

A Content Analysis of Teaching Philosophy Statements of Award Winning Colleges of Agriculture Professors

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As our economy calls for improved employment skills, educational institutions must provide quality teaching to prepare students for success. Researchers purport that an important factor in determining student learning is the teacher, and that one of the most prominent factors in student achievement is teacher quality. The search for the attributes, dispositions, knowledge, and instructional skills that define effective teachers continues as scholars seek to discover the teacher variables that lead to student achievement. The purpose of the descriptive research was to identify themes present in the teaching philosophy statements of the United States Department of Agriculture Excellence in College and University Teaching in the Food and Agricultural Sciences award recipients. Content analysis technique was utilized in reviewing the provided espoused philosophy statements of award winners from 2000 – 2010. Findings include identification of eleven emergent themes. Future recommendations would include a study to determine if a disconnect exists between the stated teaching philosophy of award winning professors and their actual teaching practice. Further application would be to analyze the classroom practice of award winning professors and the impact had on student learning.

Keywords: effective teaching, teaching philosophy, teaching and learning, award winning professors

Introduction

Today, a higher education is not just a pathway to opportunity – it is a prerequisite. Over the next decade, nearly eight in ten new job openings in the U.S. will require some workforce training or postsecondary education, and of the thirty fastest growing occupations in America, half require at least a 4-year college degree (The White House, Office of the Press Secretary, 2011). Rising levels of education are critical to creating shared economic growth (The White House, Office of the Press Secretary, 2011).

America's economic future depends on students receiving a high-quality education. Our nation's economic competitiveness and the path to the American dream depend on providing every child with an education that will enable them to succeed in a global economy that is grounded on knowledge and innovation (The

White House, Issues, 2011). The challenge is the emergence of a global and highly competitive new knowledge-based economy, which requires enormous numbers of workers with education and training beyond high school. A student's ability will become more important than ever. What students know and are able to do—their ability to analyze complex issues, communicate effectively, and contribute to the welfare of society—has never been more important (Hunt, 2006). Today's students will enter a job market that values skills and abilities far different from the traditional workplace of the past. Students must be able to collect, synthesize, and analyze information, then conduct targeted research and work with others to employ that newfound knowledge. In essence, students must learn how to learn, while responding to endlessly changing technologies and social, economic, and global conditions (Darling-Hammond et al., 2008).

As our economy calls for improved employment skills, educational institutions must provide quality teaching to prepare students for success. Many researchers (Marzano, 2003; Medley & Mitzel, 1963; Sanders & Horn, 1994) indicated that one of the most prominent factors in student achievement is teacher quality. Andrews, Garrison, and Magnusson (1996) noted that “excellence in teaching is complex and difficult to achieve. It is about content expertise and methodological technique, as well as about participants in the educational enterprise valuing and achieving quality outcomes” (p. 101). Past research has identified characteristics of excellent post-secondary teaching (Feldman, 1989; Hativa, Barak, & Simhi, 2001; Lowman, 1996; Rosenshine & Furst, 1971).

Exemplary teachers possess universal effective teaching characteristics (Hativa, Barak, & Simhi, 2001; Lowman, 1996). “Exemplary teachers are those who are likely to promote unusually high levels of learning in their students, while also creating the positive memories of learning that come to our minds years later in moments of reflection” (Lowman, 1996, p. 39). Chickering and Gamson (1987) provided a framework of good practice for higher education institutions. The framework described seven principles of good practices: (a) encourages student faculty contact, (b) encourages cooperation among students, (c) encourages active learning, (d) gives prompt feedback, (e) emphasizes time on task, (f) communicates high expectations, and (g) respects diverse talents and ways of learning.

Effective teaching begins with the development of a teaching philosophy, a representation of the personal theory that educators construct to guide student learning (Schonwetter, Sokal, Friesen, & Taylor, 2002). Teaching philosophy statements can be defined as written statements narrating the teacher’s beliefs and theories about teaching and student learning (Fitzmaurice & Coughlan, 2007). “By writing explicit teaching philosophies, teachers can understand why they teach the way they do and the goals and beliefs that underpin their practice” (Fitzmaurice & Coughlan, 2007, p. 40). However, the search for the attributes, dispositions, knowledge, and instructional skills

that define effective teachers continues as scholars seek to discover the teacher variables that can be connected to an increase in student achievement. A potential starting point would be to identify, describe, and categorize the significant themes in the philosophy statements of award winning professors, by doing so, a sense of the philosophical foundations of an excellent teacher will develop.

The 2011–2015 National Research Agenda established by the American Association of Agricultural Education address six research priorities (Doerfert, 2011). Based on these six areas of concern the focus turns to producing a learning environment where all students are engaged and are able to contextualize technical material (Doerfert, 2011). The collaborative implementation of each critical area is subject to the conveyance of material through effective instructors (Doerfert, 2011).

