**Southeastern University**
**FireScholars**

College of Education

Spring 5-2017

# A PREDICTIVE STUDY OF PRE-SERVICE TEACHERS AND SUCCESS IN FINAL STUDENT INTERNSHIP

Karen M. Ingle
*Southeastern University - Lakeland*

Follow this and additional works at: https://firescholars.seu.edu/coe

 Part of the Educational Methods Commons, Educational Psychology Commons, Elementary Education Commons, and the Secondary Education Commons

Recommended Citation
Ingle, Karen M., "A PREDICTIVE STUDY OF PRE-SERVICE TEACHERS AND SUCCESS IN FINAL STUDENT INTERNSHIP" (2017). *College of Education*. 9.
https://firescholars.seu.edu/coe/9

This Dissertation is brought to you for free and open access by FireScholars. It has been accepted for inclusion in College of Education by an authorized administrator of FireScholars. For more information, please contact firescholars@seu.edu.

# A PREDICTIVE STUDY OF PRE-SERVICE TEACHERS AND SUCCESS IN FINAL STUDENT INTERNSHIP

By

KAREN M. INGLE

A doctoral dissertation submitted to the
College of Education
in partial fulfillment of the requirements
for the degree Doctor of Education
in Organizational Leadership

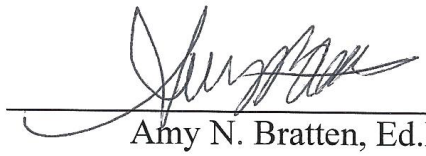
Southeastern University
April, 2017

A PREDICTIVE STUDY OF PRE-SERVICE TEACHERS AND SUCCESS IN FINAL STUDENT INTERNSHIP

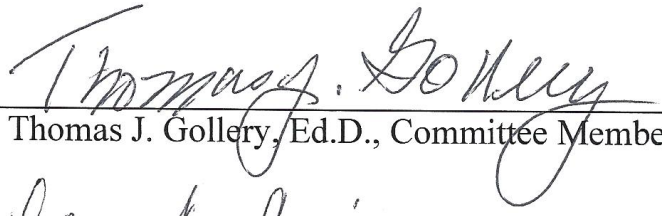
by

KAREN M. INGLE

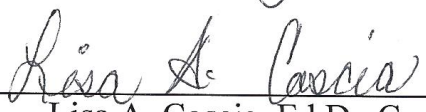
Dissertation Approved:



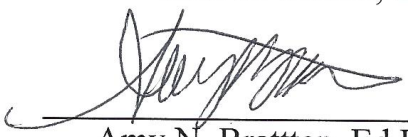
Amy N. Bratten, Ed.D., Dissertation Chair



Thomas J. Gollery, Ed.D., Committee Member



Lisa A. Coscia, Ed.D., Committee Member



Amy N. Brattten, Ed.D., Dean, College of Education

# DEDICATION

Accomplishments in life are seldom achieved alone, although the efforts may be represented by the hard work of one individual. One's success is often the results of the influences of many who have encouraged, invested, and sacrificed to help one attain a life goal or achievement. My doctoral work and journey is not just the result of my dedication to an educational program but has been made possible because of the people God has placed in my life. First, I want to thank my loving parents for their influence on my life that will last a lifetime. They always gave me words of wisdom, the gift of encouragement, and the power of prayer. Next, I want to thank my incredible husband and lifetime partner for inspiring and empowering me to follow my divine design. I thank my children for their patience and support in enduring their mother's enthusiasm to share about her latest research or the completion of one more paper or project. I also thank my wonderful mother-in-law who has been a voice of encouragement throughout my doctoral venture. Most important, I want to thank God for giving me passions and dreams to fulfill along with the abilities to succeed.

# ACKNOWLEDGMENTS

First, I would like to acknowledge my dissertation committee and thank Dr. Bratten for her leadership, insight, and knowledge in chairing my committee, Dr. Gollery for his methodological analysis expertise, and Dr. Coscia for her supportive words of encouragement and final edits. I also would like to thank Dr. Anderson, Dr. LeBlanc, Dr. Henderson, Dr. Hawkins, Dr. VanWhy, Dr. Roth, Dr. Smith, and Dr. Harris for challenging me academically to achieve a higher level of academia. Lastly, I would like to acknowledge my colleagues who inspired me through each and every course. It has been a privilege to be in the doctoral program with each of you.

ABSTRACT

Student teaching provides the final pre-service clinical teaching experience of an initial teacher preparation program. Research that specifically studies the pre-service student teacher and predictive factors of student teaching is limited. Identifying predictive factors that contribute to the success of student interns' student teaching experience is a valuable tool for initial teacher preparation programs. The research represents a predictive study of 21 pre-service teachers who participated in student teaching. The study assessed grade point average (GPA) and emotional intelligence as predictive factors of student teaching success. The researcher analyzed data of GPAs and Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) scores of student teachers in relationship to the student intern evaluations. Linear multiple regression was utilized to determine if GPA and emotional intelligence revealed any correlation to the final internship evaluations and could be considered predictive factors of student teaching success. GPA was identified as a predictive factor of student teaching success. Initial teacher preparation programs should consider students' GPAs as a valuable predictor of success in student teaching.

Key Words: College of Education; cooperating teacher; Coordinator of Clinical Education in the College of Education; emotional intelligence (EI); emotional quotient (EQ); Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT); student teacher; student intern; pre-service teacher; university supervisor

TABLE OF CONTENTS

Dedication……iii

Acknowledgments……...iv

Abstract……...v

Table of Contents……vi

Chapter Page

I. INTRODUCTION.....1

Background and Review of Relevant Literature.....1
Problem Statement.....3
Professional Significance.....5
Research Questions……5
Research Hypotheses.....6
Methods……6
Limitations and Delimitations.....9
Definitions of Key Terms.....10
Chapter Summary.....11

II. REVIEW OF LITERATURE.....12

Introduction.....12
GPA.....12
Predictor of academic success.....13
Possible factors of GPA.....13
Pre-service teacher.....15
GPA and career.....16
Emotional Intelligence.....17
History of emotional intelligence.....17
Continuing research and development of emotional intelligence.....19
Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT).....24
Creators of the MSCEIT……...24
Development of the MSCEIT……...25
Administration of assessment……...26
Reliability and validity ……27
Possible limitations……...27
Current use of assessments……...28
GPA and Emotional Intelligence Correlations……..29
Pre-service and Novice Teachers……... 31
Teacher Performance and Emotional Intelligence Training……...…….... 33

Emotional Intelligence and Job Performance……34
Florida Department of Education……...36
Chapter Summary……...39

III. METHODOLOGY .....40

Introduction.....40
Context.....40
Participants.....41
Initial Teacher Preparation Program.....42
Instruments.....43
Data Collection……...46
Procedures……..46
Data Analyses……47
Implied Limitations of the Study……....49
Results……....49
Chapter Summary……...50

IV. RESULTS.....51

Introduction.....51
Preliminary Analyses.....51
Primary Demographics .....52
Missing Data .....52
Internal Consistency of Ratings across Domains.....52
Essential Descriptive Analyses .....53
Research Questions……54
Supplementary Follow-up Analysis……..……59
Chapter Summary……..59

V. DISCUSSION .....61

Overview of Study .....61
Review of Problem Statement .....63
Summary Results .....63
Discussion and Implications .....64
Recommendations.....66
Conclusion .....67

REFERENCES .....69

APPENDICES .....78

# I. INTRODUCTION

This dissertation represents research of a predictive study of pre-service teachers and success in the final internship of an undergraduate-level initial teacher education program. The study focused on university-level education students completing the last semester of the degree program and participating in the student teaching internship. Research assessed predictive factors of student teachers and the correlation of student teaching evaluations.

The study is outlined in the first chapter, which covers the background and review of the study, describes the problem statement, introduces the research questions, explains the professional significance, and provides an overview of the methodology. The chapter addresses limitations and delimitations of the study. The conclusion of the chapter includes definitions of key terms.

## Background and Review of Relevant Literature

University-level education programs include field experiences throughout students' education. The final field experience, often referred to as student teaching or student internship, places students in the classroom full-time for a specified time period. Student teaching provides the final pre-service clinical teaching experience. Continual academic classroom preparation, field study experiences, and assessing students' potential for success in student teaching are all ongoing processes throughout education programs. Identifying predictive factors that contribute to the success of students during the student teaching experience is a valuable tool in education

programs. Universities develop educational programs that teach content, methods, instructional design and curriculum, classroom management, and provide classroom teaching experiences. Producing future successful teachers is the final outcome of university educational programs. There are few research studies that identify key predictive factors that directly predict the success of student teachers in the classroom. Many studies focus on analyzing the success of the first year teacher, but research that specifically studies the pre-service student teacher is limited.

Universities use a combination of a student's grade point average (GPA) and academic performance of either the American College Testing (ACT) or Scholastic Aptitude Test (SAT) assessment for college acceptance as predictors for college success. GPA is considered a predictor for college academic success. A specific GPA is often used as a requirement for entrance into a College of Education program within a university. College of Education initial teacher preparation programs usually require students to pass exams for state teacher certification. One study researched predicting pre-service teacher performance based on state teaching tests and student GPAs. The results of the study indicated that GPA was a better predictor of pre-service teaching performance than state licensure tests (D'Agostino & Powers, 2009).

Current research has identified emotional intelligence as a key component to success in the workplace. Results of research studies indicate varied levels of importance of emotional intelligence as a predictor of career success. Some studies indicate emotional intelligence is extremely important for career success, while other studies indicate little evidence that emotional intelligence is a factor to career success.

Valuable research identifying key factors of pre-service teachers would be helpful in preparing college education students for student teaching. Identifying key predictors for success

in student teaching would distinguish which students are prepared for a successful student internship experience and which students may need further preparation or possibly need to choose another career. GPA is considered a predictor for college success, and current emotional intelligence research points to advantages that emotional intelligence can provide in the workplace. However, research specific to addressing emotional intelligence and college cumulative GPAs as predictors of success of student internship and the relationship to student teaching evaluations is limited. One study of 826 prospective teachers indicated that emotional intelligence was a predictor of success in teaching (Modupe, 2010). Another study of 160 teachers indicated that beginner teachers needed to improve in several areas of emotional intelligence (Justice & Espinoza, 2007). Therefore, emotional intelligence research could improve the pre-service teacher or beginning teacher experience. There is a need for more research in the area of emotional intelligence and the relationship to successful student teachers.

**Problem Statement**

The purpose of this predictive study was to examine possible factors related to pre-service teachers and success in the final internship. The study researched students in a College of Education initial teacher preparation program at a university in central Florida. College of Education programs at the university-level strive to produce successful teachers. Student teaching is the last phase of preparation for full-time teaching, so it is extremely important that students are adequately prepared for the clinical experience. Leading up to the semester of student teaching, the College of Education students have participated in three field studies in which they have gained valuable experience in a classroom setting (Florida Southern College, 2016; Southeastern University, 2016).

In Field Study 1, College of Education students are placed in a K-12 classroom within the local school district for approximately 30 hours a semester. The students experience multiple opportunities to observe in the K-12 setting and to participate in tasks that are directly aligned to Florida Educator Accomplished Practices and Competencies and Skills for content-specific certification. Florida Educator Accomplished Practices is a guide of Florida's core standards for effective teachers of public school educators and initial teacher preparation programs; Florida Educator Accomplished Practices states what an educator should be able to know and do (Florida Department of Education, 2017c). Field Study 2 provides College of Education students more opportunities in a local school classroom to observe and complete specific tasks of Florida Educator Accomplished Practices and Competencies and Skills such as using data to develop and plan lessons, parent communication, and classroom management. The course requires approximately 45 hours of classroom observation and participation (Florida Southern College, 2016; Southeastern University, 2016). In Field Study 3, College of Education students complete approximately 60 hours participating in a K-12 setting. More opportunities are provided to complete tasks directly associated with Florida Accomplished Practices and Competencies Skills. Students teach classroom lessons across curriculum, evaluate and analyze data for lesson preparation, develop parent communication skills, and implement classroom management procedures (Florida Southern College; 2016 Southeastern University, 2016).

Each field study builds upon the skills established from the previous field study in preparation for full-time student teaching. The field study experiences provide the College of Education students opportunities to build and develop skills needed for the student internship along with the education major courses and state certification exams. The institution is intentional with curriculum mapping to ensure prepared candidates; however, occasionally, an

intern may struggle in the internship or will require additional time to meet and fulfill the requirements for student teaching. Identifying predictive factors of success in student internship could detect students who may be at risk during the intern process despite the field study experiences, courses for education majors, and state certification exams prior to student teaching; therefore, a private university in central Florida was interested in identifying predictive factors that would indicate student internship success of their students.

**Professional Significance**

The study evaluated the predictive variables of GPA and emotional intelligence in correlation to student teaching evaluations used as a measure of success throughout the teacher preparation program. Recognizing predictive factors of success in student teaching would strengthen the education program and the success rate of student teachers. Because the final internship mirrors the initial job placement for a new teacher, a higher rate of successful student interns should lead to a higher rate of successful teachers in the workplace. Identifying predictive factors of success in student teaching could also indicate the necessity to improve specific areas of education and training in teacher preparation programs to better prepare students for the student internship. Additionally, the results of the study could be used to train administrators to know what to look for in hiring effective teachers. Also, teacher training through seminars or workshops focused on emotional intelligence could increase teacher performance (Hen & Sharabi-Nov, 2014; Vesely, Saklofske, & Leschied, 2013).

**Research Questions**

The three research questions investigated grade point average (GPA) and emotional intelligence (EI) as predictors of success in student teaching. The possible predictive factors were assessed and analyzed by linear multiple regression.

1. Of GPA and EI, which represents the most robust predictor of student teaching summative evaluation success?

2. Of the four domains inherent in the student teaching evaluation, which represents the most statistically significant predictor of student teaching success?

3. Of GPA and emotional intelligence, which represents the most robust predictor within each of the four domains?

**Research Hypotheses**

1. $H_a$ – Emotional intelligence will represent the most statistically significant predictor of student teaching summative success.

2. $H_a$ – Domain 2: Instructional Delivery and Facilitation will represent the most statistically significant predictor of student teaching.

3. $H_a$ – GPA will represent the most robust predictor of Domain 1: Instructional Design, Lesson Planning and Assessment.

3. $H_b$ – Emotional intelligence will represent the most robust predictor of Domain 2: Instructional Design and Facilitation.

3. $H_c$ – Emotional intelligence will represent the most robust predictor of Domain 3: The Learning Environment.

3. $H_d$ – Emotional intelligence will represent the most robust predictor of Domain 4: Professional Responsibility and Ethical Conduct.

**Methods**

The researcher conducted a study of 21 participants who were students majoring in education at a private university located in Central Florida. The College of Education students completed their final semester as education majors in the teacher preparation program which

included full-time student teaching. The local public school district and state department have established specific guidelines and requirements for student teaching and the university complies with the regulations. The participants included three male students and 18 female students. The education concentrations of the student interns consisted of 11 elementary education students and 10 secondary education students including music, biology, math, English, and social studies.

The 21 university-level education major students were enrolled in the student teaching course, which was a 12-credit course. The course included written assignments, required attendance to five College of Education seminars, and full-time student teaching for 10-15 weeks. Students were assigned to student teach in local public and private schools. During the internship, the student teachers were observed and evaluated four times by a university supervisor. The College of Education at the university of the study works in collaboration with the local public school district and Florida Department of Education. Each of the student interns was assigned to a classroom and a teacher who was a credentialed clinical educator. To be a clinical educator, the classroom teacher has been trained through the Clinical Educator Training program established by the state of Florida to supervise, mentor, and train student teachers (Florida Department of Education, 2017a).

State statute requires at least 10 weeks of supervised student teaching; and the teacher preparation program at the university in central Florida requires the student teachers to intern for 70 school days but will reduce the internship to a minimum of 50 school days if the intern is offered and accepts a teaching job. Early releases from internship must follow a strict protocol and are only made available to interns who have shown excellence in the field and the profession through clinical experiences and written assignments (M. Owen, personal communication, August 8, 2016).

The College of Education conducted a pre-meeting before the semester of student teaching called the Big Reveal. At the Big Reveal, students were provided information about their student internship placement, expectations, and requirements about the student teaching course. In preparation for student teaching, the student interns attended the first seminar of the semester for a more comprehensive look at task requirements and further information about student teaching. The first part of the seminar included a session about emotional intelligence and its application to teaching. Students took the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) from Multi-Health Systems Assessments (MHS). MHS scored the assessments and provided detailed personal summary reports for each student. Student data from the MSCEIT were collected by the researcher. College cumulative GPAs from the student interns were collected by the researcher from the College of Education. Throughout the semester, university supervisors observed and evaluated interns four times using *Form H* (see Appendix A). Numerical evaluation data were recorded on *Form K* (see Appendix B), and *Form H Data Collection* (see Appendix C) documented the cumulative summative evaluation data for the study analyses. Separate results of the student intern evaluation scores of the four domains were also recorded (see Appendix D).

