

10-2017

# How Demographic and Professional Characteristics Affect Faculty Attitudes Regarding Assessment of Student Learning

Angela Erickson-Grussing  
*St. Cloud State University*

Follow this and additional works at: [https://repository.stcloudstate.edu/hied\\_etds](https://repository.stcloudstate.edu/hied_etds)



Part of the [Higher Education Commons](#)

---

## Recommended Citation

Erickson-Grussing, Angela, "How Demographic and Professional Characteristics Affect Faculty Attitudes Regarding Assessment of Student Learning" (2017). *Culminating Projects in Higher Education Administration*. 19.  
[https://repository.stcloudstate.edu/hied\\_etds/19](https://repository.stcloudstate.edu/hied_etds/19)

This Thesis is brought to you for free and open access by the Department of Educational Leadership and Higher Education at theRepository at St. Cloud State. It has been accepted for inclusion in Culminating Projects in Higher Education Administration by an authorized administrator of theRepository at St. Cloud State. For more information, please contact [rswexelbaum@stcloudstate.edu](mailto:rswexelbaum@stcloudstate.edu).

**How Demographic and Professional Characteristics Affect Faculty Attitudes  
Regarding Assessment of Student Learning**

by

Angela Erickson-Grussing

A Thesis

Submitted to the Graduate Faculty of

St. Cloud State University

in Partial Fulfillment of the Requirements

for the Degree

Master of Science

in Higher Education Administration

October, 2017

Thesis Committee:  
Christine Imbra  
Gabriela Silvestre  
Frances Kayona

## Abstract

The attitudes of faculty members regarding the assessment of student learning is a topic that has garnered much attention in recent years, predominantly since the 'assessment movement' (Walvoord, 2004) gained strength in the 1990s. While much research has been conducted to investigate attitudinal trends, relatively little investigation has uncovered what factors contribute to varying attitudes among faculty members, especially when it comes to assessment. This study investigated the relationship between personal, demographic, and professional characteristics of individual faculty members and their attitudes regarding student assessment. Specifically, teaching faculty members at a private, undergraduate, liberal arts institution in the Midwestern United States were surveyed to record demographic and professional characteristics and assess their attitudes about the assessment of student learning.

The theoretical concept for this study was based on the idea of assessment as an innovation (Hall, Loucks, Rutherford, & Newlove, 1975). According to researchers, the adoption process of an innovation is a personal experience involving developmental growth and change in several areas (Gray & Banta, 1997). Both early adopters and resisters of innovation often share demographic and professional characteristics (Moore, 1991).

While no research to date has examined the relationship between personal characteristics of faculty members and their attitudes regarding assessment, research has been conducted that investigates overall job satisfaction levels using personal, demographic and professional traits as independent variables (Grunwald & Peterson, 2003).

Using Grunwald and Peterson's study as a guide, the explanatory variables chosen for this study included three demographic traits (age, race, and gender), five professional characteristics (educational level, years of teaching experience, years at current institution, academic rank, divisional affiliation), and seven personal life events (transfer to another institution, change in academic rank, birth of a child, death of a close friend or family member, marriage, divorce, and serious illness). The dependent variable for this study was comprised of fifteen attitudinal responses to positive statements regarding assessment of student learning.

Relationships were found between each of the demographic and professional characteristics of the faculty members and their attitudinal responses, with the strongest correlations reported in the categories of gender, academic rank, divisional affiliation, and years at institution. Personal life events did not contribute significantly to attitudinal differences. Based on the findings, it is important for educational leaders to: 1) expose faculty members to assessment opportunities early in their academic careers; 2) attempt to integrate instruction on assessment into graduate-level curricula; and 3) identify those faculty members more amenable to the practice of assessment as well as those more hesitant to adopt the innovation, and adjust resource allocations accordingly.

## Acknowledgments

The completion of this thesis would not have been possible without the assistance and support of many. I shall begin by thanking my husband, Michael, whose patience and perseverance throughout our struggles these past years have not gone unnoticed. My successes are to be shared with you and our beautiful children, Elle and Bode.

Beyond my extended family, whose nudging and encouragement has truly been a gift to me, I must thank sincerely my advisor, Dr. Christine Imbra. Your candor and flexibility has made me appreciate such dispositions, encouraging me to strive for the same in my own professional life. To my other committee members, Dr. Gabriela Silvestre and Dr. Frances Kayona, I fully appreciate your willingness to provide insightful feedback based on your extensive experience with research design and execution. It has been a pleasure getting to know you all, and I am proud to have learned so many things from each of you.

Next, to my comrades, fellow MS students in Higher Education Administration, I only wish that this journey could have continued longer—not for the work, but for the experiences shared and friendships forged. I will not forget your encouragement and praise, particularly through my pregnancy and birth of our daughter!

Finally, to my colleagues: I thank each and every one of you who participated in my survey. I know how busy the lives of faculty members can become, and I truly appreciate your dedication to your colleagues' endeavors. Particularly, I must thank Dr. Philip Kramer, my practicum site mentor, who was instrumental in providing me guidance through my data collection and analysis. Your knowledge of quantitative

research methodology is second-to-none, and your nurturing spirit has made this experience truly worthwhile. Thank you all!

## Table of Contents

	Page
List of Tables .....	8
Chapter	
I. Introduction .....	9
Introduction .....	9
Statement of the Problem .....	10
Purpose of the Study .....	10
Objectives for the Study .....	11
Assumptions of the Study .....	12
Delimitations .....	12
Research Questions .....	12
Research Hypotheses .....	13
Definition of Concepts .....	13
Summary .....	14
II. Review of Literature .....	16
Introduction .....	16
The History of Assessment .....	16
Reactions to the Changing Assessment Landscape .....	22
Faculty Attitudes Regarding Assessment .....	24
Factors that Influence Faculty Attitudes .....	24
Synthesis of the Research .....	26
Summary .....	26

Chapter	Page
III. Methodology .....	28
Introduction .....	28
Participants .....	28
Instruments for Data Collection and Analysis .....	28
Statistical Treatment .....	29
Procedures for Data Collection and Analysis .....	30
Human Subjects Approval .....	31
Summary .....	31
IV. Results .....	33
Introduction .....	33
Descriptive Results .....	33
Correlational Results .....	37
Synthesis .....	42
Summary .....	42
V. Discussion .....	44
Introduction .....	44
Conclusions .....	45
Recommendations .....	48
Limitations .....	49
Future Research .....	49
Summary .....	50
References .....	52

Chapter	Page
Appendices	
A. Survey Instrument .....	56
B. Institutional Review Board Approval .....	65

**List of Tables**

Table	Page
1. Demographic Distributional Statistics for Respondents .....	34
2. Professional and Personal Distributional Statistics for Study Respondents .....	35
3. Mean Response Calculations of Assessment Attitude Survey Questions .....	36
4. Chi-squared and Pearson-r Correlation Matrix Alpha Levels; Independent versus Dependent Variables .....	38
5. Faculty Attitudes Ranked by Divisional Affiliation .....	40

## Chapter I: Introduction

### Introduction

One of the principal goals of systematic education is to have students leave the system with more knowledge than when they began their experience. Through the course of the past 50 years, however, providing students with opportunities to learn in U.S. colleges and universities has produced little data regarding how much (and how well) students actually learn (Banta, 1997). Influenced by educators, administrators, lawmakers, employers, parents, and students themselves, a desire for accountability and quantification of student learning has fostered what is referred to as the “assessment movement” (Walvoord, 2004) in the education system of the United States. It has spread throughout K-12 education and, in recent years, has also been of paramount importance to members of the higher education community.

The involvement of faculty members in the assessment process is widely hailed as invaluable, due to their interaction with students in the classroom and their high level of knowledge in the fields they teach. Nevertheless, college and university faculty members have historically resisted the integration of assessment measures in their classrooms and throughout their curricula (Palomba & Banta, 1999). This places teaching faculty at the center of the assessment controversy. According to Cummings, Maddux, and Richmond (2008), faculty members frequently resist performance assessment because of concerns that assessment activities will increase workloads, reduce time for scholarly activities, eliminate professional autonomy, and reduce faculty work into component parts or discrete technical competences.

While an overall resistance to assessment on the part of faculty is apparent, it has proven difficult to determine the motivation for such dissidence. Numerous studies have brought to light the attitudes regarding assessment on college and university campuses here and abroad (Banta, Lund, Black, & Oblander, 1996; Banta, 1997; Brennan, 2006; Cummings et al., 2008; Hagedorn, 2000; Linkon, 2005; Walvoord, 2000; Welch & Metcalf, 2003). Still, relatively little research has been done to reveal what factors contribute to such attitudes, either positive or negative.

### **Statement of the Problem**

This study investigates the relationship between personal, demographic and professional characteristics of individual faculty members and their attitudes regarding assessment. Specifically, teaching faculty at two private, undergraduate, liberal arts institutions in the Midwestern United States are surveyed to reveal their attitudes about assessment.