Theoretical Foundation and Conceptual Framework

The theoretical foundation of the study was in Mitzel’s (1960) theory on teaching and learning and Bandura’s (1977) Self Efficacy Theory. Mitzel (1960) contended that the teaching and learning process concentrations include presage variables, context variables, process variables, and product variables. Presage variables were defined as teacher characteristics. Context variables are student characteristics, and process variables reflect classroom activities. Product variables describe the outcomes of teaching. Presage variables concern traits that teachers have that affect the teaching process (Clark & Peterson, 1986; Dunkin & Biddle, 1974). These are presumed to characterize the individual teachers because they carry these attributes within themselves (Dunkin & Biddle, 1974). According to Mitzel (1960), presage variables and context variables determine the significance of process variables. The interaction of presage, context, and process variables determine the resultant process variables.

Bandura’s (1977) Social Cognitive Theory indicates that human achievement is shaped by the interaction of three variables: behavior, personal factors, and environmental factors. The

social cognition theory assumption of behavioral change is the environment provides the cognitive representations that influence a person's behavior. Personal factors are self-beliefs that facilitate a regulatory measure of control about the behavior. The agentic supposition of this behavioral change is that people can participate in their own development. Grounded in Bandura's Social Cognitive Theory is the Teacher Self-Efficacy theory. Bandura stated, self-efficacy beliefs influence the choices and goals people make, the amount of effort they apply toward these goals, how long they persevere at a task in times of failure or difficulty, and the amount of stress that is experienced (Frederickson & Turner, 2003).

This theory provides a basis to further understand needs and behaviors of teachers to include their beliefs toward teaching and learning. The interaction of these two theories can explain the outcomes of this study. In effect, teacher characteristics and beliefs espoused in philosophy statements are presage variables which impact behavior and the learning environment. In an analogous comparison Mitzel's presage variables mirrors Bandura's social cognition theory assumption of behavioral change and teacher self-efficacy based on ingrained teacher behavior and approach. The conceptual framework for the study is illustrated in Figure 1.

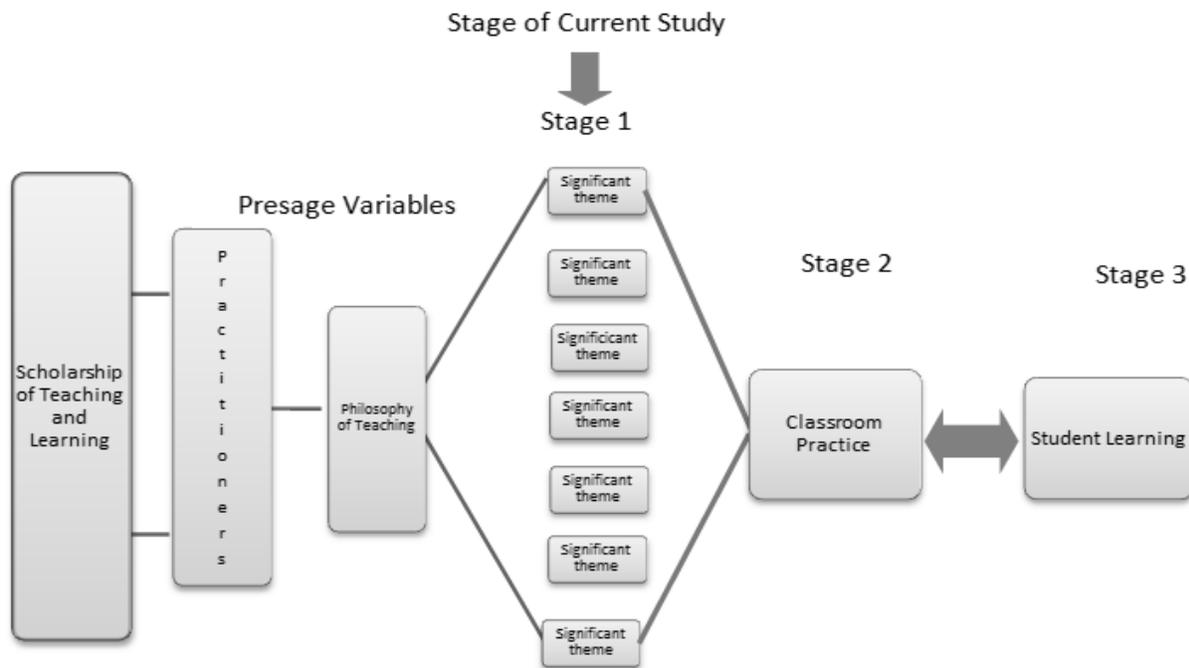


Figure 1. Conceptual Framework

In the current stage of the research study, Stage 1, significant themes in the teaching philosophy statements of award-winning professors were identified. The findings will then facilitate Stage 2 and Stage 3 for future research to focus on determining if a disconnect exists between the stated teaching philosophy of award winning professors and their actual

teaching practice and to analyze the classroom practice of award winning professors and the impact had on student learning.