The four observations were formative assessments and provided data for *Form H* (see Appendix A). The evaluation form, Teacher Evaluation Essential Performance Criteria (EPC) Rating Rubric, used for the assessments was adapted from the local public school district (Polk County Public Schools, n.d.c). The rubric covered 23 EPCs, and the evaluation form was separated into four specific domains with indicators: Domain 1 assessed Instructional Design, Lesson Planning and Assessment; Domain 2 evaluated Instructional Delivery and Facilitation; Domain 3 assessed The Learning Environment; and, Domain 4 evaluated Professional

Responsibility and Ethical Behavior.

Domain 1, Domain 2, and Domain 4 had six indicators of assessments, and Domain 3 had five indicators that were part of the student teachers' evaluation forms. The indicators were scored according to a zero to three-point scale (Polk County Public Schools, n.d.c). The final student evaluation forms with the four observations were submitted to the Coordinator of Clinical Education in the College of Education. A summative assessment of the four evaluations established a composite score. The researcher analyzed the data collected by the Coordinator of Clinical Education for the sample of pre-service teachers in the study.

The researcher analyzed the data from student GPAs and the MSCEIT along with the final internship evaluations. Linear multiple regression was utilized to determine if GPA and emotional intelligence, based on the MSCEIT results, revealed any correlation to the final internship evaluations and could be considered predictors of student success during the student internships. Statistical Package for the Social Science (SPSS) was used to analyze the data and to provide statistical results of the study.

**Limitations and Delimitations**

Twenty-one student teacher interns participated in the study. The sample included both elementary and secondary education majors. Grade inflation could be a limitation when collecting GPA data. However, in the study, the effects of grade inflation would likely not be an advantage or disadvantage for students because the sample consisted of pre-service teachers from the same university in the same teacher education program. Transfer students could be considered a limitation to grade inflation.

The student evaluations were conducted by various supervisors because it would not be feasible for one individual to supervise and evaluate every student teacher in one semester during

the internships. Different university supervisors completing student intern evaluations could affect inter-rater reliability and the lack of the program's calibration work among raters thus creating limitations to the study. All university supervisors used the same evaluation forms and scoring procedures, and they received the same training as to how to evaluate the student teachers during observations using *Form H* (see Appendix A) for the evaluation. Evaluations could reflect biases from the diverse supervisors. Supervisors could also interpret the different domain indicators and scoring terminology different than other supervisors.

**Definitions of Key Terms**

**College of Education** refers to the major education program for students desiring degrees in elementary and secondary education. The College of Education is a college within a university.

**Cooperating teacher** is the classroom teacher who supervises a student teacher during the student teaching experience. The cooperating teacher is a clinical educator, who has been trained by the Clinical Educator Training program established by the state of Florida to supervise, mentor, and train student teachers.

**Coordinator of Clinical Education in the College of Education** is the university professor who oversees the student teaching program and student data collected from student teaching in the College of Education.

**Emotional Intelligence (EI)** refers to emotional intelligence and will be used throughout the paper when the term is referred to in the context of data or a model.

**Emotional Quotient (EQ)** is sometimes used for emotional intelligence.

**Mayer-Salovey-Caruso Emotional Intelligence Test** (**MSCEIT)** is the name of the Mayer-Salovey-Caruso Emotional Intelligence Test that was used in the study to assess the emotional intelligence of the student interns.

**Student teacher, student intern,** and **pre-service teacher** are used interchangeably in the study to represent the College of Education university student who is student teaching full-time in a local school setting under the supervision of a classroom cooperating teacher and overall supervision of the university supervisor.

**University Supervisor** is the university representative who evaluates and oversees a student teacher during the student teaching semester. The university supervisor has been trained by the Clinical Educator Training program established by the state of Florida to supervise and train student teachers.

## Chapter Summary

The chapter established the purpose and professional significance of the study. Determining predictive factors of success for student teachers offers benefits to college education programs that strive to produce successful student interns and teachers. Research questions were identified for three main topics of the study. From the three different areas, seven specific questions were identified and hypotheses stated. The foundation of the research method was addressed. Limitations and delimitations of the research study were stated. The chapter concluded with a list of definitions of key terms relevant to the study.

# II. REVIEW OF LITERATURE

## Introduction

The chapter outlines a review of literature relevant to the study of predictors of success in student teaching internship. The chapter begins with reviewing the two predicting factors researched in the study. First, literature about grade point average (GPA) is reviewed. Next, the topic of emotional intelligence (EI) is discussed. The Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) as an assessment instrument is reviewed. Literature showing a correlation or lack of correlation between GPA and emotional intelligence is addressed. Studies of pre-service teachers and job performance are examined. The chapter continues by providing literature about the Florida Department of Education requirements for teacher preparation education programs and student teaching. In conclusion, the chapter reviews the student teacher evaluation form used in the study to evaluate the student interns.

## GPA

High schools and post secondary institutions use GPAs to assess academic performance. Grades in the United States are based on a numeric percentage, a letter grade, and 0 to 4.00 grading system (Kumar, 2010). In simple terms, a GPA is the average of the total number of grade points earned divided by the total number of credits attempted (Grade Point Average, n.d.).

**Predictor of academic success.** Studies have been conducted about GPA researching various relationships to academic success and predicting academic performance. Students' GPAs are commonly used as predictors of academic success. The college admission process usually utilizes a student's GPA as a predictor of future academic success. Research sometimes indicates conflicting results as to the importance of GPA and predicting future student success. GPA is used to assess the first year college student in relationship to academic success and continued success. One study compared the significance between college entrance exams like the ACT (American College Testing) and GPA; the results indicated that GPA was a better predictor of academic success than the ACT exam (Sawyer, 2013). Sawyer (2013) discussed the success rate of first year college students as a precursor to continued long-term academic success. University College of Education programs include a list of student requirements for entering education programs and for completion of programs which usually includes GPA requirements for the education students.

**Possible factors of GPA.** There are several different factors used in identifying academic success in relationship to GPA. Personality factors have been researched in academic success and correlation to GPA. A study of post-graduate secondary students by Kappe and van der Flier (2012) acknowledged intelligence as only a small factor of academic success, but identified GPA as one of the main factors of academic success. The study showed a strong correlation between conscientiousness and intrinsic motivation and its validity to GPA; conscientiousness accounted for the strongest and most consistent predictor of GPA (Kappe & van der Flier, 2012). The study findings also indicated that intrinsic motivation had twice as much variance in GPA than intelligence (Kappe &van der Flier, 2012). Kappe and van der Flier (2012) stated, "Conscientious individuals perform better because they persevere longer and are

more organized than their counterparts" (p. 615). The work by Kappe and van der Flier (2012) further identified relationships between the factors of perseverance characteristic traits and organization skills affecting GPA.

Noftle and Robins (2007) researched personality predictors of academics in relationship to GPA and Scholastic Aptitude Test (SAT) scores. Noftle and Robins stated in their research that conscientiousness had a robust association with college GPA; the research further indicated that the individuals who increased conscientiousness during college, also were more likely to achieve higher GPAs (Noftle & Robins, 2007). Conscientiousness influences GPA in college and is supported by literature.

In another study at a Georgia university, 166 early childhood education majors participated in the study focused on GPA in relationship to academic motivation and academic self-regulatory learning (Cetin, 2015). Cetin (2015) defines self-regulatory as "the process of transforming one's intelligence into academic skills" (p. 95). Student academic motivation and self-regulation of the university early childhood education majors did not indicate a correlation to GPA (Cetin, 2015). Some studies do not find significant correlations of GPA to motivation and self-regulation factors.

Hannon (2014) studied predictors of college success focusing on GPA and correlations to social/personality and learning cognitive measures. The study included 348 European-American and Hispanic university students. The findings of the study identified three areas from learning cognitive abilities and social-attitudinal beliefs that had the greatest effect on GPA; academic self-efficacy, epistemic belief of learning, and high-knowledge integration influenced GPA the most (Hannon, 2014). Several factors can influence student GPAs.

Studies of university students focused on five personality traits, which were emotional stability, extraversion, openness to experience, agreeableness, and conscientiousness; and, the study indicated that conscientiousness and motivation correlated with university GPA (Richardson & Abraham, 2009; Salgado & Táuriz, 2012). Conscientiousness demonstrated a significant predictor of GPA and job performance (Richardson & Abraham, 2009; Salgado & Táuriz, 2012). The study by Richardson and Abraham (2009) examined conscientiousness and motivation which indicated a correlation with university GPA. The study by Richardson and Abraham (2009) supported the findings of O'Connor and Paunonen (2007) which indicated that conscientiousness was the strongest and most consistent trait that relates to academic success.

Research by Horton and Snyder (2009) supported the concept that overall wellness based on seven distinct dimensions influenced college students' academic performance and GPA. The dimensions focused on the seven areas of physical, occupational, environment, social, emotional, intellectual, and spiritual; the results revealed academic success measured by GPA is achieved by a balance of wellness represented in the seven dimensions (Horton & Snyder, 2009). The implications were that higher GPAs reflected students who had a balance in their personal lives that resulted in greater academic performance (Horton & Snyder, 2009).

**Pre-service teachers.** Predicting teacher performance is important at different levels and environments of the education field. In the university setting, identifying student teaching predictors of success in student teaching is important to the education teacher preparation program. If predictors can be identified, then initial teacher preparation programs can be strengthened by placing importance on the predictive sources and helping students strengthen these areas. One study researched GPA and pre-service test scores as predictors of teaching performance; the study indicated that GPA was a better predictor of teacher performance and that

students' GPAs should be considered more in the hiring process than test scores used for the licensure process (D'Agostino & Powers, 2009). GPA has been identified in some sources as being a predictor of student teaching.

Another study of secondary math education students indicated that students who completed the teaching program were students who entered the program with higher GPAs (Sinicrope, Eppler, Preston & Ironsmith, 2015). College GPA was considered a predictor of job performance, especially for workers in the early years of their careers (Lavigna,1992). Many research studies concluded that GPA influences job performance and can be used as a valid predictor of job performance.

**GPA and career.** A study of 99 public school superintendents in Kentucky identified teacher characteristics valued in the application process of hiring teachers. Although GPA made the list, it was at the bottom of the list (Stulz, 2015). One consideration of the cumulative GPA not being effective was given by Dye and Reck (1989) who stated in their research that the GPA from major courses would be a greater representation of the skills and abilities needed in a specific career than a four-year GPA. The study findings placed greater importance on university grades from courses aligned with the students' majors instead of the overall cumulative GPA (Dye & Reck, 1989).

Other studies confirm the idea that college grades show a significant statistical relationship to job performance. Research from Wise (1975) indicated that not only was there a strong relationship between college grades and job performance, but greater salary increases were influenced by the relationship. A United States Military study reported that grades significantly helped predict the success of officers (Butler, 1976). Research indicated that college GPAs can predict professional success.

The study by Willoughby, Lee, and Beil (2013) examined GPAs of college students from a two-year turfgrass management program and the level of success achieved after five or more years in the established career. Higher levels of success for the program would be indicative of a management position or business owner. The results indicated that college graduates with higher GPAs were not any more successful than graduates with lower GPAs (Willoughby, Lee, & Beil, 2013). The study negated college GPA as a predictor of future job success.

## Emotional Intelligence

Through the years, the definition of emotional intelligence has continued to develop and evolve. Originally, the concept of emotional intelligence identified that some individuals possessed a greater ability to reason and use emotions more effectively than others (Mayer, Salovey, & Caruso, 2008). Salovey and Mayer (1990) defined emotional intelligence as "the subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (p. 189). Daniel Goleman (2006a) identified and defined emotional intelligence and its significance to success in relationships, work, and health. Goleman's work drew attention to the term "emotional intelligence". Over the years, the definitions of emotional intelligence have expanded and offered definitions that differ by various researchers and authors.

**History of emotional intelligence.** Psychology first recognized the study of intelligence and emotions as separate areas of research during the time period of 1900-1969 (Mayer, Salovey, & Caruso, 2002). The idea of researching these two areas presents the dilemma of which came first the chicken or the egg (Mayer et al., 2002). Ekman (2006) researched emotions and suggested that emotions have progressed and evolved; he also established universal similarities in facial perceptions, as well as, indications that facial perceptions have cultural differences in

assessing emotions. During the time period of 1970-1989, researchers began to look at the integration of intelligence and emotions (Mayer et al., 2002). The term emotional intelligence was used, however, it was not officially defined. The following years from 1990 to 1993, Salovey and Mayer (1990) identified emotional intelligence and established a theory and model defining emotional intelligence.

In recent years, a greater emphasis has been placed on identifying the importance of emotional intelligence and the role it plays in everyday life situations and circumstances. Peter Salovey and John Mayer have been using the term "emotional intelligence" since 1990 and defined emotional intelligence as "the subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (Salovey & Mayer, 1990, p. 189). Much of this definition was based on the foundation of social intelligence, personal intelligence, and interpersonal intelligence (Salovey & Mayer, 1990). The research findings focused on people's abilities to appraise and communicate emotions and how to use emotions to problem solve (Salovey & Mayer, 1990). The study created a mental process that involved emotional intelligence and included: "a) appraising and expressing emotions in the self and others, b) regulating emotion in the self and others, and c) using emotions in adaptive ways" (Salovey & Mayer, 1990, p. 190-91). Salovey and Mayer (1990) summarized emotional intelligence, "Thus, emotionally intelligent individuals accurately perceive their emotions and use integrated, sophisticated approaches to regulate them as they proceed toward important goals" (p. 201). Salovey and Mayer's initial research set the framework for emotional intelligence and future studies and research.

**Continuing research and development of emotional intelligence.** Daniel Goleman (2006a) wrote *Emotional Intelligence: Why It Can Matter More Than IQ,* and in the work, he identified and defined emotional intelligence (EI) and its significance to success in relationships, work, and health. Goleman's research was groundbreaking and sparked a whole new era of further research of emotional intelligence. The first EI model from Goleman (1998) focused on an emotional competence framework of two main elements. Personal competence is the first competence and highlighted how people manage themselves including self-awareness, self-regulation, and motivation; and the second competence is social competence which is how people handle relationships including empathy and social skills (Goleman, 1998).

Goleman (1998) identified self-awareness as being aware of one's internal state, preferences, resources, and intuition; the three components under self-awareness are emotional awareness, accurate self-assessment, and self-confidence. Self-regulation refers to managing internal states, impulses, and resources; components under this competence are self-control, trustworthiness, conscientiousness, adaptability, and innovation (Goleman, 1998). The third personal competence is motivation which entails "emotional tendencies that guide or facilitate reaching goals" (Goleman, 1998, p. 26). The motivation competence is represented by achievement drive, commitment, initiative, and optimism (Goleman, 1998).

Social Competence has two main competences of emotional intelligence which are empathy and social skills (Goleman, 1998). Empathy encompasses being aware of others' feelings, needs, and concerns; it includes understanding others, developing others, service orientation, leveraging diversity, and political awareness (Goleman, 1998). Social skills focus on inducing desirable responses to others; this represents influence, communication, conflict

management, leadership, change catalyst, building bonds, collaboration and cooperation, and team capabilities (Goleman, 1998).

The competences of emotional intelligence are crucial to the workplace. Goleman (1998) states, "as work becomes more complex and collaborative, companies where people work together best have a competitive edge" (p. 29). Emotional intelligence can be developed and can increase with age (Goleman, 1998). Educating young people for the future includes emotional literacy based on emotional competences because emotional intelligence matters and is crucial (Goleman, 1998).

Goleman (1998) clarified some misconceptions from his first edition of *Emotional Intelligence: Why It Can Matter More Than IQ*, "Unfortunately, misreadings of this book have spawned some myths, which I would like to clear up here and now. One is the bizarre – though widely repeated – fallacy that 'EQ accounts for 80 percent success.' This claim is preposterous" (Goleman, 2006a). Goleman goes on to explain that a statement about IQ accounting for 20 percent of career success led people to misinterpret the statement and make a false assumption that emotional intelligence was responsible for the other 80%. According Goleman (2006a), the other 80% represents a wide range of other factors.

Goleman (2006b) has continued research with a greater emphasis on social intelligence as a new study of science considering the effects of individuals and their relationships. Goleman (2006b) focused much of his work on helping individuals improve and develop their social intelligence. The research explored the brain and how the brain functions respond socially and emotionally, which has led Goleman (2006b) to become an advocate for children emphasizing social emotional learning and establishing school programs to help students develop better social

skills. Emotional and social intelligence skills develop from childhood on, so helping children master emotional and social intelligence skills is very important.

