaching performance, but ACT scores and GPA were found to be ineffective predictors of student teacher effectiveness.

The interrater reliability of group assessment in this study at USU was moderate. Correlation coefficients of scores between the two assessors were: (a) verbal abilities, r = .509; (b) interpersonal skills, r = .487; (c) leadership qualities, r = .608; and (d) overall rating, r = .663 (n = 57). Correlation coefficients found in this study were approaching interrater reliability results from the study of Shechtman (1992b).

The work of Byrnes and Shechtman and their coauthors has demonstrated that the group assessment procedure can be a valid predictor of student-teacher success. In earlier research, Shechtman (1992a) found that the group assessment procedure could predict teacher success in Israel 2 to 5 years after graduation. No studies regarding the long-term predictive ability of group assessment have been done in the United States. Cultural expectations of teachers, the scoring of group assessment, and the perceptions and

evaluations of principals may differ from Israel to the United States. Research conducted in the United States to investigate the predictive ability of group assessment to select students into teacher training programs that will be effective teachers in the classroom 2 to 5 years after graduation was warranted.

Literature Review Summary

Institutions still struggle with how to select elementary education teacher applicants who will be ideally suited to the teaching profession. The use of Biodata gives admission committees information on candidates to consider, but selection is based on impressions of the candidates' written experience rather than the candidates themselves, which suggests the advantage of an interview experience.

Individual interviews are time consuming and expensive to conduct when considering many applicants. Interviews conducted with only one rater is subjective. Multiple raters increase time and cost associated with procedures for teacher candidate selection. Research clearly suggests that traditional academic admission criteria such as ACT scores and GPA by themselves are not predictive of future teacher success.

Literature supporting the use of principal interviews in determining the level of teacher success in the classroom was also provided in this literature review. Despite the perception that principals' judgments can be subjective, many researchers still believe that principals can provide a valuable perspective on teacher effectiveness.

Research also suggests the importance of increasing our understanding of how group assessment and other academic selection criteria relate to teacher success in the

classroom. This study will help determine the relatedness of USU teacher candidate selection and their success as practicing teachers based on the principal's perspective. For teacher training programs, it is critical that colleges of education select students who are well suited to the teaching profession and can best meet the specific needs of students in the classroom. A greater understanding of group assessment will assist teacher educators in determining appropriate criteria to use in admitting students into teacher training programs.

CHAPTER III

PROCEDURES

The primary purpose of this study was to determine the level at which group assessment interview scores at USU are associated with teaching success of students who have graduated and obtained a teaching position in which they have been employed for a period of at least two years. A secondary purpose was to determine if group assessments interviews were more effective in predicting future teaching success than measures of academic selection criteria (ACT scores, GPA scores). Relatedly, the relationship between student teaching scores and group assessment scores were also examined.

To determine if group assessment was associated with future teaching success in the field, this study sought information from principals about teachers they currently supervise. Participants in the study were limited to those who graduated from USU since the College of Education and Human Services began using group assessment interviews in 1998 to select students into their teacher training programs. Self-anchoring scores obtained through principal interviews were compared to group assessment scores and other admission criteria used at USU. Study intent was to determine the association of group assessment and other admission criteria to teacher success two to five years after graduation and, relatedly, to student teaching evaluations. Additionally, the study sought to determine if academic selection criteria or group assessment scores could better predict teacher success.

Teacher Success

It is the researcher's belief that a principal who has supervised a given teacher for at least one year is best prepared to evaluate the teaching success of the study participant, particularly as the participant's performance relates to expectations in a specific teaching context (Torff & Sessions, 2005). In most elementary schools, the principal is the only person responsible for teacher evaluation (Xu & Sinclair, 2002) and would be a logical resource to articulate the success of an educator during an interview given his or her position of responsibility as building manager and instructional supervisor of the school. For this study teacher success was seen as a principal's assessment of overall teacher success in the role as a teacher in the classroom and as a contributing member of the school faculty. A study participant's group assessment score at USU was compared with his or her principal's current perception of the teacher's success. Comparative results were used to determine the ability of group assessment to predict teacher success in the workplace.

District Participation

All forty school districts in Utah were contacted about study participation. Even smaller districts that employed only 1 to 3 teachers who qualified to be a part of this study were approached about study consent. As district approvals to conduct research were received, each teacher was contacted by telephone about study participation. Some districts consented to the study but had no USU teachers who qualified for the study employed within their districts. All districts where qualifying USU teacher candidates

were employed consented to the study with one exception. A southern Utah school district containing four teacher candidates denied access for the study citing that "to ask principals to describe effective and ineffective teachers and then compare the USU teacher to other teachers employed within the school would foster a competitive rather than a preferred cooperative climate within the school."

Study Participants

The researcher obtained a list of 828 students who were admitted into teacher training from a data base kept in the College of Education at Utah State University.

These were elementary education students who took part in a group assessment interview at Utah State University between 1998 and 2002. A review of this list suggested that 648 of these names could qualify for the study based on student records kept at Utah State University. Most names removed from the original list of 828 names were removed because these students' graduation dates would not have allowed for sufficient teaching experience. Others were known not to be teaching, had moved out of state, or were working in fields other than education.

All 648 teacher candidates were looked up on a database kept by the Utah State Office of Education called CACTUS (Computer Aided Credentials of Teachers in Utah Schools). Two-hundred thirty-five graduates were listed on CACTUS as teaching in public schools in Utah during the 2006 academic school year. Most graduates not included in the 235 teachers qualifying for the study were not listed on CACTUS (no record of teaching history in Utah) or had let their certification expire. The study was

limited to graduates teaching in public school settings, so teachers working in a growing sector of private schools or early childhood preschool programs were not part of the list of 235 teachers.

After obtaining district access approvals from all but one district in the state of Utah where study candidates were employed, the workplaces of 235 study candidates were contacted by phone. Study candidates located were informed about the study, and asked to consider study participation. Teachers interested in study participation were sent two sets of consent forms (see Appendix B). One set of forms was for their own records, and one set was to be signed and returned to Utah State University. When contacting the 235 possible candidates for the study via telephone, 12 had terminated contracts since July 2006, seven lacked sufficient teaching experience (2 years minimum) for the study, six did not want to be part of the study, six were not found to be teaching at the schools indicated by CACTUS, two moved out of state, two were in schools so small a comparative study was not feasible, one was on extended maternity leave, one was working in the district office, one teacher had personal problems that prompted her principal to ask that we remove the teacher from possible study participation, one had moved to a private school teaching assignment, and four were in the district not granting study access.

After telephone contact was made with each teacher, letters requesting study participation were sent to each of the remaining 192 study candidates. One hundred thirty-six participants returned the first study participation letter. A follow-up request for participation was sent out to the 56 who did not reply and that resulted in the receipt of an

additional 15 participants. Forty-one study candidates did not return consent forms after having been sent two mailings. Of the 192 possible candidates for the study, 151 letters of consent were received at Utah State University, and principal interviews were conducted in regard to the success of each teacher who consented to the study. The study participation rate was 79% (151) of the 192 possible study candidates. A review of the group assessment scores for the 41 teachers who did not return study participation forms did not reveal them to be substantially different from those who did respond.

Initially, a randomized selection procedure was to be used to determine actual study participants. Given the small number of teachers who could be followed up on from their sophomore year in college to many years later as practicing professionals, it was determined that the study would include all Utah teachers who qualified for the study and could be found. All teacher candidates employed in public schools within the state of Utah who could qualify for the study were contacted. The group of 151 teachers used for this study represents all teacher candidates located through the Utah State Office of Education (USOE) database that qualified for the study and returned informed consent forms authorizing study participation.

Setting

Located within a small city of Cache County, USU has an enrollment of over 19,000 students. It is the only top-tiered, research-based university in Utah that is not located along the Wasatch Front. The Elementary Education program produces more certified teachers than any other public institution in the state.

Most USU teacher education graduates were found to be employed in larger school districts along Utah's Wasatch Front or in districts in close proximity to Utah State University. By size of group, the majority of study candidates were employed in districts as follows: Jordan (32), Granite (18), Cache (18), Davis (15), Box Elder (14), Logan (13), Alpine (7), and Nebo (7). The remaining 27 participants were spread in small numbers across various other school districts in the state.

Only teachers employed in Utah were studied. It is assumed that a number of graduates are teaching out of state and thus were outside the purview of this study. According to records kept by the Associate Dean of Teacher Education and Human Services at USU, approximately 15% of the elementary education graduates accept positions outside of Utah—most often in the states of Nevada, Arizona, Texas, and California.

Steps in Data Collection

Data collection for this study began after committee review and IRB approval. Subjects who qualified for this study were located using databases kept in the Department of Elementary Education and the College of Education and Human Services. These USU databases were cross-referenced with the CACTUS database of Utah teacher employment kept at the USOE. The challenge of locating past students in the field was considerably greater than expected, particularly given student name changes, the changeover to a different data management system (BANNER) at USU, and the inaccuracies found within the USOE CACTUS database system. A proportional sampling was not possible. All

students who received scores of 3, 4, 5, and 6 on the group assessment procedure and who could be located were contacted.

After successfully locating study candidates through telephone contact, a cover letter (see Appendix A) was sent to the graduates informing them about the study along with a consent form (see Appendix B) and a postage paid envelope in which to return the consent form. This consent form was necessary because information would be collected about the teacher from his/her immediate supervisor. When consent forms were not returned, follow-up mailing included a second set of informed consent documents and a handwritten note which thanked the teacher for considering study participation and gave a time constraint for returning the consent forms should they still have interest in study participation.

All school districts within the state were sent letters requesting permission to conduct research. Larger school districts have specific guidelines and timetables that must be followed in order for study approval to be granted. Some larger districts also have on-line research applications and research review committees that must approve all requests to conduct research within those district. As the required process was being followed that would eventually grant permission to conduct research in larger districts, principal interviews were conducted in smaller districts where consent had already been granted.