Purpose of the Study

The purpose of the descriptive study was to identify emergent themes present in the teaching

philosophy statements of the United States Department of Agriculture Excellence in College and University Teaching in the Food and Agricultural Sciences award recipients. To accomplish that purpose, the following research objectives guided the study:

1. Identify the biographical, educational background, and professional experience profile of award recipients from 2000 – 2010.
2. Identify via content analysis emergent themes in the espoused philosophy statements of award recipients.
3. Describe frequency of emergent themes identified in the teaching philosophy statements of the award recipients.

Methods

The participants of the study were the national/regional award winners of the United States Department of Agriculture's (USDA) National Awards Program for Excellence in College and University Teaching in the Food and Agricultural Sciences from the years 2000 – 2010. A census of 110 recipients was used. The participants were listed on the USDA National Awards Program for Excellence in College and University Teaching in the Food and Agricultural Sciences webpage.

Description of Population Selection Process

The 110 award recipients of the USDA National Awards Program for Excellence in College and University Teaching in the Food and Agricultural Sciences from the years 2000 – 2010 was the population frame for the research study. The USDA National Awards Program for Excellence in College and University Teaching in the Food and Agricultural Sciences is offered annually to identify and honor faculty who uphold excellent teaching, with the goal of giving national attention to the role of teaching in colleges and universities in the Food and Agricultural Sciences. Recipients must have exhibited continual, commendable and excellent teaching at the postsecondary level within the food and agricultural sciences (United States Department of Agriculture, 2010).

The awards program requires interested nominees submit a nomination packet. The primary component of that package is a written response to six Evaluation Criteria categories. The categories include: (a) Teaching Quality Assessment, (b) Philosophy of Teaching and Teaching Methodology, (c) Service to the Teaching Profession and the Scholarship of Teaching, (d) Service to Students, (e) Professional Growth and Competencies Development, and (f) Endorsement by Administrator, Alumnus, and Colleague. Under strict guidelines, the packets are evaluated by a panel of experts consisting of a combination of university faculty and administrators, public school teachers or administrators, representatives from professional associations, and personnel from other federal agencies (USDA, 2010).

Content Analysis Process

To analyze the teaching philosophy statements, content analysis was used. Content analysis is a technique that enables researchers to study human behavior in an indirect way, through an analysis of their communications (Fraenkel & Wallen, 2009).

A conventional qualitative content analysis approach was used while utilizing a constant comparative strategy between the philosophy statements. Themes emerged both from the data (an inductive approach) and from the investigator's prior theoretical understanding of the phenomenon under study (an *a priori* approach). Researchers identified and quantified the presence of words and concepts that represent emergent themes within the teaching philosophy statements.

The process of qualitative content analysis often begins during the early stages of data collection. Qualitative content analysis involves a set of systematic and distinct procedures for processing data. The steps are listed and described below.

1. Identify a population of documents/arrange data for qualitative content analysis

The population of documents was the teaching philosophy statements of the United States Department of Agriculture Excellence in College and University Teaching in the Food

and Agricultural Sciences award recipients from the years 2000 – 2010. A written teaching philosophy statement was a requirement of the award program evaluation criteria for applicants to receive the award. The award winning teaching philosophy statements were submitted in a word document, which was an appropriate format for analysis.

2. Determine the unit of analysis

Each philosophy statement was the unit of analysis. Each statement was coded for themes which may be expressed in single words, phrases, sentences, paragraphs, or entire documents. The researcher primarily looked for the expression of an idea. Codes were assigned to any length of text, any size, as long as a theme of interest was present.

3. Select a sample of units from the population

A census of all the philosophy statements from the award recipients from the years 2000 – 2010 were selected to be analyzed.

4. Design coding procedures: develop categories and coding scheme

In traditional content analysis, categories are required to be clearly defined, comprehensive, and mutually-exclusive. The categories were established following some preliminary examination of the data. First, the principal researcher independently reviewed the material and developed a set of themes that formed a checklist of themes. Second, two qualified coders read through ten randomly selected statements and compared notes and reconciled any differences that showed up on their initial checklists. Third, the researchers used a consolidated checklist to independently apply coding. Fourth, the researchers checked the reliability of the coding (a 95% agreement is suggested; .8 for Cohen's kappa). If the level of reliability was not acceptable, then the researchers repeated the previous steps. Once the reliability was established, the coding was applied on a large-scale basis. The final stage was a periodic quality control check.