As research has developed, different ideas have been added to the original definition of emotional intelligence by Salovey and Mayer (1990), who considered emotional intelligence a special ability of recognizing emotions in self and in others. Other researchers consider emotional intelligence a set of traits like happiness and self-esteem as opposed to an ability as was the claim on Salovey and Mayer (Bar-On, 2004; Boyatzis & Sala, 2004; Petrides & Furnham, 2001).

Mayer and Salovey (1997) established four branches of EI which consist of managing emotions, understanding emotions, using emotions, and perceiving emotions accurately; the four branches are all skill based. The different models of EI are also reflected differently in assessments. The Mayer-Salovey-Caruso created the Emotional Intelligence Test (MSCEIT) which is a skills-based test. The Emotional and Social Competency Inventory (ESCI), Emotional Quotient Inventory (EQ-i), Emotional Quotient (EQ) Map, and Six Seconds Emotional Intelligence Assessment (SEI) are more trait-orientated and reflect a more self-evaluation approach. The MSCEIT is the most well-known and widely accepted instrument for assessing emotional intelligence as an ability (Maul, 2012; Fiori et al., 2014).

Emotional intelligence definitions and models are associated with the research and work of Mayer and Salovey; and, Daniel Goleman's name and research is identified with the term emotional intelligence. In addition to the well-recognized models of EI, Bar-On's EI model, Cooper and Sawaf's Four Cornerstone Model, and Six Seconds' Team model are considered part of the five main models of EI (Rastogi, Kewalramani, & Agrawal, 2015).

The Bar-On model is based on the idea that "emotional-social intelligence is a cross-section of interrelated emotional and social competencies, skills and facilitators that determine how effectively we understand and express ourselves, understand others and relate with them, and cope with daily demands" (Bar-On, 2006, p. 3). The EI model identifies five main components which include: Intrapersonal (self-awareness and self-expression), Interpersonal (social awareness and interpersonal relationship), Stress Management (emotional management and regulation), Adaptability (change management), and General Mood (Self-motivation), and the five main components represent 15 subsections of related competencies, skills, and facilitators (Bar-On, 2006). The Bar-On model can help individuals improve emotional and social skills because the skills can be taught and learned (Bar-On, 2006). The Emotional Quotient Inventory (EQ-i) was developed to assess emotional intelligence in relationship to the Bar-On EI model and was one of the first emotional intelligence assessments. The EQ-i is a self-report assessment with 133 items based on the Bar-On EI model of the five components and 15 subtopics (Bar-On, 2006).

The Four Cornerstones of Emotional Intelligence is an emotional intelligence leadership and organization model that emphasizes four main areas: Emotional Literacy, Emotional Fitness, Emotional Depth, and Emotional Alchemy; and, each cornerstone focuses on four subsections (Cooper & Sawaf, 1998). Emotional Literacy is the first cornerstone which addresses emotional honesty, emotional energy, emotional feedback, and practical intuition (Cooper & Sawaf, 1998). The second cornerstone is Emotional Fitness and focuses on trust radius, constructive discontent, resilience and renewal, and authentic presence (Cooper & Sawaf, 1998). Emotional Depth represents the third cornerstone and includes unique potential and purpose; commitment, accountability, and conscience; applied integrity; and, influence without authority. The final

cornerstone is Emotional Alchemy which applies the concepts of intuitive flow, reflective time-shifting, opportunity sensing, and creating the future.

Cooper and Sawaf (1998) created "EQ Map" which is an emotional intelligence assessment instrument that takes 15-minutes to complete and identifies emotional intelligence strengths and weaknesses along with recommendations to help improve emotional intelligence performance. In sum, the Four Cornerstones of Emotional Intelligence identifies emotional intelligence and addresses ways to improve emotional intelligence.

The Six Seconds Emotional Intelligence model encompasses three areas of pursuit: know yourself, choose yourself, and give yourself; and, the model is further broken down to eight competencies. Know Yourself focuses on enhancing emotional literacy and recognizing patterns. Choose Yourself emphasizes applying consequential thinking, navigating emotions, engaging intrinsic motivation, and exercising optimism. Give Yourself assesses increasing empathy and pursuing noble goals. Six Seconds uses the Six Seconds Emotional Intelligence Assessment (SEI) which is a self-report assessment.

The Bar-On, Goleman, Cooper and Sawaf, and Six Seconds are emotional intelligence mixed-trait models which incorporate concepts of personality, and each model has a self-report assessment (Rastogi, Kewalramani, & Agrawal, 2015). However, the emotional intelligence ability model of Mayer-Salovey-Caruso uses a more scientific approach of study with concepts related to intelligence, and an ability-based assessment was created called the MSCEIT (Mayer et al., 2002; Rastogi et al., 2015). Brackett and Mayer (2003) state, "If a person's self-concept is accurate, then self-report data serve as an accurate measure. However, most people are inaccurate reporters of their own abilities" (p. 1). Therefore, the MSCEIT ability-based assessment is a more objective instrument that limits participant bias.

**Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT)**

The MSCEIT is a well-recognized test used to assess emotional intelligence. John Mayer, Peter Salovey, and David Caruso created the MSCEIT as an instrument to measure and assess emotional intelligence, which was an improved version of the first published assessment in 1997, named the Multifactor Emotional Intelligence Scale (MEIS). In January 2002, the Multi-Health Systems Incorporated (MHS) published the MSCEIT instrument. The MSCEIT is an ability-based assessment that measures a person's abilities to perform tasks and to solve emotional problems. Most other assessments like the Emotional and Social Competency Inventory (ESCI), Emotional Quotient Inventory (EQ-i), Emotional Quotient (EQ) Map, and Six Seconds Emotional Intelligence Assessment (SEI) are subjective assessments as a self-evaluation of one's emotional intelligence.

**Creators of the MSCEIT.** John D. Mayer received his Bachelor of Arts degree with a major in Creative Writing and Literature and Dramatic Theory and Criticism. Mayer continued his education with a Master of Arts degree and Doctor of Philosophy degree in general psychology. Mayer's research has focused on emotion and thought, and his work has been in empirical research and theory development. Mayer's research is distinguished by the many scientific and peer reviewed articles, books, and psychological tests he has written. Mayer's experience includes being a senior researcher at the United States Army Research Institute. Mayer is also a well-known expert on emotional intelligence and lectures nationally and internationally (Mayer et al., 2002).

Peter Salovey studied clinical psychology at Yale University and received a Doctor of Philosophy in clinical psychology. Salovey holds many distinguished honors and serves several reputable positions such as: President of Yale University, Chis Argysis Professor of Psychology,

Professor of Epidemiology and Public Health, and Chairman of the Department of Psychology. Salovey's research focuses on the psychological significance and function of human moods and emotions and application of social psychological principles motivation health protective behaviors (Mayer et al., 2002).

David Caruso earned his undergraduate and graduate degrees in psychology, and he founded WorkLife Strategies of New Canaan, Connecticut. WorkLife Strategies provides services for career assessments, counseling, organizational development, and coaching. Caruso's master's degree and doctorate degree focused mainly on intellectual development and training in intelligence. Caruso's interests are in emotional intelligence and personality in the workplace along with applying emotional intelligence in education. Caruso's career has included project management and consulting businesses and organizations along with market research. Caruso has combined career management with psychology in establishing WorkLife Strategies (Mayer et al., 2002). Mayer, Salovey, and Caruso are established experts in the field of psychology and specifically in the research area of emotional intelligence. Because of the expertise of Mayer, Salovey, and Caruso, colleagues in the field of psychology consider the MSCEIT a credible emotional intelligence measurement instrument (Mayer et al., 2002).

**Development of the MSCEIT.** Salovey and Mayer met in 1987 and began collaborating together in writing a series of articles. In 1996, Salovey and Mayer recognized Caruso's expertise in assessment instruments, and Caruso joined Salovey and Mayer in the development of the the Multi-Factor Emotional Intelligence Scale (MEIS), which the MSCEIT has now replaced. The MSCEIT is based on the MEIS, which was the first published ability assessment for emotional intelligence (Mayer, DiPaolo, & Salovey, 1990; Mayer & Geher, 1996). The MSCEIT developed from the MEIS. The length of the MEIS was a limitation due to the high

number of items on the test, and improvements were identified for reliability. In the development of the MSCEIT, the test was shortened and reliability was built at the task level by careful item selection (Mayer, Salovey, Caruso, & Sitarenios, 2001). The emotional intelligence tool assesses a person's abilities to solve emotional problems and not one's self-evaluation of emotional intelligence. The MSCEIT is designed for individuals 17 years of age or older. The instrument assesses two areas of emotional intelligence: emotional experience and emotional reasoning. The two categories measure the four branches or emotional intelligence: (1) accurately perceive emotions; (2) use emotions to facilitate thinking, problem solving, and creativity; (3) understand emotions; and, (4) manage emotions for personal growth (Mayer, et al., 2002).

**Administration of assessment**. Administrators of the MSCEIT must have completed university level courses in tests and measurements. Multi-Health Systems Incorporated (MHS) is the publisher of the MSCEIT, and MHS provides the scoring and results of the MSCEIT. The administration of the MSCEIT offers two different options: participants may take the test using a booklet and mailing or faxing an answer sheet to MHS, or individuals may take the online assessment. Participants respond to 141items. There is no time limit, but most people complete the assessment in 30-45 minutes (Mayer et al., 2002). The tests are scored upon completion by MHS, and reports are sent to the test administrator. The assessment yields one overall score, the MSCEIT Total, and two main area scores: Experiential Emotional Intelligence and Strategic Emotional Intelligence. The Experiential Emotional Intelligence score reflects a participant's ability to perceive emotions relating to sensations like color and taste; the Strategic Emotional Intelligence score reflects the participant's understanding of emotional information and ability to use it strategically in planning and self-management (Mayer et al., 2002). Under the Experiential

Emotional Intelligence and Strategic Emotional Intelligence areas are four branch scores: Perceiving Emotion, Facilitating Thought, Understanding Emotion, and Managing Emotion. The four branch areas identify strengths in the specific areas. Lastly, there are eight separate tasks: Faces, Pictures, Facilitation, Sensations, Blends, Changes, Emotion Management, and Emotion Relationships (Mayer et al., 2002). Test participants are asked to identify sensory experiences with emotions. The scores are compared to a normative sample, which is a representation of participants who take the MSCEIT. The respondent's scores are sent to the administrator who disperses the summary reports to the participants. The participants receive a detailed summary report that includes all scores from the different areas of the test.

**Reliability and validity.** The MSCEIT is a highly reliable test for the Branch, Area, and Total scale levels; however, the subtasks are somewhat less reliable (Mayer, Salovey, & Caruso, 2002). In light of the reliability findings, greater emphasis should be placed on the scores for the Branch, Area, and Total score results. The MSCEIT's validity is overall strong in representation of the Four Branch Model. "The MSCEIT has a factor structure congruent with the four-part model of EI and it is both reliable and content valid" (Brackett & Mayer, 2003, p.2). The full-scale reliability of the MSCEIT is $r = .91$, and the four branches range is from $r = .80$ to .91 (Mayer et al., 2002). An analysis of the assessment indicates the MSCEIT measures emotional intelligence including the distinct areas and branches of emotional intelligence as intended (Mayer et al., 2002). Therefore, supporting evidence indicates that the MSCEIT is reliable and valid (Mayer et al., 2002).

**Possible limitations.** A study by Andrew Maul (2012) identified several concerns with the scoring of the MSCEIT. The research indicated reliability of the task format was much lower than desired (Maul, 2012; Mayer et al., 2002). Maul questioned one section in which

participants respond to faces, landscapes, and designs (Maul, 2012; Mayer, Salovey, & Caruso, 2012). Mayer, Salovey, and Caruso (2012) responded to Maul's research by citing that the ability to perceive the tasks indicates an expertise in emotion and factor analyses.

Maul (2012) addressed some concerns about the consensus scoring. The scoring of the MSCEIT offers two options: general consensus or expert consensus. The general consensus score compares the respondent's score to more than 5,000 individuals' scores from a normative database, and the expert consensus score compares the individual's performance to 21 international emotional experts (Mayer et al., 2002). General consensus and expert consensus scoring overall reflects the same ability level; however, respondents may score higher with the general consensus scoring as this would indicate more responses that are in agreement with the general consensus (Mayer et al., 2002). Other participants may actually score higher with the expert consensus scoring. Psychologists seem to be in disagreement between which consensus is superior. Maul (2012) argues that the consensus of emotions can sometimes be missed in consensus scoring and that a consensus answer may be incorrect. An example would be the Duchenne smile or "camera smile" which may appear as the emotion of happiness but not be a genuine smile. A genuine smile displays small muscles around the eyes and the corner of the lips. Many would mistake the "camera smile" as a genuine smile and display of happiness. In consensus scoring, correctness would be verified by the general consensus although it would not really determine the correct answer (Ekman, Davidson, & Friesen, 1990; Maul, 2012). The Duchenne smile would be scored incorrectly in general consensus compared to expert consensus Maul, 2012). The different scoring options can yield conflicting results.

**Current use of assessment.** The results of the MSCEIT benefit corporate settings, educational settings, clinical settings, correctional facilities, preventive programs, and research

(Mayer et al., 2002). The MSCEIT authors encourage the use of the assessment for research purposes (Mayer et al., 2002). The MSCEIT can be given to individuals more than once over time, and scores can change as skills improve or weaken (Mayer et al., 2002). Most changes in skills happen gradually, so it would likely take several months to see changes in emotional intelligence (Mayer et al., 2002). The research of emotional intelligence and the testing instruments like the MSCEIT is still developing. Mayer, Salovey, Caruso, and Sitarenios (2001) acknowledged there is still much to be learned about emotional intelligence through research and the development of assessment instruments for emotional intelligence.

**GPA and Emotional Intelligence Correlations**

Reuvan Bar-on (2006) created a model of emotional-social intelligence (ESI) and the Emotional Quotient Inventory (EQ-I). Reuvan Bar-on discussed a study of 106 American first-year university students and researched how emotional intelligence correlates to GPA. The students took the EQ-I at the beginning of the semester to establish emotional intelligence, and the GPAs were evaluated in the middle of the year. Multiple regression analysis indicated a correlation of .45 and confirmed a significant correlation between ESI and performance in school GPA (Bar-on, 2006).

A study of 60 African-American female college students researched the correlation between emotional intelligence and academic achievement represented by GPA, and the participants took four different assessments. The MSCEIT and the Bar-On Emotional Quotient Test: Short Edition (EQi:S) were the instruments used to assess emotional intelligence (Bradshaw, 2008). The findings of the study indicated that there was not a significant statistical correlation between the female college students' emotional intelligence scores and their GPAs despite Bar-on's research results showing a correlation between EI and GPA (Bar-on, 2006;

Bradshaw, 2008). The results of the study implied that there was not a correlation between emotional intelligence and GPA.

Another study investigated the relationship between emotional intelligence and academic achievement of college students in a Southern California community college in which academic achievement was measured by GPA and SAT scores. The results of the study suggested that emotional intelligence measured by the MSCEIT had a significant correlation with academic achievement in relationship to GPA (Holt, 2007). The scores from the SAT showed no statistical significant relationship to emotional intelligence. The study indicated that there was a correlation between emotional intelligence and GPA.

Walker (2006) researched 1,404 university freshmen who took the Bar-On EQi: S, and the study examined the relationships between emotional intelligence, gender, ethnicity, GPA, ACT scores, number of terms completed, and number of courses failed over the first four semesters. The study defined emotional intelligence "as the level of intrapersonal and interpersonal skills, stress management ability, adaptability and general mood" (Walker, 2006, p. 2). Multiple regression analyses were run and concluded that EI significantly predicted GPA of the first four semesters of college students (Walker, 2006).

A study by Erin Jacques (2009) researched the relationship of emotional intelligence, academic performance, and choice of college majors from 221 community college student surveys. Researchers explored the correlation between emotional intelligence and gender, age, social-economic, status, ethnicity, and selected majors. The assessment identified males as having higher emotional intelligence. The study used multiple linear regression and logistic regression to analyze the data. In relationship to EI and GPA, the findings indicated that there was a significant relationship and that participants with higher EI were likely to have higher

GPAs when controlled for background and demographic variables. Results indicated p=.026, and "the complete regression model explained 13% of the variance in GPA (R = .13, Adjusted R = .09)" (Jacques; 2009). Jacques' study confirmed Walker's research and concluded with similar results of a correlation between emotional intelligence and GPA (Jacques, 2009; Walker, 2006).