Principal interviews were conducted in the following manner. Each principal was informed about the study and asked to participate. If a principal indicated a willingness to participate in the study, a phone interview time was established. Usually,

principal interviews were set for a later date or time. Scheduling a later date would allow the principal to touch base with the teacher about his/her consent to study participation. Some participants informed school supervisors about their study participation. These participants informed supervisors that a USU student researcher would be calling to set an interview time. When participants informed supervisors about study participation, principal interviews were often immediate rather than scheduled for a later date. Jordan School District required that all principals to be included in the study be contacted about the study before making any contact with teachers on their faculty regarding study consent

The Self-Anchoring Scale (see Appendix C) was used during the interview. The Self-Anchoring Scale asked the principal to describe the characteristics of a star teacher. He or she is then asked to describe the characteristics of a weak teacher. The principal is then asked to use this scale (with 10 being the "star" teacher and 1 being the "weak" teacher) to assess where the average individual on his or her faculty would score on the success scale. Principals were asked to give the average rating of provisional teachers within their faculty. Finally, the principal was asked to place the teacher in question on the same scale of success. The result was a score of the teacher's overall success on a scale of 1-10 and also a score of the teacher's success compared to the rest of the school's faculty and other provisional teachers in the building. This comparison score could theoretically range from -9 to +9. In the analysis, these scores were compared to the student's academic admission criteria, group assessment scores, and student teaching evaluations.

Definitions

An objective of any study is to clearly articulate meaning to the intended audience. In an effort to provide clarity in this regard, a list of terms used in this study is provided along with a brief contextual meaning. It is hoped that a definition section will assist the reader who may need to clarify the use of selected terms specific to this study.

Academic Selection Criteria

Two scores were used in this study to measure academic performance. ACT scores consisted of the composite score a student received on the standardized test used by USU for admission consideration. The second score was GPA. The GPA in this study was measured on a scale of 0.0 to 4.0 (4.0 being the highest possible score). The GPA score utilized for this study was based on a select number of required general education courses that were completed by all students before admission to the teacher education program was considered.

Comparative Principal Evaluation Score

The Comparative Principal Evaluation Score (CPES) used in this study is the difference on the Self-Anchoring Scale between the score given the USU graduate by the principal and the average score of teachers in the same school. This score could potentially range from -9 to +9. For example, if the average teacher at the school was a 7 but the USU graduate was given a 9, the comparative principal evaluation score would be a +2. If the USU graduate was given a 4, the CPES would be a -3.

English Language Learner

English language learner is a school demographic term that refers to the percentage of students in the school who are learning English as a second language.

Ethnic Diversity

Ethnic diversity is a school demographic term that refers to the percentage of students in a school who are not classified as White/nonHispanic.

Group Assessment Scores

Group assessment scores are ratings given to students by two trained raters after observing a 90-minute group interview intended as part of the selection criteria of teacher applicants into an elementary teacher training program. A group assessment score on a scale of 1 to 6 (1 being poor and 6 being excellent) is given in each of the following areas: verbal ability, interpersonal skills, leadership qualities, and an overall rating. The overall group assessment rating was used in this study.

Principal

A principal is the current building supervisor having at least one school year of association with the USU graduate in an administrative capacity.

Graduate Success Score

This is a score from 1 to 10 (1 = poor to 10 = highly effective) representing a principal's view of a given teacher's success. This score is obtained from the Self-Anchoring scale.

Provisional Teacher Evaluation Score

This score is the difference between the score given the USU graduate by the principal and the average score of other newer teachers who teach in the same school. This score could potentially range from +9 to -9. This score is calculated only for teachers who have less than three years of teaching experience.

School Demographics

Descriptive date involving school classification based on community demographics is shared in this study. U.S. Census Bureau, Census 2000 classifies populations living in the United States as Urbanized Area (UA), Urban Cluster (UC), and Rural areas of population. An Urbanized Area is described as a population that has at least 1,000 people per square mile and total population of at least 50,000 people. An Urban Cluster is described as an area consisting of densely settled territory (at least 500 people per square mile). An Urban Cluster has a smaller total population with at least 2,500 people but not more than 50,000. Rural areas are communities or regions with population densities and or total populations less than Urban Clusters. Schools physically located in Urban Cluster areas but which pull their students from community populations that are distinctly rural are classified as rural for purposes of this study.

School Socioeconomic Status

For this study, the socioeconomic status (SES) of the school refers to the percentage of students in the school who are receiving free or reduced lunch based on financial need.

Student Teaching Scores

Student teachers complete two student teaching experiences at this institution thus student teaching scores are an average of both experiences. Two specific student teaching scores were used for this variable. One was the average of the scores given by cooperating teachers in two different student teaching experiences and the other was an average of the two evaluations given by the university supervisors. All scores were a summative indication of teacher performance given at the end of the study subject's student teaching experience. These scores could potentially range from 0 to 4 with 4 being the highest possible score.

Dependent and Independent Variables

The dependent and independent variables for this study are listed below.

Dependent Variables

Teacher effectiveness scores provided by the principal after completing a selfanchoring scale on teacher effectiveness during an interview with the researcher will be the main dependent variable in this study. In separate analyses, the comparative principal evaluation score and, when appropriate, the provisional teacher comparative score, will also be used as dependent variables.

Independent Variables

Independent variables will be the subject's GPA considered for program admission, composite ACT scores considered for USU admission, student teaching scores

from cooperating teachers and university supervisors, and the overall group assessment interview score.

Instrumentation

Kilpatrick and Cantril's (1960) self-anchoring scale was modified and used to anchor a principal's perceptions of teacher effectiveness. The self-anchoring scale concept originated with Kilpatrick and was first applied in a study by Kilpatrick and Cantril in 1965. They stated:

A self-anchoring scale is simply one in which each respondent is asked to describe, in terms of his own perceptions, goals and values, the top and bottom, or anchoring points, of the dimension on which scale measurement is desired, and then to employ this self-defined continuum as a measuring device. (p. 521)

Cantril's self-anchoring scale has been adapted and used in a variety of research settings. The scale was used in a study that explored perceptions of self and country among Black and Caucasian students at three of South Africa's university campuses (Braungart & Braungart, 1995). In the health care industry Cantril's self-anchoring scale proved to be very useful for obtaining information about a patient's perception of his past, present, and future health status (Hilton, Budgen, Molzahn, & Attridge, 2001). Cantril's self-anchoring scale was used in a dissertation (Toughill, 2001) that assessed quality of life in aged populations. A study on contraception involving female students at a Canadian University (Harvey, 1976) used Cantril's self-anchoring striving scale to assess participants' beliefs about their past, present and future.

Cantril's self-anchoring scale has also been used to obtain research data in educational settings. In her dissertation, Morris (2000) used this scale to determine the

levels of teacher empathy toward students when considering current and future classroom management strategies. Cantril's self-anchoring scale has also been used to measure teachers' perceptions of their own effectiveness in the classroom (Chiu, 1972).

These studies all support the use of a self-anchoring type scale to help individuals quantify their perceptions of complex and often subjective states of personal belief or conditions. In this study a self-anchoring scale enabled the researcher to quantify principals' perceptions of teacher success in the classroom. After anchoring his or her perceptions of teacher success, the principal quantified the success of an average teacher. As in other studies, Cantril's self-anchoring scale was ideally suited to the task of obtaining a numerical representation of subjective data. A self-anchoring procedure on teacher success as perceived by a principal during the interview process enabled the researcher to use the anchored perceptions of the principal to quantify the success of USU graduates compared to the average faculty member. The strength of using self-anchoring in such a manner was that regardless of the variation in each principal's perception of what constitutes successful or unsuccessful teaching in the classroom, once the perception is numerically anchored the variation in score from a perceived average when describing a USU graduate on their faculty still produced the intended study data.

Collecting principal data on teaching effectiveness with traditional checklists can be problematic. For example, a review of scores from a teacher evaluation instrument used by principals in Alpine School District for more than 20 years called Scales for Effective Teachers (SET) revealed the average score of a teacher in Alpine School District to be 47/50. John Jesse, the director over testing and research at Alpine School

District confirmed that an average SET evaluation score in Alpine School District is still approximately 47/50. Principals may have a tendency to evaluate their own faculty members quite high. Principal evaluations that are first anchored on their own thoughts of teacher success may tend to be more realistic when describing an "average" teacher on a given faculty.

In this study, the self-anchoring scale allowed principals to provide his/her perceptions of the characteristics of the least successful and most successful or "star" teachers on a scale from 1 to 10. The researcher informed the principal that the top of the scale (10) represents the characteristics of the most successful (star) teacher; the bottom of the scale (1) represents the characteristics of an unsuccessful teacher.

During the interview, questions were asked that allowed the principal to numerically respond to the success of the average faculty member on his staff according to the teacher success scale he has created. The principal was given opportunity to describe the teaching success of specific study subjects who were employed in his/her building.

The self-anchoring scale instrument provided data from principals regarding the teaching success of USU graduates who were currently working in the field. The self-anchoring scale data was also a good data source for comparing a study subject's current teaching success to other practicing professionals from the principal's viewpoint. These evaluation scores were compared to the group assessment score, academic admission scores (GPA and ACT), and student teaching scores for each participant.

Pilot Study of Self-Anchoring Scale

Prior to the dissertation the researcher conducted four pilot phone interviews on teacher success with principals or faculty members not involved in the study. Based on these pilot interviews, revisions were made and a script formulated (see Appendix C). Results suggested that on a self-anchoring scale of 1 to 10 an average teacher in Alpine School District was approximately a 7.5.

Self-anchoring scales have been used for over 40 years as instruments for data collection. In this study the scale helped anchor a principal's beliefs regarding teacher success. The use of the self-anchoring scale in a pilot study with individuals who were not participating in the study provided a valuable framework of experience in charting principal responses during self-anchoring interviews.

A case was made for the use of Cantril's self-anchoring scale in this study. It is a procedure that can be utilized to quantify the perceived teaching success of study participants. Self-anchoring scales have been used successfully in obtaining study data in health care, social science, and the field of education, in dissertations and other research.

Participant Demographics

School demographics for the teachers participating in this study were obtained to describe the setting in which these graduates work. Demographic data about school settings (urbanized area, urban-cluster, or rural) have been provided in Figure 1.

Information regarding the SES of the school, specifically the percentage of students in the school who are receiving free or reduced lunch based on financial need, is provided in

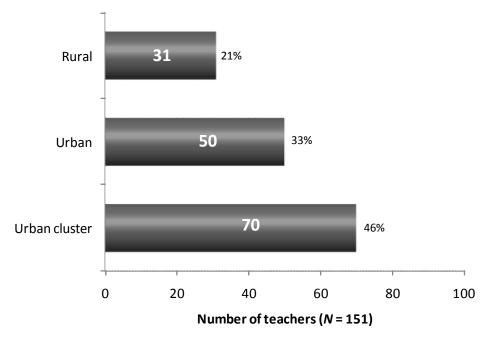


Figure 1. School demographics (community type).