5. Code all text

When sufficient consistency had been achieved, the coding rules were applied to code all text. During the coding process, researchers checked the coding constantly to prevent “drifting into idiosyncratic sense of what the codes mean” (Schilling, 2006).

6. Reporting

For the current stage of the study, the themes that emerged from the content analysis were described and reported.

A quantitative content analysis approach was used to determine the frequency at which the themes occurred throughout the population of documents. This was accomplished by establishing a spreadsheet in SPSS that ran frequency counts on the themes throughout all the documents analyzed. Analyses of word-counts yield inferences about the frequency of themes in texts. The word count does not imply importance; merely frequencies.

Survey Approach

A modified Dillman approach to social science research was utilized. Participants were contacted by email. The email informed participants of the study's purpose and objectives as well and included an implied consent form. The participants were asked to submit the philosophy of teaching statement they previously submitted to the USDA National Awards Program for Excellence in College and University Teaching in the Food and Agricultural Sciences. The participants who agreed to participate in the study; sent a copy of their philosophy statement and completed an online demographic survey. The philosophy statement was collected from award recipients as an attached word document sent in a reply email.

As the philosophy statements were submitted, each philosophy statement was numbered. A modified Dillman approach was used for initial contact and follow-up reminders to non-respondents. Award recipients who did not reply within two weeks were sent an email reminder. Altogether, as many as four contacts were made, three of which were by email, over a period of one month. A fourth and final contact was made by phone to those award recipients who had not responded to any of the previous three emails. For the participants who were unable to locate their original, award winning philosophy statement, the individuals were asked to send an email granting approval for the researcher to have the philosophy statement released from the United States Department of Agriculture, Division of Community and

Education, the office in which the award applications are received during the award application process and housed after award winners are selected. Reminder emails were sent out to non-respondents two weeks and four weeks post the initial introduction and recruitment email. Using the process a total of 86 philosophy statements were obtained, which is 78.2 percent of the target population.

Included in the emails to the participants was a link to an online demographic survey facilitated through SurveyMonkey®. The survey was reviewed by a panel of experts for face and content validity. The demographic survey was twelve demographic questions in length. Sixty four ($n = 64$) award winners elected to participate in completing the online demographic survey, for an overall response rate of 58.2 percent.

Reliability and Validity

To establish inter-coder reliability, ten philosophy statements were selected at random using a random number generator. The numbers that were assigned previously to the philosophy statements were used. Two researchers and the principal researcher were used to establish inter-coder reliability. All coders received the same text units to code. The following steps were followed:

Step one: the principal researcher read through all 86 philosophy statements and identified 13 emergent themes. The principal researcher developed a set of themes that formed a checklist of themes. Each of the 13 themes was defined and a codebook was developed. The codebook contained instructions on how the themes were identified and instructions for future coders to follow. The 13 emergent themes were then listed with definitions. A coding sheet was also attached for two outside coders to use for coding purposes.

Step two: two outside coders then read through ten randomly selected philosophy statements. If any of the thirteen emergent themes was identified during reading, the corresponding box was checked on the coding sheet. Each philosophy statement could have had up to thirteen checked themes.

Step three: the researchers compared notes and reconciled any differences that showed up on their initial codes and themes checklists.

Step four: the researchers used a consolidated checklist to independently apply coding.

Step five: the researchers checked the reliability of the coding (*a priori* set at a 90% agreement; .8 for Cohen's kappa). A Cohen's kappa percentage of agreement was calculated. "Cohen's kappa assumes nominal-level data and has a typical range from .00 (agreement at chance level) to 1.00 (perfect agreement), and a value of less than 0.00 indicates agreement less than chance" (Neuendorf, 2002, p. 150).

If the level of reliability was not acceptable, then the researchers repeated the previous steps. Once the reliability was established, the coding was applied on a large-scale basis. A periodic quality control check was followed.

Validity and reliability was established through three rounds. *Round one* consisted of the principal researcher reading through all 86 philosophy statements and identifying 13 emergent themes. The themes included: facilitator; present subject matter in multiple modalities; build personal relationships with each student; create a safe, intellectually stimulating learning environment; reflection; enthusiasm; expert in subject matter; role model; organization and clarity; professionalism; provide opportunity to learn; technological integration; and excellent researchers. The 13 themes were defined and organized in a codebook and coding sheet for inter-coder reliability to occur. Inter-coder reliability was conducted with two other researchers.

Upon completion of inter-coder reliability, all three researchers then compared results and notes. After lengthy discussion and review, several of the themes were renamed and definitions were refined for explicitness and clarity. One predetermined theme, excellent researchers, was eliminated, as it was agreed upon by all three researchers it was not emergent. Two themes, professionalism and reflection, were collapsed into one theme due to overlap in definition which was renamed, professional teaching commitment, and re-defined. The first round of reliability ended with 11 emergent themes and explicit definitions of

each, which included: student centeredness; instructional variability; student rapport; conducive learning environment; professional teaching commitment; enthusiasm; expert in subject matter; role model; organization and clarity; provide opportunity to learn; and technological integration. A percentage agreement and a Cohen's kappa were calculated.

Round two of validity and reliability was conducted after a calculated percentage agreement and Cohen's Kappa for inter-coder reliability was not desirable. Ten new philosophy statements were selected using a random number generator and each researcher read through and coded each statement. Again, identified theme definitions were expanded upon for clarity and agreement. Three steps were established for identifying themes during coding. *Step 1* was to read content. *Step 2* was to identify key words relating back to codebook. *Step 3* was to establish theme and assign. A percentage agreement and a Cohen's Kappa were calculated for each theme, which was still less than desirable. A third round of reliability was conducted.

Round three of validity and reliability was conducted. Ten randomly selected philosophy statements were distributed to each researcher. Each researcher read and coded the statements, using the three steps established in round two of validity and reliability. A final review of the results and calculations of percentage agreement and Cohen's Kappa for each theme established the findings to be valid and reliable.

Percentage agreement was calculated between the principal researcher and each individual researcher/coder that assisted in the reliability and validity rounds for each theme. The percentage agreement was calculated for each theme between the principal researcher and

researcher/coder 1, between principal researcher and researcher/coder 2, and between researcher/coder 1 and researcher/coder 2. The number of ratings for each theme was added respectively to the individual the agreement was being calculated between. The number each researcher could have had was between one and ten. The two numbers were added and divided by two. An overall average of the percentage agreement was then calculated.

Table 1 and Table 2 illustrate The Percentage Agreement and Cohen's kappa values for each of the three rounds of validity and reliability.

Limitations

Limitations of the study of conducting a content analysis occurred in the obtainment of the teaching philosophy statements. There were 110 recipients from 2000–2010. Mortality was a factor in obtaining the 110 documents. One recipient of the teaching award had passed away. Another limitation in obtaining the philosophy statement was the unfortunate computer crash experienced by several award recipients and having lost and not recovered the original submitted teaching philosophy statement. Some were recovered through working with the USDA program coordinator, but not all. In content analysis the researcher should try to have some sort of validation study built into the design. In qualitative research, validation takes the form of triangulation. Triangulation lends credibility to the findings by incorporating multiple sources of data, methods, investigators, or theories (Erlandson, Harris, Skipper, & Allen, 1993). With the study that was conducted, triangulation was a major limitation. Triangulation was a limitation due to lack of funding.

Table 1
Percentage Agreement and Cohen's kappa Statistic for Reliability in Nominal Theme Identification from Expert Panel in Round I

Identified Themes	Percentage Agreement	Cohen's kappa		
		R1 & R2	R1 & R3	R2 & R3
1. Facilitator	.87	1.00	0.00	0.00
2. Present subject matter in multiple modalities	.73	1.00	0.00	0.00
3. Build personal relationships with each student	.80	1.00	-.15	-.15
4. Create a safe, intellectually stimulating learning environment	.63	.41	.31	.09
5. Reflection	.60	.20	-.17	.20
6. Enthusiasm	.87	.73	.54	.78
7. Expert in subject matter	.60	1.00	0.00	0.00
8. Role model	.73	.54	.40	.40
9. Organization and Clarity	.73	.54	.40	.40
10. Professionalism	.67	.60	.20	.20
11. Provide opportunity to learn	.67	0.00	0.00	-.19
12. Technological integration	.87	.60	.78	.80
13. Excellent Researcher	.60	.04	-.17	.41

Note. Cohen's kappa of 1.0 is perfect reliability; R1= Researcher One; R2=Researcher Two; R3= Researcher Three

Table 2

Percentage Agreement and Cohen's kappa Statistic for Reliability in Nominal Theme Identification from Expert Panel in Rounds II and III

Identified Theme	Percentage Agreement			Cohen's kappa						
	Round II	Round III		Round II		Round III				
				R1&R2	R1&R3	R2&R3	R1&R2	R1&R3	R2&R3	
1. Student Centeredness	.80	1.00	1.00	1.00	-.15	-.15	1.00	1.00	1.00	1.00
2. Instructional Variability	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
3. Student Rapport	.87	1.00	1.00	.73	.54	.78	1.00	1.00	1.00	1.00
4. Conducive Learning Environment	.80	.93	.93	.54	.73	.34	.78	.78	.78	1.00
5. Professional Teaching Commitment	.67	.93	.93	.21	-.08	.09	.61	1.00	.61	.61
6. Enthusiasm	.83	1.00	1.00	.80	.58	.40	1.00	1.00	1.00	1.00
7. Expert in Subject Matter	.93	.93	.93	.73	.73	1.00	.80	.80	.80	1.00
8. Role Model	.80	1.00	1.00	.37	.37	.37	1.00	1.00	1.00	1.00
9. Organization and Clarity	.80	.93	.93	.58	.61	.61	.58	.80	.80	.80
10. Provide Opportunity to Learn	.73	.93	.93	.20	.78	.40	.61	1.00	.61	.61
11. Technological Integration	.80	1.00	1.00	.60	.73	.40	1.00	1.00	1.00	1.00

Findings

Research objective one was to provide a profile of the award recipients in terms of their biographical, educational and professional experiences. A total of 110 award recipients were contacted to submit their philosophy statement and complete the online demographic survey. Sixty four ($n = 64$) award winners elected to participate in completing the online demographic survey, for an overall response rate of 58.2%. The following results provide a profile of the award recipients in terms of their biographical, educational and professional experiences. Respondents were 71.4% ($n = 45$) male and 28.6% were female. One respondent did not provide a response. Of the sixty four total respondents, sixty three provided a response to the age bracket of which they belonged; 30.2% ($n = 19$) were between the ages 51 – 60, 28.6% ($n = 18$) were 61 years of age or older, 27.0% ($n = 17$) were between the ages of 41 – 50, and 14.3% ($n = 9$) were between the ages of 31 – 40 years old. The ethnic profile of fifty-nine respondents was as follows: 91.5% ($n = 54$) were white, 3.4% ($n = 2$) were black and 5.1% ($n=3$) were Asian, five respondents did not provide a response (see Table 3).

Respondents' professional rank were as follows: 78.1% ($n = 50$) held the professional

rank of Full Professor, 17.2% ($n = 11$) were Associate Professor, 1.6% ($n = 1$) were Assistant Professor, 1.6% ($n = 1$) was an Instructor/Lecturer, and 6.3% ($n = 4$) selected "Other" for their current professional rank (see Table 4).

Sixty three respondents provided the number of undergraduate courses taught, which averaged to be 3.05 per year. One respondent did not provide a response. All sixty four respondents provided the number of graduate courses taught, which averaged to be 1.63 per year.

Sixty one respondents provided their current appointment by percentage of time. It was found that 14.7% ($n = 9$) respondents held a teaching appointment between 5 – 25%. Twenty three respondents, 34.4%, held a teaching appointment between 26 – 50%. A total of 27.8% ($n = 17$) of the respondents held a 51 – 75% teaching appointment. Finally, 19.6% ($n = 12$) of the respondents held a 76 – 100% teaching appointment (see Table 5).

Respondents were asked to provide the number of years with teaching experience. The average years of teaching experience was 24.3 years for sixty three respondents. The recipients taught in fifteen different disciplines. Table 6 illustrates the disciplines.

Table 3
Gender, Age, and Ethnic Profile of Demographic Survey Respondents

Demographic Questions	Number of Respondents	Percent
Gender ($n = 63$)		
Male	45	71.4%
Female	18	28.6%
Age ($n = 63$)		
31 – 40 years old	9	14.3%
41 – 50 years old	17	27.0%
51 – 60 years old	19	30.2%
61 years or older	18	28.6%
Ethnic profile ($n = 59$)		
White	54	91.5%
Asian	3	5.1%
Black	2	3.4%

Table 4
Professional Rank of Demographic Survey Respondents

Professional Rank	Percent (n)
Full Professor	78.1 % (n = 50)
Associate Professor	17.2% (n = 11)
Assistant Professor	1.6% (n = 1)
Instructor/Lecturer	1.6% (n = 1)
Other	6.3% (n = 4)

Table 5
Current Teaching Appointment by Percentage Time of the Demographic Survey Respondents

Current Teaching Appointment by Percentage of Time	Percent (n)
5–25% Teaching Appointment	14.7% (n = 9)
26–50% Teaching Appointment	34.4% (n = 23)
51–75% Teaching Appointment	27.8% (n = 17)
76–100% Teaching Appointment	19.6% (n = 12)

Table 6
Disciplines Taught by Award Recipients

Discipline
Agricultural Communications
Agricultural Economics
Agricultural Engineering
Agricultural and Extension Education
Agriculture and Home Economics/Family and Consumer Sciences
Agricultural Law
Agronomy
Animal Science
Entomology
Food Science/Meat Science/Nutrition
Forestry
Horticulture
Plant and Soil Science
Sociology
Wildlife and Fishery Science/Natural Resource Management

Research objective two was to identify the emergent themes found in the espoused philosophy statements through content analysis. A total of 110 award recipients were contacted to submit their philosophy statement. Eighty six (n = 86) award winners elected to participate in the study by providing their teaching philosophy statement, for an overall response rate of 78.2%.