### **Purpose of the Study**

It is useful to know what factors contribute to both negative and positive attitudes among individual faculty members regarding assessment, so to better prepare administrators and faculty members themselves to combat negativity and foster positivity. According to Peter T. Gray and Trudy W. Banta (1997), "it is up to leaders in each institution, each school or college, and each department or program to identify accurately the faculty in the broad early adopter and majority groups and work with them over time to adapt assessment to local conditions in a way that overcomes any perceived disadvantages" (p. 14).

This sentiment is echoed in theories of change as summarized by Jack Lindquist (1978). Moreover, Lindquist affirms that “since we change on the basis of reason and evidence ... [we must] invest in systematic research and development of new knowledge, new practices, new products” (p. 2). An awareness of potential “assessment allies” as institutions continue on the quest to assess student learning may assist administrators hoping to focus their recruitment efforts on those most likely to respond favorably. Furthermore, faculty less amenable to the discussion and practice of student assessment may be inspired to participate by an open stream of communication and understanding initiated by an institution’s administrators.

### **Objectives for the Study**

As the study requires the investigation of personal and demographic information, professional characteristics, and attitudes of faculty members regarding assessment, the objectives for the exploration were as follows:

1. Develop a survey that accurately assesses faculty attitudes regarding student learning assessment and records demographic and professional traits;
2. Be granted permission for human subjects participation from the institution selected;
3. Pilot the survey instrument with 10-12 faculty members and examine its clarity and validity; and
4. Arrange the participation of faculty members through email and an online survey instrument.

### **Assumptions of the Study**

Several assumptions accounted for the successful execution of this study.

1. It was assumed that the institution from where data will be gathered participates in assessment activities and that the faculty members play a vital role in their execution.
2. It was assumed that the faculty members have an opinion about student learning assessment and that they are not a homogeneous group with regard to their attitudes.
3. It was presumed that faculty members' personal, demographic, and professional characteristics are also varied.
4. Through the implementation of a pilot study to test the data collection instrument, it was supposed that subsequent survey participants would clearly understand the purpose of the survey and its questions.

### **Delimitations**

While this study examined the relationship of demographic, personal, and professional characteristics of faculty and attitudes regarding assessment, it did not examine other factors that could (and do) contribute to such attitudes including, but not limited to: institutional climate or morale, institutional type, student quality, relationships with administration, recognition of achievement, and job advancement.

### **Research Questions**

In order to carry out this investigation, the following research questions guided the data collection and analysis:

1. What are the attitudes of faculty members regarding the assessment of student learning?
2. What individual life experiences persuade faculty attitudes regarding assessment?
3. What demographic characteristics influence faculty attitudes regarding assessment of student learning?
4. What professional traits influence faculty attitudes toward assessment?

### **Research Hypotheses**

The null hypothesis for this study is as follows: there is no relationship between the personal, demographic, and professional characteristics of teaching faculty and their attitudes regarding the assessment of student learning.

### **Definition of Concepts**

It is necessary to define several concepts and terms that were employed in this investigation.

1. Assessment. According to Walvoord (2004), assessment of student learning can be defined as “the systematic collection of information about student learning, using the time, knowledge, expertise, and resources available, in order to inform decisions about how to improve learning” (p. 2).
2. Attitude. “A state of mind or a feeling; disposition” (American Heritage College Dictionary). More specifically, attitudes of faculty will be classified on a continuum from negative or hostile to positive or welcoming.

3. Personal life changes. Those events in life that may contribute to a change in attitude regarding student assessment, which for this study included transfer to another institution, change in academic rank, birth of a child, death of a close friend or family member, marriage, divorce, or serious illness.
4. Demographic characteristics. Those traits that can be used to segment a population of subjects, which for this study included race, age, gender and income level.
5. Professional traits. Traits that also segment the population of subjects studied, which for this study included educational level, years of teaching experience, years at institution, divisional affiliation, and academic rank.

### **Summary**

In general, the assessment of student learning is a compelling and complex phenomenon central to systematic education. The magnitude of importance to all stakeholders makes its successful execution of the highest priority, with that execution falling largely in the hands of teaching faculty. While strides have been made among faculty members to accept the vital nature of assessment, much resistance still can be found on campuses nationwide, stemming as much from naïveté regarding its practice as from denunciation of its principles. As scholars attempt to fully grasp the complexity of the dissidence among faculty members regarding assessment, attention must be paid to what variables affect their attitudes. This study has helped to determine to what degree personal, demographic, and professional characteristics affect those attitudes.

Chapter II provides an overview of the literature regarding educational measurement, the assessment of student learning, and faculty attitudes thereof. Furthermore, an identification of the overlying theoretical constructs upon which this study was based will be addressed, including theories of innovation adoption, and job satisfaction.

## Chapter II: Review of Literature

### Introduction

With the ever-growing importance of student learning assessment in U.S. higher education today, the scholarship on the subject has been inundated with publications eager to thoroughly answer questions regarding the evolution of assessment practices and their implications for all invested parties. Since its origin in 1950s measurement theory, scholars have tracked the progress of assessment from a hodgepodge of sparse data collection methods and analyses to a highly evolved, intricate system ultimately aimed at improving student learning. More recently, marked by the assessment movement of the mid-1980s (Walvoord, 2004), investigators have become aware of the far-reaching consequences of assessment results and the impact of those consequences on the morale and overall climate of educational institutions in the United States. Much has been published regarding the cynicism and even disdain among the faculty ranks in institutions all across the United States as they reflect upon the institutionalization of the assessment of student learning. Where the research has faltered, however, is a detailed, systematic investigation of the factors contributing to such attitudes.

### The History of Assessment

The contemporary concept of assessment has stemmed from a nearly 60-year history based in educational measurement theory. Measurement theory gained notoriety in the early 1950s, as theorists interested in measuring student learning developed tests and examined them based on two central components: validity and reliability. Validity theories, in a general sense, attempt to assure that an instrument

measuring learning (a test) is not muddled by interference from factors that will make the results stray from what the test is set out to demonstrate (Litwin, 1995).

In addition to evaluating their validity, tests have been examined thoroughly since the 1950s regarding their reliability. In general terms, reliability refers to “the consistency of scores across replications of a measurement procedure” (Brennan, 2006, p. 3). In other words, it is imperative that an instrument measuring student learning produce similar results over time. An evaluation instrument would be considered unreliable if the results varied from one administration to the next beyond the principles of standard deviation.

**Assessment as an innovation.** After educational measurement gained notoriety and became relatively widespread in its implementation on college campuses throughout the United States, institutional leaders and forward-thinking faculty members began making the connection between measuring student learning outcomes and curricular improvement. This innovative process of assessment was founded on great expectations; namely, more efficient educational programs and expectations for more effective student learning (Gray, 1997). As “an idea, practice, or object perceived as new by an individual” (Rogers, 1995, p. 11), systematized assessment was considered an innovation in education, and its adoption has been facilitated or inhibited by many factors since its inception. According to Rogers (1968, p. 68), factors such as “the situation, the personality, the social and economic status of the adopter, the lines of communication used, and the innovation itself” can all influence the adoption or rejection of new ideas.

Furthermore, several other characteristics seem to affect the rate at which innovations are adopted (Rogers, 1995, pp. 15-16):

*Relative advantage* is the degree to which an innovation is perceived as better than the idea it supersedes. . . .

*Compatibility* is the degree to which an innovation is perceived as being consistent with the existing values, past experiences, and needs of potential adopters. . . .

*Complexity* is the degree to which an innovation is perceived as difficult to understand and use. . . .

*Trialability* is the degree to which an innovation may be experimented with on a limited basis. . . .

*Observability* is the degree to which the results of an innovation are visible to others.

Based on the characteristics above, assessment as an innovation can be perceived as having low levels of compatibility and observability, and high levels of complexity (Gray, 1997). To overcome these disadvantages, assessment has garnered the attention of change theorists, as it is only through effectively-planned change that assessment can be moved “from innovation to institutionalization” (Gray, 1997, p. 7).

Promoting change and adaptation in order to accommodate an ever-changing educational climate was seen by many in higher education as a positive, realistic endeavor. However, these expectations implied for some that institutions and programs were not efficient or effective enough (Gray & Banta, 1997). To that end, the perception of assessment as a valuable innovation changed quickly as it became increasingly connected to demands for accountability from external constituencies (Gray, 1997).

**The assessment movement.** Until the late 1980s, few higher education institutions had adopted assessment practices as a systematic means of improving

teaching and learning. Notable exceptions included Alverno College and Northeast Missouri State University (now Truman State University), two institutions which had been undertaking assessment initiatives since 1970 (Banta, 1997). The demand for widespread accountability in higher education rose primarily from state and federal governments and blue-ribbon commissions (Forest & Kinser, 2002), and had “spilled over from the national catharsis in the mid-1980s over the poor quality of elementary and secondary schooling” (Lazerson, Wagener, & Shumanis, 2000). These initiatives gave birth to the national assessment movement in the mid-1980s; a cry “from legislators, employers, governors, and other constituents who were disappointed with the quality of college graduates and the rising costs of higher education” (Walvoord, 2004, p. 5). Between 1990 and 1995, the assessment scene changed dramatically. By 1995, all the regional accrediting bodies and three-quarters of the states had taken steps to encourage institutions to engage in assessment (Banta, 1997).