Figure 2. Figure 3 shows the percentage of English Language Learners, students who are learning English as a second language, at the schools where participants were teaching. Figure 4 shows the percent of ethnically diverse students in the schools where the graduates are teaching. Data were obtained from public records available through the Utah State Office of Education website. The participants' years of teaching experience is provided in Figure 5. Data on years of teaching came from the USOE CACTUS database. Not surprisingly, of the 151 teachers within the study only 14 were males.

To see if study participants and their classroom assignments were close to the norm in Utah, Travis Rawlings, Education Specialist in Educator Licensing, at the USOE was contacted. Data presented in Table 1 regarding the typical teacher's years of experience comes from his office and is specific to districts that participated in the study.

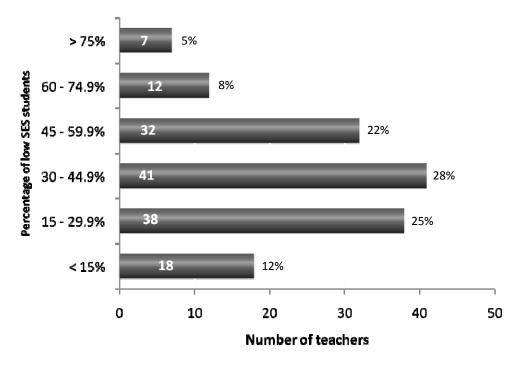


Figure 2. School demographics (percentage of low SES students).

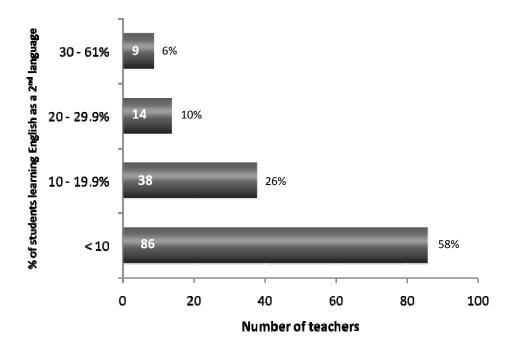


Figure 3. School demographics (percentage English language learners).

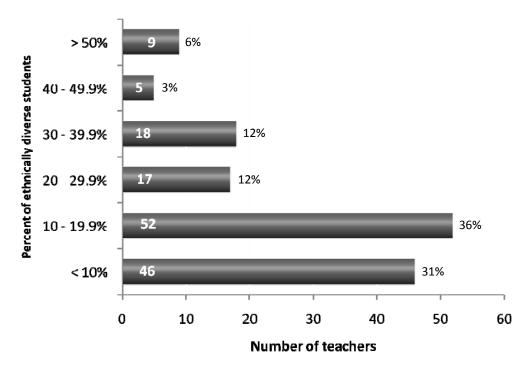


Figure 4. School demographics (school ethnic diversity).

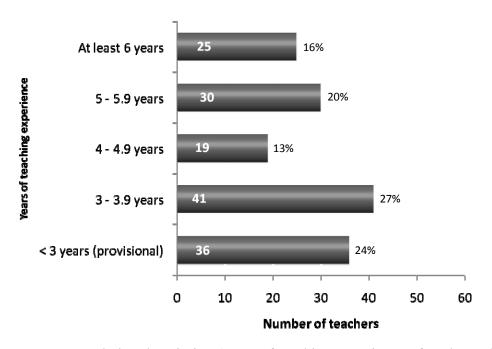


Figure 5. Population description (years of teaching experience of study participants).

Table 1

Mean Comparisons on School Demographics of Utah Teachers Versus Study

Participants

	Years of teaching experience		Percent low SES students		Percent ELL students		Percent diverse students	
Utah	Study	Utah	Study	Utah	Study	Utah	Study	
14.2	4.04	31.8	37.5	10.7	11.6	19.6	19.9	

A comparison was also made between Utah schoolteachers and the 151 study participants based on school demographic data kept by Travis Rawlings at USOE. The greatest difference between the average or typical Utah teacher and study participants was in years of experience. The average teacher in these districts had 14.2 years of experience, over three times more years teaching experience than the average study participant. This would be expected due to study qualification requirements.

The classroom assignment for both groups based on the school demographics of ethnic diversity and percent of ELL students was very similar. However, study participants held teaching assignments in schools with more economically disadvantaged students than the Utah average (37.5% low-income students versus 31.8% low income). This may represent the trend for newer teachers to be placed in lower-income schools.

Data Analysis

Descriptors provided by principals on the Self-Anchoring scale were categorized to more clearly identify how teachers were characterizing successful and unsuccessful teachers. Content analysis was used to sort the descriptions into meaningful

categories. Three auditors reviewed the descriptors and coding to assure confirmability and dependability of the categories.

Analysis of variance was used to analyze the relationship between the dependent variables (GSS, CPES, and PTES) and the overall group assessment score. Analysis of variance was also used to ascertain relationships between group assessment scores and student teaching evaluations. Pearson correlation coefficients were used to determine relationships between academic criteria (ACT and GPA), cooperating teacher student teaching score (CTS), university supervisor student teaching scores (USS), graduate success scores (GSS), comparative principal evaluation scores (CPES), and provisional teacher evaluation scores (PTES).

CHAPTER IV

FINDINGS

The main purpose of this study was to determine if group assessment scores are associated with future teacher success in the classroom. To address this question information was sought from principals within the state of Utah who have Utah State University graduates under their employ, and who were willing to be study participants. Study results are drawn from statistical analyses involving 151 Utah State University graduates found to be teaching in Utah public schools who also consented to study participation. How participants were located for the study and a description of these participants has been shared in Chapter III.

This chapter will address the following three research questions.

- 1. Is group assessment a predictor of future teacher success?
- 2. Is group assessment a better predictor of future teacher success than academic admission criteria?
- 3. Are student teaching evaluations associated with group assessment admission scores or future teacher success?

In addition to reporting the finding for these questions, the principals' responses to the Self-Anchoring Scale assessment tool will also be shared so as to better understand the dependent variables utilized for this study.

Self-Anchoring Interview Results

As discussed in Chapter III, principals' views of teachers in the study were

assessed utilizing a Self-Anchoring Interview. These interviews resulted in 115 principal descriptions of excellent teachers and poor teachers. This number is less than the 151 teachers in the study because some principals had more than one study participant in their schools. To more clearly understand how principals generally depicted excellent teachers and poor teachers, the descriptors were categorized using common themes that emerged from a content analysis. For example, during self-anchoring interviews principals often described successful teacher personality traits such as being caring, kind, child-centered, nurturing or sensitive. A personal characteristics category was created as a result of coding these phrases with other similar descriptors. Four major categories emerged.

These four categories as well as the responses associated with each category were reviewed by two independent auditors who are faculty at Utah Valley State College and have had experience with qualitative studies. An experienced elementary school teacher served as a third auditor as she was also asked for input when auditors disagreed on a few items. The audits generally confirmed the initial categories determined by the researcher. Some minor changes involving the refining of categories were made based on the input of the auditors.

Principals' Characterization of Successful Teachers

Principals were asked to identify characteristics of ideal teachers and poor teachers on a self-anchoring scale. They were subsequently asked to place the USU graduate on this personally created scale. To understand the results of this study it is important to know how principals described highly successful teachers. Interviews with

115 principals resulted in 1,146 words and phrases describing excellent teachers. These responses were categorized into four major themes.

- 1. Personal Characteristics (49% of responses)
- 2. Classroom Pedagogy (23% of responses)
- 3. Professional Conduct (15% of responses)
- 4. Conduct Management (12% of responses)

Each one of these themes will be briefly described. Frequencies in the form of subcategory percentages are reported in Table 2.

Personal Characteristics

The most common descriptors of excellent teachers involved personal characteristics (49%). These characteristics comprise mannerisms, attitudes and personality traits. More specifically, principals used descriptors such as cheerful, ever learning, nurturing, a people person, and responsible.

Classroom Pedagogy

Classroom pedagogy (23%) was a distant second as a descriptor category. This category includes words and phrases used to describe effective teaching in the classroom and elements of the teaching process identified with successful teacher instruction. A fairly common response in this category involved teachers having content knowledge and teaching the intended curriculum. Characteristics in this category are relevant to educational training in best practices as opposed to personal character traits.

Table 2

Principals' Characterization of Excellent Teachers

Descriptors	Percent for descriptor	Percent for categories
Personal characteristics	1	49%
Caring, kind, compassionate, nurturing, sensitive, empathetic	7%	
Positive, enthusiastic, happy, energetic, cheerful, perky	6%	
Teachable, continual growth, ever-learning	5%	
Child centered, believes in kids, loves kids, patient	5%	
Hard worker, focused, motivated, loves the work	3%	
Flexible	3%	
Communication skills with children	2%	
Pleasant personality, people person, well liked by students	2%	
Creative, fun, innovative, funny	2%	
Dependable, responsible	2%	
Other	12%	
Classroom pedagogy		23%
Teaches curriculum, content knowledge	8%	
Individualized instruction, outstanding strategies and pedagogy	5%	
Data driven, self assessor, record keeper, data drives instruction	3%	
Understands students abilities, potential, pacing of instruction	2%	
Effective, experienced, well trained, follows best practices	2%	
Lessons motivate and reach students, engaging	1%	
Other	2%	
Professional conduct		15%
Team player, collaborative, committee participation	5%	
Dedication to the profession, time, commitment	3%	
Prepared, intentionality	2%	
Good rapport, good relationships with parents and faculty	2%	
Professional, keeps up on profession	1%	
Cooperative, plays well with others, cooperates with school goals	1%	
Other	1%	
Conduct management		12%
Routine procedures, organization	5%	
Classroom management skills, clear expectations	3%	
Fair, consistent, follow through	2%	
Other	2%	

Professional Conduct

Principal statements regarding professional conduct (15%) was one of two categories with the lowest number of descriptors. At first glance, some of these professional conduct phrases would appear to belong in the category of personal characteristics. However, after discussion, the auditors and the researcher felt that phrases such as "dedication to the profession," "prepared," and "commitment" had more to do with professional conduct than personal characteristics. Auditors also believed the successful teacher descriptor "team players" would be better grouped with personal characteristics. The researcher declined moving "team players" to the personal characteristics category believing that within the context of this study, being a "team player" had more to do with interactions among co-workers than personal characteristics of successful teachers. A distinction of professional conduct is that descriptors in this category had little to do with classroom teaching and focused more on interactions with teachers and other education professionals outside the classroom setting.

Conduct Management

This final category, conduct management (12%), was used to group those descriptors associated with a successful teacher's classroom management system. These phrases suggest a framework successful teacher's use in managing the classroom experience for children. Conduct management is related to but not synonymous with curriculum and instruction, thus a separate category was created.