At the completion of the validity and reliability stages of the study, eleven emergent themes were identified and operationally defined. The eleven emergent themes and their operational definitions are organized in Table 7. The operational definitions consist of key words and phrases that explicitly and clearly illustrate the theme. The key words and phrases feature the

voice of the recipients by using the words *they* chose in their writing and by citing sentences and paragraphs as illustrative of a theme. The definitions were included in the codebook to

help the researchers during coding for reliability to focus on identifying themes in respect to this study and only this study.

Table 7
Identified Emergent Themes and Definitions

Identified Theme	Operational Definition
1. Student Centeredness	encourage collaboration; develop lifelong learners; help students learn to be learners; a desired outcome of students is developing skills for future and career success; empowering students to think and solve problems; refining students' skills in communication, critical thinking and problem solving; analyze, synthesize, apply and evaluate; provoke student reflective thinking; provide intellectual rigor; create enduring understanding
2. Instructional Variability	recognizes and addresses different learning styles of all students; variability; employing various teaching tactics; create learning activities; maximize student learning
3. Build Student Rapport	maintain a level of mutual respect between themselves and the students; effort put into learning the student as an individual; concern for student welfare; enjoy students; relate to students; identify each individual students' strength and weaknesses; accessible; empathize; rewarding students; listening; time and interest given to students; approachable
4. Conducive Learning Environment	safe, intellectually stimulating; positive classroom environment; welcoming; conducive to learning; comfortable
5. Professional Teaching Commitment	engage in activity to improve their teaching; constant improvement of teaching ; be progressive; stay current in instructional and laboratory teaching methods; collaborate with peers; continually update pedagogical knowledge; constantly assess; personal reflection; professional development; purposeful attention to detail on class materials and instruction; methodical; appropriate self-presentation in appearance and speech; honest; businesslike behavior; personal commitment to teaching
6. Enthusiasm	create interest and excitement; passion for subject matter; personality; fun; enjoyable; entertaining
7. Expert in Subject Matter	provide foundational facts and information; acquisition of knowledge and content material; keep course content current; master of subject matter; incorporates current research in instruction; strength in Pedagogical Content Knowledge
8. Role Model	positive impact; motivating; mentor; challenge students; inspire; encourage; provide time and attention to students; approachable; high expectations; "make a difference"; personal dignity; dedicated; high personal and professional integrity
9. Organization and Clarity	clearly stated learning objectives/goals; effective planning; uses effective principles of instructional design; structured learning; detailed instruction, materials, and activities; clear communication
10. Provide Opportunity to Learn	provide opportunities inside and outside of classroom for student success; stimulate ownership and responsibility in learning; enforce accountability; students show what they know; provide informal and/or formal feedback on student progress; informal and/or formal assessment; unique assignments and utilize student research projects
11. Technological Integration	incorporate technology into courses; use of various communications

technology and delivery mechanisms; up to date on educational technologies

The third research objective was to summarize the frequency of themes identified. Eleven themes emerged from the teaching philosophy statements. Table 8 exhibits the eleven themes and the frequency at which they occurred throughout the 86 teaching philosophy statements obtained for the research study. The three emergent themes that were the most

common were student centeredness provides opportunity to learn, and a tie for the third most commonly occurring theme was instructional variability and expert in subject matter. The three emergent themes that were the least common were conducive learning environment, organization and clarity, and technological integration.

Table 8
Frequency at which Emergent Themes Occurred Throughout Philosophy Statements

Emergent Theme	Number of Philosophy Statements Analyzed	Number of Philosophy Statements with Theme Present	Percent
1. Student Centeredness	86	81	94.2%
2. Instructional Variability	86	66	76.7%
3. Build Student Rapport	86	63	73.3%
4. Conducive Learning Environment	86	40	46.5%
5. Professional Teaching Commitment	86	63	73.3%
6. Enthusiasm	86	61	71.0%
7. Expert in Subject Matter	86	66	76.7%
8. Role Model	86	57	66.3%
9. Organization and Clarity	86	44	51.2%
10. Provide Opportunity to Learn	86	70	81.4%
11. Technological Integration	86	48	55.8%

Conclusions

The purpose of the descriptive research was to identify emergent themes present in the teaching philosophy statements of the USDA Excellence in College and University Teaching in the Food and Agricultural Sciences award recipients. The biographical, educational background and professional experience (research objective one) was collected from an online demographic survey. Award recipients

are uniform and monocultural in regards to ethnicity, gender, age and experience. The researcher acknowledges that the demographic survey presents current characteristics of the 2000–2010 award recipients as opposed to the demographics when award winners received the award.