Goleman (2006b) stated, "IQ and emotional intelligence are not opposing competencies, but rather separate ones" (p. 44). He further acknowledged, "there is a slight correlation between IQ and some aspects of emotional intelligence – though small enough to make clear these are largely independent entities" (Goleman, 2006b, p. 44). Mayer and Caruso (1999) indicated that emotional intelligence and analytical intelligence have a low correlation. Many studies have indicated a correlation between emotional intelligence and GPA; however, other studies provided solid contradictive evidence concluding no relationship between emotional intelligence and GPA.

**Pre-service and Novice Teachers**

A study examined the emotional quotient (EQ) of pre-service novice teachers and the significance of training teachers to recognize their own emotional intelligence as well as that of their students (Byron, 2001). The teachers participated in a pretest and posttest of the MSCEIT. The treatment group attended workshops and received emotional intelligence training. The results indicated that novice teachers did not score differently than the normative sample. The findings showed that traits such as warmth, optimism, and persistence, which are traits associated with teachers, were independent of emotional intelligence (Byron, 2001). The results also reported that novice teachers increased emotional knowledge skills by attending emotional

intelligence workshops, which further indicated that emotional intelligence can be improved (Byron, 2001).

The research of Corcoran and Tormey (2013) examined emotional intelligence as a predictor of student teacher performance. The study looked at 352 pre-service teachers in a university in Ireland who were in the third year of a four-year undergraduate program or from a one-year graduate program. The study used the MSCEIT to assess EI, compulsory exams similar to the SAT, and teacher rankings based on teacher performance of their final teaching practicum. The findings of the study indicated no relationship between EI and student teacher performance; however, there was a significant negative correlation between the emotional skill of perceiving emotions in self and others with teacher performance (Corcoran & Tormey, 2013).

Nursing students have some similarities to the education students. Like teachers, the nursing profession requires nurses to be in constant communication with individuals and their family members. An explorative, descriptive study researched the relationship between emotional intelligence and GPA of 72 first-year nursing students at a university in the south central region of the United States by using the MSCEIT assessment and pre-admission GPAs from school records (Codier & Odell, 2014). The results indicated that there was a significant correlation between GPA and total emotional intelligence ($r = .24$), and between GPA and the subscore of experiential emotional intelligence ($r = .25$) (Codier & Odell, 2014). The group mean scores for the total emotional intelligence score of the nurses were within average range, but 18% of the nurses were below average for the total emotional intelligence score. The score for experiential emotional intelligence and mood indicated a statistically significant correlation. The nurses' results from the subscore that focused on correct identification of emotions showed that 42% scored above average; however, 28% of the sample scored below average for using

emotions to reason (Codier & Odell, 2014). The below average scores indicate the nursing students might not perform well in clinical performance and that nursing students could benefit from emotional intelligence training (Codier & Odell, 2014). The correlations between GPA and emotional intelligence identified strengths and weaknesses of the nursing students that could be useful to the nursing program in assessing the needs of their students.

**Teacher Performance and Emotional Intelligence Training**

Mohamad and Jais (2016) researched the emotional intelligence and relationship to job performance of 212 teachers. The research findings indicated EI had a statistically significant relationship with job performance. Each of the four domains of EI, which are self-awareness, self-regulation, self-motivation, and social skills, all identified a significant correlation to job performance (Mohamad & Jais, 2016).

Research implies that teacher training of emotional intelligence can improve the classroom environment and increase teacher emotional intelligence and empathic concern (Hen & Sharabi-Nov, 2014). Emotional intelligence can provide support to teacher efficacy and can be developed through emotional intelligence training (Vesely, Saklofske, & Leschied, 2013). One study examined pre-service teacher training of emotional intelligence of college students who had only practicum experience in the classroom, and the results showed increased teacher efficacy correlating with previous research that emotional intelligence corresponds with positive psychological factors (Vesely, Saklofske, & Nordstokke, 2014).

According to Mouton, Hansenne, Delcour, and Cloes (2013), a study with a sample of 119 physical education teachers researched emotional intelligence and the relationship to self-efficacy. The results indicated a positive correlation between emotional intelligence and self-efficacy. There was no association between teachers' age or teaching time experience to the

results of emotional intelligence and self- efficacy scores (Mouton, Hansenne, Delcour, & Cloes, 2013). The study indicated the importance of emotional intelligence and self-efficacy to the teaching profession.

A person's emotional intelligence can change; it may improve, or it may regress (Mayer, Salovey, & Caruso, 2002). Pre-service teachers at a university participated in a study where emotional intelligence training was provided in order to improve emotional intelligence performance. The study addressed the following question: "How, and to what extent, does the implementation of the Six Seconds (Know Yourself, Give Yourself, Choose Yourself) model with teacher candidates in a master's program in a high-needs urban middle school impact emotional intelligence and teacher satisfaction?" (Rojas, 2012). The study used a self-reporting assessment called the Six Seconds Emotional Intelligence Assessment (Freedman, 2007). The research focused on predicting success factors of personal effectiveness, relationship quality, general health, and quality of life (Rojas, 2012). The findings of the research indicated that emotional intelligence is greatly impacted when teachers commit to the development of emotional intelligence and practice techniques learned according to Six Seconds (Rojas, 2012).

**Emotional Intelligence and Job Performance**

Many occupations require good leaders and employees who have the ability to make quick decisions and swift responses to immediate needs. Daniel Goleman (2013) stated, "intellect alone will not make a leader; leaders execute a vision by motivating, guiding, inspiring, listening, persuading – and, most crucially, through creating resonance" (p. 27). A study conducted of a health care organization researched the correlation between work performance evaluations and an emotional intelligence assessment of health care managers (Rau, 2001). The study used Weisinger's self-evaluation as the EI instrument and a job evaluation based on

standards of a job description. The findings indicated that there was no correlation between emotional intelligence and job performance of the health care managers (Rau, 2001). Despite the Rau findings related to the health care industry, research of emotional intelligence and educational leadership provides significant insights to emotional intelligence. The educational leadership study sample was 39 pre-service educational leaderships students and 34 practicing administrators (King, 1999). The pre-service educational leadership students were working on a master's degree program and did not have educational leadership experience. Both groups took the Multifactor Emotional Intelligence Scale (MEIS). The results indicated that the practicing administrators scored statistically significantly higher in perceiving emotions, assimilating emotions, and total emotional intelligence than the pre-service educational leadership students. Total emotional intelligence scores reflected greater leadership experience of the practicing administrators (King, 1999). Goleman (1998) states that emotional intelligence increases with age and experience, and King's findings confirm research supported Goleman.

Emotional intelligence is linked to overall job performance. Bradberry and Greaves' (2009) research focused on the two main categories of personal competence and social competence: personal competence emphasizes the skills of self-awareness and self-management while social competence looks at social awareness and relationship management. Bradberry and Greaves (2009) state, "Emotional quotient (EQ) is so critical to success that it accounts for 58% of performance in all types of jobs. It's the single biggest predictor of performance in the workplace and the strongest driver of leadership and personal excellence" (p. 21). Based on the research, emotional intelligence appears to be a significant factor in job performance and including student teacher training of the emotional intelligence skills related to personal competence and social competence would benefit pre-service teachers.

**Florida Department of Education**

University initial teacher preparation programs strive to prepare pre-service teachers for the student teaching experience with the expectation of effective student internships. Identifying relationships between GPA, emotional intelligence, and student teacher performance can provide initial teacher preparation programs insight to better prepare student teachers for the student internship. Student teachers are observed and evaluated by university supervisors to identify the student teachers' performance similar to job performance. Student teacher evaluations are one of many requirements established by a state department of education for initial teacher preparation programs.

Within the Florida Department of Education, the Office of Educator Preparation oversees the initial and continued approval of educator initial teacher preparation programs and the certification process to teach in Florida's schools. Initial teacher preparation programs are offered at Florida post-secondary institutions and work in coordination with the Florida Department of Education to meet all state requirements for teacher certification. Candidates of initial teacher preparation programs are usually working towards a bachelor's degree or master's degree resulting in an initial Florida Professional Educator's Certificate (Florida Department of Education, 2017b).

Teacher evaluation systems play a vital role in school districts throughout the state of Florida and, therefore, are a significant aspect to the pre-service teacher experience in initial teacher preparation programs. The Florida Department of Education provides models of instructional personnel and school administrator evaluation systems. School districts choose an evaluation system for instructional personnel and school administrators with the approval of the Florida Department of Education. Many districts opt to use the evaluation system based on Dr.

Robert Marzano's (2012) research and meta-analyses. Charlotte Danielson (2007) provides another preferred evaluation system choice for school districts. Both evaluation systems are approved by the Florida Department of Education. School districts are not limited to the two evaluation systems but may choose other evaluation systems with the approval of the Department of Education.

Charlotte Danielson (2007) developed the Framework for Teaching based on research, effective practices of teaching, and classroom organization. The framework focuses on four domains and 22 specific components. The four domains are "Domain 1: Planning and Preparation, Domain 2: The Classroom Environment, Domain 3: Instruction, and Domain 4: Professional Responsibilities" (Danielson, 2007, p. 1). The framework is comprehensive and includes what happens in the classroom, for planning, during parent communication, and in collaborating with colleagues. Danielson's Framework of Teaching offers an effective teacher evaluation system that is "viewed as a tried and tested framework" (Moss, 2015).

Administrators need to know how to use evaluation systems in order to effectively evaluate teachers. Teacher evaluations are a responsibility to the public for upholding the standard for quality teachers, and evaluations become a necessity to ensure teacher quality and to promote professional development (Danielson, 2010). Danielson (2010) provides training for evaluators to learn how to best utilize strategic steps in evaluating teachers. Evaluators should be familiar with the Framework for Teaching, be able to recognize evidence for each component and element, learn how to interpret the evidence against each rubric level, and calibrate their evaluation judgments in alignment with other evaluators (Danielson, 2010). Danielson emphasizes the importance of administrators scheduling a follow-up meeting with teachers after evaluations for meaningful conversations and feedback. Both informal and formal evaluations

supply meaningful feedback for teachers and encourage teacher reflection and self-assessment (Danielson, 2010).

Robert Marzano (2012) is an educational researcher who remarked, "Teacher evaluation systems have not accurately measured teacher quality and have not aided in developing a highly skilled teacher workforce" (p. 15). Marzano acknowledged that teacher evaluation systems have not been effective because of the inability to identify effective and ineffective teachers, and evaluations failed to help develop highly skilled teachers. Evaluations may have two distinct purposes: one evaluation focuses on measuring teachers, and another evaluation emphasizes developing teachers (Marzano, 2012). Research indicates educators feel that evaluations should include both factors of teacher measurement and teacher development (Marzano, 2012). Teacher evaluation systems with the intent to help teacher improvement include three main strategies: the system is comprehensive and specific, the system includes a developmental scale, and the system acknowledges and encourages growth (Marzano, 2012). Strategies reflect routine, content, and acting on the spot. The developing scale includes a rubric and a guide that teachers can use to indicate teacher development. Marzano (2012) developed an effective teacher evaluation plan that included both teacher measurement and teacher development.

A local school district in the state of Florida created a state-approved evaluation system based on the models of Marzano and Danielson. The district took key elements from both models of Danielson and Marzano and developed their unique teacher evaluation system. The detailed instrument is used to evaluate teachers in the local school district, which serves over 100,000 students in 150 schools (Polk County Public Schools, n.d.a). The teacher evaluation plan utilizes four domains and 23 elements, which are similar to the four domains and 23 elements in Danielson's Framework of Teaching (Danielson, 2010; Polk County Public Schools,

n.d.c). Marzano's teacher evaluation systems are demonstrated through the elements of teacher self-evaluation, administration feedback and conversations, and an emphasis of professional growth through continuous professional improvement (Marzano, 2012; Polk County Public, Schools, n.d.b). The school district's teacher evaluation system was developed with the foundation of established research from experts in the education field.

**Chapter Summary**

The chapter provided a literature review relevant to the predictive study of pre-service teachers. GPA and emotional intelligence research was discussed. Correlations between GPA and emotional intelligence were identified. Research was presented of pre-service teachers, teacher performance, and job performance in relationship to emotional intelligence. Information from the Florida Department of Education provided insight to initial teacher preparation programs, and teacher evaluation systems that are related to the study were reviewed.

# III. METHODOLOGY

## Introduction

The chapter explains the methodology of the predictive study of pre-service teachers focusing on grade point average (GPA) and emotional intelligence (EI) as factors of student teaching success in relationship to student teacher evaluations. The correlational research converged from a quantitative perspective and multiple regression analysis. The chapter discusses the context, participants, program, instruments, data collection, procedures, data analysis, and results.

## Context

The goal of university initial teacher preparation programs is to produce highly effective, successful teachers. Coursework and practical classroom experiences help prepare teachers for the education profession. The final phase of an initial teacher preparation program is student teaching, which takes place the last semester of the program. Universities expect the students of the initial teacher preparation programs to be prepared for student internship by the time students complete coursework. Identifying predictive factors of pre-service teachers becomes a significant aspect of preparing students for the student teaching internship. At the completion of a state-approved university teacher preparation program, most students have fulfilled state requirements for teacher certification and finished student internships in preparation for full-time teaching. The research of the study took place at private university in central Florida during a fall semester. The university is well established and has been in existence since 1935. Over the last several years the university has experienced significant growth in enrollment and

programming. The university has been identified as one of the fastest-growing liberal arts universities in the nation.

The study focused on university pre-service teachers in the College of Education state-approved teacher preparation program who were enrolled in the student internship program, which took place the fall semester of 2017. The College of Education at the university works in collaboration with the local public school district and the Florida Department of Education which both have established specific guidelines and requirements for student teaching. The interns spent the semester student teaching in classrooms at local schools in the community. The student teachers were supervised by classroom cooperating teachers and university supervisors, and both groups had been trained through the Clinical Educator Training program established by the state of Florida to supervise and train student teachers (Florida Department of Education, 2017a). The cooperating teachers supervised the student interns daily in the classroom setting. The university supervisors oversaw the student interns throughout the student teaching experience and provided feedback from four specific classroom observations and evaluations.

**Participants**

The study sample was convenient and purposive as it included 21 participants enrolled in the final semester of a state-approved teacher preparation program at a specific university. Of the 21 student interns, 18 students were female, and three students were male. Eleven students were elementary education majors, and 10 students were secondary education majors. All participants were over 18 years of age or older. The student interns participated in the study during the fall semester of 2017.

**Teacher Preparation Program**

The College of Education elementary and secondary initial teacher preparation program at the university is a 4-year degree program with students completing a 12-credit student internship the last semester. The university state-approved teacher preparation program follows the established specific guidelines and requirements for student teaching according to the local school district and the Florida Department of Education. Candidates of the initial teacher preparation program were working towards a bachelor's degree and an initial Florida Professional Educator's Certificate (Florida Department of Education, 2017b). Students must meet the eligibility requirements for student teaching: minimum cumulative GPA of 2.5; minimum GPA of 2.5 in all education courses and specialization courses; no grade lower than a "C" in any education course or specialization course; and completion of all three Field Studies and all Florida Teacher Certification Examinations (FTCE): General Knowledge Test (GKT), Professional Education Test (PEd), and Subject Area Exam (SAE) (Southeastern University, 2016). Successful completion of student teaching is the final phase of the initial teacher preparation program.

Student interns are assigned to a classroom in the local school district and supervised by a cooperating teacher. The interns are under the daily direct supervision and instruction of the cooperating teacher. A university supervisor is assigned to each intern for the semester. The university supervisor conducts four formal observations and evaluations of the student interns' teaching performance. The student internship course has specific guidelines for the formal observations. Formal observations were documented on *Form H* (see Appendix A), and then a summative evaluation for each observation was completed on *Form K* (see Appendix B). *Form H Data Collection* (see Appendix C) documented the cumulative summative evaluation data for

the study analyses, and the student intern evaluation scores of each of the four domains was also recorded for analysis purposes.

Student interns were required to adhere to the specific student teaching procedures as outlined in the Student Teaching Handbook (Owen, 2017). The College of Education required student teachers to complete a total of 70 days or a minimum of 10 weeks (by state statute) if a job offer was made and accepted. Student teachers who have shown excellence in the field and the profession needed to follow early release protocol, and an early release date is considered anywhere from day 51 through day 69 of the student internship (M. Owen, personal communication, August 8, 2016).