The demand from government bodies to measure student learning more objectively—and for the purposes of comparison between and among institutions—changed forever the landscape of higher education in America (Banta, 1997). The movement was met initially with much resistance by members of the academic community, citing a denigration of academic freedom and a concentration of resources on a task deemed impossible; namely, the assessment of the “higher types of learning” (Walvoord, 2004, p. 5). After over 15 years of development, however, there is now broad agreement—among accrediting agencies, disciplinary and professional associations, administrators, and faculty opinion leaders—that improving student learning is (or should be) the primary goal of assessment (Forest & Kinser,

2002, p. 86), and that assessment is an integral component of any higher education curriculum.

Most notably, in 1992, the American Association of Higher Education laid out *Principles of Good Practice for Assessing Student Learning* as a framework for higher education institutions to follow. The principles are:

1. The assessment of student learning begins with educational values;
2. Assessment is most effective when it reflects an understanding of learning as multidimensional, integrated, and revealed in performance over time;
3. Assessment works best when the programs it seeks to improve have clear, explicitly stated purposes;
4. Assessment requires attention to outcomes but also and equally to the experiences that lead to those outcomes;
5. Assessment works best when it is ongoing, not episodic;
6. Assessment fosters wider improvement when representatives from across the educational community are involved;
7. Assessment makes a difference when it begins with issues of use and illuminates questions that people really care about;
8. Assessment is most likely to lead to improvement when it is part of a larger set of conditions that promote change; and
9. Through assessment, educators meet responsibilities to students and to the public. (American Association for Higher Education, 1992)

Later, in 1996, a tenth principle was added to attend to the needs of higher education institutions and the difficulties encountered with the adoption of assessment by faculty members: “assessment is most effective when undertaken in an environment that is receptive, supportive, and enabling” (Banta et al., 1996, p. 62). This last principle in particular has proven a source of contention, as faculty members continue to question the value of assessment in their individual institutions even today.

**Assessment today.** Today, assessment of student learning has permeated all arenas of institutions of higher learning. Generally accepted assessment techniques,

developed since the assessment movement of the 1980s, have infiltrated colleges and universities across the nation. These include standardized tests, capstone courses, performance evaluations, portfolios, independent research projects, as well as other means of measuring student productivity and performance (Forest & Kinser, 2002, p. 86). All of these techniques are based on a more general understanding of assessment: direct versus indirect measures producing quantitative versus qualitative evidence (Dugan, Herson, & Schwartz, 2006, p. 143). They have all contributed to an intricate network of information meant to both validate an institution's current effectiveness and highlight areas of potential improvement.

Assessment today is an endeavor that can alter the culture and morale of an institution. It wields the power to control the allocation of funding (Penuel, 2010) or to alter the perception of an institution in the eyes of consumers (Katz, 2010). Therefore, assessment must be a transparent, systematic analysis of student performance, since it helps to tell the story of an institution's effectiveness.

In a controversial statement about the state of American higher education, former U.S. Secretary of Education Margaret Spellings said of colleges and universities that they should "want to be able to tell their story better" and that "they are served when they can do that with real data and no anecdotes" (Dugan et al., 2006, p. 2). "The proposals of the Spellings Commission and the attempt to enforce them through new regulations have been widely viewed as unacceptable by the higher education community" (Brittingham, 2008, p. 32). In particular, faculty members engaged with programs that are not accredited and those falling within the

humanities disciplines continue to struggle with the acceptance of assessment as an innovation and a tool for improving teaching and learning (Brittingham, 2008).

### **Reactions to the Changing Assessment Landscape**

Theories of change abound in the literature both within and outside academia. What the many theories of change, both planned and unplanned, have in common is the predication that human behavior is established by observational learning and cultural influences (Schein, 1995). Changes in behavior, in turn, arise from influences that provide opportunities to learn resulting in the practice of alternate behavior(s). Following this logic, change is certainly not something that happens as an isolated event, and will not be accomplished just because a decision maker has announced that change will happen. Instead, the adoption of an innovation such as assessment “is a process ... that each innovation user experiences individually” (Hall et al., 1975, p. 52). The process of change is a highly personal experience that entails developmental growth in feelings, skills and knowledge all at the same time (Gray & Banta, 1997).

Among the major stumbling blocks to the adoption of assessment is the difficulty in changing the attitudes, habits and knowledge of faculty members. Despite their influential position in the assessment arena, faculty members often view assessment as “yet another item in a long list of new responsibilities that (they) are being asked to assume without additional compensation or recognition” (Banta, 1997, p. 89). As individual faculty members waded through the emotional and practical complications of welcoming change, it became clear that the disjuncture between

faculty behaviors and the change that was being mandated by state and regional accrediting bodies remained significant (Lazerson et al., 2000).

The varied reactions of faculty members to the innovation of assessment are not surprising, since each individual treads through the process of change at his or her own individual pace. Some, in fact, may never accept the change at all.

According to Moore (1991), the continuum of adopters of change in any organization ranges from those “innovators” and “early adopters” who welcome it with open arms to the “laggards” who may even object to the innovation’s use by others.

Furthermore, it has been noted that resistance to change often occurs in a predictable pattern: “the passage from the visionary group (the early adopters) to the mainstream is where the most significant potential for failure lies” (Geoghegan, 1994, p. 12). If this chasm is not crossed, the innovation will remain with only about 15% of the population. It is important to the adoption of an innovation such as assessment to identify the characteristics of each group. According to Geoghegan (1994, p. 14), there are specific traits that members of each group of adopters share, for example:

*Early Adopters*

Favor revolutionary change  
 Visionary  
 Project oriented  
 Risk takers  
 Willing to experiment  
 Generally self-sufficient  
 Horizontally connected

*Early Majority*

Favor evolutionary change  
 Pragmatic  
 Process oriented  
 Risk averse  
 Want proven practices  
 May need significant support  
 Vertically connected

Individual characteristics of faculty members, as illustrated by Geoghegan, are important to understand as institutions attempt to overcome barriers to change.

## **Faculty Attitudes Regarding Assessment**

The widespread belief that faculty have strongly resisted the assessment movement has prompted a plethora of investigation into the intricacies of such attitudes. Researchers (Banta, 1997, 2002; Banta et al., 1996; Linkon, 2005; Nichols, 1995; Palomba & Banta, 1999, 2001; Walvoord, 2000, 2004; Welch & Metcalf, 2003) have outlined many of the external influences of faculty attitudes regarding assessment. Arguably the most significant downfall of the current assessment culture is the perceived necessity to serve the external forces that drive it (accreditors, legislators, etc.). This overwhelming feeling of performing assessment to meet the needs of external constituents has led to a negative attitude regarding assessment and a cloak of doubt cast over its meaningfulness for students and faculty (Banta, 1997).

Other challenges include the portrayal of certain techniques of assessment as more meaningful than others, the question of academic freedom and infringement on faculty rights, the privacy of students, the immeasurability of the “real” goals of higher education, and the factors beyond faculty control that affect student learning (Walvoord, 2004).

## **Factors that Influence Faculty Attitudes**

According to the literature review, there are no theoretical models currently in place that predict faculty attitudes regarding assessment. Therefore, it was necessary to predict faculty attitudes in general. Little research has been conducted on this subject, but two significant studies were found that have proven useful in developing a theoretical model for this study.

Hagedorn (2000) introduced a general model of faculty satisfaction based on an extensive literature review. Her hypothesis revolves around two basic types of constructs that may predict faculty satisfaction: triggers and mediators. Triggers refer to significant life events that may be either related or unrelated to the job, while mediators refer to variables or situations that influence the relationships between other variables. Examples of triggers include marriage, divorce, change in rank or tenure, and transfer to another institution: one-time or short-term events that can have significant impact on employee attitudes or satisfaction. In contrast, mediators are variables that are more static in nature, but can be defined as motivators, demographics, and environmental conditions. Examples of mediators include the work itself, age, ethnicity, and institutional climate (Hagedorn, 2000). Based on this model, triggers and mediators were selected as independent variables for this study.

Grunwald and Peterson (2003) performed a thorough investigation of factors that promote faculty involvement in and satisfaction with institutional and classroom student assessment. They preferred the term 'satisfaction' to 'attitude', equating a lack of satisfaction to a negative attitude, and, in turn, a positive attitude to overall satisfaction. Using the same theoretical constructs (triggers and mediators) laid out in Hagedorn's study (2000), they surveyed faculty and administrators involved with student assessment using the Institutional Climate for Student Assessment (ICSA) instrument developed by Peterson (2000). The statements elicited responses using a Likert-type scale of 1 (strongly disagree) to 5 (strongly agree), and were plotted against the triggers and mediators identified in their study. The researchers concluded that the concept of job satisfaction is complex and convoluted and that

multiple factors interacted with and affected job satisfaction. Since the ICSEA instrument had been tested for validity and reliability, a portion of it was used to develop the attitudinal questions for this study.