Research objective two was to identify via content analysis emergent themes in the espoused philosophy statements of award recipients. Eleven emergent themes were identified and operationally defined. The eleven

themes include: Student Centeredness, Instructional Variability, Build Student Rapport, Conducive Learning Environment, Professional Teaching Commitment, Enthusiasm, Expert in Subject Matter, Role Model, Organization and Clarity, Provide Opportunity to Learn, and Technological Integration.

The frequency at which they occurred throughout the 86 teaching philosophy statements obtained for the research study was calculated (research objective three). The three emergent themes that were the most common were student centeredness, provide opportunity to learn, and a tie for the third most common theme was expert in subject matter and instructional variability. The three emergent themes that were the least common were a conducive learning environment, organization and clarity, and technological integration.

Implications

In a 2003–04 report released by the National Center for Education Statistics, teaching faculty in the career teaching field of Agriculture and Natural Resources were profiled. The demographic survey found the typical faculty population to be 78.1% male, 90.3% white, with an average age of 49.8 (National Center for Education Statistics, 2004). The question must be raised regarding whether or not the award recipient profile is congruent with the current faculty demographic profile in colleges of agriculture. The question is: are all demographic groups being represented equally? If not, why? There is also an implication that teaching excellence awards generally come later in a professor's career.

Fitzmaurice and Coughlan (2007) stressed the importance of post–secondary teachers to examine their beliefs and attitudes to formulate a concept of higher education that goes beyond classroom competency and emphasizes teaching both as a pedagogical and moral activity. The eleven emergent themes exemplify traits that encompass excellent teaching and effective teaching characteristics. There is concern that while *keywords* may be used in a philosophy statement to indicate a theme, could the instructor identify that concept in action? For example, would all professors know student–

centeredness when they saw it and have a similar operational definition of the concept?

All eleven emergent themes are found to be characteristics of excellent teachers. If teaching faculty members are not espousing certain themes in their philosophy statement, then there is a possibility they are not practicing such characteristics in the classroom. A healthy combination of all themes in a classroom will promote student learning and in essence overall student achievement. If a teacher lacks any of the characteristics, student achievement could be affected. Each theme illustrates specific behaviors instructors can adopt to better the teaching and learning experience. There is a possibility that the professional development received in instructional practice could impact what themes are emphasized in the philosophy statements.

Recommendations for Future Research

Award program managers should make every effort to ensure that under–represented populations are aware of the award program and are provided the professional development necessary to complete the application process. Further research is recommended for a comparison of demographic profile of award winners to college of agriculture faculty profiles to university faculty profiles to general population demographic profiles. Additionally, further research is recommended to investigate reasons for those discrepancies identified.

Research studies contribute to understanding the perceived attributes of excellent teachers, however, they have had limited influence on improving the practice of less experienced university teachers. Identifying the elements of excellent university teaching has not shed light on *how* university teachers develop these attributes. Future research should investigate the characteristics of award winning teaching faculty and use these findings to address teaching development needs of less experienced or novice teaching faculty.

Further research should be conducted to inventory what professional development is provided to faculty members in colleges of agriculture across the nation. Once the amount of a professional development is determined,

research should be conducted to provide empirical evidence to the professional development format and topic that provides the greatest gains in student achievement. The need for developing metrics to measure student gains and/or outcomes, while common in secondary education, is rapidly advancing to post-secondary education. How can student success be determined?

Additionally, there is a possibility of a disconnect between espoused philosophy and actual practices. Thus, research is recommended to create methods to measure the effective teaching characteristics in classroom practice. By capturing the teacher in action of how they are carrying out their espoused teaching philosophy, professional development personnel on college campuses could develop teaching improvement workshops, seminars, and in-services to teaching faculty based on effective

teaching practices and how to implement them into one's teaching. Roche and Marsh (2000) purport that researchers and practitioners agree that teaching is complex and consists of multiple dimensions. Future research must pay more attention to the complexity of teaching when attempting to further our understanding of university-level teaching. Often times, research universities expect faculty members to produce and disseminate research, which means that they are not often trained in effective instruction. The concern lies with supporting those new faculty members who strive to become excellent teachers. The importance of understanding how teaching faculty learn to teach and the examination of what teachers say and what they do in the university classroom will help develop research that can lead to improved and quality teaching at the post-secondary level.

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