During the student internship, interns maintained the same schedules as the cooperating teachers. Student teachers were also required to attend other school events such as parent-teacher conferences, faculty meetings, Open House nights, Parent-Teacher Association meetings, athletic events, professional development meetings, and any other events that the cooperating teacher attended (M. Owen, personal communication, August 8, 2016). The interns were responsible for providing a blank hard copy evaluation form for the university supervisors to record the observation. Additionally, the interns provided hard copies of lesson plans, materials/worksheets for the lesson, and copies of previous observations for data comparisons. After each observation, the student teacher and university supervisor meet to go over the data collected on the evaluation form (M. Owen, personal communication, August 8, 2016).

**Instruments**

The Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) was used as the Emotional Intelligence (EI) assessment instrument to assess the emotional intelligence of the student interns in the study. John Mayer, Peter Salovey, and David Caruso (2002) created one of

the first EI assessment instruments, the Multifactor Emotional Intelligence Scale (MEIS), in 1997, and John Mayer, Peter Salovey, and David Caruso continued to improve the instrument, which resulted in the MSCEIT assessment instrument published by Multi-Health Systems in 2002. The instrument is an ability-based assessment that measures a person's abilities to solve emotional problems and perform tasks. The MSCEIT is commonly used as an instrument in research conducted for emotional intelligence. The assessment is valid and reliable (Mayer et al., 2002). The MSCEIT uses computer scoring which allows for quick results. The four areas of EI assessed by ability are accurately perceive emotions, use emotions to facilitate thinking, problem solving and creativity, understand emotions, and manage emotions for personal growth (Mayer et al., 2002). The instrument can be used for individuals 17 years old or older. Average testing time is 30-45 minutes to respond to the 141 items on the MSCEIT (Mayer et al., 2002).

There are two scoring methods available for the MSCEIT assessment. Respondents' correctness is scored either by a general consensus criterion or an expert criterion. The general consensus criterion compares an individual's responses to a normative database of over 5,000 individuals, while the expert criterion compares the participant's responses to 21 international emotional experts (Mayer et al., 2002). Some items may be scored differently reflecting the scoring option chosen but generally result in the same ability level (Mayer et al., 2002). The researcher chose the expert criterion scoring based on expertise of authorities of emotional intelligence. The main score is an overall Emotional Intelligence Quotient (EIQ) score. The other areas scored are two Area EIQs, four Branch EIQs, and eight Task scores. Score report options provide either a Personal Summary Report that includes scores graphically and numerically with raw data or the Resource Report that provides feedback in plain language and addresses strengths and weaknesses. The researcher determined that the Personal Summary

Report, which supplies raw data, provided the best information of research for the study and relevance for future use in the university internship program.

The university-specific instrument to assess the formal student intern observations and evaluations is referred to as *Form H* (see Appendix A). The *Form H* (see Appendix A) student intern evaluation form is in alignment with the local school district teacher evaluation rating rubric tool. The form assesses four specific domains with 23 indicators. Each indicator is rated on a zero to three-point scale with three being the highest value and reserved for outstanding performance. The four domains are: Domain 1: Instructional Design, Lesson Planning, and Assessment; Domain 2: Instructional Delivery and Facilitation; Domain 3 The Learning Environment; and, Domain 4: Professional Responsibility and Ethical Conduct. The instrument includes specific indicators under each domain. Domain 1: Instructional Design, Lesson Planning, and Assessment assesses indicators of demonstrating knowledge of content and pedagogy, demonstrating knowledge of students, setting instructional outcomes, demonstrating knowledge of resources and technology, designing student instruction, and designing student assessments. Domain 2: Instructional Delivery and Facilitation focuses on the indicators of communicating with the students, using strategies to evoke high-order thinking and discussions, engaging students in learning and lesson delivery, using assessment in instruction, demonstrating flexibility and responsiveness, and integrating cross content reading and writing instruction. Domain 3: The Learning Environment evaluates creating an environment of respect and rapport, establishing a culture for learning, managing classroom procedures, managing student behavior, and organizing physical space. Domain 4: Professional Responsibility and Ethical Conduct assesses paying attention to equity and diversity, maintaining accurate records, communicating with families, participating in a professional community, providing individual continuous

professional improvement, and attending to professional responsibilities. The evaluation instrument established by the school district is thorough and complete as an effective measuring tool for teachers' and student teachers' performance while providing extensive feedback and encouragement for professional growth.

**Data Collection**

All data used in the study was previously collected by the College of Education at the university. Original data was collected from course work requirements and the College of Education student electronic files. The researcher obtained all data from the university Coordinator of Clinical Education in the College of Education. The data received by the researcher were cumulative GPAs prior to student teaching, results from the MSCEIT, and student teachers' evaluation forms. Names from data were not linked to respondents but to designated numbers. Data were stored on the researcher's password protected laptop, and hard copies of any data were secured in a locked file cabinet. After a five-year period, all hard copies will be shredded and disposed of, and digital files will be deleted.

**Procedures**

The predictive study focused on researching the student teachers' cumulative GPAs, emotional intelligence assessed by the MSCEIT, and the relationship of those data to the students' success demonstrated by the interns' evaluations. Cumulative GPA data were collected before the students began the internship as student teachers. The student teachers attended several course seminars during the semester of student teaching. The first seminar was before the student interns began their student teaching, and during the first seminar, a workshop was conducted about emotional intelligence in the classroom. The students were administered the online MSCEIT assessment and provided ample time to complete the test during the seminar.

Twenty-one student interns participated in the emotional intelligence MSCEIT assessment. The students were provided their results of the MSCEIT electronically approximately a week after the assessment was given.

The student interns were assigned to classrooms in the local school district. The internship lasted throughout the fall semester for a minimum of 70 days or 10 weeks of classroom experience. The state department of education requires 10 weeks of student teaching for interns; however, the university teacher preparation program of the study requires 70 days of student teaching, which allows student interns a more extensive internship to enrich their classroom teaching experience. If a student intern has completed 50 days of student teaching and is offered a job, an intern who has demonstrated excellence during the student internship may accept the position by following the early release protocol of the teacher preparation program (M. Owen, personal communication, March 30, 2017). During the internship, the student teachers were observed and evaluated four times by a university supervisor, and *Form H* (see Appendix A) was utilized for the evaluation. The university supervisors provided immediate observation and evaluation feedback to the student interns following the observations through a one-on-one conference. The university supervisors were responsible for documentation of the evaluations and providing the completed student evaluation forms to the professor of the student internship course. The evaluations were filed electronically in the College of Education under the supervision of the university Coordinator of Clinical Education in the College of Education, who also serves as the professor of the student internship course.

**Data Analyses**

Prior to addressing the analysis of research questions and hypotheses posed in the current investigation, preliminary analyses were conducted: primary demographical information, missing

data, and internal constancy (reliability) of ratings within observation domains. Descriptive statistical techniques were utilized in analyzing study demographic data. Both Expectancy Maximization (EM) and Multiple Imputations (MI) were employed to assess the nature and extent of missing data. Little's Missing Completely at Random (MCAR) statistic assessed the randomness of study data. Internal consistency (reliability) of study participant ratings was evaluated using Cronbach's Alpha *(a*) statistic.

The data relevant to all three research questions was assessed using two primary statistical techniques: Pearson's *r* Correlation Coefficient and Multiple Linear Regression. The statistical significance of both mathematical association and prediction were assessed using an Alpha level of $p < .05$ as the threshold.

Predictive model fitness was addressed through the interpretation of the ANOVA statistic, with the threshold of interpretive viability set at $p < .05$. Tolerance levels of less than .2 and below were considered the threshold for violation of the assumption of multicollinearity. Durbin-Watson values between 1.0 and 3.0 were considered appropriate in fulfilling the assumption of independence of error within the predictive model.

Exploratory Factor Analysis (EFA) using Principal Components Analysis (PCA) was also used to assess the presence of three factors within the data set rather than the four factors or domains featured in the study's research instrument. Kaiser-Meyer-Olkin (KMO) values of .50 and above were considered appropriate in evaluating the sample used for factoring purposes. An Alpha Level of $p < .05$ was used to assess the statistical significance of correlations necessary for viable factoring in the application of Bartlett's Test of Sphericity Chi Square test statistic. A Varimax rotated solution was interpreted for factoring process.

**Implied Limitations of the Study**

The research utilized previously collected data from the College of Education at the university for the student interns' cumulative GPAs. Grade inflation or grading inconsistencies could be considered a limitation, however, because all of the student interns were in the same teacher preparation program at the same university, it is assumed that all grading factors would influence all interns in the same way without any advantages of disadvantages influencing student GPAs. However, GPAs from transfer students could be considered a limitation of grade inflation or grading inconsistencies.

Another implied limitation applies to the student intern evaluations. Student teachers were evaluated by different university supervisors because it would not be possible for one supervisor to conduct four observations of twenty-one student interns during one semester. All university supervisors used the same evaluation forms and scoring procedures. Supervisors received the same training for performing student intern observations and evaluations; however, student intern evaluations could have been affected by inter-rater reliability and the lack of the program's calibration work among raters. Different supervisors may have interpreted the domain indicators in a slightly different way. The point values based on the terminology of unsatisfactory, needs improvement or developing, effective, or highly effective could also have been construed differently by each supervisor.

**Results**

A descriptive analysis was provided along with an analysis of the research questions and hypotheses. Tables were provided representing the findings of the data, and correlations were identified in perspective to the research questions and hypotheses.

The results were shared with the dean of the College of Education at the university to determine if changes to the overall education program should be made to address any findings from the study. Addressing the correlations or lack of correlations between GPA, emotional intelligence, and the student interns' success in student teaching was significant to providing direction for the current student internship program. The professor of the student internship course also received the research results. The professor was interested in identifying the strengths and weaknesses identified in the student intern evaluations, as well as identifying the relationships that GPA or EI represented from the evaluations. The professor of the student internship course, who is also the Coordinator of Clinical Education in the College of Education, was given the results of the study for data collection of the education students.

**Chapter Summary**

The chapter represented the methodology of the predictive study. The contextual setting of the study was identified along with a detailed description of the participants. The student internship program was discussed, and the chapter covered expectations and requirements of the students during the internship. The instruments for EI and teacher evaluations were identified and explained. The details of data collection, procedures, and data analyses were provided. The implied limitations addressed possible concerns of the study. Elements of results were noted that are further discussed in the following chapter. The individuals who received the results of this study were identified along with the value of the information that it would provide to their area of interest.

# IV. RESULTS

## Introduction

The chapter presents the results of the predictive study of 21 pre-service teachers in the final internship of an undergraduate-level teacher preparation program. The research assessed predictive factors of student teachers and the correlation of student teaching evaluations. An analysis included the three specific research questions and hypotheses posed in the study. The results addressed preliminary analyses and identified the primary demographics of the study. The analysis of the study included the internal consistency of the ratings across the four domains, the descriptive analyses of key study variables, the comparison of essential study measures by educational concentration, the relationship between the independent variables and the dependent variable of the domain composite scores, the summary of the findings for the research questions, the predictor domain composite score, the correlation of the individual domains and summative composite domain score, the correlation coefficients of emotional intelligence and GPA within domains, and the evaluating predictive ability of emotional intelligence and GPA within domains. A supplementary follow-up analysis concluded the overall analysis of the study.

## Preliminary Analyses

Prior to addressing the analysis of research questions and hypotheses posed in the current investigation, preliminary analyses were conducted: primary demographical information, missing data, internal constancy (reliability) of ratings within observation domains, and essential

descriptive analyses. Preliminary analyses allowed the researcher to determine statistically significant sample size and generalizability of the study.

**Primary Demographics**

A total of 21 student teachers participated in the study, fully meeting the requirements for participation. Of the 21 participants, 86% (n = 18) were female, and 14% (n = 3) were male. Concerning education level and area of concentration, 52% (n = 11) were elementary education majors, and 48% (n= 10) were secondary education majors.

**Missing Data**

The data set contained no missing data points within the four respective domains in which participants received observational rating scores. Therefore, no subsequent imputation of study data was necessary for analytical purposes.

**Internal Consistency of Ratings across Domains**

The overall internal consistency (reliability) of participant ratings across all participants and all four study domains was $a = .91$, a value considered to be "very high" as shown in Table 1, which represents the internal reliability of rating values across the four domains by educational concentration.

Table 1

*Internal Reliability (a) Across Domains by Educational Concentration of Participant*

| Educational Level | *a* |
|---|---|
| Elementary | .91 |
| Secondary | .93* |

*$p < .05$

**Essential Descriptive Analyses**

Table 2 shows the descriptive analyses of key study variables using measures of central tendency and variability.

Table 2

*Descriptive Analyses of Key Variables Using Measures of Central Tendency and Variability*

| Measure | Mean | Mode | SD | SE | Minimum | Maximum |
|---|---|---|---|---|---|---|
| Emotional Intelligence | 108.38 | 103.00 | 9.45 | 2.06 | 88.00 | 128.00 |
| GPA | 3.61 | 3.72 | 0.38 | 0.08 | 2.71 | 4.00 |
| Domain Composite | 8.47 | 6.74 | 1.29 | 0.28 | 6.74 | 11.70 |
| Domain 1 | 2.12 | 1.90 | 0.37 | 0.08 | 1.47 | 2.88 |
| Domain 2 | 2.09 | 2.00 | 0.36 | 0.08 | 1.65 | 3.00 |
| Domain 3 | 2.14 | 2.00 | 0.32 | 0.07 | 1.60 | 2.90 |
| Domain 4 | 2.13 | 2.00 | 0.40 | 0.09 | 1.34 | 2.92 |

When each of the measures listed in Table 2 were compared for differences by educational concentration of participant (Elementary or Secondary), none were found to be statistically significant.

Table 3 illustrates the comparison of essential study measures by educational concentration.

Table 3

*Comparison of Essential Study Measures by Educational Concentration*

| Measure | Mean Difference (Elementary/Secondary) | *t* |
|---|---|---|
| Emotional Intelligence | 6.18 | 1.33 |
| GPA | .03 | 0.14 |
| Domain Composite Score | .47 | 0.74 |
| Domain 1 | .04 | 0.24 |
| Domain 2 | .13 | 0.72 |
| Domain 3 | .23 | 1.47 |
| Domain 4 | .15 | 0.77 |

**Research Questions**

To address the stated research problem of the current investigation, three specific research questions and hypotheses were posed:

1. Of participant GPA and Emotional Intelligence, which represents the most robust predictor of student teaching Summative Evaluation success?

The mathematical relationship between participant GPA and emotional intelligence is considered inverse and weak in effect ($r = -.02$; $p > .05$). This associative separation of predictor variables avoided the violation of the assumption of multicollinearity of predictor variables in the prediction model, thus allowing for a clear evaluation of the predictive prowess of the respective independent variables of participant GPA and emotional intelligence quotient. Table 4 represents the mathematical relationship between the independent variables and the dependent variable of "Domain Composite Score".

Table 4

*Independent Variables and the Dependent Variable of Domain Composite Score*

| Independent Variable | *r* |
|---|---|
| GPA | .48** |
| Emotional Intelligence | .06 |

**$p < .01$

Participant GPA represents the more robust and statistically significant predictor of participant "Domain Composite Score" when compared to Emotional Intelligence. Table 5 represents a summary of findings for research question one.

Table 5

*Predicting Domain Composite Score (Emotional Intelligence and GPA)*

| Variable | ß | *SE* | *Beta* | *t* |
|---|---|---|---|---|
| Intercept | 1.67 | 3.99 | | 0.42 |
| Emotional Intelligence | .01 | 0.03 | .07 | 0,31 |
| GPA | 1.62 | 0.70 | .48 | 2.33* |

*$p < .05$

1. $H_a$ – Emotional intelligence will represent the most statistically significant predictor of Student Teaching summative success.

In light of the statistically significant finding favoring participant GPA over Emotional Intelligence as the more robust predictor of participant "Domain Composite Score", the alternative research hypothesis for research question one is rejected.

2. Of the four domains inherent in the *Student Teaching Evaluation Protocol*, which represents the most robust predictor of Student Teaching Summative Assessment or "Domain Composite Score"?

The mathematical relationship between the four domains of the Student Teaching Protocol and the "Composite Domain Score" or Summative Assessment score is considered "very strong", ranging from $r = .77$ to $r = .95$. A summary of associative finding between individual domains and the summative composite domain score is illustrated in Table 6.

Table 6

*Correlation of Individual Domains and Summative Composite Domain Score*

| Domain | *r* |
|---|---|
| 1. Instructional Design/Lesson Planning/Assessment | .77*** |
| 2. Instructional Delivery/Facilitation | .95*** |
| 3. Learning Environment | .92*** |
| 4. Professional Responsibility/Ethical Conduct | .91*** |

***$p < .001$

All four domains represented robust, statistically significant predictors of the summative composite domain score ($p < .001$), with a slight predictive edge favoring Domain 2. Table 7 depicts the predictive prowess of individual domains with the dependent variable "Composite Domain Score".