### **Synthesis of the Research**

Assessment of student learning has been deeply ingrained into the culture of American higher education. After investigating its history, it is clear that the various measurement theories and assessment techniques used today have stood the test of time. They continue to provide reviewers, both internal and external, with evidence of the merits and pitfalls of an institution and its academic programs. As can be summarized through a dissection of the current state of assessment, it is a phenomenon far too highly developed to be discounted; it instead must be embraced and amended to better serve the needs of all invested parties. Finally, a look into the challenges facing today's assessment scene offers valuable insight into the development of future plans that adhere more faithfully to the original objectives of the American higher education system. More specifically, the investigation into the factors that contribute to faculty attitudes regarding assessment, while under-investigated, may reveal to what extent a positive or negative attitude is influenced by various triggers and mediators.

### **Summary**

While the scholarship of assessment is a fledgling endeavor, it has the potential to profoundly impact institutional policies and practices. It is that influence that drives the persistence of contemporary scholars of assessment, who know that their work will be widely reviewed as faculty members, staff, and administrators seek

to institutionalize and streamline the complex and often convoluted phenomenon that is student learning assessment. And though several gaps in the current research exist, scholars in the field are working arduously to collapse them.

Chapter III provides a thorough discussion of the research design that is used in this quantitative study, including an in-depth description of the sample, data collection, and data analysis techniques used to carry out this investigation.

## **Chapter III: Methodology**

### **Introduction**

This quantitative study explored relationships among several variables. In this case, a use of quantitative methods and analyses was appropriate, since personal, demographic, and professional characteristics (independent variables) as well as faculty attitudes regarding assessment (dependent variables) were all quantifiable in nature. The variables were chosen based on two studies encountered in the review of literature (Hagedorn, 2000; Grunwald & Peterson, 2003).

### **Participants**

Faculty members from two small, residential, liberal arts institutions in the Midwestern United States which operate a joint academic curriculum were invited to participate in the study. As a member of the faculty at the institutions, it seemed a logical choice to begin my data collection there. Participation was elicited from all teaching faculty, providing a population size of approximately 350 individuals.

### **Instruments for Data Collection and Analysis**

In order to collect useful data, it was imperative to develop a valid collection instrument that incorporated two distinct types of data. The first section of the instrument asked respondents to classify themselves according to the set of personal, demographic, and professional criteria chosen for this study based on the discussion of triggers and mediators in the literature on faculty satisfaction (Grunwald & Peterson, 2003; Hagedorn, 2000). The survey elicited responses regarding whether the following triggers had occurred in the past year: transfer to new institution, change in academic rank, birth of a child, death of close friend/family

member, marriage, divorce, and serious illness. In addition, respondents indicated their demographic and professional characteristics in the following categories (defined as mediators in Hagedorn 2000): age, gender, race, educational level, years of teaching experience, years at institution, divisional affiliation, and academic rank.

The second part of the survey was used to quantify attitudes of faculty members regarding assessment of student learning. Grunwald and Peterson (2003) developed a complex survey instrument to investigate factors that promote faculty involvement in and satisfaction with institutional and classroom assessment. In that instrument, a particular section was developed to measure faculty attitudes regarding assessment and serves as the content of the survey instrument for this study. Using a Likert-type scale (1 = disagree strongly to 5 = agree strongly), responses were elicited for 16 affirmations. The full survey is available in Appendix A. A lower value on the scale corresponded to a negative attitude regarding assessment, while a higher point value indicated a more positive attitude. Following the data collection, responses were totaled for each respondent, and a mean value for each faculty member was scored in a range from 1.0 (negative attitude) to 5.0 (positive attitude).

### **Statistical Treatment**

The research design used in this study was correlational in nature. More specifically, as the study had not predicted any particular outcomes, it is further characterized as a descriptive research design. Descriptive statistics were used to make generalizations, and Pearson-r and Chi-squared correlation tests were used to determine any statistically significant relationships between the attitudinal responses of respondents and any of the triggers or mediators.

## **Procedures for Data Collection and Analysis**

Following the development of the survey instrument and its preliminary approval by the thesis committee, an online survey was created using Survey Monkey. A pilot of the survey was then conducted to examine its validity. The survey was administered to 10 faculty members at the institutions; the faculty members were asked to participate via email and directed to the survey electronically. In addition to completing the survey, respondents were asked if the survey was clear in its design and encouraged to provide feedback regarding the execution of the instrument. Guided by the comments offered by the original pilot participants, a question regarding the income level of the respondents was removed, the informed consent page was augmented, and a definition of 'assessment' was provided on the attitudinal statements section.

After finalizing the survey, the survey and a form were submitted to the Institutional Review Board at Saint Cloud State University. The study was ruled exempt from human subjects' approval based on its limited use of sensitive information. Once approval had been granted by SCSU, permission to elicit responses from participants at the desired institutions was initiated. The Academic Dean was contacted by email to gain permission to survey the faculty members in accordance with the human subjects' approval policy at St. Cloud State University. Dr. Joseph DesJardins approved my request, and suggested that I, as a member of the faculty at the institutions, contact faculty members directly using the Faculty Discussion/Announcements List list-serv.

An email was sent to all recipients of the list-serv, explaining the study and directing them to the online survey on Survey Monkey's website. Faculty members were given approximately one month to complete the survey, and a reminder email was sent with 10 days remaining until the deadline originally set. The respondents' data was collected and housed completely online until the deadline had passed, when it was then downloaded into an Excel spreadsheet.

The raw data in the Excel spreadsheet was inspected for errors in transfer, and means were calculated using an Excel formula for the attitudinal section of the survey, yielding an 'attitude score' of 1.0 to 5.0 for each respondent. The data was then imported into a program called JMP, statistical treatment software for the social science and humanities disciplines. After labeling columns and values properly for the output (JMP allows numerical values to be labeled with alphanumeric values to give more user-friendly output), correlational statistics were plotted for each attitudinal statement plus the mean attitude score (dependent variables) against each of the demographic, professional, and personal traits of the respondents.

### **Human Subjects Approval**

The Institutional Review Board of St. Cloud State University has approved the participation of human subjects in this study. Documentation can be found in Appendix B.

### **Summary**

The nature of this investigation lent itself well to a quantitative study of a correlational nature, while the number of participants fell within the range acceptable for achieving validity and reliability of results. The use of an online survey to elicit

responses and correlational statistics for data analysis simplified the interpretation of the data as every effort was made to discover relationships among demographic characteristics, professional traits, and faculty attitudes regarding assessment.

Chapter IV of this thesis focuses on the analysis of the data collected. A recapitulation of the research questions is offered as each of the questions is responded to by statistical treatment of the data set.

## Chapter IV: Results

### Introduction

This quantitative study set out to discover relationships between personal, demographic, and professional characteristics of faculty members and attitudes regarding the assessment of student learning. The research questions guiding this study included:

5. What are the attitudes of faculty members regarding the assessment of student learning?
6. Which, if any, demographic and professional characteristics persuade faculty attitudes regarding assessment?
7. Do personal life events ('triggers') influence faculty attitudes regarding assessment of student learning?

The independent variables in this study comprised three types: demographic (race, age, and gender); professional (educational level, years of teaching experience, years at current institution, academic rank, and divisional affiliation); and personal (transfer to another institution, change in academic rank, birth of a child, death of a close friend or family member, marriage, divorce, and serious illness). The dependent variable was the faculty member's attitude regarding assessment as measured on a Likert-type scale.

### Descriptive Results

The sample in this study included 135 respondents from a population of approximately 350 teaching faculty members, yielding a response rate of 39%. The distributional statistics for the respondents can be found in Tables 1 and 2.

Table 1

*Demographic Distributional Statistics for Respondents*

VARIABLE	FREQUENCY	PROBABILITY
AGE		
26-30	6	0.0444
31-35	9	0.0667
36-40	18	0.1333
41-45	16	0.1185
46-50	24	0.1778
51-55	14	0.1037
56-60	23	0.1704
61-65	13	0.0963
66-70	7	0.0519
Greater than 70	5	0.0370
Total	135	1.0000
RACE		
White (Non-Hispanic)	123	0.9179
Black or African American	1	0.0075
Asian	2	0.0149
Hispanic/Latino	5	0.0373
Other	3	0.0224
Total	134	1.0000
GENDER		
Male	64	0.4849
Female	67	0.5076
Prefer not to answer	1	0.0076
Total	132	1.0000

Considerable variability was found in the independent variable categories of age, gender, years of teaching experience, years at current institution, academic rank, and divisional affiliation. Limited variability occurred within the categories of race, educational level, and each of the life events. As no relationship was found between any individual life event and faculty attitudes, all life events were classified together to yield an overall frequency score for any 'trigger' (Grunwald & Peterson, 2003); that is, the greater the number of life events each respondent experienced, the higher 'trigger score' he/she received. That variable was then plotted against faculty attitude responses.