Principals' Characterization of Unsuccessful Teachers

After principals were asked to identify characteristics of ideal teachers on a self-anchoring scale, they were asked to describe poor teachers. To understand the results of this study it is also important to know how principals described poor teachers. Interviews with 115 principals resulted in 830 words and phrases describing poor teachers. These responses were categorized into the same four major themes.

- 1. Personal characteristics (39% of responses)
- 2. Professional conduct (33% of responses)
- 3. Classroom pedagogy (14% of responses)
- 4. Conduct management (14% of responses)

Each one of these themes will be briefly described below. Frequencies in the form of category and subcategory percentages are reported in Table 3.

Personal Characteristics

Phrases describing personal characteristics of poor teachers (39%) created the largest category of poor teacher descriptors. Personal characteristics of poor teachers (39%) accounted for considerably less descriptors than the personal characteristics category used to describe successful teachers at (49%). Phrases used by principals to describe personal characteristics of struggling educators in the classroom suggest the frustration or difficulty of managing personnel not ideally suited to the teaching profession.

Table 3

Principals' Characterization of Poor Teachers

Descriptors	Percent for Descriptor	Percent for Categories
Personal characteristics	2 courpeer	39%
Inflexible, rigid	4%	
Lack of caring, here for a paycheck	3%	
Resistant to change, not reflective	3%	
Pessimistic, ornery, negative, unfriendly, defensive	2%	
Selfish, self-interested	2%	
Arrogant, know-it-all, won't listen, not teachable, they've arrived	2%	
Does not like kids, does not relate with kids, impatient, apathetic	2%	
Lazy, sleepy, bored	2%	
Not happy, miserable, discouraged	2%	
Poor social skills, disconnected, loner, isolate	2%	
Passive, devil may care, lackadaisical, complacent, unconcerned	1%	
Stagnant, sits at desk, burned out, fossilized	1%	
Whiney, complains, blames others	1%	
Tardy, absent	1%	
Other	11%	
Professional conduct		33%
Not a team player, no collaboration, difficulty working w/ adults	6%	
Will not learn new skills, lecture only, lacks additional training	4%	
Unprepared	4%	
In a rut, lacks dedication or motivation, no drive, dysfunctional	3%	
Poor communication skills with shareholders, seems uncaring	3%	
No vision or direction of stewardship	1%	
Other	12%	
Classroom pedagogy		14%
Lack of/cannot apply/or does not seek content knowledge	3%	
Ineffective instruction, not reaching all students	3%	
Not engaging students, no "it" factor	2%	
Boring, mediocre, lacks luster, no enthusiasm	1%	
Other	5%	
Conduct management		14%
Disorganized, messy environment	6%	
Poor classroom management, sloppy transitions, poor discipline	5%	
Punitive inconsistent discipline	2%	
Other	1%	

Professional Conduct

This category (39%) contains phrases used to describe professional attributes/ attitudes of a poor teacher. Most glaring are descriptors suggesting a tendency to be "unprepared," "unwilling to learn new skills," and "a lack of collaboration with others." The percentage of phrases in the professional conduct category at 33% makes it second only to the personal characteristics category in describing weak teachers. Poor teachers were characterized as having poor professional conduct 39% of the time while only 15% of the descriptors of great teachers were in this category. Principals were much more likely to focus on attributes in this category when describing poor teachers than when describing excellent teachers.

Classroom Pedagogy

The classroom pedagogy category includes phrases principals used to describe attitudes and actions of struggling teachers as they prepare for and attempt to provide classroom instruction. Fourteen percent of the descriptors of poor teachers fell into the category. Included are phrases specific to teacher instruction and teacher content knowledge in their subject area. By comparison, this category encompassed 23% of the descriptors of excellent teachers.

Conduct Management

The last category of principal descriptors is centered on phrases that characterize poor classroom management skills in weak teachers. Like classroom pedagogy, this category also received 14% of the descriptors. Lack of classroom organization, a messy

environment for learning, and poor discipline are examples of poor classroom management skills described during principal interviews.

Summary of Self-Anchoring Descriptors

Principals most frequently described both excellent and poor teachers in terms of their personal characteristics. However, excellent teachers received even more of these "personal" descriptors than did poor teachers. In contrast, professional conduct was a much more salient category to principals when characterizing poor teachers than when describing excellent teachers. Concerns principals associate with the professional conduct of poor teachers are illustrated in the higher percentage of descriptors in this category (33%) versus 15% for successful teachers. The number of descriptors associated with professional conduct in the description of poor teachers is double that of successful teachers. Classroom pedagogy was mentioned 23% of the time in descriptions of successful teachers and only 14% of the time when describing poor teachers. This was a surprising finding given the importance one would expect good instruction to receive when evaluating teachers. The last category used to describe both groups was conduct management. This category included 12% of the descriptors for successful teachers and 14% of the descriptors for poor teachers. This may suggest a willingness on the part of principals to overlook some of the descriptors in this category when considering teachers who are struggling or teachers who are succeeding in favor of addressing other characteristics.

Descriptive Data on the Self-Anchoring Scale

After each principal gave a description of excellent teachers (a score of 10 on the Self-Anchoring scale) and poor teachers (a score of 1 on the Self-Anchoring scale), each principal then placed the average teacher, the average provisional teacher, and lastly the study participant on this 1-10 scale. In this study, the mean Self-Anchoring score for average teachers at the various schools was 7.4 with a standard deviation of .8 and a range of 5 to 9. The average mean for provisional teachers was 6.6 on the Self-Anchoring scale with a standard deviation of 1.3 and a range of 2.5 to 9.5. The average Graduate Success Score (GSS) for participants in the study was 8.5 with a standard deviation of 1.2 and a range of 4 to 10. These scores indicate that participants in this study tended to score above the mean for average and provisional teachers. Findings obtained through the use of Cantril's Self-Anchoring scale support the usability of this scale to collect data on the success of teachers who have graduated from USU and who are currently working in the profession.

Research Question 1

After creating a framework to identify principal perceptions of successful and unsuccessful teacher characteristics, the first research question of this study was addressed. Is group assessment a predictor of future teacher success?

This question was answered by running three separate one-way ANOVAs using different measures of teacher success as dependent variables and using Overall group assessment scores as the independent variable. The three dependent variables are

described below.

- 1. GSS: Graduate Success Score This score indicates where the principal placed the teacher on a scale of 1-10 with 10 being excellent and 1 being poor (with excellent and poor being defined by each principal's individual self-anchoring scale).
- 2. CPES: Comparative Principal Evaluation Score This score indicates the difference on the Self-Anchoring Scale between the score given the USU graduate by the principal and the average score of teachers in the same school. This score could potentially range from -9 to +9. In reality, the scores ranged from -3.50 to 4.5 with a mean of 1.1.
- 3. PTES: Provisional Teacher Evaluation Score This score is the difference between the score given the USU graduate by the principal and the average score of other newer teachers who teach in the same school. This score could potentially range from +9 to -9. In reality it ranged from -2.5 to 6 with a mean of 1.7. The Provisional Teacher Evaluation score was only calculated for and used with teachers in the study who had taught three or less years. As shown in Table 4, there was no statistically significant relationship between overall group assessment scores and measures of principal's perceptions of inservice teaching success.

Upon viewing the mean teaching effectiveness scores (see Table 4) for each group assessment level (3s, 4s, 5s, and 6s) it became clear that students who received 3s on the group assessment interview were not consistent with the general trend for teaching effectiveness scores to become higher as group assessment interview scores increased.

The teaching success scores of students who received 3s on the group assessment were

Table 4

ANOVA Results: Differences in Graduate Success Scores by Group Assessment Scores

Variable	Overall group assessment						
	GA score	n	Mean	SD	F	p	
GSS	3.00	28	8.59	1.34			
	4.00	72	8.35	1.23			
	5.00	43	8.40	1.19			
	6.00	8	9.44	.68			
	Total	151	8.47	1.23	2.063	.108	
CPES	3.00	28	1.11	1.54			
	4.00	72	1.02	1.34			
	5.00	43	.99	1.23			
	6.00	8	2.00	.80			
	Total	151	1.08	1.33	1.391	.248	
PTES	3.00	11	1.86	1.61			
	4.00	28	1.44	1.77			
	5.00	15	2.17	1.69			
	6.00	3	1.50	.50			
	Total	57	1.72	1.67	.639	.593	

higher than would be expected. It is also important to note that the 6s did not score high as expected on the PTES analysis. However, as shown in Table 4 there were only 3 students in the novice teacher group who scored a 6 on the group assessment thus a valid analysis was not possible.

A closer analysis of the 3s revealed that two distinct groups of 3s existed.

Students scoring 3 on the group assessment interview often are not admitted due to limited space in the program. Some 3s were admitted to the teacher education program only if space allowed. Another group of 3s was admitted despite lower group assessment

scores because they scored particularly high on academic measures utilized in the selection process (GPA range = 3.8 to 4.0; ACT range = 24 to 30). Thus, this provision allowed students who performed adequately on the interview but were academically high achievers to still be admitted. These high academic 3s were admitted above students who scored 4 or 5 on the group assessment interview and who had only average or above average academic scores. The group of high academic achieving 3s was recoded into a new category and ANOVAs were rerun. This new category was labeled 5.5 because of where group scores fell in the new analysis. Since an analysis of variance uses categorical data for independent variables the label of 5.5 is inconsequential. Table 5 shows the result of this analysis.

As can be seen in Table 5, overall group assessment scores are now shown to have a statistically significant relationship to Graduate Success Scores and Comparative Principal Evaluation Scores. Once the high academic achieving 3s are split out of the overall group of 3s, teaching effectiveness follows the expected pattern of generally becoming higher as GA scores increase on the GSS and CPES. An analysis of Provisional Teacher Evaluation scores (PTES) showed no association with overall group assessment scores. However, with the exception of the 6s where there are only three cases, the trend is similar to that of GSS and CPES scores.