Table 7

*Predicting Composite Domain Score using Individual Domains*

| Domain | ß | *SE* | *Beta* | *t* |
|---|---|---|---|---|
| 1 | 2.66 | 0.51 | .77 | 5.21*** |
| 2 | 3.43 | 0.27 | .95 | 12.90*** |
| 3 | 3.70 | 0.35 | .92 | 10.47*** |
| 4 | 2.85 | 0.31 | .91 | 9.27*** |

***$p < .001$

2. $H_a$ – Domain 2: Instructional Delivery and Facilitation will represent the most robust, statistical significant predictor of summative student teaching "Composite Domain Score". In light of the finding favoring Domain 2 in the predictive model, the alternative research hypothesis is retained.

3. Of participant GPA and Emotional Intelligence, which represents the most robust predictor within each of the four domains?

The mathematical relationship between the two predictor variables, GPA and Emotional Intelligence, with each of the four domains within the Student Teaching Protocol is represented in Table 8.

Table 8

*Correlation Coefficients of Emotional Intelligence and GPA within Domains*

| Domain | GPA (*r*) | Emotional Intelligence (*r*) |
|---|---|---|
| 1 | .22 | -.05 |
| 2 | .53*** | .12 |
| 3 | .38* | .15 |
| 4 | .56*** | .01 |

*$p < .05$ ***$p < .001$

Participant GPA represents a more robust correlate in all four domain comparisons when matched against the variable Emotional Intelligence. A weak relationship exists between Emotional Intelligence and each of the four domains, whereas moderate relationships exist in three of four domain comparisons for the variable participant GPA.

Table 9 represents a summary depiction of the comparative predictive prowess of the two independent variables, GPA and Emotional Intelligence, with the four domains of the Student Teaching Assessment Protocol.

Table 9

*Evaluating Predictive Ability of Emotional Intelligence and GPA within Domains*

| Domain | GPA ($\beta$) | Emotional Intelligence ($\beta$) |
|---|---|---|
| 1 | 0.21 | -.01 |
| 2 | 0.49** | .00 |
| 3 | 0.32 | .01 |
| 4 | 0.60** | .00 |

**$p < .01$

3. $H_a$ – GPA will represent the most robust predictor of Domain 1: Instructional Design, Lesson Planning and Assessment.

In light of the finding favoring participant GPA, although not statistically significant, the alternative research hypothesis is nonetheless retained.

3. $H_b$ – Emotional intelligence will represent the most robust predictor of Domain 2: Instructional Delivery and Facilitation.

Based on the statistically significant finding favoring participant GPA, the alternative research hypothesis is rejected.

3. $H_c$ – Emotional intelligence will represent the most robust predictor of Domain 3: The Learning Environment.

Due to finding favoring participant GPA, although not statistically significant, the alternative research hypothesis is rejected.

3. $H_d$ – Emotional intelligence will represent the most robust predictor of Domain 4: Professional Responsibility and Ethical Conduct.

In light of the statistically significant finding favoring participant GPA, the alternative research hypothesis is rejected.

**Supplementary Follow-up Analysis**

Due to the finding regarding the predictive prowess of each of the four domains of the study with the dependent measure "Domain Composite Score", a supplementary, follow-up Exploratory Factor Analysis (EFA*)* using Principal Components Analysis (PCA) was conducted. The factoring model was robust (KMO = .77; Bartlett's Test of Spherecity: $x^2_{(6)} = 64.57$; $p <$ .001) in its ability to detect three distinct "factors" that the four domains loaded upon. The three-factor solution accounted for 97.79 % of explained variance in the model. Domain 2 and Domain 3 loaded together on factor two, whereas Domain 1 and Domain 4 loaded individually upon factor one and factor three respectively. Additionally, the mathematical relationship between Domain 2 and Domain 3 represented the strongest correlation between domains in the study ($r = .88$).

**Chapter Summary**

The purpose of the current investigation was to evaluate the predictive ability of participant Emotional Intelligence. Three distinct research questions with accompanying research hypotheses were posed to address the stated research problem. The participant sample consisted of student teachers (n = 21) enrolled in a private university located in the central portion of the State of Florida. The performance assessment protocol, the study's research instrument, consisted of four specific domains of evaluation. The primary independent predictive variables were participant GPA and Emotional Intelligence Quotient. The study's

primary dependent variable was the summative or "Composite Domain Score" each participant received at the termination of the student teaching experience.

Study data were analyzed using a combination of descriptive, inferential, associative, and predictive statistical techniques. A supplementary, follow-up Exploratory Factor Analysis (EFA) was also conducted in light of one specific finding within research question three. A remarkably high level of internal reliability of participant performance was noted ($a > .80$), and comparisons of all study variables by educational concentration of participants depicted a sample that was equivocal across all study variables.

Participant GPA rather than participant Emotional Intelligence appeared to be the more robust predictor of performance on the summative evaluation "Composite Domain Score" as well as with the individual domain analyses. Domain 2 appeared to be the most robust of the four domains. The results provided relevant information for initial teacher preparation programs to consider in identifying predictor factors of pre-service teachers and success in student teaching.

# V. DISCUSSION

University pre-service teachers participated in student teaching internships as the culmination of the College of Education initial teacher preparation program. The chapter presents a discussion of the data analysis results considering the factors of GPA and emotional intelligence as predictors of success in student teaching. The findings indicated GPA was a predictor of student success in student teaching; however, emotional intelligence did not show a correlation as a predictor of student success in student internship.

## Overview of Study

The purpose of the dissertation was to investigate possible factors related to pre-service teachers and the relationship to success in student teaching through a predictive study. Research analyzed the GPAs and emotional intelligence scores of student teachers and the correlation to student teaching evaluations as predictors of success of student teaching. The study focused on 21 education majors in a College of Education initial teacher preparation program at a university in central Florida of which 11 students were elementary education majors, and 10 students were secondary majors. Leading up to the semester of student teaching, the College of Education students had participated in three field studies in which students had gained valuable experience in a classroom setting and met all pre-requisites for student internship. Student teaching is the last phase of preparation for full-time teaching, so it is of utmost importance that students are adequately prepared for the clinical experience.

The study concentrated on two specific possible predictive factors, GPA and emotional intelligence, and the correlation to the final summative student teaching evaluations identifying success of student teaching. The 21 student interns were assigned to classrooms in the local school district where they were under the daily supervision of a classroom teacher. University supervisors observed and evaluated the student teachers four times. The university supervisors provided feedback to the student teachers about the evaluations and oversaw the student interns throughout the entire internship.

Two instruments were used in the study to assist the research. The Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) instrument assessed the emotional intelligence of the student interns and was administered in the first seminar of the course before the students began student teaching. *Form H* (see Appendix A) was the performance assessment protocol, the study's research instrument, which consisted of four specific domains of evaluation. *Form K* (see Appendix B) provided numerical data for each student teaching evaluation, and *Form H Data Collection* (see Appendix C) presented the cumulative summative evaluation data. The primary independent predictive variables were participant GPA and Emotional Intelligence Quotient. The primary dependent variable of the study was each participant's summative or composite domain score received at the termination of the student teaching experience.

The correlational research study converged from a quantitative perspective and multiple regression analysis. Results of the study were provided through primary analyses, demographics, and internal consistencies of the four domains. A descriptive analysis was presented along with an analysis of the research questions and hypotheses. Tables representing the findings of the data and correlations were presented in perspective to the research questions and hypotheses.

## Review of Problem Statement

The purpose of this predictive study was to examine possible factors related to pre-service teachers and the correlation to success in the final student teaching internship of a teacher preparation education program. The study researched 21 student interns in a College of Education program at a university in central Florida. University College of Education initial teacher preparation programs strive to produce successful teachers. Preparing successful teachers is the goal of initial teacher preparation programs, and student teaching is the last phase of a teacher preparation program. A successful university teacher preparation program will be able to not only prepare the pre-service college education student for student teaching but will be able to predict the success of their students in student teaching.

The problem for university initial teacher preparation programs is knowing what predictive factors will predict student success in student teaching. If predictive factors can be identified, then College of Education initial teacher preparation programs can identify which students are prepared for student teaching and which students may at risk of a successful student internship or simply benefit from more preparation before student teaching. Identifying predictive factors of student teaching success could also identify a need or specific area in which pre-service college education students could benefit from additional courses or seminars. School administrators could also consider the predictive factors in the hiring process of new teachers.

## Summary of the Results

Preliminary analyses of the study were conducted of demographic information, missing data, internal constancy (reliability) of ratings within observation domains, and essential descriptive analyses. The primary demographics identified 21 student teachers who participated in the study; 18 of the 21 participants were female (n=18) and 3 were male (n=3). The education

concentration area represented (n=11) were elementary education majors, and (n=10) were secondary education majors.

Of emotional intelligence (EI) and grade point average (GPA), GPA represented the most statistically significant predictor of student teaching summative success. All four domains represented robust, statistically significant predictors of the summative composite domain score ($p<.001$). Domain 2: Instructional Delivery and Facilitation indicated a slight predictive edge over the other domains. The results of the analyses indicated that GPA represented a more robust correlate of all four domain comparisons against the variable emotional intelligence. Emotional intelligence revealed a weak relationship existed in each of the four domains, whereas moderate relationships existed in three of the four domains for the variable GPA. For Domain 1: Instructional Design, Lesson Planning and Assessment, the finding favored GPA, although it was not statistically significant. GPA indicated a statistically significant finding for Domain 2: Instructional Delivery and Facilitation. For Domain 3: The Learning Environment, results favored GPA although not statistically significant. The findings indicated that GPA was statistically significant to Domain 4: Professional Responsibility and Ethical Conduct. Of GPA and emotional intelligence, GPA indicated a moderate to statistically significant correlation to the four domains assessed from the student teacher evaluations.

**Discussion and Implications**

GPA was determined to be a predictor of student teaching success. Domain 2 and Domain 4 both identified statistically significant results for GPA, which identify areas of instructional delivery and facilitation, and professional responsibility and ethical conduct. Students with higher GPAs are likely to excel in these two domains; whereas, students with lower GPAs may need more preparation and practice in the two domains before the student

internship. Conscientiousness and intrinsic motivation are important factors of GPA, and research indicated that conscientiousness and intrinsic motivation were more important than IQ (Kappe & van der Flier, 2012). Conscientious individuals perform better because they have more perseverance and better organizational skills (Kappe & van der Flier, 2012). Research by Noftle and Robins (2007) confirmed the same findings of conscientiousness as being a predictor of GPA. Research also indicated that motivation is a predictor of GPA (Kappe & van der Flier, 2012; O'Connor and Paunonen, 2007; Noftle & Robins, 2007; Richardson & Abraham, 2009; Salgado & Táuriz, 2012). Conscientiousness and motivation related to GPA would appear to directly reflect factors that contributed to Domain 4 indicators of responsibility and ethical conduct. Research by Holt (2007) indicated statistical analyses showed a positive correlation between GPA and emotional intelligence as determined by the MSCEIT. The positive correlation may indicate traits that are factors of both GPA and emotional intelligence.

In the study by Hannon (2014), correlations to social/personality and learning cognitive measures were researched. The study identified three factors that correlated to GPA. Academic self-efficacy, epistemic belief of learning, and high-knowledge influenced GPA the most, and consideration should be given to the three factors when trying to improve GPA (Hannon, 2014). Horton and Snyder (2009) studied overall wellness based on seven distinct dimensions influenced college students' academic performance and GPA. The seven areas focused on physical, occupational, environment, social, emotional, intellectual, and spiritual; and the findings of the study indicated that having a balanced life results in greater academic success (Horton & Snyder, 2009). Understanding the many different factors that contribute to GPA will help to identify what specific characteristics of GPA might more specifically predict success of student teachers.

The researcher noted other observations from the data collection, which supported the study findings. The two students with the highest GPAs also demonstrated the highest cumulative summative evaluation scores; however, both students' MSCEIT scores were just slightly higher than the mean of the sample size. The implications are GPA is a better predictor of success in student teaching demonstrated by evaluations rather than emotional intelligence.

Various definitions and models of emotional intelligence are broad, which makes it difficult to assess and to define within a context. The MSCEIT is an ability-based assessment, and Mayer, Salovey, and Caruso (2002) encourage the assessment for research purposes. The MSCEIT is the most well-known and widely accepted instrument for assessing emotional intelligence as an ability (Maul, 2012; Fiori et al., 2014), and most other emotional assessments are self-report. The student interns' emotional intelligence scores from the MSCEIT did not establish a correlation to the student teachers' cumulative evaluations failing to predict success of student teaching. The MSCEIT limits its assessment to its definition and model of emotional intelligence. There is a need for more ability-based emotional intelligence assessments that reflect other models and definitions of emotional intelligence.

**Recommendations**

GPA was identified as a predictor of pre-service teachers' success in student teaching. Recommendations for further research need to focus on identifying specifically what elements and traits contribute the most to GPA that will indicate predictive factors of student teaching success. Current research identifies similar traits and characteristics of both GPA and emotional intelligence. Further research is necessary to identify the relationship between the traits and characteristics of GPA and emotional intelligence.

Research that focuses on traits and characteristics of successful teachers would be beneficial for identifying specific predictive traits of successful teachers and pre-service teachers. Identifying specific traits and characteristics of successful teachers could be useful to initial teacher preparation programs by implementing seminars and lectures for student professional growth and development as the education students prepare for student teaching.

The definition of emotional intelligence is broad and varies from model to model. Additionally, emotional intelligence instruments vary greatly and include ability-based and self-report assessments. Research needs to find a way to differentiate between the different definitions of emotional intelligence and the many different models. Current research of emotional intelligence often provides contradictive findings, which could be the result of the varied emotional intelligence definitions, models, and instruments. Recommendations encourage continued research of emotional intelligence that could further identify and specify a distinct definition and characteristics associated with emotional intelligence.

**Conclusion**

The dissertation presented a predictive study of pre-service teachers who participated in student teaching, which was the final culmination of the university-level teacher preparation program. The research assessed predictive factors of GPA and emotional intelligence of student teachers and the correlation to success of the student internship represented by student teaching evaluations. The study identified GPA as a predictive factor of success in student teaching based on the correlation to student teacher evaluations; furthermore, the study indicated no correlation between emotional intelligence and student teaching success. The chapter presented an overview of the study, reviewed the problem statement, and provided a summary of the results. Discussion and implications of the study were addressed along with recommendations for additional

research. The dissertation study provided pertinent information about the value and predictive factor of GPA in relationship to student teachers and success in student teaching internship programs.

# REFERENCES


Bar-On, R. (2004). The Bar-On emotional quotient inventory (EQ-i): Rationale, description and summary of psychometric properties. In G. Geher (Ed.), *Measuring emotional intelligence: Common ground and controversy* (pp. 115–145). New York: Nova Science.

Bar-On, R. (2006). The Bar-On model of emotional-social intelligence (ESI). [Supplemental material]. *Psicothema*, *18*, 13-25.

Boyatzis, R. E., & Sala, F. (2004). The emotional competence inventory (ECI). In G. Geher (Ed.), *Measuring emotional intelligence: Common ground and controversy* (pp. 147–180). New York: Nova Science.

Brackett, M.A., & Mayer, J. D. (2003). Convergent, discriminant, and incremental validity of competing measures of emotional intelligence. *Personality and Social Psychology Bulletin, 29*(9), 1147-1158. doi:10.1177/01461672033254596

Bradberry, T., & Greaves, J. (2009). *Emotional intelligence 2.0.* San Diego, CA: Talent Smart.

Bradshaw, F. B. (2008). *Exploring the relationship between emotional intelligence and academic achievement in African American female college students* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (Order No. 3304794)

Butler, R.P. (1976). Relationship between college performance and success as an army officer. *Journal of Vocational Behavior. 9*(3), 385-391.

Byron, C. M. (2001). *The effects of emotional knowledge education in the training of novice teachers.* (Unpublished doctoral dissertation). Columbia University, New York.

Çetin, B. (2015). Academic motivation and self-regulated learning in predicting academic achievement in college. *Journal of International Education Research*, *11*(2), 95-106.

Codier, E., & Odell, E. (2014). Measured emotional intelligence ability and grade point average in nursing students. *Nurse Education Today, 34*(4) 608-6121. doi:10.1016/j.nedt.2013.06.007

Cooper, R. K., & Sawaf, A. (1998). *Executive EQ: emotional intelligence in leadership and organizations*. New York: Berkley Pub. Group.

Corcoran, R. P., & Tormey, R. (2013). Does emotional intelligence predict student teachers' performance? *Teaching and Teacher Education*, *35*(8), 34-42.