Table 2

*Professional and Personal Distributional Statistics for Study Respondents*

VARIABLE	FREQUENCY	PROBABILITY
<b>EDUCATIONAL LEVEL</b>		
Master's Degree or Certificate	23	0.1704
ABD	6	0.0444
Ph.D./Ed.D.	104	0.7704
Other	2	0.0148
Total	135	1.0000
<b>YEARS OF TEACHING EXPERIENCE</b>		
Less than 5	18	0.1343
6-10	18	0.1343
11-15	25	0.1866
16-20	13	0.0970
21-25	14	0.1045
26-30	12	0.0896
Greater than 30	34	0.2537
Total	134	1.0000
<b>YEARS AT CURRENT INSTITUTION</b>		
Less than 5	35	0.2612
6-10	21	0.1567
11-15	23	0.1716
16-20	13	0.0970
21-25	15	0.1119
26-30	11	0.0821
Greater than 30	16	0.1194
Total	134	1.0000
<b>ACADEMIC RANK</b>		
Adjunct (Part-Time)	16	0.1185
Adjunct (Full-Time)	11	0.0815
Instructor/Lecturer (Term Contract)	7	0.0519
Assistant Professor (Tenured or Tenure-Track)	15	0.1111
Associate Professor (Tenured or Tenure-Track)	41	0.3037
Professor (Tenured or Tenure-Track)	38	0.2815
Professor Emerita/us	5	0.0370
Other	2	0.0148
Total	135	1.0000
<b>DIVISIONAL AFFILIATION</b>		
Education	10	0.0746
Fine Arts	9	0.0672
Humanities	43	0.3209
Natural Sciences	37	0.2761
Social Sciences	30	0.2239
Interdisciplinary/Pre-Professional	2	0.0149
Other	3	0.0224
Total	134	1.0000
<b>TRIGGERS SCORE</b>		
0	76	.5891
1	38	.2946
2	11	.0853
3	2	.0155
4	1	.0078
5	1	.0078
Total	129	1.0000

The dependent variable, faculty attitudes regarding assessment of student learning, was examined in several ways throughout the data analysis. First, to address the research question pertaining to the overall attitude of faculty members regarding assessment, mean scores were computed for each of the 15 assessment attitude questions posed on the faculty survey, and a mean of means was calculated to provide a general understanding of faculty attitudes throughout the survey questions. The questions and mean response for each can be found in Table 3.

Table 3

*Mean Response Calculations of Assessment Attitude Survey Questions*

QUESTION	MEAN RESPONSE
a. Students today are learning more due to an institutional focus on the assessment of student learning.	2.67
b. Student assessment has improved the quality of education at this institution.	2.91
c. Faculty use student assessment information to modify how or what they teach.	3.49
d. Assessing students has resulted in the development of learning experiences that better meet diverse learning styles.	3.08
e. Faculty enjoy participating in student assessment activities.	1.86
f. Faculty use more student assessment techniques than they did 5 years ago.	4.01
g. Faculty frequently communicate with colleagues on how to improve their student assessment practices.	2.85
h. Faculty update their in-class assessment techniques on a regular basis.	2.84
i. Faculty and administrators agree on the value of assessing student learning.	2.47
j. The effectiveness of teaching is enhanced when faculty regularly engage in student assessment.	3.48
k. Student assessment techniques accurately measure students learning.	2.67
l. State or federally mandated assessment requirements improve quality of education.	2.09
m. Administrators have a common understanding of the meaning of the term student assessment.	2.40
n. Faculty have a common understanding of the term student assessment.	2.26
o. Mandated student assessment does not limit the academic freedom of faculty.	3.19
Mean of means	2.82

With the Likert-type scale employed for gathering data serving as a guide, the mean values for each of the questions fell between 1.00 (strongly disagree with positive statement) and 5.00 (strongly agree with positive statement). Eleven of the 15 questions resulted in mean scores below 3.00, indicating an overall negative

attitude response for those eleven questions. Four of the questions yielded a mean response of greater than 3.00, indicating a neutral or positive attitude in those areas. The lowest mean value, indicating the strongest negative attitude for a particular question, pertained to question e. (faculty enjoy participating in assessment activities), with a value of 1.86. The strongest positive attitude was recorded for question f. (faculty use more assessment techniques now than 5 years ago), with a mean value of 4.01. The mean of means calculation yielded a result of 2.82, indicating an overall negative attitude among faculty members at CSB/SJU regarding the assessment of student learning.

### **Correlational Results**

To answer the second research question regarding the relationship between demographic and professional characteristics and faculty attitudes pertaining to assessment of student learning, several strategies were employed. Each of the respondents' characteristics (independent variables) were plotted against individual answers for each of the 15 assessment attitude questions as well as against an 'assessment attitude score'; a mean calculation of the responses to each of the 15 attitudinal questions. The dependent variables were measured against the independent variables using the Pearson-r correlation test and the Chi-squared goodness of fit test, due to their varied relational characteristics. Two independent variables measured in this study were classified as ordinal measurements, three were considered ratio measurements, and three were examples of nominal measurements. Ordinal categories included educational level, and professional rank. Ratio categories were determined on the basis of age, years of teaching experience,

and years of experience at current institution. Nominal categories divided the variables of race, gender, and divisional affiliation.

The matrix in Table 4 indicates the alpha levels for likelihood ratios (Chi-squared) and Pearson-r correlation tests for each faculty attitude question plotted against each independent variable. Statistically significant results are starred to indicate an alpha level of .05.

Table 4

*Chi-squared and Pearson-r Correlation Matrix Alpha Levels; Independent versus Dependent Variables*

QUESTION	AGE	RACE	GNDR	EDUC LVL	YRS EXP	INST EXP	ACAD RANK	DIV AFFL	TRIG SCR
a. Learning more	0.0655 0.1180	0.9651 0.9854	0.2580 0.3047	0.0426* 0.0893	0.0887 0.1341	0.0778 0.1666	0.0028* 0.0298*	0.3831 <.0001*	0.6076 0.7697
b. Improving education	0.0796 0.1886	0.5248 0.6657	0.1596 0.1290	0.1843 0.2176	0.3152 0.5004	0.4785 0.4570	0.0555 0.0844	0.3162 0.0919	0.2642 0.3555
c. Modify teaching	0.4420 0.7181	0.5756 0.3088	0.5743 0.2193	0.4763 0.6872	0.0542 0.0606	0.0870 0.1937	0.1369 0.2613	0.5370 0.6560	0.1974 0.0219*
d. Diverse learning styles	0.0845 0.1533	0.2569 0.1930	0.0078* 0.0016*	0.1095 0.2910	0.3394 0.4408	0.2743 0.2733	0.0043* 0.0141*	0.7807 0.9316	0.3268 0.3737
e. Faculty enjoy	0.1608 0.1823	0.0717 0.0059*	0.3949 0.2555	0.1026 0.1466	0.3424 0.4013	0.5137 0.6343	0.0883 0.0600	0.3423 0.2536	0.9246 0.9509
f. More than 5 years ago	0.7086 0.8144	0.2600 <.0001*	0.1259 0.2292	0.4202 0.1589	0.4176 0.5756	0.2058 0.2524	0.8083 0.7826	0.1113 0.1260	0.4822 0.3996
g. Frequent communication	0.2052 0.5125	0.6708 0.7279	0.1490 0.0203*	0.4631 0.4036	0.0228* 0.1696	0.0069* 0.0096*	0.0062* 0.0229*	0.1794 0.0779	0.6206 0.6269
h. Update assessment	0.3182 0.2220	0.5671 0.5676	0.0423* 0.0028*	0.1146 0.1322	0.0255* 0.0725	0.0037* 0.0066*	0.0334* 0.0092*	0.1284 0.2166	0.6759 0.5359
i. Faculty and admin agree on value	0.2578 0.6651	0.5839 0.7620	0.0944 0.0766	0.4176 0.3787	0.4445 0.7185	0.2549 0.5064	0.0529 0.0996	0.0435* 0.0252*	0.7611 0.6558
j. Teaching enhanced	0.1554 0.3781	0.0293* 0.0067*	0.1543 0.1542	0.3365 0.5135	0.1432 0.1945	0.2165 0.4273	0.0744 0.1513	0.0886 0.2162	0.4311 0.4966
k. Accurate measure	0.0955 0.1839	0.7441 0.8893	0.1034 0.1415	0.6713 0.7475	0.2541 0.2244	0.0114* 0.0244*	0.3983 0.5420	0.1440 0.2126	0.5478 0.7549
l. Mandates improve quality	0.6665 0.8380	0.1010 0.1074	0.6941 0.6604	0.1206 0.1108	0.0945 0.2298	0.5494 0.6960	0.4930 0.4880	0.3379 0.4785	0.5785 0.6162
m. Admin common understanding	0.9732 0.9778	0.7947 0.8412	0.3348 0.2183	0.4272 0.5944	0.3982 0.4351	0.8229 0.9098	0.2512 0.1681	0.1897 0.3811	0.9749 0.9819
n. Faculty common understanding	0.9235 0.9192	0.2742 0.1945	0.7466 0.7362	0.0628 0.0389*	0.1854 0.1460	0.5788 0.6272	0.0847 0.0674	0.1676 0.4850	0.6987 0.8746
o. Academic freedom	0.6559 0.8739	0.1890 0.1469	0.7405 0.5877	0.5027 0.6040	0.2363 0.4508	0.6819 0.8447	0.3220 0.5807	0.0409* 0.0987	0.8101 0.7258

Top value in each cell indicates alpha level for Chi-Squared Likelihood Ratio; bottom value indicates alpha level for Pearson-r Correlation Statistic

Based on the findings in Table 4, the professional characteristics most likely to influence faculty attitudes regarding assessment are academic rank, divisional affiliation, and years at current institution. The relationship between academic rank and attitudinal variation was found to be significant at an alpha level of .05 for 4 of the 15 questions, and was significant at a .10 alpha level for an additional five questions (9/15 total). Divisional affiliation plotted against each of the 15 questions yielded a difference at a .05 alpha level for 3 of them; another 3 (6/15 total) were found to be significant at a .10 alpha level. The relationship between years at current institution and attitudinal differences was found at a .05 alpha level for 3 of the 15 questions, and another 2 were found significant at a .10 alpha level (5/15 total).