To see if academic achievement was a significant factor for other group assessment groups (4s, 5s, and 6s), the data file was split by group assessment scores and correlations were analyzed for achievement variables and the dependent variables of GSS, CPES, and PTES. There were no statistically significant relationships for the 4s,

Table 5

ANOVA Results: Differences in Graduate Success Scores by Group Assessment Scores (recoded)

Variable	Overall group assessment						
	GA score	n	Mean	SD	F	p	
GSS	3.00	16	8.22	1.57			
	4.00	72	8.35	1.23			
	5.00	43	8.40	1.19			
	5.50	12	9.08	.76			
	6.00	8	9.44	.68			
	Total	151	8.47	1.23	2.454	.048*	
CPES	3.00	16	.53	1.64			
	4.00	72	1.02	1.34			
	5.00	43	.99	1.23			
	5.50	12	1.88	1.00			
	6.00	8	2.00	.80			
	Total	151	1.08	1.33	2.918	.023*	
PTES	3.00	5	1.20	1.25			
	4.00	28	1.45	1.77			
	5.00	15	2.17	1.69			
	5.50	6	2.42	1.77			
	6.00	3	1.50	.50			
	Total	57	1.72	1.67	.840	.506	

Note. High achieving 3s and special exceptions as a separate category.

5s, or 6s. As to be expected, given the analysis of variance findings reported above, statistically significant coefficients were found for the 3s on CPES (r = .40) and PTES (r = .60). High academic achievement was only relevant for students in the lower group assessment category of 3s.

^{*} *p* < .05

Research Question 2

Question 2 asks whether group assessment scores are a better predictor of success than other admission criteria (ACT and GPA at time of admission). Pearson correlation coefficients were calculated to determine relationships for the independent variables ACT score, and GPA at time of admission. Results of the Pearson correlations test are shown below in Table 6.

No relationship was found between Graduate Success Scores, Comparative Principal Evaluation Scores, or Provisional Teacher Comparative Scores and either GPA at time of admission or ACT scores. If relationships had been found, a Univariate analysis of variance, where both categorical (group assessment scores) and continuous variables (ACT and GPA scores) could be entered into the equation as independent variables would have been run. Given no association was found between the academic variables and the dependent variables, further analysis was not needed to answer research

Table 6 Pearson Correlation Coefficient Values

Variable		CPES	PTES	CTS	USS	GPA	ACT
1. Graduate success score	1	.81**	.67**	.37**	.32**	.08	.11
2. Comparative principal evaluation score		1	.66**	.35**	.27**	.03	.10
3. Provision teacher evaluation score (novice teachers only, $N = 57$)			1	.24	.27*	.13	09
4. Cooperating teacher score				1	.83**	.05	03
5. University supervisor score					1	01	08
6. GPA at admission						1	.48**
7. ACT score at admission							1

^{*} p < .05 ** p < .01

question number 2. Group assessment scores (recoded) were the only admission variable associated with future teaching success as measured by GSS and CPES.

Research Question 3

Question 3 asks if student teaching evaluations are associated with group assessment scores or future teacher success. Pearson correlation coefficients were calculated to determine relationships for the cooperating teacher student teaching score and university supervisor student teaching score with teaching success in the field. As shown in Table 6 cooperating teacher scores and university supervisor scores were found to be associated with graduate success scores (r = .37, p < .01 and r = .32, p < .01, respectively), and the comparative principal evaluation score (r = .35, p < .01 and r = .27, p < .01, respectively). The provisional teacher evaluation score was associated only with the university supervisor score (r = .27, p < .05).

Two separate univariate ANOVA's were performed to determine if group assessment scores or group assessment scores recoded were associated with student teaching evaluations given by cooperating teachers and university supervisors. There was no association between group assessment scores (regular or recoded) and student teaching evaluations given by cooperating teachers (F = .932, df = 3; F = 1.307, df = 4, respectively) or university supervisors (F = .53, df = 3; F = 1.093, df = 4, respectively). This is interesting given that both group assessment scores and student teaching evaluations are associated with future teaching success.

Conclusions

The three dependent variables (graduate success scores, comparative principal evaluation scores, and provisional teacher evaluation scores) were the result of quantifying principals' response to a Self-Anchoring Interview. In the development of those dependent variables, principals were most likely to describe excellent and poor teachers using personality descriptors. Based on interview descriptors, principals were likely to characterize excellent teachers as caring, compassionate individuals who teach the curriculum and have strong content knowledge. Excellent teachers were seen as collaborative individuals dedicated to the profession who were well organized with established classroom management skills and as having a strong rapport with children. Conversely, principals describe poor teachers as inflexible, uncaring individuals who find it difficult to work with children and adults. They are often unprepared for class, unwilling to learn new skills, disorganized, and messy. Poor teachers are also thought to exhibit poor classroom management skills, are considered weak in content knowledge, and are just plain boring.

Research question one of this research study asks if group assessment is a predictor of future teacher success. An analysis of variance using three different measures of teacher success obtained through principal interviews as dependent variables and using Overall group assessment scores as the independent variable initially suggested no significant relationship between group assessment scores and inservice teacher success. However, when high achieving 3s are separated out as a new category, group assessment scores were shown to have a statistically significant relationship to both GSS

and CPES. With the exception of high achieving 3s, as students' group assessment scores increased, principals' ratings of their teaching success increased. This pattern also appeared when group assessment scores were compared to the CTES. The higher a graduate's score on group assessment, the higher above the average teacher he or she would be scored by the principal. High achieving 3s would be the exception. High achieving 3s were performing according to principals, more like graduates receiving 5s and 6s on the group assessment at the time of admission to teacher training. When only provisional teachers were analyzed, there was no relationship between their admission group assessment scores and how they were evaluated with respect to the other provisional teachers.

Research question two of this study asks whether group assessment scores are a better predictor of success than academic admission criteria (ACT and GPA at time of admission). No relationship was found between GSS, CPES, or PTES and either GPA at time of admission or ACT scores. Thus, group assessment scores (recoded) are the only admission variable associated with future teaching success.

Question 3 asks if student teaching evaluations are associated with group assessment scores or future teacher success. Cooperating teacher scores and university supervisor scores are both related to GSS and CPES. Only university supervisor student teaching scores were correlated with PTES. Neither group assessment scores nor group assessment scores recoded were associated with student teaching evaluations given by cooperating teachers and university supervisors.

CHAPTER V

DISCUSSION

Teacher education selection committees face unique challenges in choosing admission criteria intended to identify teacher candidates most likely to be successful in the classroom after graduation. This study investigated the ability of the group assessment procedure used at USU to predict future teaching success in the classroom compared to traditional measures such as ACT scores or Grade Point Average at time of admission. For this study each participant's ACT scores, GPA scores, student teaching evaluations and group assessment scores, and student teaching evaluations were compared to a principal's self-anchored score of the participant's success as a teacher. The study intended to determine which if any of these measures were associated with future teaching success in the classroom.

The selected tool used for measuring the success of teachers in the field was Cantril's Self-Anchoring scale. Numerous studies have used this scale to help individuals quantify their perceptions of complex and often subjective states of personal belief or conditions. In early stages of this study's development, Cantril's self-anchoring scale seemed to be an ideal tool for helping principals to first identify their own belief systems about which attributes characterize successful and unsuccessful teachers before judging teachers on their own staff. After allowing principals to self-anchor beliefs and perceptions about successful and unsuccessful teachers on a scale of one to ten, principals were given the opportunity to quantify the average teacher, average provisional teacher, and Utah State University graduate faculty at their school. As anticipated, the strength of

using Cantril's self-anchoring scale in this manner was that regardless of the principal's perception of what constitutes successful or unsuccessful teaching in the classroom, once the perception is numerically anchored the variation in score from a perceived average when describing a USU graduate on their faculty-produced data very useful to this study. Such a scale helps to diminish the likelihood that scores of principals will be overly inflated as some past studies of principals evaluations have shown. While inflation was somewhat of a problem in this study, the Comparative Principal Evaluation score helped to discern when principals were particularly high or low evaluators of teachers on average.

It is interesting to note that study categories that emerged as principal interview descriptors were organized, have similarity in meaning to individual components used in determining overall group assessment scores. The group assessment instrument consists of subscales on communication, interpersonal skills, and leadership. The three subscales scores inform the overall group assessment score used for this study. However, as stated on the score sheet, the overall score is not an average of these scores and may include consideration of other qualities such as integrity, self-awareness, and emotional stability.

The four study categories and the three components of group assessment have much in common. Almost all personal characteristics descriptors from this study could have been characteristics observed and categorized under the communication and interpersonal skills components of the 90-minute group assessment interview. Personal characteristics was the largest category of descriptors for both successful and unsuccessful teachers. Descriptors from the personal characteristics category are not the

only similarity between the principals' descriptions and the group assessment subscales. Principal descriptors under professional conduct such as "not a team player," "no collaboration," "difficulty working with adults," "lacks motivation," and "seems uncaring" are all characteristics that could surface in a teacher applicant group assessment interview.

However, some principal descriptors of teachers come under categories that are not easily seen outside of a classroom setting. Descriptors identified in conduct management such as "messy environment," "sloppy transitions," and "punitive inconsistent discipline" are descriptors unlikely to be observed in Group Interview observations. Some descriptors connected to classroom pedagogy such as being "data driven" are also unlikely to be observed in group assessment interviews. It is not possible to simulate actual teaching in a group assessment interview.

A large number of descriptors principals used in identifying teacher traits in this study are also characteristics that are evaluated within a group assessment interview. The relationship between the terms principals use to describe successful and unsuccessful teachers and their commonalities with characteristics evaluated within the group assessment Interview add face validity to the group assessment process.

Results from this study initially found that group assessment was not shown to be predictive of future teacher success. An analysis of variance showed no statistically significant relationship between overall group assessment scores and measures of inservice teaching success. This is interesting because a previous study in Israel by Shechtman and Godfried (1993) indicated group assessment scores had demonstrated

ability to predict future teaching success. Additionally, a study by Byrnes and colleagues (2003) in the United States demonstrated group assessment to be predictive of student teaching success in the United States. This relationship to student teaching was also found in the work of Shechtman and Godfried.

Statistical significance in the relationship between group assessment scores and measures of teacher success was found when those admitted into the teacher training program under the exceptions policy called high achieving 3s were placed in a separate category. When high achieving 3s are separated from other 3s into a new category of their own, the association is significant. The expected trend of teacher success scores rising as group assessment scores rise is observed. This result suggests group assessment can be associated with future teacher success if exceptions for high-achieving students scoring 3 on their group interviews are made. Group assessment scores, with the recoded high-achieving 3s, is the only admission variable associated with future teaching success found in this study.

The issue of why high-achieving students who scored average on their group interviews (3s) are so successful in classrooms is perplexing. Students who receive 3s in a group interview generally perform well but do not distinguish themselves. They are more likely to go along with the group as they complete activities and they do not show leadership or share ideas in ways that particularly capture the group's interest. They would show acceptable levels of warmth, friendliness, and supportiveness toward others but would in no way be seen as having charisma or being particularly aware of the needs of others in the group. While they adequately articulate their ideas, they are probably

more hesitant to share their thoughts then students who receive higher group assessment scores.