Danielson, C. (2007). *Enhancing professional practice: A framework for teaching*. Alexandria, VA: ASCD.

Danielson, C. (2010). Evaluations that help teachers learn. *Part of a Special Issue: The Effective Educator*, *68*(4), 35–39. Retrieved from https://seu.idm.oclc.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=ofm&AN=508198502&site=ehost-live&scope=site

D'Agostino, J. V., & Powers, S. J. (2009). Predicting teacher performance with test scores and grade point average: A meta-analysis. *American Educational Research Journal, 46*(1), 146–182. doi:10.3102/0002831208323280

Dye, D. A., & Reck, M. (1989). College grade point average as a predictor of adult success: A reply. *Public Personnel Management*, *18*(2), 235.

Ekman, P. (2006). *Darwin and facial expression: A century of research in review*. Cambridge, Mass.: Malor.

Ekman, P., Davidson, R. J., & Friesen, W. V. (1990). The Duchenne smile: Emotional expression and brain physiology: II. *Journal of Personality and Social Psychology*, *58*(2), 342-353. doi:10.1037/0022-3514.58.2.342

Fiori, M., Antonietti, J.P., Mikolajczak, M., Luminet, O., Hansenne, M., & Rossier, J. (2014). What is the ability emotional intelligence test (MSCEIT) good for? An evaluation using item response theory. *PLoS ONE*, *9*(6), e98827.

Florida Department of Education. (2017a). *Clinical educator training (CET) program overview*. Retrieved from http://www.fldoe.org/teaching/professional-dev/clinical-educator-training-cet-program.stml

Florida Department of Education. (2017b). *Educator preparation programs information.* Retrieved from http://www.fldoe.org/teaching/preparation/

Florida Department of Education. (2017c). *The Florida educator accomplished practices (FEAPs)*. Retrieved from http://www.fldoe.org/teaching/professional-dev/the-fl-educator-accomplished-practices.stml

Florida Southern College. (2016). *Florida Southern College academic catalog 2016-2017*. Retrieved from https://www.flsouthern.edu/FSC/media/Academics/catalogs/FSC-Academic-Catalog-2016-2017.pdfFreedman, J. (2007). *At the heart of leadership: How to get results with emotional intelligence*. San Mateo, CA: Six Seconds.

Goleman, D. (1998). *Working with emotional intelligence.* New York: Bantam Books.

Goleman, D. (2006a). *Emotional intelligence: Why it can matter more than IQ* (10th anniversary ed.). New York: Bantam Books.

Goleman, D. (2006b). *Social intelligence: The revolutionary new science of human relationships*. New York, NY: Random House Publishing Group.

Goleman, D. (2011). *The brain and emotional intelligence: New insights* (2nd ed.). Florence, MN: More Than Sound.

Goleman, D., Boyatzis, R. E., & McKee, A. (2013). *Primal leadership: Unleashing the power of emotional intelligence* (Tenth anniversary edition.). Boston, Massachusetts: Harvard Buss Review Press.

Grade Point Average. (n.d.). In *Merriam-Webster's online dictionary* (11th ed.). Retrieved from https://www.merriam-webster.com/dictionary/grade%20point%20average

Hannon, B. (2014). Predicting college success: The relative contributions of five social/personality factors, five cognitive/learning factors and SAT scores. *Journal of Education and Training Studies*, *2*(4), 46-58.

Hen, M., & Sharabi-Nov, A. (2014). Teaching the teachers: Emotional intelligence training for teachers. *Teaching Education*, *25*(4), 375-390.

Holt, S. (2007). *Emotional intelligence and academic achievement in higher education* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Global. (Order No. 3256101)

Horton, B. W., & Snyder, C. S. (2009). Wellness: Its impact on student grades and implications for business. *Journal of Human Resources in Hospitality & Tourism*, *8*(2), 215-233. doi:10.1080/15332840802269858

Jacques, E. T. (2009). *The relationships between emotional intelligence and the academic performance and selection of a major of college students* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Global. (Order No. 3353999)

Justice, M., & Espinoza, S. (2007). Emotional intelligence and beginning teacher candidates. *Education, 127*(4), 456-461.

Kappe, R., & van der Flier, H. (2012). Predicting academic success in higher education: What's more important than being smart? *European Journal of Psychology of Education*, *27*(4), 605-619.

King, D. H. (1999). *Measurement of differences in emotional intelligence of preservice educational leadership students and practicing administrators as measured by the multifactor emotional intelligence scale* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Global. (Order No. 9922717)

Kumar (2010). How is GPA computed in US schools? GPA Computation formula? Retrieved from http://redbus2us.com/how-is-gpa-computed-in-us-schools-gpa-computation-formula/

Lavigna, R. J. (1992). Predicting job performance from background characteristics: More evidence from the public sector. *Public Personnel Management*, *21*(3), 347-61.

Marzano, R. J. (2012). The two purposes of teacher evaluation. *Educational Leadership*, *70*(3), 14-19.

Maul, A. (2012). The validity of the Mayer-Salovey-Caruso emotional intelligence test (MSCEIT) as a measure of emotional intelligence. *Emotional Review, 4,* 394-402.

Mayer, J. D., & Caruso, D. R. (1999). Emotional intelligence meets traditional standards for an intelligence. *Intelligence, 27*(4), 267.

Mayer, J. D., DiPaolo, M. T., & Salovey, P. (1990). Perceiving affective content in ambiguous visual stimuli: A component of emotional intelligence. J*ournal of Personality Assessment*, *54*, 772-781.

Mayer, J.D., & Geher, G. (1996). Emotional intelligence and the identification of emotion. *Intelligence, 22*, 89-113.

Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. Sluyter (Eds.), *Emotional development and emotional intelligence: Educational implications* (pp. 3–31). New York: Basic Books.

Mayer, J. D., Salovey, P., & Caruso, D. R. (2002). *Mayer-Salovey-Caruso emotional intelligence test (MSCEIT): Users manual*. North Tonawanda, NY: Multi-Health Systems Inc**.**

Mayer, J. D., Salovey, P., & Caruso, D. R. (2008). Emotional intelligence: New ability or eclectic traits? *American Psychologist*, *63*(6), 503-517.

Mayer, J. D., Salovey, P., & Caruso, D. R. (2012). The validity of the MSCEIT: Additional analyses and evidence. *Emotion Review,4*(4), 403-408. doi:10.1177/1754073912445815

Mayer, J. D., Salovey, P., Caruso, D. R., & Sitarenios, G. (2001). Emotional intelligence as a standard intelligence. *Emotion, 1*(3), 232-242. http://dx.doi.org/10.1037/1528-3542.1.3.232

Modupe, H. E. (2010). Emotional intelligence and self-esteem as predictors for success in teaching practice exercise. *Academic Leadership*, *8*(3), 53-55.

Mohamad, M., & Jais, J. (2016). Emotional intelligence and job performance: A study among Malaysian teachers. *Procedia Economics and Finance, 35*(*125*), 674-682.

Moss, J. T. (2015). *The Danielson model of teacher evaluation: Exploring teacher perceptions concerning its value in shaping and improving instructional practice* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (Order No. 3717968)

Mouton, A., Hansenne, M., Delcour, R., & Cloes, M. (2013). Emotional intelligence and self-efficacy among physical education teachers. *Journal of Teaching in Physical Education, 32*(4), 342-354.

Noftle, E. E., & Robins, R. W. (2007). Personality predictors of academic outcomes: Big five correlates of GPA and SAT scores. *Journal of Personality & Social Psychology*, *93*(1), 116-130.

O'Connor, M. C., & Paunonen, S. V. (2007). Big five personality predictors of post-secondary academic performance. *Personality & Individual Differences*, *43*(5), 971-990. doi:10.1016/j.paid.2007.03.017

Owen, M. (2017). *Southeastern University student teacher handbook college of education.* [Brochure].

Petrides, K. V., & Furnham, A. (2001). Trait emotional intelligence: Psychometric investigation with reference to established trait taxonomies. *European Journal of Personality, 15,* 425–448.

Polk County Public Schools. (n.d.a). Retrieved from http://www.polk-fl.net/districtinfo/default.htm

Polk County Public Schools. (n.d.b). Retrieved from https://www.polk-fl.net/districtinfo/rttt/documents/TeacherEvaluationSystem.pdf

Polk County Public Schools. (n.d.c). *Teacher evaluation EPC rating rubrics.* [Brochure].

Rastogi, M. R., Kewalramani, S., & Agrawal, M. (2015). Models of emotional intelligence: Similarities and discrepancies. *Indian Journal of Positive Psychology, 6*(2), 178-181.

Rau, W. A. (2001). *The relationship of emotional intelligence test scores to job performance evaluation scores in the management group of a health care organization* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Global. (Order No. 3002137)

Richardson, M., & Abraham, C. (2009). Conscientiousness and achievement motivation predict performance. *European Journal of Personality*, *23*(7), 589-605. doi:10.1002/per.732.

Rojas, M. (2012). *The missing link: Emotional intelligence in teacher preparation* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Global. (Order No. 3495309)

Salgado, J. F., & Táuriz, G. (2012). The five-factor model, forced-choice personality inventories and performance: A comprehensive meta-analysis of academic and occupational validity studies. *European Journal of Work and Organizational Psych*ology, 23(1), 3-30. doi:10.1080/1359432x.2012.716198

Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition, and Personality, 9*, 185-211.

Sawyer, R. (2013). Beyond correlations: Usefulness of high school GPA and test scores in making college admissions decisions. *Applied Measurement in Education*, *26*(2), 89-112.

Sinicrope, R. S., Eppler, M., Preston, R. V., & Ironsmith, M. (2015). Preservice teachers of high school mathematics: Success, failure, and persistence in the face of mathematical challenges. *School Science & Mathematics*, *115*(2), 56-65.

Southeastern University. (2016). *2016-2017 Southeastern University catalog.* Retrieved from http://catalog.seu.edu/content.php?catoid=22&navoid=720

Stultz, S. L. (2015). The characteristics sought by public school leaders of applicants for teaching positions. *SRATE Journal*, *24*(2), 14-24.

Thomas, S. L. (2000). Deferred costs and economic returns to college major, quality, and performance. *Research in Higher Education*, *41*(3), 281–313.

Vesely, A. K., Saklofske, D. H., & Leschied, A. D. W. (2013). Teachers - The vital resource: The contribution of emotional intelligence to teacher efficacy and well-being. *Canadian Journal of School Psychology*, 28, 71–89. doi:10.1177/0829573512468855

Vesely, A. K., Saklofske, D. H., & Nordstokke, D. W. (2014). EI training and pre-service teacher wellbeing. *Personality and Individual Differences*, *65,* 81-85. doi:10.1016/j.paid.2014.01.052

Walker, M. E. B. (2006). *Emotional intelligence and academic success in college* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Global. (Order No.3268481)

Willoughby, D. A., Lee, F. P., & Beil, J. (2013). Academic performance in a two-year turfgrass management program as an indicator for career success. *NACTA Journal; Twin Falls*, *57*(3), 27–31. Retrieved from http://search.proquest.com/docview/1437602273/abstract/842D000F04B446FDPQ/2

Wise, D. A. (1975). Academic achievement and job performance. *American Economic Review, 65*(3), 350.

# APPENDICES

Appendix A

**Form H: Student Teacher Formative Evaluation Tool**

This form is to be used by the University Supervisor as a formative assessment. Supervisors will observe the student teacher and provide feedback regarding the evidence of domain mastery as seen in the observation. Include strengths/weaknesses observed. A review of this feedback will be discussed with the student teacher in a post observation conference.

| | | | | |
|---|---|---|---|---|
| Student's Name: | | | Major: | |
| Observer's Name: | | | Observation Date: | |
| School: | | | Start Time: | End Time: |
| Cooperating Teacher: | | | Subject:<br>Grade Level: | |
| University Supervisor: | | | **Circle One**: Observation/Formative Evaluation<br>1 2 3 4 | |
| **Student Teacher Preparedness** | | | | |
| Is a Lesson Plan provided? | Y | N | Remarks: | |
| Are ESOL/ESE needs addressed in the plan? | Y | N | Remarks: | |
| Is SEU student prepared for observation? | Y | N | Remarks: | |
| Is SEU student dressed/groomed appropriately? | Y | N | Remarks: | |
| Is observer's "station" prepared? | Y | N | Remarks: | |
| **Classroom Setting and Qualities** | | | | |
| Total # of Male Students: | | Describe the Classroom or School Wide Management System used. | | |
| Total # of Female Students: | | | | |
| Total # of Students: | | | | |
| Is the classroom print rich? | Y | N | Remarks: | |
| Are there adequate materials? | Y | N | Remarks: | |
| Is the LEQ/UEQ/I Can Statement accessible to all students? | Y | N | Remarks: | |
| Available Technology: | | | | |
| Notable qualities of classroom environment: | | | | |

| **Domain 1: Instructional Design, Lesson Planning, and Assessment** | |
|---|---|
| **1a. Demonstrating knowledge of content and pedagogy** [(a).3] | **Please document any of the following in the space below:** *Evidence of Instruction, Student Engagement, Student Teacher's Strengths, and/or Student Teacher's Needed Improvements.* |
| Examples:<br>✓ Demonstrates knowledge of content<br>✓ Uses effective instructional strategies | |
| ***Points Earned*** (Circle One) | ***0**-Unsatisfactory* ***1**-Developing* ***2**-Effective* ***3**-Highly Effective* |
| **1b. Demonstrating knowledge of students** [(a).2, 3] | **Please document any of the following in the space below:** *Evidence of Instruction, Student Engagement, Student Teacher's Strengths, and/or Student Teacher's Needed Improvements.* |
| Examples:<br>✓ Differentiates instruction<br>✓ Leads data chats w/ students | |
| ***Points Earned*** (Circle One) | ***0**-Unsatisfactory* ***1**-Developing* ***2**-Effective* ***3**-Highly Effective* |
| **1c. Setting instructional outcomes** [(a).1] | **Please document any of the following in the space below:** *Evidence of Instruction, Student Engagement, Student Teacher's Strengths, and/or Student Teacher's Needed Improvements.* |
| Examples:<br>✓ Lesson plans<br>✓ Use of progress monitoring record<br>✓ Use of researched-based best practices (LFS, CRISS, etc.) | |
| ***Points Earned*** (Circle One) | ***0**-Unsatisfactory* ***1**-Developing* ***2**-Effective* ***3**-Highly Effective* |
| **1d. Demonstrating knowledge of resources and technology** [(a).2, 3] | **Please document any of the following in the space below:** *Evidence of Instruction, Student Engagement, Student Teacher's Strengths, and/or Student Teacher's Needed Improvements.* |
| Examples:<br>✓ Technology enhances instruction<br>✓ Student use of technology | |

| | |
|---|---|
| ***Points Earned*** (Circle One) | ***0**-Unsatisfactory* ***1**-Developing* ***2**-Effective* ***3**-Highly Effective* |
| **1e. Designing coherent instruction** [(a).1] | **Please document any of the following in the space below:** *Evidence of Instruction, Student Engagement, Student Teacher's Strengths, and/or Student Teacher's Needed Improvements.* |
| Examples:<br>✓ Differentiated assignments<br>✓ Lesson plans<br>✓ Use of researched-based best practices | |
| ***Points Earned*** (Circle One) | ***0**-Unsatisfactory* ***1**-Developing* ***2**-Effective* ***3**-Highly Effective* |
| **1f. Designing student assessments** [(a).4] | **Please document any of the following in the space below:** *Evidence of Instruction, Student Engagement, Student Teacher's Strengths, and/or Student Teacher's Needed Improvements.* |
| Examples:<br>✓ Formative assessments<br>✓ Progress monitoring records<br>✓ Observations | |
| ***Points Earned*** (Circle One) | ***0**-Unsatisfactory* ***1**-Developing* ***2**-Effective* ***3**-Highly Effective* |
| **Domain 2: Instructional Delivery and Facilitation** | |
| **2a. Communicating with students** [(a).2, 3] | **Please document any of the following in the space below:** *Evidence of Instruction, Student Engagement, Student Teacher's Strengths, and/or Student Teacher's Needed Improvements.* |
| Examples:<br>✓ Refers to LEQ, UEQ, or I Can statement during lesson<br>✓ Checks for understanding<br>✓ Connects to prior knowledge<br>✓ Conveys high expectations | |
| ***Points Earned*** (Circle One) | ***0**-Unsatisfactory* ***1**-Developing* ***2**-Effective* ***3**-Highly Effective* |
| **2b. Using strategies to evoke high-order (HOT) thinking and discussions** [(a).3] | **Please document any of the following in the space below:** *Evidence of Instruction, Student Engagement, Student Teacher's Strengths, and/or Student Teacher's Needed Improvements.* |
| ***Points Earned*** (Circle One) | ***0**-Unsatisfactory* ***1**-Developing* ***2**-Effective* ***3**-Highly Effective* |