An inverse relationship between academic rank and faculty attitudes was indicated for each of the statistically significant values. In each case, a higher academic rank resulted in a more negative attitude regarding the assessment of student learning. The relationship between years at current institution and faculty attitudes was found to be inverse as well; that is, as faculty members' years at current institution increased, attitudes became more negative.

The nature of the relationship between divisional affiliation and faculty attitudes varied somewhat among each of the statistically significant questions, as evidenced in Table 5.

Table 5

*Faculty Attitudes Ranked by Divisional Affiliation (.10 Alpha Level)*

QUESTION	MOST POSITIVE ←————→ MOST NEGATIVE					
a. Learning more	ED	FA	PP	SS	HU	NS
b. Improving education	PP	ED	FA	SS	NS	HU
g. Frequent communication	FA	PP	ED	SS	NS	HU
i. Faculty and admin agree on value	PP	ED	FA	NS	SS	HU
j. Teaching enhanced	PP	ED	FA	HU	NS	SS
o. Academic freedom	PP	HU	NS	ED	SS	FA

Divisional Abbreviations: ED (Education), FA (Fine Arts), PP (Pre-Professional), SS (Social Sciences), HU (Humanities), NS (Natural Sciences).

Faculty members in Education, Fine Arts and Pre-Professional programs displayed a tendency of more positive attitudes, while the faculty from the divisions of Social Sciences, Natural Sciences, and Humanities demonstrated a more negative attitude regarding the assessment of student learning.

The independent variables related to demographic characteristics of the faculty also yielded significant results. Among the variables age, race, and gender, the variable gender was the most likely indicator of variation in faculty attitudes (see Table 4). Three of the 15 questions produced statistically significant results to a .05 alpha level, with another 1 of 15 significant to the .10 alpha level (4/15 total). Race as a variable also yielded statistically significant results after running Chi-squared and Pearson-r correlations, but the findings were rejected due to lack of variation among the sample distribution: 91.7% of respondents to the survey classified themselves as white (see Table 1).

The nature of the relationship between gender and attitudes regarding assessment was consistent throughout the results. In each case, the female respondents tended to respond with a more positive attitude to each question; in turn, the male faculty members sustained a more negative attitude for each of the four statistically significant question responses.

After calculating the Chi-squared and Pearson-r correlation statistics for each of the individual attitudinal questions versus each of the demographic and professional characteristics of the faculty members, a 'mean attitude score' was calculated for each respondent. This calculation yielded a number ranging from 1.00 to 5.00, with a lower score indicating a more negative attitude in accordance with the Likert-type scale used for collecting data (lower scores indicate stronger disagreement with positive statements regarding assessment; see Appendix A for survey details).

The third research question set out to investigate the relationship between personal life events, or 'triggers', and faculty attitudes regarding assessment. As previously mentioned, there were no statistically significant results plotting individual triggers against attitudinal responses. To that end, the total number of triggers was summed for each respondent to yield a 'trigger score', and those scores were then plotted against attitudes using Chi-squared and Pearson-r correlation statistics. Results at an alpha level of .05 were found for 1 of the 15 attitudinal questions; question c. (use to modify teaching). However, due to the limited variability for this trait (see Table 2), these results were rejected.

## **Synthesis**

As this study examined the influence of demographic, professional, and personal characteristics of faculty members on their attitudes regarding the assessment of student learning, each of the research questions yielded interesting findings. Faculty attitudes in general were found to be negative, with a mean of means score of 2.82 (see Table 3). Several demographic and professional characteristics of the faculty members were shown to influence attitudes regarding assessment, with most significant correlations occurring within the variable categories of academic rank, divisional affiliation, years at current institution, and gender. The results of investigating the third research question were not clear. Upon analyzing the data set, there was no significant influence of specific personal life events on faculty attitudes about assessment; however, little variation in general was found among respondents which may have contributed to the result.

## **Summary**

This study investigated the nature of faculty attitudes regarding the assessment of student learning and what role, if any, demographic, professional, and personal characteristics play in attitudinal variation. The analysis of the data collected indicated that overall faculty attitudes at these institutions are negative with regard to assessment, and that several demographic and professional characteristics influence those attitudes. Among the demographic characteristics studied, gender was the most significant predictor of faculty attitudes. Regarding professional traits, it was concluded that academic rank contributed most significantly to faculty attitudes, followed by divisional affiliation and years at current institution.

The final chapter of this thesis discusses the limitations of this study and the implications of the results for various stakeholders in the field of academic assessment. Furthermore, recommendations will be made and future research possibilities identified.

## Chapter V: Discussion

### Introduction

The attitudes of faculty members regarding the assessment of student learning is a topic that has garnered much attention in recent years, predominantly since the 'assessment movement' (Walvoord, 2004) gained strength in the 1990s. While much research has been conducted to investigate attitudinal trends, relatively little investigation has uncovered what factors contribute to varying attitudes among faculty members. The investigation predominantly focused on institutional factors that contribute to positive versus negative attitudes; very little attention has been paid to individual faculty member characteristics that may play a role. This study has investigated the relationship between personal, demographic, and professional characteristics of individual faculty members and their attitudes regarding assessment. Specifically, teaching faculty at two private, undergraduate, liberal arts institutions in the Midwestern United States were surveyed to record demographic and professional characteristics and assess their attitudes about the assessment of student learning.

The theoretical foundation for this study was based on the idea of assessment as an innovation (Hall et al., 1975). According to researchers, the adoption process of an innovation is a personal experience involving developmental growth and change in several areas (Gray & Banta, 1997). Early adopters of innovation often share characteristics, as resisters of change labeled as 'laggards' (Moore, 1991) may have similar traits as well.

While no research to date has examined the relationship between personal characteristics of faculty members and their attitudes regarding assessment, some research has been conducted that investigates overall job satisfaction levels using personal, demographic, and professional traits as independent variables (Grunwald & Peterson, 2003). That particular study served as both the overall theoretical model for this investigation as well as the source of the attitudinal questions used in the development of the faculty survey.

The independent variables for this study included three demographic traits (age, race, and gender), five professional characteristics (educational level, years of teaching experience, years at current institution, academic rank, divisional affiliation), and seven personal life events (transfer to another institution, change in academic rank, birth of a child, death of a close friend or family member, marriage, divorce, and serious illness). The dependent variable for this study was comprised of 15 attitudinal responses to positive statements regarding assessment of student learning using a 5-point Likert-type scale (disagree strongly–agree strongly).

The findings of this study provide useful information to faculty members and administrators about the overall attitudes of faculty regarding assessment, and which individual characteristics of faculty members influence those attitudes. The information contained in this thesis could be used by administrators and faculty alike to assist in the continuation of assessment efforts in academic affairs.

## **Conclusions**

The results of this study support the literature to date regarding the overall attitudes of faculty; that is, that in general, a negative attitude about assessment

persists among teaching faculty members at these institutions. As further indicated in the research, a variety of factors have contributed (and continue to contribute) to the attitudes about assessment on campuses across the nation. The findings of this investigation indicate that several professional and demographic traits contribute to variation in attitudes, and that personal life events do not contribute significantly to such variability in attitude.

All professional characteristics identified in this study were shown to contribute significantly to variation in faculty attitudes regarding assessment for specific statements using the Chi-squared and Pearson-r correlation tests. Academic rank, followed by divisional affiliation and years at current institution were the three most significant influences on faculty attitudes. In general, as academic rank and years of experience increase, attitudes regarding assessment have a tendency to turn more negative.

This study also found a relationship between divisional affiliation and faculty attitudes regarding assessment. Overall, faculty members in education, fine arts, and pre-professional programs indicated a more positive attitude of assessment. Conversely, faculty members in social sciences, natural sciences, and humanities divisions indicated a more negative attitude regarding the assessment of student learning. While it is difficult to establish a rationale for such findings, it may be that pre-professional programs and education departments are more familiar with outside accrediting bodies and have had more exposure to assessment in general, thus viewing it as par for the course in their fields. Those faculty members in the divisions yielding more negative attitudes may be less familiar with current assessment

practices, and as indicated in the research on adopting innovation, may need more exposure to assessment in order to improve their attitudes.

With regard to demographic characteristics that influence faculty attitudes about assessment, each of the three traits studied yielded statistically significant results for specific survey statements. Gender, however, was the most significant predictor of variation in attitude. In general, females tended to have more positive attitudes regarding assessment than did their male counterparts. This finding also aligns itself with the literature on the adoption of an innovation, as women tend to be earlier adopters of innovations than men.