Given data that the high-academic achievers in this group go on to be very successful teachers, it is important to consider what the group interview is not picking up on. Perhaps these students are slow to warm in new situations and are thus penalized for being shy in the group interview. Shy people often appear reserved, take more time to make new friends, and often like to work alone. Rivet, Bruch, Haase, and Sturmer (2004) compared two approaches in predicting discomfort during a laboratory social interaction and found that the trait of shyness is viable in predicting discomfort. A case could be made that shy applicants are likely to be more uncomfortable during group assessment interviews than more outgoing applicants. Since the group assessment interview is a relatively short, high-stakes interview procedure, shy applicants may not have the opportunity to warm up in the group so as to show their true potential. In a classroom setting, where interactions are continuous and long term, their true personalities may shine through.

Unlike 3s who are not academically inclined, this group of high achieving 3s may be slow to warm but they also have the skills and motivation to achieve their goals as evidenced by their high achievement. Once they are comfortable in a situation, it seems their interpersonal, verbal, and leadership skills emerge and combine with their high academic skills to create very effective teachers. Students receiving adequate scores on the group assessment interview who are not high achieving academically may simply be of average ability with respect to interpersonal, verbal, and leadership abilities and do not

have the high academic skills (e.g., knowledge of classroom pedagogy and motivation) to shine in classrooms. Applicants who are aware of their own academic shortcomings may also be are more likely to allow self-doubt to factor into their interactions in the group assessment interview and also later on as professionals in the field.

A second purpose of this study was to determine if group assessment is a better predictor of future teacher success than academic admission criteria. No relationship was found between GSS, CPES, or PTES and either GPA at time of admission or ACT scores. This finding supports previous research at USU by Byrnes and colleagues (2003) who found student GPA did not demonstrate predictive validity when compared to university supervisor and cooperating teacher ratings. A study by Shechtman (1989b) also demonstrated that components of group assessment interviews; verbal communication, human interaction, and leadership contribute more to initial teaching success than the intellectual admission criteria (IQ scores and GPA). High ACT scores were even found to have a negative association to student teacher ratings in the Byrnes and colleagues study. There was a trend for individuals with higher ACT scores to actually do less well in student teaching ratings that those not scoring as high on ACT testing.

In this study, as in others, ACT and GPA scores correlated with each other but were not correlated to any measure of future teaching success including student teaching scores. ACT and GPA scores used for admission criteria may be convenient as they are easy to obtain from student records but they are not related to teaching success. Relying on academic admission criteria may be considered safe because there is a long history of doing so, but the research does not support such use. Group assessment interviews take

additional time and are more taxing in terms of faculty load but are more useful in selecting preservice teachers who will succeed as future teachers.

A difference between this study and the earlier Byrnes and colleagues (2003) study is that in the Byrnes study group assessment scores were related to student teaching scores. In the current study the relationship between group assessment and student teaching scores was not found. This is surprising given that both Groups Assessment scores and student teaching evaluations were associated with teaching success. A plausible explanation has to do with the differing percentages of students scoring 3, 4, 5, or 6 in the two studies. In the Byrnes and colleagues study, the data set had more 3s (24% vs. 19%). The study also had a higher number of 5s and 6s (46% vs. 33%). Thus, there was more variability in the scores. This study had a larger number of 4s (47% vs. 31%). While the mean GA scores in each of the two studies are virtually the same at 4.28 for the Byrnes and colleagues study, and a mean score of 4.21 for this study, the distribution of scores was different. As the USU Department of Elementary Education has continued to use the group assessment interview, over a period of years raters appear more likely to give 4s and less likely to give 3s, 5s, and 6s. A closer look at the data suggests a possible regression to the mean in the scores raters are giving during group assessment interviews. There was also less variation in student teaching scores in the present study. The means were higher for cooperating teachers (3.59/4 in the present study vs. 3.47/4 in the earlier study) and university teacher scores (3.54 in the present study vs. 3.32 on the earlier study). Relationships among variables are harder to establish when larger percentages of scores tend to be in the middle of a distribution (which

occurred for the group assessment scores) and when many students receive the highest score possible as occurred with the student teaching evaluations (30% of the cooperating teachers gave 4s and 15% of the university supervisors gave 4s).

For this study, an ANOVA was performed on Provisional Teacher Evaluation scores by overall group assessment scores. Novice teachers' scores (PTES) were not associated with GSS. A closer look at the data may suggest an explanation. With only 57 novice teacher participants, there were several very small group assessment subgroups. There were only five students who scored 3s, there were only six students who had been 3s and were recoded as high-achieving 3s, and most importantly, there were only three students who scored 6. These small subgroups were problematic and did not allow for appropriate analysis.

Many teacher education program selection committees are hoping to prepare students who are more likely to be successful in elementary school settings. For such selection committees a group assessment interview procedure that has been shown to be associated with teacher success is a viable alternative to considering academic admission criteria alone. Study findings are supported by Demetrulias and colleagues (1990), Freeman and colleagues (1989), and Shechtman (1989b) who have also suggested selecting student applicants solely on the basis of academic admission criteria is not to be recommended. Therefore, group assessment interviews are an additional tool for teacher training selection committees to consider.

This study also asked if student teaching evaluations were associated with group assessment admission scores, or future teacher success. Coefficients calculated to

determine relationships between future teaching success and student teaching scores found a relationship does exist between teacher success and university supervisor student teaching scores. A relationship was found between teacher success and cooperating teacher student teaching scores. Student teaching scores were related to graduate success scores, and the comparative principal evaluation score. However, provisional teacher evaluation scores were related only to university supervisor scores, no relationship was found between provisional teacher evaluation scores and cooperating teacher student teaching scores.

This correlation of student teaching scores with teaching success is reasonable considering student teaching scores are a culmination of teacher preparation experience when classroom skills and success can actually be observed. This finding is useful in that those who hire teachers based on student teaching evaluations have research based evidence on the relationship between success of the student teaching experience and success in teaching. This benefit, however, is lost on teacher education program selection committees that must select students into teacher training programs long before they student teach.

Significance

The Department of Elementary Education Selection Committee at USU has used group assessment as part of the selection criteria for choosing student applicants for Elementary Education since 1998. Only students receiving at least an overall score of 3 or higher on group assessment interviews are admitted into the program. Students given

a score of 1 or 2 are not admitted into the teacher education program. Depending on the number of applicants during times of admission not all 3s are admitted into the program although high achieving 3s are always admitted.

This selection procedure created a challenge to this study in that the success of 1s and 2s who would be expected to score lower than those receiving higher scores are not admitted into the program so their future success in the classroom cannot be measured. On the positive side, the department's decision not to admit students with group assessment scores of 1 or 2 may offer explanation for part of the success USU is having with their graduates in the field.

Of 151 USU students participating in the study, only 14 participants did not score equal to or higher than the average teacher in the school. Eight of the 14 teachers scoring below the average teacher in the building were provisional teachers with 3 or less years teaching experience. However, they are being compared to average (but more experienced) teachers in the school. The average participant in this study had 4 years of experience. According to records kept at the USOE, the average years of teaching experience in school districts that participated in this study was 14.2 years. Participants in this study averaged 10 years less teaching experience than teachers with whom they were compared yet 138 out of 151 teachers scored equal to or higher than the average teacher in the school. Given USU teacher success when compared through principal interviews to their more experienced co-workers, group assessment appears to be effective.

Most principals (49 out of 57) scored their USU provisional teachers equal to or

higher than the average teacher in the building, describing them with phrases like, "She is better prepared and motivated..." and "...from her first year, she just knew how to teach!" Only 6 of 94 teachers who were not provisional teachers scored below the average teacher in the school where they are employed. The Department of Elementary Education at Utah State University is preparing teachers who, with few exceptions, become more successful teachers than the average new or experienced teachers in these districts.

Limitations

As mentioned earlier, this study did not use scores from those who scored below 3 on group assessment when interviewed. Individuals applying for admission into the college of education given group assessment scores of 1 or 2 were not admitted into the program. This study therefore can only assess the teaching success of those who scored at least a 3 on group assessment interviews. Study results may well have demonstrated even stronger predictive validity on teaching success if those who struggled during group assessment interviews could have been study participants. The study limitation is beneficial in that not admitting 1s and 2s regardless of academic ability has the effect of allowing more opportunity for admitting prospective teachers into the program who the study suggests are more likely to be successful teachers.

It is possible that the 151 study participants may differ in some way from students who graduated and chose not to participate in the study, are teaching in private schools, teaching outside the state of Utah, or are not currently working in the field of education.

The total number of students taking the group assessment interview from April, 1998 to July, 2002 and earning at least a score of 3 was 807. They were distributed across the possible ratings as follows: 3s = 20%, 4s = 44.5%, 5s = 29.7%, 6s = 5.7%. In this study the graduates of the program who were located and agreed to be in the study were distributed as follows: 3s = 18.5%; 4s = 47.6%, 5s = 28.5%, 6s = 5.3%. The distribution of GA scores is almost the same. This similar distribution of scores suggests that group assessment scores given study participants are similar to group assessment scores assigned the whole group.

Another possible limitation of this study was the assumption that principals are best suited to determine teacher effectiveness. Perhaps the views of parents, co-workers, students, or teachers themselves would be viable data sources for evaluating teacher success. However, according to Xu and Sinclair (2002), in most elementary schools, the principal is the only person responsible for teacher evaluation and would be a logical resource to articulate the success of an educator during an interview given his or her position of responsibility as building manager and instructional supervisor of the school. It is still possible that, given their many administrative responsibilities, some principals may be a little unsure of a specific teacher's success.

Principal self-anchored beliefs about successful and unsuccessful teacher are inherently subjective and therefore potentially biased. Additionally, the actual causes for successful or unsuccessful teaching and principals' self-anchored beliefs about causes for teaching success or failure may differ.

No Child Left Behind (NCLB) is federal law that centers on teacher, school,

district, and state accountability. This study did not look at student scores to determine teacher success.

Delimitations

There are many considerations that make USU a unique institution. The students at USU are mostly middle-class, Caucasian students from Utah, Idaho, and Wyoming.

The typical student at USU is also affiliated with The Church of Jesus Christ of Latterday Saints. These are all unique factors that may limit the generalizability of this study to other universities

Suggestions for Further Research

An increasing number of institutions of higher learning contact USU about group assessment (D.A. Byrnes, personal communication, January 28, 2008). Teacher education programs are looking for a procedure to select teacher candidates that will allow for a candidate's interpersonal, communication, and leadership skills to factor into their teacher education program admission criteria. An area of future research might involve additional research at other institutions regarding the prediction of teacher success before and after using group assessment scores as admission criteria.

To address concerns regarding the merit of principal evaluations as a measure of teacher effectiveness it would be interesting to study how outcome measures for elementary students are related to the group assessment scores of teachers. This would be a challenging study to conduct since high quality, vertically scaled tests of

achievement would be necessary to do such a study correctly. No such tests currently exist in Utah. However, as such assessments become available; this may be the best test of whether or not group assessment is associated with successful teaching. High quality observation studies of teachers in classrooms using validated and reliable observation instruments may be another way to further assess the relationship of group assessment scores to successful teaching.

Elementary education coursework could include curriculum content that addresses characteristics, mannerisms, and attitudes of unsuccessful teachers based on elementary school principals' descriptions from this study. Coursework could also include curriculum intended to develop within elementary education majors personal characteristics seen by principals interviewed in this study as desirable in successful teachers. The effect of this personal characteristic specific curriculum on future teaching success could be studied.

Researchers may want to look more closely at high achieving students who score 1 or 2 on group assessment interviews. A future study could look at the possible interaction effect of high academic achievement with students scoring 1s or 2s on group assessment and later teaching success. It is possible that the same interaction effect seen in high achieving 3s and teacher success may be observed in high achieving 1s and 2s. Perhaps high achieving 1s and 2s could be admitted under an extended exceptions policy that currently allows only for admission of high achieving 3s.

Conclusions

This study will be helpful for institutions considering admission criteria changes in how teacher candidates are selected into teacher training programs. Institutions not currently considering admission criteria changes will be well served by selection committee members willing to review literature relative to strengthening the admissions process. Results from this study, when added to the body of existing literature on group assessment and college admission criteria, suggest teacher education programs may want to reexamine selection procedures that involve only measures of academic ability. Group interviews appear to be a better tool for identifying applicants who are more likely to succeed in the teaching profession.

Traditional academic admission criteria may eliminate from consideration student applicants whose nonacademic qualities would make them ideally suited to the teaching profession. Conversely, the same academic criteria may admit into teacher education programs students whose lack of leadership skills, inability to communicate, and demonstrated difficulty in working with others would suggest they are poorly suited to the teaching profession. Teacher candidate selection procedures should reflect our efforts to choose individuals who are most likely to be successful in the classroom rather than selecting students based solely on academic qualifications.

REFERENCES

- Allen, J. L., & Shaw, D. H. (1990). Teachers' communication behaviors and supervisors' evaluation of instruction in elementary and secondary classrooms. *Communication Education*, *39*, 308-322.
- Baskin, M.K., Ross, S.M., & Smith, D.L. (1996). Selecting successful teachers: The predictive validity of the urban teacher selection interview. *The Teacher Educator*, 32, 1-21.
- Beerens, D. (2000). *Evaluating teachers for professional growth*. Thousand Oaks, CA: Corwin Press.
- Braungart, R. G., & Braungart, M. M. (1995). Black and white South African university students' perceptions of self and country: An exploratory study. *South African Journal of Sociology*, 26(3), 77-87.
- Brown, R. B. (2007). A study on the admissions process to a teacher education program. *Dissertation Abstracts International*, 68(06) AAT NR27919.
- Byrnes, D. A., Kiger, G., & Shechtman, Z. (2003). Evaluating the use of group interviews to select students into teacher-education programs. *Journal of Teacher Education*, 54(2), 163-172.
- Cappelli, P. (1991). Assessing college education: What can be learned from practices in the industry? East Lansing, MI: National Center for Research on Teacher Learning. (ERIC Document Reproduction Service No. ED 340 754)
- Casey, C. E. (2005). The relationships among teacher education admission criteria, practice teaching, and teacher candidate preparedness. *Dissertation Abstracts International*, 66(6) AAT NR02733.
- Chiu, L. (1972). Application of self-anchoring scaling for study of teaching effectiveness. *Journal of Educational Researcher*, 65(7), 317-321.
- Crafts, J. (1991). *Using biodata as a selection instrument*. Washington, DC: ERIC Clearinghouse on Tests, Measurement, and Evaluation. (ERIC Document Reproduction Service No. ED 338 702)
- Cuban, L. (1988). *The managerial imperative and the practice of leadership in schools*. Albany: State University of New York Press.

- Danielson, C., & McGreal, T. L. (2000). *Teacher evaluation to enhance professional practice*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Demetrulias, D. M., Chiodo, J. J., & Diekman, J. E. (1990). Differential admission requirements and student achievement in teacher education. *Journal of Teacher Education*, 41(2), 66-72.
- Dunkin, M. J., Barnes, J. (1986). Research on teaching in higher education. In M.C. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp. 754-777). New York: Macmillian.
- Dybdahl, C. S., Shaw, D. G., & Edwards, D. (1997). Teacher testing: Reason or rhetoric. Journal of Research and Development in Education. 30(4), 248-254.
- Dye, D.A. (1990) Construct validity of the Individual Achievement Record, Phase 1: Development of a confirmatory model. Washington, DC: U.S. Office of Personnel Management. (ERIC Document Reproduction Service No. ED 327 578)
- Freeman, D. J., Martin, R. J., Brousseau, B. A., & West, B. B. (1989). Do higher admission standards alter profiles of entering teacher candidates? *Journal of Teacher Education*, 40(3), 33-41.
- Frase, L., & Hetzel, R. (1990). *School management by wandering around*. Lancaster, PA: Technomic.
- Hambleton, R. K., & Rogers, J. H. (1990). Advances in criterion-referenced measurement. In R. K. Hambleton & J. N. Zaal (Eds.), *Advances in educational and psychological testing: Theory and applications* (pp. 3-43). Boston, MA: Kluwer.
- Harvey, A. (1976). Risky and safe contraceptors: Some personality factors. *Journal of Psychology*, 92, 109-112.
- Hicken, S. (1992). The Pre-Professional Skills Test: how it affects teacher aspirants and predicts performance in teacher preparation programs. *The Urban Review*, 24(4), 253-261.
- Hilton, A.B., Budgen, C., Molzahn, A.E., & Attridge, C.B. (2001). Developing and testing instruments to measure client outcomes at the comox valley nursing center. *Public Health Nursing*, *18*(5), 327-339.
- Kilpatrick, F. P., & Cantril, H. (1960). Self-anchoring scaling, a measure of individuals' unique reality worlds. *Journal of Individual Psychology*, *16*, 158-173.

- Lawrence, A., & Crehan, K. D. (2001, April). A study on the validity evidence of the preprofessional skills test as a screening device for entrance into teacher education programs. Paper presented at the 2001 annual meeting of the National Council on Measurement in Education, Seattle, WA.
- Machell, J. (1995). The teacher evaluation environment: An examination of attributes related to teacher growth. *Journal of Personnel Evaluation in Education*, *9*, 259-273.
- Malvern, D. (1991). Assessing the personal qualities of applicants to teacher training. *Studies in Educational Evaluation*, *17*, 239-253.
- Marrow, J. E., Giley, W. F., Russell, T. E., & Strope Jr., J.L. (1985). Improving teacher effectiveness: Perceptions of principals. *Education*, 105(4), 385-390.
- McEvoy, G., & Beatty, R. (1989). Assessment centers and subordinate appraisals of managers: A seven-year examination of predictive validity. *Personnel Psychology*, 42, 37-52.
- Minor, L. C., & Onwuegbuzie, A. J. (2002). Preservice teachers' educational beliefs and their perceptions of characteristics of effective teachers. *Journal of Educational Research*, 96(2), 116-128.
- Mikitovics, A., & Crehan, K. D. (2002). Pre-professional skills test scores as college of education admission criteria. *The Journal of Educational Research*, 95(4), 215-223.
- Morris, E. (2000). Teachers' understanding of empathy and its application in the management of students' misbehavior in secondary classrooms. *Dissertation Abstracts International*, 61(5) 1803 (UMI No. 9975691).
- Petersen, G. J., & Speaker, K.M. (1996, February). *Bottom half of the pool: Who is admitted to teacher education?* A paper presented at the 19th Annual Meeting of the Eastern Educational Research Association, Boston, MA.
- Peterson, K. (2000). *Teacher evaluation: A comprehensive guide to new direction and practices.* Thousand Oaks, CA: Corwin.
- Porter, E., Lipson, L., Butler, O., & Andrade, M. V. (1992). *Development of a biographical data instrument*. Washington, DC: U.S. Department of Labor. (ERIC Document Reproduction Service No. 356 268)

- Pratt, D. (1977). Predicting teacher survival. *Journal of Educational Research*, 71, 12-18.
- Pratt, D. (1987). Predicting career success in teaching. *Action in Teacher Education*, 8(4), 25-34.
- Ralph, E.G., Kesten, C., Lang, H., & Smith, D. (1998). Hiring new teachers: What do districts look for? *Journal of Teacher Education*, 49, 47-56.
- Riggs, I. M., & Riggs, M. L. (1990, February). A test on the validity of selected predictors of student success in a teacher education program. Paper presented at the Annual Meeting of the American Association of Colleges for Teacher Education Chicago, IL. (ERIC Document Reproduction Service No. ED 324324)
- Rivet, A. K., Bruch, M.A., Haase, R. F., & Sturmer, P. J. (2004, May). Trait shyness, actual-ought self-discrepancy and discomfort in social interaction. *Personality & Individual Differences*, 36(7), 1597.
- Roose, D., Mitchell, S., & Rudman, M. K. (1985). Selecting the brightest and the best. *Phi Delta Kappan*, 67, 219-221.
- Sentz, E. I. (1991). Predicting success in student teachers from teacher perceiver screeners and pre-professional skills tests. (ERIC Document Reproduction Service No. ED 329517)
- Shechtman, Z. (1989a). The contribution of interpersonal behavior evaluation to the prediction of initial teaching success: A research note. *Teaching and Teacher Education*, 5, 243-248.
- Shechtman, Z. (1989b). The validation of a group assessment procedure for the selection of teacher-education candidates. *Educational and Psychological Measurement*, 49, 653-6660.
- Shechtman, Z. (1991). A revised group assessment procedure for predicting initial teaching success. *Educational and Psychological Measurement*, *51*, 963-974.
- Shechtman, Z. (1992a). A group assessment procedure as a predictor of on-the-job teacher performance. *Journal of Applied Psychology*, 77(3), 383-387.
- Shechtman, Z. (1992b). Interrater reliability of a single group assessment procedure administered in several educational settings. *Journal of Personnel Evaluation in Education*, 6, 31-39.

- Shechtman, Z, & Godfried, L. (1993). Assessing the performance and personal traits of teacher education students by a group assessment procedure: A study of concurrent and construct validity. *Journal of Teacher Education*, 44(2), 130-138.
- Shepard, L. A. (1997). The centrality of test use and consequences for test validity. *Educational Measurement: Issues and Practice*, 16, 5-8, 13, 24.
- Smith, H. A., & Pratt, D. (1996). The use of bio-data in admissions to teacher education. *Journal of Teacher Education*, 47(1), 43-52.
- Stronge, J. H., & Hindman, J. L. (2003). Hiring the best teachers. *Educational Leadership*, 60(8), 48-52.
- Torff, B., & Sessions, D. N. (2005). Principals' perceptions of the causes of teacher effectiveness. *Journal of Educational Psychology*, 97(4), 530-537.
- Toughill, E. (2001). Quality of life: The impact of age, severity of urinary incontinence and adaptation. *Dissertation Abstracts International*, 61(10), 5240. (UMI No. 9992365)
- Wayne, A. J., & Youngs, P. (2003). Teacher characteristics and student achievement gains: A review. *Review of Educational Research*, 73(1), 89-122.
- Westbrook, A. B. (1998). *Teacher selection practices in effective elementary schools which differ by community type and socioeconomic status context*. Unpublished doctoral dissertation, Louisiana State University, Baton Rouge.
- Xu, S., & Sinclair, R.L. (2002, May). *Improving teacher evaluation for increasing student learning*. Paper presented at the 2002 Annual Meeting of the American Educational Research Association, New Orleans, LA.

APPENDICES

Appendix A

Cover Letter for Teacher Participants

Cover Letter

Date	
Dear	

I would like you to consider taking part in a study that will investigate how admission criteria used to select students into the Utah State University Elementary Education Program relates to employment success in teaching. Specifically, this study will compare admission criteria data and student teaching scores to teaching success in the classroom. Participation in this study requires that written permission be obtained before any contact with your principal will be attempted. You do have the right to refuse to participate in the study.

Please realize that the focus of this evaluation is on the USU Elementary Education Program not on you as an individual. While I will be asking your principal to share his/her impressions of your performance as a teacher as compared to other teachers he/she has worked with, the data collected will not be reported back to the institution in any form that would identify any individual participant.

Any data related to your program admission or student teaching is held <u>confidential</u> at Utah State University, and will not be discussed with your building supervisor as part of this study.

If you are willing to participate in this study, which means you grant us permission to contact your supervisor in an effort to interview him/her regarding your success as a teacher, please sign this consent form and return it in the envelope provided.

Sincerely,

Appendix B

Informed Consent

Page 1 of 3

Date Created: 6/05/05

INFORMED CONSENT

A Study on the Group Assessment Student Selection Procedure at Utah State University

Introduction/ Purpose

LaVaun Faulk, a doctoral student in the Department of Education and Human Services at Utah State University, is conducting a research study to examine the relationship between admission criteria at Utah State University and teacher success in the classroom. You are being asked to participate in this study because you were admitted to the Elementary Education program at Utah State University after a group interview became part of the required application process.

Procedures

If you agree to participation in this study, your principal/ immediate supervisor will be contacted for a telephone interview. During the telephone interview he/she will be asked to describe the qualities of effective and ineffective teachers. He or she will then be asked to evaluate your performance as a teacher given the descriptors he of she has provided. You will not be asked to participate in any other way during the study except that permission must be obtained from you before your supervisor can be contacted.

New Findings

During the course of this study, you will be informed of any new findings such as changes in risks or benefits to participation in the study. You will be informed of anything that might cause you to reconsider study participation. If new information is obtained that is relevant or useful to you, or if procedures and/or methods were to change at any time, your consent to continue study participation will need to be obtained again.

Risks

Given that principals regularly evaluate teachers in their schools, no additional risk is anticipated. Evaluations of any kind, however, may increase awareness of a teacher's effectiveness in the classroom.

Unforeseeable Risks

This is a study based on survey research, there could be some unknown risks, but any risks associated with this study would be considered minimal.

INFORMED CONSENT

A Study on the Group Assessment Student Selection Procedure at Utah State University

Benefits

There are likely no direct benefits to you from study participation. The investigator and Utah State University, however, may learn more about the effectiveness of their admission procedures. This knowledge may help Utah State University and other universities select teacher candidates who will be more effective teachers in the classroom setting.

Explanation and offer to answer questions

LaVaun Faulk has explained (by letter) this study to you and answered your questions. If you have other questions or research-related concerns, you may contact LaVaun Faulk at telephone 801-768-8280 (home) or 801-756-8537 (work). Or, you may contact Professor Deborah Byrnes, principal investigator, at 435-797-0396.

Extra Costs

There will be no costs to study participation.

Voluntary nature of participation and right to withdraw without consequence Participation in the study is entirely voluntary. You may refuse to participate (by disallowing the principal interview or the analysis of data subsequently generated by the interview) without consequence. You may be withdrawn from this study without your consent by the investigator if you do not meet participant criteria. (Examples of this would be if you are no longer employed by the district, or you are employed by the district in a position outside of the classroom.)

Confidentiality

Only the investigator and his doctoral committee chair will have access to the data, and it will be kept in a locked file cabinet in a locked office at Utah State University. All names will be removed from principal interview protocols and replaced with code numbers. The code number sheets will be kept separately from the interview protocols. The data will be kept by Utah State University indefinitely and may be reviewed as part of a future study to improve the quality of teacher candidates graduating from Utah State University

IRB Approval Statement

The Institutional Review Board (IRB) for the protection of human participants at USU has reviewed and approved this research study.

Page 3 of 3 Date Created: 6/05/05

INFORMED CONSENT

A Study on the Group Assessment Student Selection Procedure at Utah State University

Copy of Consent	You have been given two copies of this Informed Consent. Please sign both copies and retain one copy for your files. Send the other copy in the self-addressed stamped envelope provided.		
Investigator Statement	"I certify that this survey research study has been explained to the individual by me through a letter accompanying this Informed Consent participation request, that the individual understands the nature and purpose of the study as well as possible risks and benefits associated with study participation, and any questions that have been raised have been answered."		
Signature of Principal Investigator			
investigator	Deborah Byrnes, Principal Investigator		
	Date		
	435-797-0396		
Signature of Subject			
	Subject's Printed Name Date		
	Subject's Signature		

Appendix C

Self-Anchoring Scale

Principal Self-Centering Teacher Effectiveness Scale

Self-Anchoring Scale Script

1.	On the top of a blank sheet of paper please write down a series of words and phases that describe a "Star" teacher. By "Star" I mean a teacher who is highly successful, an exceptional teacher. As you write down these words, tell me what you are writing so that I can also record them.
2.	Now, at the bottom of your paper write down words that describe a teacher whom you would consider to be unsuccessful. As you write down these qualities of an unsuccessful teacher, tell me what you are writing so that I can write them down as well.
3.	Now that you have written these descriptions, place a 10 under the description of a "Star" teacher and a 1 above the description of an "Unsuccessful Teacher. Draw a line that extends from the 10 to the 1.
4.	You have now created a scale from 10 to 1 that can be used to evaluate teachers at your school. A teacher who is an exceptional "Star" teacher would receive a 10. A teacher who is not successful at his or her profession would receive a 1. Most teachers will fall somewhere between 1 and 10.
5.	On the scale of 1 to 10 that you have created, where would you say the average teacher at your school would fall? (Have them give you a number designation.)
6.	Now, what rating on your scale of 1 to 10 would you give (USU graduate)?
7.	Next, what type of rating do you think the average provisional teacher would receive on your scale?

8.	low, I would like to ask you about three "specific qualities" as they relate to this USU graduate.
	How would you evaluate this graduate in terms of interpersonal skills with students, parents, and colleagues? Is she/he average for your faculty? Below average? Or, above average?
	How strong is this graduate in terms of being able to effectively communicate with students, parents, and colleagues? Is she/he average for your faculty? Below average? Or, above average?
	Lastly, how would you evaluate this graduate in terms of leadership skills in your school? Given other teachers at your school, does he or she demonstrate average leadership skills? Below average leadership skills? Or above average leadership skills?

CURRICULUM VITAE

LAVAUN GENE FAULK

Academic Appointment

Educator K-8 August 1983 State of Utah Teaching Certificate

Education

<u>Year</u>	<u>Degree</u>	<u>Discipline</u>	<u>Institution</u>
2008	Doctorate of Education	Education	Utah State University
	Curriculum and Instruction		Logan, Utah
1987	Master of Education	Educational	Brigham Young University
		Administration	Provo, Utah
1983	Bachelor of Science	Elementary	Brigham Young University
		Education	Provo, Utah

Certification

Year	<u>Title</u>	<u>Institution</u>
1987	Basic Supervisory/Administrative	Utah State Office of Education
1983	Standard K-8 Teaching Certificate	Utah State Office of Education

Professional Experience

<u>Year</u>	<u>Title</u>	<u>Institution</u>
1998-present	3-6 Grade Art Specialist	Highland Elementary School
1995-1997	3-6 Grade P.E. Specialist	Highland Elementary School
1993-1994	5/6 Grade Science Specialist	Highland Elementary School
1990-1992	5/6 Grade Social Studies Specialist	Highland Elementary School
1987-1989	5/6 Grade P.E. Specialist	Highland Elementary School
1983-1986	6 th Grade teacher (traditional setting)	Highland Elementary School

Professional Activities

- Arts Representative 2006-present
- Mentor Coordinator 2005-present
- First Responder CPR/First Aid 1996-present
- Alpine Education Association/ Board of Directors 1990-1993
- National Education Association/ Delegate 1993
- Alpine Education Association/ Faculty Representative 1988

Other Professional Experience

<u>Year</u>	<u>Title</u>	<u>Institution</u>
1990-present	General Contractor B-100	State of Utah DOPL
1982-1987	Psychiatric Technician	Utah State Hospital

Presentations/Publications

• Presenter: Art in the Sun Conference St. George, UT 2004

Professional Organizations

- National Education Association 1983-present
- Alpine Education Association 1983-present
- National Art Education Association 1999-present

Continuing Education

- Doctoral Student: Utah State University, Logan, UT 2002-current
- National Art Education Association/ National Conference: New York, NY 2007
- National Art Education Association/ National Conference: Washington, DC 2001
- Art in the Sun Conference: St. George, UT 1999-2002
- National Art Education Association/ National Conference: Chicago, IL 1999