| | |
|---|---|
| **2c. Lesson delivery and engaging students in learning** [(a).3] | **Please document any of the following in the space below:** *Evidence of Instruction, Student Engagement, Student Teacher's Strengths, and/or Student Teacher's Needed Improvements.* |
| Examples:<br>✓ Instruction engagingly meets student needs<br>✓ Uses distributed summarizing<br>✓ Uses accountable talk | |
| ***Points Earned*** (Circle One) | ***0****-Unsatisfactory* ***1****-Developing* ***2****-Effective* ***3****-Highly Effective* |
| **2d. Using assessment in instruction** [(a).4] | **Please document any of the following in the space below:** *Evidence of Instruction, Student Engagement, Student Teacher's Strengths, and/or Student Teacher's Needed Improvements.* |
| Examples:<br>✓ Checks for understanding through varied questioning techniques<br>✓ Provides feedback to students<br>✓ Uses assessment prompts | |
| ***Points Earned*** (Circle One) | ***0****-Unsatisfactory* ***1****-Developing* ***2****-Effective* ***3****-Highly Effective* |

| | |
|---|---|
| **2e. Demonstrating flexibility and responsiveness** [(a).3] | **Please document any of the following in the space below:** *Evidence of Instruction, Student Engagement, Student Teacher's Strengths, and/or Student Teacher's Needed Improvements.* |
| Examples:<br>✓ Uses varied instructional strategies<br>✓ Adjusts instruction based on student responses | |
| ***Points Earned*** (Circle One) | ***0****-Unsatisfactory* ***1****-Developing* ***2****-Effective* ***3****-Highly Effective* |
| **2f. Integrating cross content reading and writing instruction** [(a).3] | **Please document any of the following in the space below:** *Evidence of Instruction, Student Engagement, Student Teacher's Strengths, and/or Student Teacher's Needed Improvements.* |
| Examples:<br>✓ Incorporates Reading in content<br>✓ Develops content vocabulary<br>✓ Incorporates writing<br>✓ Uses comprehension strategies | |

| | |
|---|---|
| ***Points Earned*** (Circle One) | ***0****-Unsatisfactory* ***1****-Developing* ***2****-Effective* ***3****-Highly Effective* |
| **Domain 3: The Learning Environment** | |
| **3a. Creating an environment of respect and rapport** [(a).2] | **Please document any of the following in the space below:** *Evidence of Instruction, Student Engagement, Student Teacher's Strengths, and/or Student Teacher's Needed Improvements.* |
| Examples:<br>✓ Reinforces appropriate actions<br>✓ Environment is open and respectful | |
| ***Points Earned*** (Circle One) | ***0****-Unsatisfactory* ***1****-Developing* ***2****-Effective* ***3****-Highly Effective* |
| **3b. Establishes a culture for learning** [(a).2, 3] | **Please document any of the following in the space below:** *Evidence of Instruction, Student Engagement, Student Teacher's Strengths, and/or Student Teacher's Needed Improvements.* |
| Examples:<br>✓ Interacts with students positively<br>✓ Provides appropriate feedback<br>✓ Communicates expectations to students | |
| ***Points Earned*** (Circle One) | ***0****-Unsatisfactory* ***1****-Developing* ***2****-Effective* ***3****-Highly Effective* |
| **3c. Managing classroom procedures** [(a).2, 3] | **Please document any of the following in the space below:** *Evidence of Instruction, Student Engagement, Student Teacher's Strengths, and/or Student Teacher's Needed Improvements.* |
| Examples:<br>✓ Establishes procedures & routines for managing the classroom<br>✓ Manages transitions to maximize instructional time | |
| ***Points Earned*** (Circle One) | ***0****-Unsatisfactory* ***1****-Developing* ***2****-Effective* ***3****-Highly Effective* |
| **3d. Managing student behavior** [(a).2] | **Please document any of the following in the space below:** *Evidence of Instruction, Student Engagement, Student Teacher's Strengths, and/or Student Teacher's Needed Improvements.* |

| | |
|---|---|
| Examples:<br>✓ Establishes standards for behavior, implements a behavior plan, and responds to misbehaviors | |
| ***Points Earned*** (Circle One) | ***0****-Unsatisfactory* ***1****-Developing* ***2****-Effective* ***3****-Highly Effective* |
| **3e. Organizes physical space** [(a).2] | **Please document any of the following in the space below:** *Evidence of Instruction, Student Engagement, Student Teacher's Strengths, and/or Student Teacher's Needed Improvements.* |
| Examples:<br>✓ Classroom environment supports learning<br>✓ Classroom is safe, accessible, and inclusive | |
| ***Points Earned*** (Circle One) | ***0****-Unsatisfactory* ***1****-Developing* ***2****-Effective* ***3****-Highly Effective* |
| **Domain 4: Professional Responsibility and Ethical Conduct** | |
| **4a. Attention to equity and diversity** [(a).2; (b).2] | **Please document any of the following in the space below:** *Evidence of Instruction, Student Engagement, Student Teacher's Strengths, and/or Student Teacher's Needed Improvements.* |
| Examples:<br>✓ Treats all students equitable | |
| ***Points Earned*** (Circle One) | ***0****-Unsatisfactory* ***1****-Developing* ***2****-Effective* ***3****-Highly Effective* |
| **4b. Maintaining accurate records** [(b).2] | **Please document any of the following in the space below:** *Evidence of Instruction, Student Engagement, Student Teacher's Strengths, and/or Student Teacher's Needed Improvements.* |
| Examples:<br>✓ Grading system<br>✓ PS/RTI documentation<br>✓ Attendance<br>✓ IEP Documentation | |
| ***Points Earned*** (Circle One) | ***0****-Unsatisfactory* ***1****-Developing* ***2****-Effective* ***3****-Highly Effective* |

| | |
|---|---|
| **4c. Communicating with families** [(b).1, 2] | **Please document any of the following in the space below:** *Evidence of Instruction, Student Engagement, Student Teacher's Strengths, and/or Student Teacher's Needed Improvements.* |
| Examples:<br>✓ Documentation logs<br>✓ Agenda artifacts<br>✓ Emails<br>✓ Parent Conference documentation | |
| ***Points Earned*** (Circle One) | ***0****-Unsatisfactory* ***1****-Developing* ***2****-Effective* ***3****-Highly Effective* |
| **4d. Participating in a professional community** [(b).1, 2] | **Please document any of the following in the space below:** *Evidence of Instruction, Student Engagement, Student Teacher's Strengths, and/or Student Teacher's Needed Improvements.* |
| Examples:<br>✓ Leadership roles in school district<br>✓ Participation in professional organization<br>✓ Conversation with teachers | |
| ***Points Earned*** (Circle One) | ***0****-Unsatisfactory* ***1****-Developing* ***2****-Effective* ***3****-Highly Effective* |
| **4e. Individual continuous professional improvement** [(b).1, 2] | **Please document any of the following in the space below:** *Evidence of Instruction, Student Engagement, Student Teacher's Strengths, and/or Student Teacher's Needed Improvements.* |
| Examples:<br>✓ PD records<br>✓ Learning community documentation<br>✓ Observed application of learning in the classroom<br>✓ Collaborative planning<br>✓ Serve as a resource | |
| ***Points Earned*** (Circle One) | ***0****-Unsatisfactory* ***1****-Developing* ***2****-Effective* ***3****-Highly Effective* |
| **4f. Professional responsibilities** [(b).2] | **Please document any of the following in the space below:** *Evidence of Instruction, Student Engagement, Student Teacher's Strengths, and/or Student Teacher's Needed Improvements.* |
| Examples:<br>✓ Conversation with teachers<br>✓ Observation | |

| | |
|---|---|
| ***Points Earned*** (Circle One) | ***0****-Unsatisfactory* ***1****-Developing* ***2****-Effective* ***3****-Highly Effective* |
| ***A review of this feedback will be held in a post observation conference.*** | |

| Post Lesson Conference | |
|---|---|
| **At the conclusion of the lesson, students and evaluators are to meet one-on-one. The meeting should flow according to feedback based on the evaluation and guided questions provided below. A plan of action for remediation of specific skills may be developed. The student is to ask clarifying questions throughout the conference for the purpose of professional development and with a teachable spirit.** | |
| **Suggested Guided Questions** | |
| **Were there any special situations or circumstances of which the observer should be aware?** | |
| | |
| **What data did you use to design this lesson?** | |
| | |
| **How did you determine the students' background knowledge, skills, experiences, cultural differences to make the lesson accessible for all?** | |
| | |
| **How did you check for understanding during the lesson?** | |
| | |
| **How did you elicit student critical thinking and problem solving?** | |
| | |
| **Was the lesson objective successfully achieved? Why/why not?** | |
| | |
| **What data support the answer to the previous question?** | |
| | |
| **What worked well in the lesson?** | |
| | |
| **What needs to be refined if the lesson were to be taught over?** | |
| | |
| **Outline the next steps in the process of student learning in relation to follow-up after this lesson.** | |

# Appendix B

**Form K:** This form is to be used by the **University Supervisor** as a final summative evaluation. Supervisors will quantify the student teacher's evidence of domain mastery as seen in the previous observations. Include strengths/weaknesses observed. A review of this feedback may be discussed with the student teacher in a post observation conference.

**Directions:** Circle the level of effectiveness demonstrated per indicator. Refer to the *Domain & FEAPs Crosswalk Reference Guide* to assist you in determining appropriate evidence of effectiveness.

**Point Values Represent:**
0 points – Unsatisfactory
1 point – Needs Improvement or Developing
2 points – Effective
3 points – Highly Effective (Reserved for outstanding pre-service teachers!)

| **Domain Indicators** | **Points Earned** | **Evidence/Notes** |
|---|---|---|
| **Domain 1: Instructional Design, Lesson Planning, and Assessment** | | |
| 1a. Demonstrating knowledge of content and pedagogy [(a).3] | **0, 1, 2, 3** | |
| 1b. Demonstrating knowledge of students [(a).2, 3] | **0, 1, 2, 3** | |
| 1c. Setting instructional outcomes [(a).1] | **0, 1, 2, 3** | |
| 1d. Demonstrating knowledge of resources and technology [(a).2, 3] | **0, 1, 2, 3** | |
| 1e. Designing coherent instruction [(a).1] | **0, 1, 2, 3** | |
| 1f. Designing student assessments [(a).4] | **0, 1, 2, 3** | |
| **Domain 2: Instructional Delivery and Facilitation** | | |
| 2a. Communicating with students [(a).2, 3] | **0, 1, 2, 3,** | |
| 2b. Using strategies to evoke high-order thinking (HOT) and discussions [(a).3] | **0, 1, 2, 3** | |
| 2c. Lesson delivery and engaging students in learning [(a).3] | **0, 1, 2, 3** | |
| 2d. Using assessment in instruction [(a).4] | **0, 1, 2, 3** | |
| 2e. Demonstrating flexibility and responsiveness [(a).3] | **0, 1, 2, 3** | |
| 2f. Integrating cross content reading and writing instruction [(a).3] | **0, 1, 2, 3** | |
| **Domain 3: The Learning Environment** | | |
| 3a. Creating an environment of respect and rapport [(a).2] | **0, 1, 2, 3** | |
| 3b. Establishes a culture for learning [(a).2, 3] | **0, 1, 2, 3** | |
| 3c. Managing classroom procedures [(a).2, 3] | **0, 1, 2, 3** | |
| 3d. Managing student behavior [(a).2] | **0, 1, 2, 3** | |
| 3e. Organizes physical space [(a).2] | **0, 1, 2, 3** | |
| **Domain 4: Professional Responsibility and Ethical Conduct** | | |
| 4a. Attention to equity and diversity [(a).2; (b).2] | **0, 1, 2, 3** | |
| 4b. Maintaining accurate records [(b).2] | **0, 1, 2, 3** | |
| 4c. Communicating with families [(b).1, 2] | **0, 1, 2, 3** | |
| 4d. Participating in a professional community [(b).1, 2] | **0, 1, 2, 3** | |
| 4e. Individual continuous professional improvement [(b).1, 2]4e. Individual continuous professional | **0, 1, 2, 3** | |
| 4f. Professional responsibilities [(b).2] | **0, 1, 2, 3** | |
| **TOTAL POINTS** | | 69 points possible |

Appendix C

| Form H Data Collection | | | | |
|---|---|---|---|---|
| **Student Teacher's Name:** | | **Semester:** | | |
| | | **Major:** | | |
| **Directions:** For each indicator, fill in the point achieved for that observation.<br>**Point Values Represent:**<br>0 points – Unsatisfactory<br>1 point – Needs Improvement or Developing<br>2 points – Effective<br>3 points – Highly Effective (Reserved for outstanding pre-service teachers!) | | | | |
| **Domain Indicators** | **Obs. #1** | **Obs. #2** | **Obs. #3** | **Obs. #4** |
| **Domain 1: Instructional Design, Lesson Planning, and Assessment** | | | | |
| 1a. Demonstrating knowledge of content and pedagogy [(a).3] | | | | |
| 1b. Demonstrating knowledge of students [(a).2, 3] | | | | |
| 1c. Setting instructional outcomes [(a).1] | | | | |
| 1d. Demonstrating knowledge of resources and technology [(a).2, 3] | | | | |
| 1e. Designing coherent instruction [(a).1] | | | | |
| 1f. Designing student assessments [(a).4] | | | | |
| **Domain 2: Instructional Delivery and Facilitation** | | | | |
| 2a. Communicating with students [(a).2, 3] | | | | |
| 2b. Using strategies to evoke high-order thinking (HOT) and discussions [(a).3] | | | | |
| 2c. Lesson delivery and engaging students in learning [(a).3] | | | | |
| 2d. Using assessment in instruction [(a).4] | | | | |
| 2e. Demonstrating flexibility and responsiveness [(a).3] | | | | |
| 2f. Integrating cross content reading and writing instruction [(a).3] | | | | |
| **Domain 3: The Learning Environment** | | | | |
| 3a. Creating an environment of respect and rapport [(a).2] | | | | |
| 3b. Establishes a culture for learning [(a).2, 3] | | | | |
| 3c. Managing classroom procedures [(a).2, 3] | | | | |
| 3d. Managing student behavior [(a).2] | | | | |
| 3e. Organizes physical space [(a).2] | | | | |
| **Domain 4: Professional Responsibility and Ethical Conduct** | | | | |
| 4a. Attention to equity and diversity [(a).2; (b).2] | | | | |
| 4b. Maintaining accurate records [(b).2] | | | | |
| 4c. Communicating with families [(b).1, 2] | | | | |
| 4d. Participating in a professional community [(b).1, 2] | | | | |
| 4e. Individual continuous professional improvement [(b).1, 2] | | | | |
| 4f. Professional responsibilities [(b).2] | | | | |
| **TOTAL AVERAGE** (69 Points Possible) | | | | |

Appendix D

# STUDENT INTERN EVALUATION SCORES OF THE FOUR DOMAINS

| STUDENT | DOMAIN 1 | DOMAIN 2 | DOMAIN 3 | DOMAIN 4 |
|---|---|---|---|---|
| 1 | 1.47 | 2 | 1.95 | 2 |
| 2 | 2.08 | 2 | 2.25 | 2.74 |
| 3 | 2.88 | 3 | 2.9 | 2.92 |
| 4 | 2.86 | 1.81 | 1.8 | 1.71 |
| 5 | 2.51 | 2.61 | 2.48 | 2.65 |
| 6 | 2.44 | 2.07 | 2 | 2 |
| 7 | 2.11 | 2.04 | 1.95 | 2 |
| 8 | 1.9 | 1.65 | 1.6 | 1.66 |
| 9 | 1.84 | 1.73 | 1.83 | 1.34 |
| 10 | 1.9 | 1.77 | 1.75 | 1.75 |
| 11 | 2 | 1.95 | 2 | 2 |
| 12 | 2.17 | 2.17 | 2.25 | 2.28 |
| 13 | 2.4 | 2.38 | 2.33 | 2.3 |
| 14 | 2 | 2 | 2 | 2 |
| 15 | 1.98 | 2.07 | 2.18 | 2.27 |
| 16 | 2.5 | 2.75 | 2.5 | 2.39 |
| 17 | 2.34 | 2.44 | 2.67 | 2.64 |
| 18 | 1.86 | 1.81 | 2.33 | 1.97 |
| 19 | 1.63 | 1.75 | 1.85 | 1.54 |
| 20 | 1.79 | 1.92 | 2.11 | 2 |
| 21 | 1.92 | 1.96 | 2.15 | 2.33 |