The personal life events ('triggers') identified as variables in this study indicated little relationship to faculty attitudes regarding assessment. This may be due to the limited variation of responses, but may also indicate that personal life events do not contribute to varied attitudes. More research, particularly with a larger sample size, would be needed to reach a conclusion on this point.

While statistically significant relationships were found between professional and demographic characteristics of faculty and their attitudes about assessment, it is important to note that several of these variables are related, resulting in co-variance and confounding of the findings. For instance, academic rank and years at institution are often related; as years at an institution increase, academic rank also typically increases. It would be helpful to further investigate these findings and perform multiple regression analyses on the data to determine to what extent several variables contribute simultaneously to variation in faculty attitudes regarding assessment.

## Recommendations

Based on the findings of this study, the following recommendations can be made:

1. While the results of this study merit further investigation, it is important to note the importance of reaching out to faculty members early in their academic careers in order for them to develop an understanding of and an appreciation for the assessment of student learning. In order to create a climate of assessment on college campuses, it is vital to recruit as many 'assessment allies' as possible, as quickly as possible, before negative attitudes have time to materialize.
2. As administrators at these institutions continue to assess student learning, these findings may help allocate professional development resources to academic divisions in need of more 'assessment allies'. Directors of assessment on college and university campuses may use this information to 1) understand WHY individual faculty members feel as they do about assessment, and 2) consider HOW they might approach both those considered 'early adopters' as well as 'laggards', thus increasing buy-in and fostering a culture of accountability focused on improving student learning.
3. Although more research is clearly needed, results such as these may also assist graduate programs in preparing future professors; identifying sources of resistance to assessment may be a crucial step in eradicating the problem of negativity among faculty members.

## **Limitations**

There are several limitations of the findings of this study. First, the findings are likely limited to reflect the population at the institutions surveyed; due to the small sample size, they cannot be confidently extrapolated to other institutions. The response rate for this study was approximately 39%, but the respondents' characteristics were representative of the overall demographics of the institutions. In addition, while the correlations are significant for many of the independent variables, there are likely other lurking variables not measured that contribute to changes in attitudes regarding assessment. Studies exist that examine external factors (institutional support, budgetary allocations, etc.), but these variables have not been investigated side-by-side with the individual faculty variables used in this study. Finally, as previously mentioned, several of the variables of this study co-vary, which may impact the statistical significance of some of the relationships.

## **Future Research**

Based on the findings of this study, it is evident that additional research on the subject is needed. The trends that have been uncovered through the analysis of the data set in this study have important implications for students, faculty members, administrators, and graduate programs and should be investigated further to extrapolate larger significant trends. This study could be replicated at other institutions, both similar in size and character to CSB/SJU as well as distinct to see if the statistical significance holds. Furthermore, an investigation of other variables that may contribute to varying attitudes regarding assessment should be studied side-by-

side with the variables identified in this study to determine which variables contribute more strongly to the variation in faculty attitudes.

Further investigation may also prove helpful to support or refute the evidence from this data set indicating that there is not a relationship between life events and assessment attitudes. The findings of this study are not consistent with the results of the job satisfaction study on which this investigation is based. Other demographic or professional characteristics could also be identified to investigate variation in faculty attitudes. For example, traits such as income level, household size, dwelling type, departmental affiliation, service on committees, and others may also yield interesting findings. Finally, as mentioned previously, multiple regression analyses would be helpful to identify which, if any, variables studied during this investigation confound the results or magnify their significance.

### **Summary**

An awareness of the relationship between demographic and professional characteristics of faculty members and their attitudes toward assessment is likely to help them and administrators target those groups with particularly negative attitudes in order to improve their outlook on assessment. In addition, a knowledge of which groups or individuals maintain a positive outlook on assessment will help identify who administrators should seek out as allies when assessment tasks are to be carried out.

This study has identified which personal, professional, and demographic characteristics of individual faculty members contribute to variation in attitudes regarding the assessment of student learning. The most significant predictors of

variation included academic rank, divisional affiliation, years at current institution, and gender. The relationships between each of these variables and faculty attitudes, while fledgling in their discovery, are likely to provide vital information to institutional leaders charged with continuing the arduous task of assessing student learning at higher education institutions throughout the United States.

## References

- American Association for Higher Education. (1992). *Principles of good practice for assessing student learning*. Washington, DC: Author.
- American Heritage College Dictionary*. (1993). Attitude. Boston, MA: Houghton Mifflin.
- Banta, T. W. (1997). Moving assessment forward: Enabling conditions and stumbling blocks. *New Directions for Higher Education*, 100, 79-91.
- Banta, T. W., Lund, J. P., Black, K. E., & Oblander, F. W. (1996). *Assessment in practice: Putting principles to work on college campuses*. San Francisco, CA: Jossey-Bass.
- Banta, T. W. (& Associates). (2002). *Building a scholarship of assessment*. San Francisco, CA: Jossey-Bass.
- Brennan, R. L. (2006). Perspectives on the evolution and future of educational measurement. In R. L. Brennan (Ed.), *Educational measurement* (pp. 1-16). Westport, CT: Praeger Publishing.
- Brittingham, B. (2008). An uneasy partnership: Accreditation and the federal government. *Change: The Magazine of Higher Learning*, 40(5), 32-38. Retrieved from ERIC database.
- Cummings, R., Maddux, C., & Richmond, A. (2008, December). Curriculum-embedded performance assessment in higher education: Maximum efficiency and minimum disruption. *Assessment & Evaluation in Higher Education*, 33(6), 599-605. doi:10.1080/02602930701773067

- Dugan, R. E., Herson, P., & Schwartz, C. (Eds.). (2006). *Revisiting outcomes assessment in higher education*. Westport, CT: Libraries Unlimited.
- Forest, J. J. F., & Kinser, K. (Eds.). (2002). *Higher education in the United States: An encyclopedia*. Santa Barbara, CA: ABC-CLIO.
- Geoghegan, W. H. (1994). What ever happened to instructional technology? In S. Bapna, A. Emdad, & J. Zaveri (Eds.), *Proceedings of the 22nd Annual Conference of the International Business Schools Computing Association*. Baltimore, MD: International Business Schools Computing Association, 1994.
- Gray, P. J. (1997). Viewing assessment as an innovation: Leadership and the change process. *New Directions for Higher Education*, (100), 5. Retrieved from Academic Search Premier database.
- Gray, P. J., & Banta, T. W. (Eds.) (1997). The campus-level impact of assessment: Progress, problems, and possibilities. *New Directions for Higher Education*. San Francisco, CA: Jossey Bass.
- Grunwald, H., & Peterson, M. W. (2003). Factors that promote faculty involvement in and satisfaction with institutional and classroom student assessment. *Research in Higher Education*, 44(2), 173-204.
- Hagedorn, L. S. (2000). Conceptualizing faculty job satisfaction: Components, theories, and outcomes. *New Directions for Institutional Research*, 105, 5-21.
- Hall, G. E., Loucks, S. F., Rutherford, W. L., & Newlove, B. W. (1975). Levels of use of the innovation: A framework for analyzing innovation adoption. *Journal of Teacher Education*, 26(1).

- Katz, S. N. (2010). Beyond crude measurement and consumerism. *Academe*, 96(5), 16-20. Retrieved from EBSCOhost.
- Lazerson, M., Wagener, U., & Shumanis, N. (2000). What makes a revolution? Teaching and learning in higher education, 1980-2000. *Change*, 32(3), 12-19. Retrieved from ERIC database.
- Lindquist, J. (1978). *Strategies for change*. Berkeley, CA: Pacific Soundings Press.
- Linkon, S. L. (2005). How can assessment work for us? *Academe*, 91(4), 28-32.
- Litwin, M. S. (1995). *How to measure survey reliability and validity*. Thousand Oaks, CA: Sage.
- Moore, G. A. (1991). *Crossing the chasm: Marketing and selling technology products to mainstream customers*. New York, NY: Harper Business.
- Nichols, J. O. (1995). *Assessment case studies: Common issues in implementation with various campus approaches to resolution*. New York, NY: Agathon Press.
- Palomba, C. A., & Banta, T. W. (1999). *Assessment essentials: Planning, implementing, and improving assessment in higher education*. San Francisco, CA: Jossey-Bass.
- Palomba, C. A., & Banta, T. W. (Eds.). (2001). *Assessing student competence in accredited disciplines: Pioneering approaches to assessment in higher education*. Sterling, VA: Stylus.
- Penuel, W. R. (2010). A dialogical epistemology for educational evaluation. *Yearbook of the National Society for the Study of Education*, 109(1), 128-143. Retrieved from EBSCOhost.

- Peterson, M. W. (Director). (2000). *Institutional Climate for Student Assessment (ICSA)*. National Center for Postsecondary Improvement, University of Michigan, Ann Arbor, MI.
- Rogers, E. M. (1968). The communications of innovations in a complex Institution. *Educational Record*, (Winter), 67-77.
- Rogers, E. M. (1995). *Diffusion of innovations*. New York: Free Press.
- Schein, E. H. (1995). *Kurt Lewin's change theory in the field and in the classroom: Notes toward a model of managed learning*. [WWW document] (74 paragraphs). Retrieved March 12, 2009 from <http://www.sol-ne.org/res/wp/10006.html>.
- Walvoord, B. E. (2000). Academic departments: How they work, how they change. *ASHE-ERIC Higher Education Reports*, 27(8). San Francisco, CA: Jossey-Bass.
- Walvoord, B. E. (2004). *Assessment clear and simple: A practical guide for institutions, departments, and general education*. San Francisco, CA: Jossey-Bass.
- Welsh, J. F., & Metcalf, J. (2003). Cultivating faculty support for institutional effectiveness activities: Benchmarking best practices. *Assessment & Evaluation in Higher Education*, 28(1), 33-45.

## Appendix A: Survey Instrument

### 1. Instructions

Dear Faculty Member,

The research on faculty attitudes regarding assessment indicates that faculty members' attitudes are not homogeneous in nature. However, the research that has been done to determine what effects those attitudes has primarily focused on institutional factors rather than the personal, demographic, or professional attributes of faculty members themselves.

This survey is being used to collect data for a research project titled "HOW PERSONAL, DEMOGRAPHIC AND PROFESSIONAL CHARACTERISTICS AFFECT FACULTY ATTITUDES REGARDING ASSESSMENT OF STUDENT LEARNING". Teaching faculty members from several higher education institutions have been invited to participate. Your answers are important to the understanding of what factors contribute to positive or negative attitudes regarding the assessment of student learning.

The survey will take between five and ten minutes to complete, and all responses of individual participants in this survey will remain confidential. Your participation in this survey is anonymous.

If you have questions, comments, or would like to be notified of the results of this investigation, please contact Angela Erickson-Grussing at (320) 491-9451 or [eran0702@stcloudstate.edu](mailto:eran0702@stcloudstate.edu).

Please answer each question by highlighting the appropriate radio button, and be sure to check your answers before continuing to the subsequent page.

Thank you for your participation!

Angela Erickson-Grussing  
Graduate Student, Higher Education Administration Program  
Saint Cloud State University

## 2. Informed Consent

"I agree to complete this survey under the direction of researcher Angela Erickson-Grussing. I understand that the completion time for this questionnaire is approximately 5-10 minutes.

I understand that the purpose of this study seeks to determine the effect of personal, demographic, and professional characteristics on faculty attitudes regarding student assessment. I further understand that in order for the researcher to examine this topic, I will be asked to answer demographic questions.

I understand that my participation is voluntary and that I may end my participation at any time with no consequences. I understand that there are no known risks or benefits involved with my participation in this study. I have been given the opportunity to ask questions concerning the procedures of this study and any questions have been answered to my satisfaction.

I understand that every effort will be made to keep my data confidential. My responses will be identified only by a code number and never by name. I understand that I may talk individually with the researcher if I desire. The researcher may be reached at (320) 491-9451 or eran0702@stcloudstate.edu.

This project has been reviewed by the Institutional Review Board of Saint Cloud State University and my home institution. Any questions regarding the conduct of this research or my rights as a research participant may be directed to Dr. Eric Rudrud, Chair of the Institutional Review Board at Saint Cloud State University, at ehrudrud@stcloudstate.edu.

I have read and understood the above. Completion of the survey is deemed consent to participate.\*

### 3. Personal, Demographic and Professional Characteristics

#### 1. What is your age?

- < 25
- 26-30
- 31-35
- 36-40
- 41-45
- 46-50
- 51-55
- 56-60
- 61-65
- 66-70
- > 70

#### 2. What is your race?

- White (Non-Hispanic)
- Black or African American
- American Indian
- Asian
- Hawaiian/Other Pacific Islander
- Hispanic/Latino
- Other

#### 3. What is your gender?

- Male
- Female
- Prefer not to answer

#### 4. What is your highest educational level?

- Bachelor's Degree
- Master's Degree or Certificate
- ABD
- Ph.D/Ed.D.
- Other

**5. How many years of teaching experience do you have?**

- < 5
- 6-10
- 11-15
- 16-20
- 21-25
- 26-30
- > 30

**6. How many years have you been at your current institution?**

- < 5
- 6-10
- 11-15
- 16-20
- 21-25
- 26-30
- > 30

**7. What is your current academic rank?**

- Adjunct (Part-Time)
- Adjunct (Full-Time)
- Instructor/Lecturer (Term Contract)
- Assistant Professor (Tenured or Tenure-Track)
- Associate Professor (Tenured or Tenure-Track)
- Professor (Tenured or Tenure-Track)
- Professor Emerita/us
- Other

**8. With which academic division are you affiliated?**

- Education
- Fine Arts
- Humanities
- Natural Sciences
- Social Sciences
- Interdisciplinary/Pre-Professional
- Other

**9. Have you experienced any of the following life events within the last year?**

	Yes	No
Transfer to new institution	<input type="radio"/>	<input type="radio"/>
Change in academic rank	<input type="radio"/>	<input type="radio"/>
Birth of a child	<input type="radio"/>	<input type="radio"/>
Death of close friend/family member	<input type="radio"/>	<input type="radio"/>
Marriage	<input type="radio"/>	<input type="radio"/>
Divorce	<input type="radio"/>	<input type="radio"/>
Serious illness	<input type="radio"/>	<input type="radio"/>

#### 4. Faculty Attitudes Regarding Assessment

**1. For purposes of this study, assessment is defined as "the systematic collection of information about student learning, using the time, knowledge, expertise, and resources available, in order to inform decisions about how to improve learning" (Walvoord 2004).**

**Please indicate how much you agree or disagree with the following statements regarding student assessment at your institution using the scale below.**

	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
1. Students today are learning more due to an institutional focus on the assessment of student learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Student assessment has improved the quality of education at this institution.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Faculty use student assessment information to modify how or what they teach.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Assessing students has resulted in the development of learning experiences that better meet diverse learning styles.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Faculty enjoy participating in student assessment activities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Faculty use more student assessment techniques than they did 5 years ago.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Faculty frequently communicate with colleagues on how to improve their student assessment practices.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Faculty update their in-class assessment techniques on a regular basis.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Faculty and administrators agree on the value of assessing student learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. The effectiveness of teaching is enhanced when faculty regularly engage in student assessment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Student assessment techniques accurately measure students learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. State or federally mandated assessment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

requirements improve quality of education.					
13. Administrators have a common understanding of the meaning of the term student assessment.	<input type="radio"/>				
14. Faculty have a common understanding of the term student assessment.	<input type="radio"/>				
15. Mandated student assessment does not limit the academic freedom of faculty.	<input type="radio"/>				

## 5. Wrap-Up

**1. Is there anything you would like to add about faculty attitudes regarding assessment that I may have left out of this survey?**

## 6. Thank You!

Thank you for participating in this survey! Your thoughtful contributions will be invaluable as the data is analyzed.

Sincerely,

Angela Erickson-Grussing

## Appendix B: Institutional Review Board Approval



### St. Cloud State University Institutional Review Board (IRB)

*Office of Sponsored Programs Administrative Services 210*  
 Website: [stcloudstate.edu/osp](http://stcloudstate.edu/osp) Email: [osp@stcloudstate.edu](mailto:osp@stcloudstate.edu) Phone: 320-308-4932

**Name:** Angela Erickson-Grussing  
**Address:** 1104 East Callaway St.  
 St. Joseph, MN 56374  
**Email:** [eran0702@stcloudstate.edu](mailto:eran0702@stcloudstate.edu)

**IRB APPLICATION  
 DETERMINATION:  
 EXEMPT**

**Co-Investigator:**

**Project Title:** How Personal, Demographic and Professional Characteristics Affect Faculty Attitudes Regarding the Assessment of Student Learning

**Advisor:** Dr. Christine M. Imbra

The Institutional Review Board has reviewed your application to conduct research involving human subjects. Your project has been: **EXEMPT**

We are pleased to advise you that your project has been deemed as exempt in accordance with federal regulations. The IRB has found that your research project meets the criteria for exempt status and the criteria for protection of human subjects in exempt research. Please note the following items concerning our exempt policy:

- Principal Investigator assumes the responsibilities for the protection of human subjects in this project
- Exempt protocols DO NOT need to be renewed.
- Exempt protocols DO NOT require revisions. However, if changes are made to a protocol that may no longer meet the exempt criteria, a new initial application will be required.
- Adverse events (research related injuries or other harmful outcomes) must be reported to the IRB as soon as possible.
- The IRB reserves the right to review the research while it is in progress or when it is completed.

Good luck on your research. If we can be of further assistance, please contact the Office of Sponsored Programs at 320-308-4932 or email [jkuznia@stcloudstate.edu](mailto:jkuznia@stcloudstate.edu). Please use the SCSU IRB number listed on any of the forms submitted which relate to this project, or on any correspondence with the IRB.

**For the Institutional Review Board:**

Jodi Kuznia  
 IRB Administrator  
 Office of Sponsored Programs

**For St. Cloud State University:**

Dennis Nunes  
 Dean, Graduate Studies

OFFICE USE ONLY

SCSUIRB#: 656 - 800  
 Type of Review: Expedited

EXEMPT: 7/15/2009  
 Expiration Date: