Teaching Evaluator Competencies: An Examination of Doctoral Programs

A Dissertation

Presented for the

Doctor of Philosophy

Degree

The University of Tennessee-Knoxville

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May 2012

Acknowledgements

I would like to extend a special thank you to my advisor and dissertation chair, Dr. Jennifer Ann Morrow! Your exceptional guidance and mentoring allowed me to successfully complete my graduate education. Moreover, I would like to thank my parents, Marianne and Alfons Kaesbauer, for their continued support throughout my education! Your critical thinking, encouragement and positive nature have been invaluable to me. Finally, I would like to thank my ESM colleagues for their support. I consider myself very fortunate to have been part of such an exceptional group of evaluators and researchers.

Abstract

Program evaluators may currently enter the field of evaluation through a variety of avenues. Entry into the profession at this time is uncontrolled by a professional body of evaluators, as an evaluator certification process does not yet exist in the United States of America. One avenue for evaluators to enter into the profession is through a graduate training program in evaluation. This study sought to understand the preparedness of evaluators who enter the profession in this manner. Specifically, this study aimed to determine the current state of the teaching of evaluator competencies, across 26 doctoral evaluation programs in the United States. A descriptive multi-method multi-sample approach was chosen for this study. Results revealed students, faculty and syllabi most frequently addressed other competencies, followed by competencies related to the Essential Competencies for Program Evaluators (ECPE) framework and the Canadian Evaluation Society (CES) framework. Moreover, students, faculty and syllabi most frequently listed teaching or learning about data collection analysis and interpretation and evaluation analysis, planning and design competencies. Project management and ethics competencies were addressed or encountered least frequently by all three sources. However, students encountered technical competencies most frequently and non-technical competencies least frequently, whereas, both faculty and syllabi most frequently mentioned teaching technical competencies and non-technical competencies related to communication. Moreover, students, faculty and syllabi listed teaching or encountering competencies most frequently in lectures and associated activities and assignments.

Nevertheless, students least frequently reported learning competencies in practical/field experiences, whereas, faculty and Syllabi stated students learned competencies through practical or field-experiences. Study limitations and implications for future research are discussed.

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Chapter 1: Introduction

Chapter one describes the overarching research problem guiding this study, as well as the study's purpose and significance. Evaluator competencies and the teaching of program evaluation are topics currently generating a substantial amount of interest within the community of evaluators. At this time, entry into the profession of evaluation is uncontrolled (Altschuld, 1999; Jacob & Boisvert, 2010, Jones & Worthen, 1999; Worthen, 1999). Thus, individuals with a variety of training backgrounds and practical experiences related to the field of program evaluation may call themselves evaluators and engage in evaluation work (Worthen, 1999). As a result, discussions regarding certification of evaluators have begun to emerge (Altschuld, 1999; Worthen, 1999).

Literature on the topic of evaluator certification focuses on differences among definitions of licensure, certification, credentialing and accreditation (Altschuld, 1999; Canadian Information Centre for International Credentials, 2006; Worthen, 1999). While these processes differ from one another, they are often combined and referred to as certification. The community of evaluators recognizes the benefits of establishing a certification process (Altschuld, 1999; Bickman, 1997; Worthen, 1999. However, many challenges associated with the development of a certification process are also discussed in detail throughout the literature.

Closely linked to the concept of evaluator certification are competencies necessary for evaluators to conduct evaluations in an ethical and competent manner. Specifically, certification of evaluators based on a set of specific competencies has been deemed as most desirable form of certification (Worthen, 1999). While a set of

competencies for evaluators has been established, it is recognized that these competencies may require modification in the near future (Stevahn et al., 2005a). Thus, the establishment of an evaluator certification process is further complicated.

Statement of the Problem

Entry into the profession of evaluation is currently uncontrolled, as a process of certification does not yet exist. Evaluators may enter the profession through a variety of avenues. One such avenue is the completion of a formal graduate program in evaluation. Hence, it is vital to understand the university training of novice evaluators. Currently, there are 26 doctoral programs, which contain evaluation in their title, specialization or concentration in the United States of America (AEA, 2011; LaVelle & Donaldson, 2010). As both, students enrolled in these training programs and their faculty, spend a considerable amount of resources on graduate training programs, it is vital to understand the preparedness of novice evaluators to conduct evaluations in an ethical and competent manner upon graduation.

Currently, two of the most comprehensive manners to assess the preparedness is through the most recent versions of Essential Competencies for Program Evaluators (ECPE) and the competencies identified by the Canadian Evaluation Society Project (Stevahn et al., 2005a; Zorzi, Perrin, McGuire, Long & Lee, 2002). At the moment, literature describing how evaluator competencies are addressed in graduate programs for evaluators does not exist. As some of the main goals of program evaluation are to understand and improve vital social and educational programs, it is crucial that the

graduate training programs in evaluation are understood in terms of the preparedness or competence of the novice evaluators they produce.

Purpose of the Study

The current study aims to explore what evaluator competencies are taught in doctoral programs in evaluation, as well as how these competencies are taught. Specifically, this study seeks to gain an understanding of the teaching of the competencies across all doctoral programs in evaluation that currently exist in the United States. The current study aims to obtain this understanding of the teaching of evaluator competencies through the use of a multi-method approach.

Significance of the Study

Understanding of the teaching of evaluator competencies across graduate programs in evaluation is a necessary component for the continued improvement of the training programs. The field of evaluation benefits from this improvement, as novice evaluators will be more knowledgeable about and competent in their future evaluation work. Thus, the quality of evaluation could be directly affected by this understanding. Ensuring the quality of evaluations is essential as the lives of program beneficiaries can be directly affected by evaluations. Moreover, as an evaluator certification process, which could ensure the quality of evaluation work, does not yet exist, it is especially important that graduate programs and students are aware of the extent of their preparedness or competence to engage in evaluation work.

Despite the current lack of evaluator certification, a better understanding of the formal training of evaluators could aid the certification development process.

Specifically, by understanding how the ECPE and the competencies of the Canadian Evaluation Society are addressed in graduate programs, the identification of elements of process for the accreditation of graduate training programs may be facilitated. The establishment of an evaluator certification process has many potential benefits and drawbacks for evaluation as a discipline. Similar to the improvement of training programs, certification is linked to the quality assurance of evaluation work. Specifically, by preventing under qualified evaluators from conducting evaluations, the quality of evaluations can be expected to increase. For example, under qualified evaluators may harm programs and their stakeholders through their work. Thus, by assisting the development of an evaluator certification process, this research could aid the professionalization of the discipline of evaluation.

Objective

The objective of this study is to determine the current state of the teaching of evaluator competencies across 30 doctoral programs in the United States, which focus on Evaluation. The following research questions and sub questions guide this study.

1. What evaluator competencies are taught in doctoral programs in Evaluation across the Unites States?
    a. What frameworks of competencies and which of their corresponding individual competencies are encountered by doctoral students?
    b. What frameworks of competencies and which of their corresponding individual competencies are taught by faculty of the doctoral programs?

   c. What frameworks of competencies and which of their corresponding individual competencies are reflected in the doctoral programs' syllabi?

2. How are the evaluator competencies taught in doctoral programs in Evaluation?
   a. In what areas of their graduate training have doctoral students encountered evaluator competencies?
   b. How do faculty teach evaluator competencies in the doctoral programs in evaluation?
   c. How are evaluator competencies addressed in the doctoral programs' syllabi?

Chapter 2: Literature Review

Evaluator competencies and the teaching of program evaluation are topics currently generating a substantial amount of interest within the professional community of evaluators. A review of the literature revealed, at this time, entry into the profession of evaluation is uncontrolled (Altschuld, 1999; Jacob & Boisvert, 2010, Jones & Worthen, 1999; Worthen, 1999). Thus, individuals with a variety of training backgrounds and practical experiences related to the field of program evaluation may call themselves evaluators. As a result, discussions regarding certification of evaluators have begun to emerge. This literature review will discuss the current lack of certification or licensure in the field of evaluation. Next, existing guidelines for evaluators will be discussed. Also, the teaching of essential evaluator competencies and how existing guidelines are incorporated into this process will be discussed. Finally, conclusions will be presented regarding current evaluator guidelines and evaluation doctoral programs.

Evaluator Certification

The field of evaluation recognized the need for certification, credentialing or licensure around four decades ago (Altschuld, 1999; King, Stevahn, Ghere & Minemma, 2001; Worthen, 1999). Discussions regarding this process began to emerge as members of the American Evaluation Association (AEA) and its predecessors, the Evaluation Research Society and the Evaluation Network, acknowledged program evaluations were sometimes conducted by self-proclaimed evaluators, who possessed little background knowledge and experience regarding program evaluations (Altschuld, 1999; Worthen, 1999). Moreover, some AEA members viewed this situation as tarnishing to the

reputation of evaluators as a whole, while negatively affecting the clients and beneficiaries of evaluations. Thus, the lack of certification or licensure of evaluators made it difficult for competent evaluators to distinguish themselves from those who are not (Worthen, 1999). Both Worthen (1999) and Altschuld (1999) viewed certification or licensure as a necessary step for the relatively new field of evaluation to progress into a profession. Otherwise, evaluation would continue to be ascribed the status of a "near-profession" (Worthen, 1999).

Prior to continued description and discussion of the process of certification in the field of evaluation, it is of value to note the differences between certification, credentialing, licensure and accreditation. Although at times used interchangeably, important differences exist between these terms. Worthen (1999) defines certification as "formal process used to determine individuals' relative levels of competence" (p.535). This definition was cited and adopted by Altschuld (1999) in his research. Moreover, his definition is consistent with the definition of certification of the Canadian Information Centre for International Credentials (2006), which states certification involves recognition of proficiency attested to by a governing body. In contrast to certification, credentialing is defined as a process of completion of certain courses, training programs or field experiences, which prepare individuals to be competent evaluators (Altschuld, 1999; Worthen, 1999). Licensure is defined as formal process of granting an individual the permission to conduct evaluation work, which is granted by a legal agency, such as a national evaluation association (Altschuld, 1999; Worthen, 1999). Accreditation on the other hand is the process of "certification of training programs". Here training programs

are evaluated in terms of existing standards (Worthen, 1999). The remainder of this section of the literature review will focus on the process of evaluator certification.

In 1997, a task force was established by the American Evaluation Association to inform the Board of Directors about ongoing discussions regarding certification of evaluators. The task force analyzed benefits and challenges associated with evaluator licensure. Discussions among task force members revealed the overarching goals of certification of evaluators to be the protection of beneficiaries of evaluation services, protection of practitioners and improvement of the status of evaluation as a profession (Altschuld, 199). These goals are consistent with the benefits of certification noted by Worthen (1999). Bickman (1997), former president of AEA, also stated a certification process would be necessary for the continued development and survival of the profession of evaluation. However, he also noted the process of establishing certification would not be easily accomplished.

The task force established in 1997 also conducted a survey of current AEA members to determine their opinions towards evaluator certification (Jones & Worthen, 1999). Specifically, the survey sought to determine respondents' perceived need, effectiveness and feasibility of certification. However, AEA members were not asked directly about their opinions regarding evaluator certification. Results of the survey revealed that AEA members were more confident about the feasibility of certification than about its necessity or effectiveness. However, this optimism may have been due to a lack of real-world evaluation experiences. Moreover, these perceptions were more pronounced for doctorate-holding respondents than other respondents. Also, respondents

who had obtained their degrees more recently, were more confident in feasibility, effectiveness and necessity of evaluator certification (Jones & Worthen, 1999). This suggests evaluator certification will likely become of greater importance and necessity to AEA members as time progresses. This may be especially pronounced for evaluators who have obtained greater education and training, as they compete for jobs with evaluators with less training and experience. However, AEA members also identified challenges associated with the certification process in their responses to open-ended survey questions. Most frequently mentioned was the challenge of establishing core competencies for evaluators on which certification could be based. Furthermore, challenges associated with logistics, such as cost, time, labor and legality issues were identified (Jones & Worthen, 1999). The following section will discuss in more detail the challenges associated with evaluator certification.

Challenges associated with evaluator certification.

The discussions regarding evaluator certification in the literature highlight its benefits in great detail. Challenges associated with evaluator certification are also discussed. The fact that discussions about evaluator certification began to emerge four decades ago (Altschuld, 1999; King, Stevahn, Ghere & Minemma, 2001; Worthen, 1999), yet a certification process has not been established to this date, further attests to the severity of these challenges. One major challenge associated with the development of the evaluator certification is the sheer cost of this process (Altschuld, 1999). For example, costs are associated with the establishment of the certification materials and procedures. These costs could either be paid for by evaluators seeking certification or by AEA.

Granted these costs were paid for by AEA, its yearly membership dues would inevitably increase, thus, the costs would ultimately be paid for by evaluators seeking certification. Moreover, evaluators may incur these costs repeatedly, if certification requires renewal throughout the years (Altschuld, 1999; Perrin, 2005). As the field of evaluation is rapidly changing, specific skills and knowledge required to conduct evaluations may change as well. Thus, certification may be required more than once, which would further increase the cost of certification for all evaluators.

Second, the specific way to establish a certification process must be determined (Worthen, 1999). For example, certification could be based on formal training, such as graduate courses completed. Certification could also be based on practical evaluation experience obtained. This option would make it easier for seasoned evaluators to be certified than for novice evaluators. Also, certification could be based on performance. However, developing a measure of performance would be more difficult than developing a measure of specific evaluator competencies. Thus, certification could also be based on a set of agreed-upon core competencies. According to McGuire and Zorzi (2005) "Evaluation competencies are the skills, knowledge, abilities and attributes required to conduct evaluation" (p.74). Worthen (1999) describes the certification based on competencies as most desirable process. However, the challenge of establishing and agreeing upon a set of universal evaluator competencies is noted as a challenge secondary to the first challenge of determining a certification process. Jacob and Boisvert (2010) also describe the identification of universal evaluator competencies, encompassing

"knowledge, expertise, experience and behaviors" as great challenge preventing the professionalization of evaluation (p.357).

Perrin (2005) notes the importance of taking into account the diversity of practical experiences in the development of an evaluator certification process. For example, there are many competencies required by all types of evaluations and one evaluator may not conduct evaluations of all types during his or her lifetime. Thus, not all knowledge and skills may be necessary for all evaluators. Prior to establishing a certification procedure, decisions must be made regarding which knowledge and skills are so essential that they are required by most evaluations and thus all evaluators must possess them. Also, a determination as to whether these skills include practical experiences should be made prior to the implementation of a certification process. Thus the identification, application, use and teaching of a set of competencies for evaluators are of great importance to the profession of evaluation.

In addition, consideration should be given concerning whether training programs themselves could be accredited to facilitate this process. If graduate programs in evaluation taught the majority of the essential knowledge and skills, this could facilitate or lessen the costs of the certification process for some. The same could be applicable to professional development. While accreditation of training programs could facilitate the evaluator certification process, it would create additional costs (Altschuld, 1999). Specifically, a part of the financial burden of evaluator certification would then be distributed to training programs.

Benefits associated with evaluator certification.

While the certification of evaluators is hindered by a variety of challenges, several benefits are associated with certification. Some argue that for evaluation to fully mature and obtain the status of a profession, certification or some form of licensure must be established (Chevalier, 2010; Engle, Altschuld & Kim, 2006; Jacob, 2009; Wilensky, 1964). Once established, certification will control entry into the profession of evaluation (Altschuld, 1999). By controlling entry into the profession, certification will assure a certain level of quality of the discipline of evaluation (Jacob & Boisvert, 2010). Thus, the status of the profession will be enhanced, as those who conduct evaluations but do not have the necessary knowledge and skills will be prevented from doing so. As a result, clients and stakeholders of evaluations will be protected from mistakes, misinformation and fraud (Jacob & Boisvert, 2010). This is especially important for the discipline of evaluation, as clients and stakeholders rely on the conclusions and recommendations of evaluators to judge program success and make decisions about its continuance. Moreover, lives of people are directly affected by the quality of evaluations and programmatic decisions. Also, great amounts of resources may be involved in programs. Due to the immense impact of evaluations, they should only be conducted by individuals with the knowledge and skills to do so in an effective and ethical manner. Existing guidelines about knowledge, skills and ethics necessary for evaluators are discussed in the following section.

Existing Guidelines for Evaluators

The Program Evaluation Standards.

As discussions about evaluator certification began to emerge, evaluators organized into local professional organizations across North America also began to discuss the need for standards or guidelines to inform the practice of evaluation. As a result, in 1974 the Joint Committee on Standards for Educational Evaluation (JCSEE) was formed. This committee proceeded to develop a first set of standards for evaluators, titled Standards for Evaluations of Educational Programs (Yarbrough, Shulha, Hopson & Caruthers, 2011). The purpose of these standards was to define what constitutes evaluation quality and to serve as a guide to evaluators, thus ensuring this evaluation quality (Yarbrough et al., 2011). Moreover, the standards aimed to take into account a variety of stakeholder groups and their roles in the evaluation process. As the support for the JCSEE from professional organizations across North America grew, standards were revised in 1994 and again in 2011. Revisions occurred in accordance with the mission of the JCSEE, which aims "to develop and implement inclusive processes producing widely used evaluation standards that serve educational and social improvement" (p.xviii) (Yarbrough et al., 2011).

In the most recent third edition, the Program Evaluation Standards are organized into five dimensions of quality, namely utility, feasibility, propriety, accuracy and accountability. Please refer to Figure 1 for a complete list of standards and their corresponding dimensions. The recent version of the standards illustrates rationales for standards, as well as connections among individual standards. Similar to the Guiding

Principles for Evaluators, Program Evaluation Standards provide a framework for both identifying and conceptualizing ethical issues. However, concrete skills required to perform competent evaluations are not discussed and concrete suggestions for the training of evaluators are not provided by the Program Evaluation Standards.

Figure 1 The Program Evaluation Standards (Yarbrough, Shulha, Hopson & Caruthers, 2011)

Utility Standards
Evaluator credibility
Attention to stakeholders
Negotiated purposes
Explicit values
Relevant information
Meaningful processes and products
Timely and appropriate communicating and reporting
Concern for consequences and influence
Feasibility Standards
Project management
Practical procedures
Contextual viability
Resource use
Propriety Standards
Responsive and inclusive orientation
Formal agreements
Human rights and respect
Clarity and fairness
Transparency and disclosure
Conflicts of interest
Fiscal responsibility
Accuracy Standards
Justified conclusions and decisions
Valid information
Reliable information
Explicit program and context descriptions
Information management
Sound designs and analyses
Explicit evaluation reasoning
Communication and reporting
Evaluation Accountability Standards
Evaluation documentation
Internal metaevaluation
External metaevaluation

Guiding Principles for Evaluators.

As the program evaluation standards second edition was being published, the American Evaluation Association (AEA) concurrently developed and published the original version of the Guiding Principles for Evaluators in the year 1995 (American Evaluation Association, 2004). The Guiding Principles aim to guide the professional practice of all evaluations. Also, they aim to inform stakeholders, evaluation clients and the public regarding what can be expected from the evaluation process (American Evaluation Association, 2004). Thus, the overarching goal of the Guiding Principles for evaluators is to ensure the quality of evaluations conducted in a variety of settings. The principles take into account a variety of evaluation types, while remaining cognizant of the existence of other evaluation types, to which some of the Guiding Principles may not apply. Finally, the Principles aim to guide evaluators in a proactive manner, in order to ensure the best possible quality of evaluations (American Evaluation Association, 2004).

While the purpose of the Guiding Principles remained in place, the original Guiding Principles were followed by a revised publication of Guiding Principles for Evaluators in 2004 (Morris, 2010). In 2005, a brochure containing an abbreviated version of the Guiding Principles was developed and disseminated by AEA (American Evaluation Association, 2004). The following year, a training package was developed and disseminated on the AEA website (American Evaluation Association, 2004).

The current Guiding Principles are grouped into five categories: systematic inquiry, competence, integrity/honesty, respect for people and responsibility for general and public welfare. Please see Figure 2 for a complete list of the Guiding Principles and

overarching categories. Although the Guiding Principles state evaluators must “provide competent performance to stakeholders”, specific skills necessary to provide this competent performance are not discussed. While Guiding Principles are an essential component of the training of evaluators, concrete training suggestions are not provided by the guiding principles. Thus, neither the Program Evaluation Standards, nor the Guiding Principles for Evaluators alone can be used to guide decision-making.

Figure 2 Guiding Principles for Evaluators (American Evaluation Association, 2004)

Systematic Inquiry
Adhere to the highest technical standards appropriate to the methods they use.
Explore with the client the shortcomings and strengths of evaluation questions and approaches.
Communicate the approaches, methods, and limitations of the evaluation accurately and in sufficient detail to allow others to understand, interpret, and critique their work.
Competence
Ensure that the evaluation team collectively possesses the education, abilities, skills, and experience appropriate to the evaluation.
Ensure that the evaluation team collectively demonstrates cultural competence and uses appropriate evaluation strategies and skills to work with culturally different groups.
Practice within the limits of their competence, decline to conduct evaluations that fall substantially outside those limits, and make clear any limitations on the evaluation that might result if declining is not feasible.
Seek to maintain and improve their competencies in order to provide the highest level of performance in their evaluations.
Integrity/Honest
Negotiate honestly with clients and relevant stakeholders concerning the costs, tasks, limitations of methodology, scope of results, and uses of data.
Disclose any roles or relationships that might pose a real or apparent conflict of interest prior to accepting an assignment.
Record and report all changes to the original negotiated project plans, and the reasons for them, including any possible impacts that could result.
Be explicit about their own, their clients', and other stakeholders' interests and values related to the evaluation.
Represent accurately their procedures, data, and findings, and attempt to prevent or correct misuse of their work by others.
Work to resolve any concerns related to procedures or activities likely to produce misleading evaluative information, decline to conduct the evaluation if concerns cannot be resolved, and consult colleagues or relevant stakeholders about other ways to proceed if declining is not feasible.
Disclose all sources of financial support for an evaluation, and the source of the request for the evaluation.
Respect for People
Seek a comprehensive understanding of the contextual elements of the evaluation.
Abide by current professional ethics, standards, and regulations regarding confidentiality, informed consent, and potential risks or harms to participants.
Seek to maximize the benefits and reduce any unnecessary harm that might occur from an evaluation and carefully judge when the benefits from the evaluation or procedure should be foregone because of potential risks.
Conduct the evaluation and communicate its results in a way that respects stakeholders' dignity and self-worth.
Foster social equity in evaluation, when feasible, so that those who give to the evaluation may benefit in return.
Understand, respect, and take into account differences among stakeholders such as culture, religion, disability, age, sexual orientation and ethnicity.

Figure 2 Continued
Guiding Principles for Evaluators (American Evaluation Association, 2004)

Responsibilities for General and Public Welfare
Include relevant perspectives and interests of the full range of stakeholders.
Consider not only immediate operations and outcomes of the evaluation, but also the broad assumptions, implications and potential side effects.
Allow stakeholders' access to, and actively disseminate, evaluative information, and present evaluation results in understandable forms that respect people and honor promises of confidentiality.
Maintain a balance between client and other stakeholder needs and interests.
Take into account the public interest and good, going beyond analysis of particular stakeholder interests to consider the welfare of society as a whole.

Evaluator competencies

In addition to the Program Evaluation Standards developed by the Joint Committee on Standards for Educational Evaluation and the Guiding Principles for Evaluators developed by AEA, two recent initiatives were enacted to develop detailed lists and descriptions of competencies required of evaluators. Both initiatives aimed to identify skill and knowledge components required by competent evaluators. One initiative to develop competencies was sponsored by the Canadian Evaluation Society (McGuire & Zorzi, 2005; Zorzi, Perrin, McGuire, Long & Lee, 2002), while the other initiative was sponsored by AEA (King, Stevahn, Ghere & Minemma, 2001; Stevahn, King, Ghere & Minemma, 2005a). Although both approaches to develop a series of essential competencies aimed to be applicable to evaluators in various evaluation contexts, the frameworks differed from each other.

The Canadian Evaluation Society project.

The competency framework developed in Canada provides more detail and addresses which competencies are relevant to specific types of program evaluations. Specifically, 23 general knowledge elements were identified through Internet consultation with evaluators, which contained more detailed knowledge, skill and practice components (Zorzi, Perrin, McGuire, Long & Lee, 2002). Please refer to Figure 3 for the complete list of knowledge elements. The researchers aimed to compare these knowledge elements to benefits and outputs of example program evaluations that were also identified by the initiative. However, the definition of relationships between these elements was not successful, due to overlap among knowledge elements.

Nevertheless, the specific knowledge elements and skills could be targeted by graduate training programs and professional development workshops. In this competency framework, phases of evaluations, evaluation design, sampling and measurement are addressed. As competencies are discussed in this manner, it appears that evaluator competencies overlap with each other. This may be due to the fact that a specific list of core competencies was not agreed upon. Instead, Zorzi and colleagues (2002) argue it is not possible for evaluators to be proficient in all areas of evaluation. Thus, self-assessment and understanding of one's professional limitations is especially important for evaluators subscribing to this competency framework.

Figure 3 Knowledge Elements Identified by the Canadian Evaluation Society Project (Zorzi, Perrin, McGuire, Long & Lee, 2002)

Ethics
Ethical conduct
Competence and quality assurance
Evaluation Planning and Design
Understanding the program
Assessing readiness for the evaluation
Focusing the evaluation
Systems theory, organizational development, and change
Specific types of evaluation
History of evaluation, evaluation theory, and evaluation models
Research design
Constructing meaning
Selecting appropriate data collection and analysis methods
Effective practices in applied research
Data Collection
Sampling
Measurement issues
Data collection methods
Data Analysis and Interpretation
Qualitative analysis
Quantitative analysis
Determining merit or worth
Critical thinking skills
Communication and Interpersonal Skills
Interpersonal skills
Reporting skills
Other communication skills
Project Management
Managing evaluation projects

The Essential Competencies for Program Evaluators framework.

The initial competency framework developed by King and colleagues (2001), under the auspices of AEA, enlisted evaluators from a variety of settings to establish consensus among a list of core competencies. First, researchers developed a list of competencies. Evaluators from diverse backgrounds then individually rated their perceived importance of each competency. Next, participants discussed their reasoning in small groups of three to ten people. Finally, evaluators individually provided their final ratings taking into account group discussions. Results from this study indicated evaluator consensus among 78 percent of competencies. Please see Figure 4 for the complete list of competencies identified by this initiative. Competencies identified in this initial study overlapped with each other and included terms that were difficult to define. Also, the sample of evaluators used to identify and discuss the competencies was small and geographically limited. Thus, further study of evaluator competencies was warranted.

Figure 4 Essential Evaluator Competencies Taxonomy (King, Stevahn, Ghere & Minemma, 2001

Systematic Inquiry
Research-oriented activities
Framing research question
Research design
Measurement
Research methods
Evaluation-oriented activities
Evaluation theory, models and philosophical assumptions
Needs Assessment
Framing evaluation questions
Evaluation design
Evaluation processes
Making judgments
Developing recommendations
Meta-evaluation
Activities common to both research and evaluation
Literature review
Sampling
Instrument construction
Data collection
Data analyses
Data interpretation
Reporting results
Competent Evaluation Practice
Informational needs of intended users
Situational analysis
Organizational development, change and politics
Analyze political context
Respect uniqueness of evaluation site
Open to other's input
Adapt/change study as needed
Organize and manage evaluation projects
Respond to RFP
Write formal agreements
Budget and evaluation
Access needed resources

Supervise others
Train others
Evaluate in a non-disruptive manner
Complete work in a timely manner
Deal with stress during a project
General Skills for Evaluation Practice
Logical and critical thinking
Written communication
Verbal communication
Interpersonal competence
Negotiation skills
Conflict resolution skills
Group facilitation skills
Group processing skills
Teamwork/collaboration skills
Cross-cultural skills
Computer application
Evaluator Professionalism
Knowledge of self
Ethical conduct
Honesty and integrity of evaluation
Conveys evaluator approach and skills
Respects program, participants and stakeholders
Contributes to general and public welfare
Knowledge of professional standards
Application of professional standards
Professional development
Aware of professional growth needs
Reflects on practice
Networks
Updates personal knowledge in evaluation
Updates knowledge in relevant content areas
Contributes to knowledge base of evaluation

This further study was conducted in order to revise and group competencies established in 2001. Through discussions with individuals at conferences, presentations and in courses, Stevahn and colleagues (2005a) identified the need for a more user-friendly format of competencies, the need to cross-reference competencies with other standards and competencies, the need for additional competencies, the need for more precision within competencies and the need to disseminate the competencies. Thus, competencies were reorganized into six distinct categories, namely Professional Practice, Systematic Inquiry, Situational Analysis, Project Management, Reflective Practice and Interpersonal Competence. Crosswalk-comparisons were conducted, comparing the competencies to the Program Evaluation Standards, the Guiding Principles for Evaluators and the Essential Skill Series in Evaluation developed by the Canadian Evaluation Society.

After crosswalk-comparisons and revisions, the final list of competencies consisted of 61 core competencies. Specifically, six competencies fell under the category of Professional Practice, 20 competencies are grouped under the category of Systematic Inquiry, 12 competencies were assigned into the category of Situational Analysis, 12 competencies fell under the category of Project Management, five competencies were aligned with the category of Reflective Practice and six competencies were assigned to the category of Interpersonal Competence (Stevahn et al., 2005a). Figure 5 presents the 61 competencies and their overarching categories. In addition to their research, Stevahn and colleagues (2005a) recognize the list of 61 core competencies warrants further validation. Nevertheless, the authors advocate for the use of the existing list of competencies to guide training and professional development for evaluators. As such,

competencies are tested in a general manner and suggestions for further revisions can be developed.

Figure 5 Essential Competencies for Program Evaluators (Stevahn, King, Ghere & Minemma, 2005a)

Professional Practice
Applies professional evaluation standards
Acts ethically and strives for integrity and honesty in conducting evaluation
Conveys personal evaluation approaches and skills to potential clients
Respects clients, respondents, program participants, and other stakeholders
Considers the general and public welfare in evaluation practice
Contributes to knowledge base of evaluation
Systematic Inquiry
Understands the knowledge base of evaluation (terms, concepts, theories, assumptions)
Knowledgeable about quantitative methods
Knowledgeable about qualitative methods
Knowledgeable about mixed methods
Conducts literature reviews
Specifies program theory
Frames evaluation questions
Develops evaluation designs
Identifies data sources
Collects data
Assesses validity of data
Analyzes data
Interprets data
Makes judgments
Develops recommendations
Provides rationales for decisions throughout the evaluation
Reports evaluation procedures and results
Notes strengths and limitations of the evaluation
Conducts meta-evaluation
Situational Analysis
Describes the program
Determines program evaluability
Identifies the interests of relevant stakeholders
Serves the information needs of intended users
Addresses conflicts
Examines the organizational context of the evaluation
Analyzes the political considerations relevant to the evaluation
Attends to issues of evaluation use
Attends to issues of organizational change
Respects the uniqueness of the evaluation site and client
Remains open to input from others
Modifies the study as needed
Project Management
Responds to requests for proposals
Negotiates with clients before the evaluation begins
Writes formal agreements
Communicates with clients throughout the evaluation process
Budgets an evaluation
Justifies cost given information needs
Identifies needed resources for evaluation, such as information, expertise, personnel, instruments
Uses appropriate technology
Supervises others involved in conducting the evaluation
Trains others involved in conducting the evaluation
Conducts the evaluation in a nondisruptive manner
Presents work in a timely manner
Reflective Practice
Aware of self as an evaluator (knowledge, skills, disposition)
Reflects on personal evaluation practice (competencies and areas for growth)
Pursues professional development in evaluation
Pursues professional relationships in relevant content areas
Builds professional relationships to enhance evaluation practice
Interpersonal Competence
Uses written communication skills
Uses verbal/listening communication skills
Uses negotiation skills
Facilitates constructive interpersonal interaction (teamwork, group facilitation, processing)
Demonstrates cross-cultural competence

Altschuld (2005) suggests existing general agreement on the competencies presented by Stevahn and colleagues (2005a). Also, the Essential Competencies for Program Evaluators overlap with evaluator roles identified by Skolits, Morrow and Burr (2009). Thus, the existing list of core competencies for evaluators, although preliminary, could be utilized to guide the training of evaluators. In their research, Stevahn and colleagues (2005b) discussed the use of the Essential Competencies for Program Evaluators to guide the training of novice evaluators through formal university-based training programs. Specifically, the competencies framework can be used to guide programmatic decisions, course decisions and advising decisions for faculty. For students, competencies can guide the development of research questions, reflections and decisions for professional growth, as well as employment decisions (Stevahn, King, Ghere & Minemma, 2005b). Perrin (2005) discusses the use of the evaluator competencies to guide basic education and training in a manner consistent with the Stevahn and colleaues' (2005b) research discussed above. While this research discusses the use of the evaluator competencies to guide instructional decision-making, specific ways of teaching the skills and knowledge outlined in the taxonomy of Essential Competencies for Program Evaluators are not discussed. The following section provides an overview of the teaching of essential competencies to novice evaluators through graduate training courses and programs.

Teaching of Program Evaluation

Research addressing the teaching of program evaluation to novice evaluators describes the complexity of this task. An extensive period of training is required in order

for novice evaluators to master the skills and knowledge necessary to provide evaluation services to clients in a competent and ethical manner (LaVelle & Donaldson, 2010). This sentiment is echoed by Stufflebeam (2001), who describes the importance of graduate evaluation training programs using the following statement: "the evaluation field's future success is dependent on sound evaluation programs that provide a continuing flow of excellently qualified and motivated evaluators" (p. 445). Thus, research focusing on the graduate training of evaluators is especially important to the growth of the profession of evaluation.

Current literature focusing on the graduate training of evaluators discusses topics, such as understanding what counts as credible evidence (Donaldson, Christie & Mark, 2008), as well as the evaluation theories and practice (Fitzpatrick, Christie & Mark, 2009). Moreover, standards and ethical guidelines for evaluation practice are discussed in the literature addressing the training of novice evaluators (American Evaluation Association, 2004; Yarbrough, Shulha, Hopson & Caruthers, 2011). As the field of evaluation evolves rapidly, a focus on the training of evaluators in modern times is present in the current literature (Engle, Altschuld & Kim, 2006; Donaldson, Gooler & Scriven, 2002; Schwandt, 2008). Specifically, a substantial amount of literature focuses on the importance of practical or hands-on experiences for novice evaluators.

Literature addressing the teaching of program evaluation theories, methodology, and skills to novice evaluators consistently recommends the employment of practical or hands-on experiences for novice evaluators (Altschuld, 1995; Trevisan, 2002, Trevisan, 2004). These types of experiences are deemed especially important, as program

evaluation is a practice-oriented field. Thus, non-technical skills, such as interpersonal communication, negotiation and flexibility are required in addition to technical skills taught in evaluation graduate coursework. Trevisan (2002) and Leviton (2001) argue that non-technical skills related to program evaluation, such as dealing with clients' hidden agendas, can only be developed through practical or hands-on experiences. Thus, without practical experiences, novice evaluators cannot develop the full range of competencies required to conduct evaluations.

Trevisan (2004) conducted a review of the literature on practical training experiences in the field of program evaluation. Eighteen articles detailing hands-on experiences in 16 graduate programs and two undergraduate programs were reviewed. Results of the literature review revealed the majority of articles discussed the use of single-course projects to assist novice evaluators in graining practical experiences. This was followed by practicum experiences. Simulation and role-play were each mentioned in only one article reviewed by Trevisan (2004). While benefits and drawbacks, such as increased motivation and cost of each practical experience, are discussed, specific evaluator competencies, such as skills and knowledge that can be obtained from each experience are rarely discussed.

Dewey, Montrosse, Schröter, Sullins and Mattox (2008) recognized a gap in competencies of novice evaluators and those competencies sought by employers of novice evaluators. Thus, evaluator competencies taught in graduate training programs and those sought by employers were assessed and compared. Survey data collected from graduate students revealed, less than 30 percent of students were taught the competencies

of project planning, relating to stakeholders and project or team management. Nevertheless, data collected from a survey of employers revealed that relating to stakeholders and report writing were most commonly sought competencies (Dewey et al., 2008). The authors propose this gap in competencies taught and competencies sought could be remedied through the addition of practical or real-world experiences of the graduate students. This is consistent with suggestions of research conducted by Trevisan (2002) and Leviton (2001), who also recommend additional practical experiences to teach the full range of competencies to evaluators in graduate training programs.

Although Dewey and colleagues (2008) discovered a difference between competencies taught in graduate school and those sought by employees, competencies taught in graduate school were assessed through self-report survey data collected from only 53 graduate students. In addition, data on competencies sought were collected from only 44 employees identified through the AEA job-banks. Thus, self-reported data collected from this limited sample may not be representative of evaluator competencies taught in all graduate training programs in evaluation. Furthermore, the 19 competencies examined by Dewey and colleagues (2008) were not the same competencies as those proposed by Stevahn et al. (2005a).

Further study should explore the teaching of the Essential Program Evaluator Competencies Taxonomy (Stevahn et al., 2005a) as well as the teaching of the evaluator competencies identified by the Canadian Evaluation Society Project (Zorzi, Perrin, McGuire, Long & Lee, 2002) in all evaluation graduate programs throughout the United States of America. Moreover, the most current versions of the complete evaluator

competencies, for which general agreement exists, should be used as basis of this research. As evaluator certification or accreditation of graduate programs currently do not exist, it is essential for graduate students to understand what evaluator competencies are taught at each institution and how they are taught. This could provide a basis for self-assessment and self-directed learning, which are both essential components of graduate-level education.

Exploring the teaching of evaluator competencies in all evaluation graduate programs is also of importance to graduate program coordinators and faculty, as programmatic and course decisions could be based on information about the teaching of competencies at various institutions. Program coordinators and faculty that are aware of the teaching of competencies at other institutions may then be more inclined to seek collaboration with faculty at other institutions. Thus, research about the teaching of evaluator competencies could serve to foster inter-institutional collaboration. Moreover, faculty members could advise students to continually reflect on the evaluator competencies, in order to determine in which areas they would like to obtain additional training. Thus, information gained from this type of research could be used to ensure that all graduates have the necessary skills and knowledge to succeed as evaluators upon graduation.

Finally, research exploring the teaching of the evaluator competencies may also be beneficial to employers of evaluators. Although graduate programs are not formally accredited, employers could use this research to obtain a general understanding of the

institutions that are most likely to teach the competencies they desire. This could potentially assist employers in making hiring decisions.

Goals of the Study

The current study aimed to explore what evaluator competencies are taught by doctoral programs in evaluation across the United States, as well as how these competencies are taught. A recent study conducted by LaVelle and Donaldson (2010) revealed 26 doctoral programs with "Evaluation" in their title, specialization, emphasis or concentration. Additional doctoral programs that offered a smaller number of evaluation courses but did not contain "Evaluation" in their titles were also identified. In addition, master's level programs were also identified. This study utilized online searches of websites and AEA's training opportunities webpage, as well as curricular document analysis to obtain a list of graduate training programs in evaluation. Although the LaVelle and Donaldson study (2010) was published in 2010, data for this study were collected in 2008. Thus, for the current study, an additional search of the AEA training directory was conducted. This search revealed four additional doctoral programs with Evaluation" in their title, specialization, emphasis or concentration (AEA, 2011). However, the current search of the AEA training directory also produced changes in program titles for nearly all doctoral programs identified by LaVelle and Donaldson (2010). Thus, it was vital for the current study to explore whether program names listed on the AEA training web page are correct and up to date. Please refer to Table 1 for a list of the doctoral programs identified by LaVelle and Donaldson (2010), the doctoral programs identified by the current AEA training directory search and their corresponding changes.

Graduate program coordinators may submit information about recent changes made to their programs to AEA throughout the year, in order to update the AEA training opportunities webpage. AEA updates this directory as they receive information on changes from graduate program coordinators. Moreover, AEA contacts each institution in their directory every December to obtain information regarding changes to their programs.

The current study examined the 30 doctoral programs identified by LaVelle and Donaldson (2010) and the AEA training web page (http://www.eval.org/Training/university_programs.asp). Specifically these programs were chosen, as they contained "Evaluation" in their titles, specializations, emphases or concentrations. Thus, it was assumed these programs aimed to produce evaluators who are able to conduct evaluations in a competent and ethical manner. Moreover, only doctoral-level evaluation programs were included in the current study. It was expected that evaluator competencies are addressed in more detail in these programs, as they require more extensive coursework in evaluation, as well as practical experiences. Similarly, only programs that contained evaluation as their title, concentration or specialization were included in the study, as it was expected that they addressed evaluator competencies more widely and thoroughly.

Table 1 Comparison of Doctoral Programs Containing "Evaluation" in their Titles, Specializations, Concentrations or Emphases (AEA, 2011; LaVelle and Donaldson, 2010)

University	Program Title identified by LaVelle and Donaldson (2010)	Program Title identified by AEA Training Directory (2011)	Changes from 2010 study to 2011 Directory Search
American University	Not listed	Ph.D.; Clinical or behavioral/cognitive/neuroscience; emphasis program evaluation	
Boston College	Ph.D.; Educational research, measurement and evaluation	Ph.D.; Educational research, measurement and evaluation	No change
Brigham Young University	Ph.D.; Research and evaluation	Ph.D.; Instructional psychology and technology, focus on research and evaluation	Title change
Claremont Graduate University	Ph.D.; Evaluation and applied research methods	Ph.D.; Evaluation and applied research methods	No change
Columbia University	Ph.D.; Measurement and evaluation	Not listed	
Georgia State University	Ph.D.; Policy and program evaluation	Not listed	
Florida State University	Ph.D.; Program Evaluation	Ph.D.; Policy and program evaluation	Title change
Ohio State University	Ph.D.; Quantitative research, evaluation and measurement	Not listed	
Oklahoma State University	Ph.D.; Research and evaluation	Not listed	
Syracuse University	Ph.D.; Instructional design, development and evaluation	Ph.D.; Instructional design, development and evaluation, concentration in evaluation	Title change

Table 1 Continued
Comparison of Doctoral Programs Containing "Evaluation" in their Titles, Specializations, Concentrations or Emphases (AEA, 2011; LaVelle and Donaldson, 2010)

University	Program Title identified by LaVelle and Donaldson (2010)	Program Title identified by AEA Training Directory (2011)	Changes from 2010 study to 2011 Directory Search
Tennessee Technological University	Ph.D.; Program planning and evaluation	Ph.D.; Concentration in program planning and evaluation	Title change
The George Washington University	Not listed	Ph.D.; Program evaluation	
University of California – Berkeley	2 Concentrations: Ed.D.; Quantitative methods and evaluation Ed.D.; Program Evaluation and Assessment	Ph.D.; Quantitative methods and evaluation	Title change
University of California – Los Angeles	Ph.D.; Social research methods: Evaluation	Ph.D.; Social science research methods, specialization in evaluation	Title change
University of Connecticut	Ph.D.; Measurement, evaluation and assessment	Ph.D.; Educational measurement, evaluation and assessment	Title change
University of Iowa	Ph.D.; Educational measurement and evaluation	Not listed	
University of Kentucky	Ph.D.; Educational policy and evaluation	Ph.D.; Educational policy studies and evaluation	Title change
University of Louisville	Ph.D.; Educational leadership and organizational development, Evaluation Emphasis	Not listed	
University of Maryland - Baltimore County	Not listed	Ph.D.; Public policy, concentration in evaluation and analytical methods	

Table 1 Continued
Comparison of Doctoral Programs Containing "Evaluation" in their Titles, Specializations, Concentrations or Emphases (AEA, 2011; LaVelle and Donaldson, 2010)

University	Program Title identified by LaVelle and Donaldson (2010)	Program Title identified by AEA Training Directory (2011)	Changes from 2010 study to 2011 Directory Search
University of Minnesota – Twin Cities	Ph.D.; Evaluation Studies	Ph.D.; Quantitative methods in education and in educational policy and administration, evaluation studies	Title change
University of North Carolina – Chapel Hill	Ph.D.; Educational psychology, measurement and evaluation	Ph.D.; Education	Title change
University of Illinois – Champaign Urbana	Ph.D.; Queries, emphasis evaluation research	Ph.D.; Qualitative, quantitative and evaluative research methodologies, specializations in evaluation, measurement and statistics	Title change
University of Pittsburgh	Not listed	Ph.D.; Public health, program evaluation concentration	
University of South Florida	Ph.D.; Applied evaluation	Ph.D.; Curriculum and instruction, emphasis in measurement and evaluation	Title change
University of Tennessee – Knoxville	Ph.D.; Evaluation and assessment	Ph.D.; Evaluation, statistics and measurement	Title change
University of Texas – Austin	Ph.D.; Program evaluation	Ph.D.; option no longer listed	Possible program elimination
University of Virginia	Ph.D.; Research, statistics and evaluation	Not listed	
Utah State University	Ph.D.; Research and evaluation methodology	Ph.D.; Experimental and applied psychological science, emphasis in research and evaluation methodology	Title change
Washington State University	Ph.D.; Research, evaluation, measurement	Ph.D.; Educational psychology, emphasis on program evaluation and assessment	Title change
Western Michigan University	2 Departments: Ph.D. Evaluation, measurement and research Ph.D.; Evaluation	Ph.D.; Interdisciplinary in evaluation	Title change

Research Questions

The following research questions and sub questions guide this study.

1. What evaluator competencies are taught in doctoral programs in Evaluation across the Unites States?
    a. What frameworks of competencies and which of their corresponding individual competencies are encountered by doctoral students?
    b. What frameworks of competencies and which of their corresponding individual competencies are taught by faculty of the doctoral programs?
    c. What frameworks of competencies and which of their corresponding individual competencies are reflected in the doctoral programs' syllabi?
2. How are the evaluator competencies taught in doctoral programs in Evaluation?
    a. In what areas of their graduate training have doctoral students encountered evaluator competencies?
    b. How do faculty teach evaluator competencies in the doctoral programs in evaluation?
    c. How are evaluator competencies addressed in the doctoral programs' syllabi?

Chapter 3: Methodology

Chapter three discusses the procedures and methodology employed to conduct this study. Specifically, participants, data collection procedures, instrumentation, research design and data analysis are described.

Design

The current study is a multi-method multi-sample descriptive study that aimed to gain an understanding of what evaluator competencies are taught in doctoral programs in evaluation across the United States, as well as how these competencies are taught. Data were collected from three sources, including faculty and program coordinators, students and course syllabi. Data collection from multiple sources was intended to aid triangulation of results, thus, strengthening the validity of the study and the reliability of the study's results. Specifically, triangulation facilitates validation by cross-examining data collected from multiple sources. Cohen and Manion (2000) define triangulation as an attempt to more fully understand multifaceted human behaviors by examining data from multiple sources.

A multi-methods approach was chosen for this study, combining open-ended interview questions, closed-ended interview questions, closed-ended survey items, open-ended survey items and a content analysis in an effort to triangulate on the overarching research questions. Tashakkori and Teddlie (1998) defined the mixed-methods approach as combining the quantitative approach and the qualitative approach throughout various stages of the research process. This approach was deemed most appropriate for the current study, in order to obtain a thorough understanding of the teaching of evaluator

competencies across multiple doctoral programs. While the current study's type of investigation is classified as descriptive, both the data collection and the data analysis will encompass a quantitative, as well as a qualitative methodology. Specifically, qualitative, open-ended interview questions were chosen most suitable to understand in-depth the realities of the program coordinators and faculty members teaching evaluator competencies. The currently limited understanding of the teaching of evaluator competencies did not allow for the development of a variety of closed-ended questions suitable for understanding faculty's and program coordinators' teaching of competencies. All the same, a quantitative approach was chosen most suitable for the student survey in order to obtain a general understanding of the students' encounters of evaluator competencies in their respective doctoral programs. Finally, the content analysis approach was deemed most suitable to quantify a wealth of information obtained from numerous evaluation course syllabi. By selecting a mixed-methods approach most suitable for the exploratory nature of this study, the validity of this research was further strengthened (Peterson & Peterson, 2004).

Participants

Survey Participants.

One data source was of students enrolled in doctoral evaluation programs across the United States. Here, the program coordinators and faculty interviewed were asked to forward the survey invitation to all students currently enrolled in each doctoral program. As a result, the population of doctoral students enrolled in evaluation doctoral programs would be sampled. In addition to sampling the student population, a snowball

sampling strategy was also used to solicit further student participation. Students, who have completed the survey, were asked to forward the survey invitation or the survey link to their colleagues who were also enrolled in their respective doctoral programs. As these strategies did not yield a sufficient response rate, convenience-sampling strategies were also implemented to solicit further student participation. Specifically, students were also invited to participate through post cards distributed directly by the researcher, through AEA's Graduate Student and New Evaluator Topical Interest Group's facebook page or through email.

Of the 99 survey respondents, 55 (73.6%) were females and 20 (26.7%) were males. Twenty-four respondents did not indicate their gender. In addition, students indicated they were born in the years ranging from 1956 to 1988. The majority of the respondents identified most with the ethnicity of White or Caucasian (78.6%), followed by students who identified most with the ethnicities of Asian (12.9%) and Black or African American (8.6%). Moreover, the majority of survey respondents classified themselves as not Hispanic (95.9%). Fifty-four students (73.0%) indicated they were currently full-time students and 20 students (27.0%) indicated they were currently part-time students. The majority of survey respondents (80.3%) stated they have completed a Master's degree prior to enrolling in their doctoral programs, while nearly 20 percent (19.7%) have not completed a Master's degree prior to their enrollment. When asked to describe their student status, the majority of respondents stated they were third year students working on coursework (24.6%) or second year students working on coursework

(20.3%). This was closely followed by fourth year students working on their dissertation (18.8%).

In addition, survey respondents were asked to indicate the university at which they were currently enrolled in their doctoral studies. Eleven students (15.3%) were enrolled at Claremont Graduate University and 10 students (13.9%) were enrolled at Western Michigan University. Further, nine students (12.5%) stated they were enrolled at Boston College and seven students (9.7%) were enrolled at The University of Tennessee. The remaining students were enrolled at fourteen other institutions. Please refer to Table 2 for more detailed information on the universities at which students were enrolled.

Table 2 Participant Universities

	N	Percent of Respondents
Boston College	9	12.5
Brigham Young University	3	4.2
Claremont Graduate University	11	15.3
Ohio State University	2	2.8
Oklahoma State University	3	4.2
Syracuse University	4	5.6
University of California – Berkeley	4	5.6
University of California – Los Angeles	4	5.6
University of Kentucky	1	1.4
University of Maryland – Baltimore	2	2.8
University of Minnesota – Twin Cities	4	5.6
University of North Carolina – Chapel Hill	1	1.4
University of Illinois – Champaign Urbana	4	5.6
University of South Florida	1	1.4
University of Tennessee – Knoxville	7	9.7
University of Virginia	1	1.4
Washington State University	1	1.4
Western Michigan University	10	13.9

Interview Participants.

Another data source for this research were program coordinators and faculty members of the 26 doctoral programs in evaluation (refer to Table 1). As these faculty members and program coordinators were considered most important to the study of the research questions at hand, a purposive sampling methodology was employed. Program faculty's and coordinators' contact information was obtained from program websites, as well as searches of AEA's training directory website. Initially, thirty doctoral programs with evaluation as title, specialization, focus or concentration were identified through online searches and literature reviews. However, after an additional detailed review of the program websites, four doctoral programs either no longer listed evaluation as title, specialization, focus or concentration or no longer existed. Please see Table 6 for the programs changes. Thus, 26 doctoral programs in evaluation provided the population of interest for the faculty interviews. Specifically, interview data were obtained from 13 faculty members of the 26 doctoral programs. Thus, a response rate of 50 percent was obtained for the faculty interviews. Of the 13 interview participants, seven (54%) considered themselves program coordinators. In addition, two participants (15%) stated their doctoral programs did not have a designated program coordinator. Instead, all faculty members contributed equally to all program activities.

Syllabi for Content Analysis.

The third data source for this study consisted of doctoral program core course syllabi obtained from program coordinators and faculty members of the doctoral programs in evaluation who participated in interviews. Additional contact information for

instructors of core courses were obtained from program website searches, bookstore website searches, faculty directory searches and calls to university registrars. Thus, a convenience-sampling strategy was employed to obtain the necessary documents. A total of 85 syllabi were obtained from program faculty and website searches. Specifically, syllabi were obtained from 23 universities. The majority of syllabi (n = 8) were obtained from each The University of Tennessee and the University of Minnesota – Twin Cities. Please refer to Table 3 below for the syllabi obtained from each university. Syllabi obtained were all recently used by faculty. In particular, all syllabi were used to teach in the Fall 2011 or the Spring 2012 semesters.

Table 3 Syllabi Obtained from Universities

University	Syllabi *N* (%)
University of Minnesota – Twin Cities	8 (9.4)
The University of Tennessee – Knoxville	8 (9.4)
University of Louisville	7 (8.2)
University of Maryland – Baltimore County	7 (8.2)
Columbia University	6 (7.1)
Ohio State University	6 (7.1)
Western Michigan University	6 (7.1)
Brigham Young University	4 (4.7)
University of Kentucky	4 (4.7)
University of North Carolina – Chapel Hill	4 (4.7)
Florida State University	3 (3.5)
University of California – Berkeley	3 (3.5)
University of Virginia	3 (3.5)
Claremont Graduate University	2 (2.4)
Oklahoma State University	2 (2.4)
Syracuse University	2 (2.4)
The George Washington University	2 (2.4)
University of South Florida	2 (2.4)
Washington State University	2 (2.4)
Boston College	1 (1.2)
Tennessee Technological University	1 (1.2)
University of California – LA	1 (1.2)
University of Pittsburgh	1 (1.2)

Materials and Measures

Program Coordinator/Faculty Interviews.

The program coordinator/faculty interview protocol consisted of open-ended questions, as well as closed-ended questions utilizing rating scales (Appendix B). Specific prompts were identified for open-ended questions. First, interviewees were asked demographic questions about their respective program backgrounds. Interviewees were asked to state the name of their graduate program and the department and college in which it is located. Next, interviewees were asked to provide the name of the program coordinator and the number of faculty members associated with the program. Interviewees were also asked about the number of courses required for students to complete their doctoral coursework.

Following the demographic questions, faculty were asked to rate their familiarity with the ECPE framework. Five answering options for this question ranged from not at all familiar to extremely familiar. Next, faculty were asked to rate their familiarity with the competency framework identified by the Canadian Evaluation Society. Again, five answering options range from not at all familiar to extremely familiar.

The remainder of the interview inquired about the teaching of the ECPE. To address research question one, which inquires about competency frameworks taught by faculty and program coordinators, faculty and program coordinators were asked what evaluator competencies are taught in their graduate programs. Specific prompts for this question included the ECPE framework, the Canadian Evaluation Society framework or others.

To address the fifth research question, which focuses on how faculty teach evaluator competencies in doctoral programs in evaluation, interviewees were asked how evaluator competencies are addressed in their graduate programs. Prompts for this question included mission/core values, coursework, in-class assignments, homework assignments, practicum/internship experiences, reflections, advising and other.

Student Survey.

The student survey consisted of closed-ended items, as well as open-ended items (Appendix E). To address the second research question, inquiring about frameworks of competencies reflected in doctoral programs' curriculums, students were asked whether they have learned about the ECPE in their doctoral programs. Answering options for this question were: yes, no and not sure. Next, students were given a list of the 64 ECPE and their overarching categories. Here respondents were asked to indicate to what extent these have been discussed in their respective doctoral programs. The answering options for this question were based on a six-point Likert scale ranging from not at all to very great extent.

To address the second research question, students were also asked whether they have learned about the evaluator competencies identified by the Canadian Evaluation Society in their doctoral program. Answering options for this question were: yes, no and not sure. Next students were given a list of the competencies and their overarching categories. Respondents were asked to indicate to what extent each of these competencies have been discussed in their doctoral programs. The answering options for this question were based on a six-point Likert scale ranging from not at all to very great extent.

To address the second research question, students were asked whether they have learned about any other evaluator competencies in their doctoral programs. Answering options for this question were: yes, no and not sure. If students selected yes, they were asked to specify the evaluator competencies they have learned about. This was an open-ended survey question. Next, students were asked to rate to what extent they have learned about these other evaluator competencies in their training. Answering options for this question are based on a five-point Likert scale ranging from very little extent to very great extent. The not at all answering option was removed for this question, as students themselves specified that these competencies were discussed in their training in a previous question.

To address the third research question, inquiring about the areas of their doctoral training, in which students have encountered evaluator competencies, students were asked to indicate whether they have encountered the ECPE in the following aspects of their graduate training: required evaluation course lectures, elective evaluation course lectures, required evaluation course assignments, elective evaluation course assignments, required evaluation course in-class activities, elective evaluation course in-class activities, required evaluation course outside-class activities, elective evaluation course outside-class activities, required evaluation course reflections, elective evaluation course reflections, required internships, elective internships, required practicum, elective practicum, advising from program faculty, assistantships outside of graduate coursework, professional development or trainings. Answering options for these questions were: yes,

no and not sure. Students also had the option to specify other areas of their graduate training, in which they have encountered the ECPE.

To address the third research question, students were also asked to indicate whether they have encountered the competencies identified by the Canadian Evaluation Society in the following aspects of their graduate training: required evaluation course lectures, elective evaluation course lectures, required evaluation course assignments, elective evaluation course assignments, required evaluation course in-class activities, elective evaluation course in-class activities, required evaluation course outside-class activities, elective evaluation course outside-class activities, required evaluation course reflections, elective evaluation course reflections, required internships, elective internships, required practicum, elective practicum, advising from program faculty, assistantships outside of graduate coursework, professional development or trainings. Answering options for these questions included yes, no and not sure. Students also had the option to specify other areas of their graduate training, in which they have encountered the competencies identified by the Canadian Evaluation Society.

To address the third research question, students, who stated that they have encountered other competencies in their graduate training, were asked to indicate whether they have encountered these competencies in the following aspects of their graduate training: required evaluation course lectures, elective evaluation course lectures, required evaluation course assignments, elective evaluation course assignments, required evaluation course in-class activities, elective evaluation course in-class activities, required evaluation course outside-class activities, elective evaluation course outside-

class activities, required evaluation course reflections, elective evaluation course reflections, required internships, elective internships, required practicum, elective practicum, advising from program faculty, assistantships outside of graduate coursework, professional development or trainings. Answering options for these questions consisted of yes, no and not sure. Students also had the option to specify other areas of their graduate training, in which they have encountered these other evaluator competencies.

Upon completion of the above-described survey items, students were asked to complete ten demographic questions. First, students were asked whether they are currently enrolled in a doctoral program or a master's program. Second, respondents were asked if they have completed a Master's degree prior to entering into their doctoral program. Answering options included yes, no and prefer not to answer. If students indicated that they have completed a Master's degree, they were asked to specify the discipline in which they have completed the degree. The fourth question asked students to indicate the university at which they are completing their doctoral work. Here, students could select one of the 30 institutions described in Table 1. Students could also choose other and supply a different institution. This other category was added to help the researcher identify other graduate students, not currently enrolled in an evaluation doctoral program, who may have received the survey invitation by mistake from their peers through the snowball sampling procedure. Students could also select prefer not to answer. Fifth, students were asked to indicate their current student status. Answering options for this question were 1st year student working on coursework, 2nd year student working on coursework, 3rd year student working on coursework, 4th year student

working on coursework, 4th year student working on dissertation only/coursework completed, 5th year student working on coursework, 5th year student working on dissertation only/coursework completed, 6th year student or greater working on coursework, 6th year student or greater working on dissertation only/coursework completed and prefer not to answer. Sixth, students were prompted to indicate whether they are currently a full-time student. Full-time student status was defined as either taking nine or more credit hours per semester or as taking at least six credit hours in combination with a 20-hour assistantship. Answering options for this question consisted of, yes, I am a full-time student, no, I am a part time student and prefer not to answer. Seventh, respondents were asked to select their gender from the options of male and female. Students could also select prefer not to answer. Eighth, students were asked to supply the year in which they were born. Again, students could choose the prefer not to answer option. Next, respondents were prompted to indicate the ethnicities they identify with. Students were instructed to check all that apply from the ethnicities of white or Caucasian, black or African American, American Indian or Alaska Native, Asian, Hawaiian Native or Pacific Islander and prefer not to answer. Lastly, students were asked whether they are Hispanic. Answering options for this question included yes, no and prefer not to answer. Finally, students were given the option to enter their email address to participate in the raffle for one iPad2 and five $20 Amazon gift certificates. Students were also encouraged to forward the survey link to their peers enrolled in their doctoral program.

Content Analysis of Syllabi.

To address research questions two and four, a content analysis of core course syllabi was conducted. Specifically, the content analysis aimed to answer the questions what competencies frameworks are addressed in program curriculums and how the competencies are addressed in the program curriculums. For the content analysis of core evaluation course syllabi, direct references to the ECPE and specific overarching categories, as well as direct references to the competencies identified by the Canadian Evaluation Society Project and specific overarching categories were counted. Following this, descriptions of lectures, in-class activities, assignments, practical experiences, internship, practicum and advising were grouped into competency categories described below. Both the ECPE and the CES competency frameworks each have six overarching competency categories addressing similar competencies. Nevertheless, the competency categories could not simply be combined based on the individual competencies within each category. Thus, the six ECPE categories were combined with the six CES categories to form a total of five categories. Figure 6 highlights which competency categories were combined based on the individual competencies falling under each category.

Procedure

Prior to beginning the data collection for this study, Institutional Review Board approval was obtained from The University of Tennessee's Office of Research. Next, contact information of program coordinators and faculty was obtained from program website searches and AEA training directory searches. Subsequently, the doctoral student survey was uploaded into an online survey management software. Data collection began

with telephone interviews of doctoral program coordinators and faculty members. Specifically, program coordinators and faculty members of each of the 26 doctoral programs were contacted via email and invited to participate in this research. Program coordinators were contacted first. However, if program coordinators did not respond to the reminder email, all other program faculty members from the institution were contacted via email. Please see Appendix A for a copy of the interview invitation email. The email explains the nature of the study. Program coordinators and faculty are asked to schedule a telephone interview, to forward a survey invitation email to all students currently enrolled in their doctoral programs and to provide the researcher with required core course syllabi and brochures. Program coordinators and faculty were offered a $15 gift certificate to Amazon as incentive for their participation in this study. The telephone interviews took between 10 and 27 minutes to complete.

One week after the initial survey invitation email was sent, a reminder email, consisting of the same survey invitation (Appendix A) was sent to faculty and program coordinators who had not yet responded. One week after sending the reminder email, non-respondents received a telephone call from the researcher asking them to participate in the research (Appendix A). Please refer to Appendix B for the complete interview protocol. During the telephone interview, the researcher took field-notes by hand or on a laptop. Three interviews were conducted in person at the AEA conference in Anaheim, California. Through this procedure, interview data were obtained from 13 faculty of the 26 doctoral programs in evaluation.

Program coordinators and faculty forwarded a survey invitation email to all students enrolled in their respective doctoral programs. Please see Appendix C for the survey invitation email. In addition, a snowball sampling procedure was employed to obtain participation in the student survey. The email invitation encouraged participants to forward the survey invitation email or the link to the survey to their peers also enrolled in their doctoral programs. As these strategies did not yield a sufficient response rate, convenience-sampling strategies were also implemented to solicit further student participation. Specifically, students were also invited to participate through post cards distributed directly by the researcher at the AEA conference. In addition, students were invited to participate through AEA's Graduate Student and New Evaluator Topical Interest Group's facebook page. Finally, students affiliated with the Graduate Student and New Evaluator Topical Interest Group were invited to participate through email. An additional email reminder was sent to students one week after the survey invitation was sent out.

In order to participate, students followed a link to the online student survey, where they read and agree to the Informed Consent statement prior to beginning the survey (Appendix D). Please refer to Appendix E for a copy of the student survey. The student survey took around ten to 15 minutes to complete. Students could enter their email address at the end of the survey to be entered in a raffle for one iPad2 and five $20 Amazon gift certificates. Both the informed consent statement and the survey invitation email (Appendices C and D) described that the survey was anonymous and email addresses collected for raffle purposes would be collected in a separate database. Thus,

data collected from the student survey could not be matched with the email addresses collected.

A content analysis of the core evaluation course syllabi, collected from faculty and their websites, was also conducted. Syllabi obtained from faculty and website searches were coded by the researcher and an assistant. Inter-rater reliability was assessed and considered acceptable at 97 percent of agreement. Please refer to Appendix F for the content analysis coding sheet. First, direct references to the ECPE and the competencies identified by the Canadian Evaluation Society, as well as their overarching competency categories were counted. Following this, descriptions of lectures, in-class activities, assignments, practical experiences, internship, practicum and advising were grouped into competency categories described below. Both the ECPE and the CES competency frameworks each have six overarching competency categories addressing similar competencies. Nevertheless, the competency categories could not simply be combined based on the individual competencies within each category. Thus, the six ECPE categories were combined with the six CES categories to form a total of five categories. Figure 6 highlights which competency categories were combined based on the individual competencies falling under each category. The resulting five categories were arbitrarily named Ethics; Evaluation Analysis, Planning and Design; Data Collection, Analysis and Interpretation; Interpersonal Communication and Reflective Practice; and Project Management. The competency categories were combined to facilitate the coding of activities listed on syllabi.

Analyses Performed

Student Survey.

To address research question 1a, inquiring what specific frameworks of competencies were reflected in doctoral programs' curriculums, students were asked whether they have learned about the ECPE in their doctoral program. Students were also asked whether they have learned about the evaluator competencies identified by the Canadian Evaluation Society in their doctoral program. In addition, students were asked whether they have learned about any other evaluator competencies in their doctoral programs. Answering options for the three above-mentioned questions were categorical. All data collected from the student survey were imported into the SPSS software. Results from the above-described questions were presented using frequencies and percentages. Percentages of missing data were also reported. Moreover, chi-square analyses were conducted to determine correlations of the competencies encountered with students' year in their graduate programs. As sufficient sample size did not allow for this comparison across all 6 years of students' doctoral study, categories were collapsed into two groups. The two groups were students currently engaged in coursework and those currently engaged in dissertation work only. In addition to sufficient sample size, the assumption of expected cell count was addressed prior to conducting the analyses.

To address research question 1a, students were also asked to indicate to what extent competencies from the ECPE framework have been discussed in their doctoral programs. Similarly, respondents were asked to what extent the competencies from the Canadian Evaluation Society framework have been addressed in their doctoral programs.

Also, if respondents indicated that other competencies were addressed by their graduate programs, they were asked to indicate to what extent this has been done. Data obtained from these three questions, using rating 6 point rating scales, can be treated as continuous (Colton & Covert, 2007). Thus, results from these questions were presented using frequency counts, descriptive statistics and percentages. Percentages of missing data were also reported. In addition, t-tests were conducted to compare differences in the extent to which the competencies have been addressed in doctoral programs by students' year of doctoral study. Assumptions of normality, linearity and sample size were addressed prior to conducting t-tests.

To further address research question 1a, students, who indicated that they have encountered evaluator competencies other than those of the ECPE framework or those of the Canadian Evaluation Society were asked to specify these competencies. Data collected from this question were reported using frequencies and percentages.

To address research question 2a, inquiring about the areas of their doctoral training, in which students have encountered evaluator competencies, students were asked to indicate whether they have encountered the ECPE in the various aspects of their graduate training. Students were also asked whether they have encountered the evaluator competencies identified by the Canadian Evaluation Society in the various aspects of their graduate training. Finally, students were asked whether they have encountered the other evaluator competencies they have previously specified in the various aspects of their graduate training. Answering options for this question were categorical. Thus, data collected from these questions were presented using frequencies, percentages and

percentages of missing data. Chi-square analyses were conducted to determine correlations of the competencies encountered in the areas of training with the collapsed variable of students' year in their graduate programs. In addition to sufficient sample size, the assumption of expected cell count was addressed prior to conducting the analyses.

Outliers were not anticipated from data collected in response to research question 2a. The above-mentioned three questions also provided respondents with an option to specify other areas of their graduate training in which they have learned about evaluator competencies. Responses were presented using frequency counts and percentages. Missing data were not reported as this was an optional answer selection.

In addition to the above described survey items, respondents were asked a variety of demographic questions. Data collected from demographic survey questions were reported using frequencies, descriptive statistics and percentages.

Program Coordinator/Faculty Interviews.

Demographic information and information regarding faculty's familiarity with the ECPE framework and the Canadian Evaluation Society Competencies Framework were transcribed by hand and entered into QDA Miner. Responses to these questions were reported using frequencies and percentages. These data were not cleaned or sanitized.

Research question 1b inquires about competency frameworks taught by faculty and program coordinators. To address this research question, faculty and program coordinators were asked what evaluator competencies are taught in their graduate programs. Data collected from this interview question were transcribed by hand and

analyzed using the process of analytic induction (Jupp, 2006). Transcripts were scanned for themes and categories and a coding schema was developed. Responses to open-ended questions were then coded into the schema. The coding schema was modified throughout the coding process as new themes and categories emerged. After the coding process, responses were reported both numerically and by themes and categories including concrete examples of participants' responses. This way, emergent findings were presented in an organized manner, while using interviewees' own words and descriptions. The use of participants' words and descriptions in the report of findings constitutes the principal evidence for assessing the validity of the report (Goetz & LeCompt, 1984).

To address research question 2b, which focuses on how faculty teach evaluator competencies in doctoral programs in evaluation, interviewees were asked how evaluator competencies are addressed in their graduate programs. Again, data collected from this interview question were transcribed by hand and analyzed using the QDA Miner Qualitative software analysis program. Similar to data collected to answer the first research question, data collected to answer the fifth research question were analyzed using the analytic induction process. Responses were presented both numerically and by themes and categories including concrete examples of participants' responses. In addition, data from this question were not cleaned or sanitized, as all information was necessary for the development of coding schemes. Coding schemes were subject to modification throughout the data coding process.

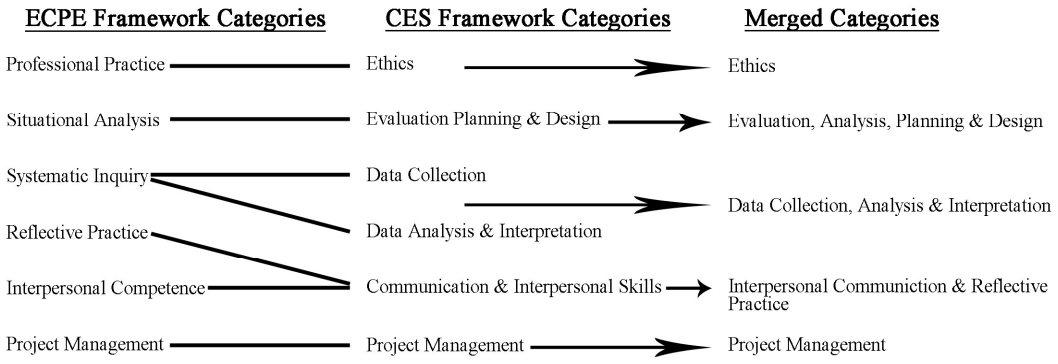
Content Analysis of Syllabi.

The content analysis aimed to answer research questions 1c and 2c focusing on what competencies frameworks are addressed in program curriculums and how the competencies are addressed in the program curriculums. For the content analysis of core evaluation course syllabi, the number of direct references to the ECPE and specific overarching categories were counted. Also, the number of direct references to the evaluator competencies identified by the Canadian Evaluation Association and specific overarching categories were counted. Following this, descriptions of lectures, in-class activities, assignments, practical experiences, internship, practicum and advising were grouped into competency categories described below. Both the ECPE and the CES competency frameworks each have six overarching competency categories addressing similar competencies. Nevertheless, the competency categories cannot simply be combined based on the individual competencies within each category. Thus, the six ECPE categories were combined with the six CES categories to form a total of five categories. Figure 6 highlights which competency categories were combined based on the individual competencies falling under each category. The resulting five categories were arbitrarily named Ethics; Evaluation Analysis, Planning and Design; Data Collection, Analysis and Interpretation; Interpersonal Communication and Reflective Practice; and Project Management. The competency categories were combined to facilitate the coding of activities listed on syllabi.

Data collected from the content analysis of the syllabi were reported using frequency counts and percentages. Here, results were presented by the five overarching

competency categories, as these constitute the units of analysis for the content analysis. Outliers and missing data were not anticipated from the content analysis.

Figure 6 Merged Competency Categories



Chapter 4: Results

Data Cleaning

Student Survey.

A total of 117 respondents attempted to take the online student survey. Data from ten respondents were deleted, as the only information available indicated that the informed consent had been read and other questions had not been answered. In addition, data from seven students were deleted, as these were not doctoral students. Moreover, data from an additional respondent, who indicated they were no longer a current student in a doctoral program in evaluation, were deleted. Thus, a total of 18 responses were deleted and data from 99 respondents were included in the analyses. The variable examining students' status in their doctoral programs initially consisted of six categories: 1st year student working on coursework, 2nd year student working on coursework, 3rd year student working on coursework, 4th year student working on coursework, 4th year student working on dissertation only/coursework completed, 5th year student working on coursework, 5th year student working on dissertation only/coursework completed, 6th year student or greater working on coursework and 6th year student or greater working on dissertation only/coursework completed. However, the six categories were collapsed into two categories due to limited sample size within each category. Prior to conducting Chi Square analyses, the assumption of expected cell count was examined and considered as met as the count within each cell was greater than five.

Faculty Interviews.

Field notes from faculty interviews were transcribed using Microsoft Word and imported into QDA Miner for coding. Identifying information, such as interviewee names was not included in the analyses or the report. Only comments without linked identifying information were included as examples.

Content Analysis of Syllabi.

Syllabi obtained from faculty and websites were coded by hand and entered into SPSS. Names and affiliations were not included in the SPSS dataset. Thus, identifying information was not reported in the Results section of this document.

Results for Research Question 1

The first research question inquires, what evaluator competencies are taught in doctoral programs in evaluation across the United States.

Competencies Encountered by Students.

To address the research question 1a, students were asked whether they have learned about the Essential Competencies for Program Evaluators (ECPE) and the Canadian Evaluation Society Competencies (CES) in their doctoral programs. Of the 99 students surveyed, 35 (35.4%) stated they have encountered the Essential Competencies for Program Evaluators and twenty-one (24.1%) students indicated that they have learned about the competencies identified by the Canadian Evaluation Society project in their doctoral programs. Moreover, 37 (44.6%) students stated that they have encountered other evaluator competencies in their doctoral programs (Table 4). When asked to describe the other competencies students have encountered, nine students stated they had

encountered the Joint Committee Standards on Educational Evaluation. In addition, seven students stated they had encountered the American Evaluation Association's Guiding Principles for Evaluators. Two students stated the core competencies addressed in Western Michigan University's doctoral program. Additionally, two students stated the competencies outlined in the article titled "Evaluator Competencies: What's Taught Versus What's Sought" by Dewey and colleagues (2008). Finally, one student stated the competency of grounding one's evaluation in a body of literature.

Table 4 Competency Frameworks Encountered by Students

	Yes	No	Missing
Essential Competencies for Program Evaluators	*n* = 35 35.4%	*n* = 64 64.6%	*n* = 0
Canadian Evaluation Society Project	*n* = 21 24.1%	*n* = 66 75.9%	*n* = 12
Other	*n* = 37 44.6%	*n* = 46 55.4%	*n* = 16

To examine the relationship between competencies encountered by students based on the time they have spent studying in their respective doctoral programs, bivariate correlations were conducted. Here, the competency frameworks encountered (Yes or No) were correlated with students' status. The two categories of the collapsed student status variable distinguish between those students currently engaged in coursework and those who have completed their coursework and are now working on their dissertations. The Chi Square correlations did not show any significant relationships between the competency frameworks encountered and students' status within their doctoral programs. Specifically, there was no significant relationship between ECPE encountered and collapsed student status χ^2 (1) = 2.58, *ns*. Similarly, there was no significant relationship between CES competencies encountered and collapsed student status χ^2 (1) = .23, *ns*. Finally, there was no significant relationship between other competencies encountered and collapsed student status χ^2 (1) = .99, *ns*.

To further address research question 1a, the extent to which the competencies were encountered was assessed. Here, students indicated to what extent they have encountered each specific competency related to the Essential Competencies for Program Evaluators framework, the Canadian Evaluation Society project framework or other competencies. Composite variables were computed, where averages of individual competencies were computed for each of the six competency categories associated with the ECPE and the CES frameworks. Thus, similar to individual competencies, means for each competency category composite could also range from zero through five. ECPE average composite scores contained from five to 19 competencies each. CES average

composites contained two through 10 competencies each. Next, frequency counts and descriptive statistics were computed for the mean composite variables. For the competency categories identified by the ECPE framework, means ranged from .97 to 1.36 and standard deviations ranged from 1.44 to 1.89. The competency category of Systematic Inquiry had the highest mean (M = 1.36), followed by Professional Practice (M = 1.30), Situational Analysis (M = 1.19), Reflective Practice (M = 1.13), Interpersonal Competence (M = 1.07) and Project Management (M = .97). For the competency categories identified by the CES framework, means ranged from .61 to .81 and standard deviations ranged from 1.30 to 1.63. The competency categories Evaluation Planning and Design (M = .81) and Data collection (M = .81) had the highest means, followed by the categories Data Analysis and Interpretation (M = .80), Ethics (M = .73), Communication and Interpersonal Skills (M = .69) and Project Management (M = .61). Table 5 presents the extent to which competencies were encountered in more detail.

Table 5 Extent of Competencies Encountered

	N	***M***	***SD***
ECPE Professional Practice	99	1.30	1.83
ECPE Systematic Inquiry	99	1.36	1.89
ECPE Situational Analysis	98	1.19	1.70
ECPE Project Management	98	.97	1.44
ECPE Reflective Practice	98	1.13	1.69
ECPE Interpersonal Competence	98	1.07	1.56
CES Ethics	85	.73	1.47
CES Evaluation Planning and Design	84	.81	1.63
CES Data Collection	85	.81	1.61
CES Data Analysis and Interpretation	85	.80	1.59
CES Communications and Interpersonal Skills	85	.69	1.42
CES Project Management	84	.61	1.30
Other Competencies	80	1.39	1.78

In addition to frequency counts and descriptive statistics, independent t-tests were computed to assess differences in competencies encountered by student status. A t-test was conducted to compare differences in mean scores on the ECPE category of Professional Practice on the collapsed student status variable. The t-test revealed no significant difference in encounters of competencies related to Professional Practice for the students engaged in coursework (M = 1.18, SD = 1.78) and those engaged in their dissertation work only (M = 1.90, SD = 1.97), $t(67) = 1.57$, p = .12, *ns*. Another t-test was conducted to compare differences in scores on the ECPE category of Systematic Inquiry on the collapsed student status variable. The t-test revealed no significant difference in encounters of competencies related to Systematic Inquiry for the students engaged in coursework (M = 1.27, SD = 1.88) and those engaged in their dissertation work only (M = 1.99, SD = 2.01), $t(67) = 1.54$, p = .13, *ns*. A t-test was conducted to compare differences in scores on the ECPE category of Situational Analysis on the collapsed student status variable. The t-test revealed no significant difference in encounters of competencies related to Situational Analysis for the students engaged in coursework (M = 1.14, SD = 1.67) and those engaged in their dissertation work only (M = 1.76, SD = 1.84), $t(67)$ = 1.44, p = .15, *ns*. A t-test was conducted to compare differences in scores on the ECPE category of Project Management on the collapsed student status variable. The t-test revealed no significant difference in encounters of competencies related to Project Management for the students engaged in coursework (M = .91, SD = 1.38) and those engaged in their dissertation work only (M = 1.42, SD = 1.62), $t(67) = 1.42$, p = .16, *ns*. An additional t-test was conducted to compare differences in scores on the ECPE

category of Reflective Practice on the collapsed student status variable. The t-test revealed no significant difference in encounters of competencies related to Reflective Practice for the students engaged in coursework (M = 1.05, SD = 1.61) and those engaged in their dissertation work only (M = 1.68, SD = 1.90), $t(67) = 1.48$, $p = .15$, *ns*. Next, a t-test was conducted to compare differences in scores on the ECPE category of Interpersonal Competence on the collapsed student status variable. The t-test revealed no significant difference in encounters of competencies related to Interpersonal Competence for the students engaged in coursework (M = .98, SD = 1.48) and those engaged in their dissertation work only (M = 1.70, SD = 1.83f), $t(67) = 1.82$, $p = .07$, *ns*.

A t-test was conducted to compare differences in scores on the CES category of Ethics on the collapsed student status variable. The t-test revealed no significant difference in encounters of competencies related to Ethics for the students engaged in coursework (M = .76, SD = 1.50) and those engaged in their dissertation work only (M = .98, SD = 1.68), $t(67) = .57$, $p = .57$, *ns*. A t-test was conducted to compare differences in scores on the CES category of Evaluation Planning and Design on the collapsed student status variable. The t-test revealed no significant difference in encounters of competencies related to Evaluation Planning and Design for the students engaged in coursework (M = .80, SD = 1.51) and those engaged in their dissertation work only (M = .93, SD = 1.65), $t(66) = .35$, $p = .73$, *ns*. In addition, a t-test was conducted to compare differences in scores on the CES category of Data Collection on the collapsed student status variable. The t-test revealed no significant difference in encounters of competencies related to Data Collection for the students engaged in coursework (M = .93,

SD = 1.77) and those engaged in their dissertation work only (*M* = .98, *SD* = 1.69), *t*(67) = .10, *p* = .92, *ns*. Another t-test was conducted to compare differences in scores on the CES category of Data Analysis and Interpretation on the collapsed student status variable. The t-test revealed no significant difference in encounters of competencies related to Data Analysis and Interpretation for the students engaged in coursework (*M* = .86, *SD* = 1.63) and those engaged in their dissertation work only (*M* = 1.06, *SD* = 1.79), *t*(67) = .10, *p* = .92, *ns*. A t-test was conducted to compare differences in scores on the CES category of Communication and Interpersonal Skills on the collapsed student status variable. The t-test revealed no significant difference in encounters of competencies related to Communication and Interpersonal Skills for the students engaged in coursework (*M* = .71, *SD* = 1.42) and those engaged in their dissertation work only (*M* = .94, *SD* = 1.66), *t*(67) = .49, *p* = .62, *ns*. Next, a t-test was conducted to compare differences in scores on the CES category of Project Management on the collapsed student status variable. The t-test revealed no significant difference in encounters of competencies related to Project Management for the students engaged in coursework (*M* = .64, *SD* = 1.35) and those engaged in their dissertation work only (*M* = .83, *SD* = 1.49), *t*(66) = .54, *p* = .59, *ns*.

A final t-test was conducted to compare differences in scores on other competencies on the collapsed student status variable. The t-test revealed no significant difference in encounters of other competencies for the students engaged in coursework (*M* = 1.77, *SD* = 1.93) and those engaged in their dissertation work only (*M* = 1.07, *SD* = 1.65), *t*(65) = -1.55, *p* = .13, *ns*.

Competencies Taught by Faculty.

Prior to asking faculty about the teaching of evaluator competencies, faculty were asked to indicate the name of their doctoral programs. Comparing these responses to the list of doctoral programs in Table 1, three program title changes were noted, as well as one concentration title change. Please see Table 6 below for a complete display of program names and changes.

Table 6 Changes to Doctoral Programs

University	Program Title identified by LaVelle and Donaldson (2010)	Program Title identified by AEA Training Directory (2011)	Changes from 2010 study to 2011 Directory Search	Changes noted in 2012 Interviews or online searches
American University	Not listed	Ph.D.; Clinical or behavioral/cognitive/neuroscience; emphasis program evaluation		No longer listed as emphasis in evaluation
Boston College	Ph.D.; Educational research, measurement and evaluation	Ph.D.; Educational research, measurement and evaluation	No change	No change
Brigham Young University	Ph.D.; Research and evaluation	Ph.D.; Instructional psychology and technology, focus on research and evaluation	Title change	No change from 2011 directory search
Claremont Graduate University	Ph.D.; Evaluation and applied research methods	Ph.D.; Evaluation and applied research methods	No change	No change
Columbia University	Ph.D.; Measurement and evaluation	Not listed		
Georgia State University	Ph.D.; Policy and program evaluation	Not listed		No longer listed as evaluation in title or concentration.
Florida State University	Ph.D.; Program Evaluation	Ph.D.; Policy and program evaluation	Title change	Title change: Ph.D. in Educational Policy and Evaluation

Table 6 Continued
Changes to Doctoral Programs

University	Program Title identified by LaVelle and Donaldson (2010)	Program Title identified by AEA Training Directory (2011)	Changes from 2010 study to 2011 Directory Search	Changes noted in 2012 Interviews or online searches
Ohio State University	Ph.D.; Quantitative research, evaluation and measurement	Not listed		No change from 2010
Oklahoma State University	Ph.D.; Research and evaluation	Not listed		Title change: Ph.D. in Research, Evaluation, Measurement and Statistics
Syracuse University	Ph.D.; Instructional design, development and evaluation	Ph.D.; Instructional design, development and evaluation, concentration in evaluation	Title change	
Tennessee Technological University	Ph.D.; Program planning and evaluation	Ph.D.; Concentration in program planning and evaluation	Title change	
The George Washington University	Not listed	Ph.D.; Program evaluation		

Table 6 Continued
Changes to Doctoral Programs

University	Program Title identified by LaVelle and Donaldson (2010)	Program Title identified by AEA Training Directory (2011)	Changes from 2010 study to 2011 Directory Search	Changes noted in 2012 Interviews or online searches
University of California – Berkeley	2 Concentrations: Ed.D.; Quantitative methods and evaluation Ed.D.; Program Evaluation and Assessment	Ph.D.; Quantitative methods and evaluation	Title change	Title change: Ph.D. in Policy, Organization, Evaluation and Measurement
University of California – Los Angeles	Ph.D.; Social research methods: Evaluation	Ph.D.; Social science research methods, specialization in evaluation	Title change	
University of Connecticut	Ph.D.; Measurement, evaluation and assessment	Ph.D.; Educational measurement, evaluation and assessment	Title change	
University of Iowa	Ph.D.; Educational measurement and evaluation	Not listed		
University of Kentucky	Ph.D.; Educational policy and evaluation	Ph.D.; Educational policy studies and evaluation	Title change	

Table 6 Continued
Changes to Doctoral Programs

University	Program Title identified by LaVelle and Donaldson (2010)	Program Title identified by AEA Training Directory (2011)	Changes from 2010 study to 2011 Directory Search	Changes noted in 2012 Interviews or online searches
University of Louisville	Ph.D.; Educational leadership and organizational development, Evaluation Emphasis	Not listed		
University of Maryland - Baltimore County	Not listed	Ph.D.; Public policy, concentration in evaluation and analytical methods		No change
University of Minnesota – Twin Cities	Ph.D.; Evaluation Studies	Ph.D.; Quantitative methods in education, track in evaluation studies	Title change	No change
University of North Carolina – Chapel Hill	Ph.D.; Educational psychology, measurement and evaluation	Ph.D.; Education	Title change	
University of Illinois – Champaign Urbana	Ph.D.; Queries, emphasis evaluation research	Ph.D.; Qualitative, quantitative and evaluative research methodologies, specializations in evaluation, measurement and statistics	Title change	No change
University of Pittsburgh	Not listed	Ph.D.; Public health, program evaluation concentration		
University of South Florida	Ph.D.; Applied evaluation	Ph.D.; Curriculum and instruction, emphasis in measurement and evaluation	Title change	

Table 6 Continued
Changes to Doctoral Programs

University	Program Title identified by LaVelle and Donaldson (2010)	Program Title identified by AEA Training Directory (2011)	Changes from 2010 study to 2011 Directory Search	Changes noted in 2012 Interviews or online searches
University of Tennessee – Knoxville	Ph.D.; Evaluation and assessment	Ph.D.; Evaluation, statistics and measurement	Title change	No change
University of Texas – Austin	Ph.D.; Program evaluation	Ph.D.; option no longer listed	Possible program elimination	Ph.D. option no longer listed
University of Virginia	Ph.D.; Research, statistics and evaluation	Not listed		
Utah State University	Ph.D.; Research and evaluation methodology	Ph.D.; Experimental and applied psychological science, emphasis in research and evaluation methodology	Title change	No longer listed as evaluation in title or specialization
Washington State University	Ph.D.; Research, evaluation, measurement	Ph.D.; Educational psychology, emphasis on program evaluation and assessment	Title change	Concentration change: Research, Evaluation and Measurement
Western Michigan University	2 Departments: Ph.D. Evaluation, measurement and research Ph.D.; Evaluation	Ph.D.; Interdisciplinary in evaluation	Title change	No change

When asked about the number of faculty members affiliated with their doctoral programs, responses ranged from 4 faculty members to 30. The majority of the respondents (n = 4, 31%) stated their doctoral program had four faculty members, followed by 12 (n = 3, 23%) and seven (n = 2, 15%) faculty. One faculty member each (8%) stated their program had five, eight, ten or 30 affiliated faculty. The average number of doctoral program affiliated faculty was 9.5. Please see Figure 7 for a list of doctoral programs, from which a faculty or program coordinator was interviewed.

Figure 7 Doctoral Programs Participating in Interviews

Boston College
Brigham Young University
Claremont Graduate University
Florida State University
Ohio State University
Oklahoma State University
University of California – Berkeley
University of Illinois – Champaign Urbana
University of Maryland – Baltimore
University of Minnesota – Twin Cities
University of Tennessee – Knoxville
Washington State University
Western Michigan University

Interviewees were also asked about the number of credits their graduate program requires of students in order to graduate. Here, responses ranged from 42 to 90 credits required to graduate. The average number of credits required to graduate was 70.34. One interviewee stated "it depends" and one interviewee did not know how many credits were required to graduate. Similarly, faculty were asked how many core course credits were required for students. Responses to this question ranged from 8 to 21. The average number of core course credits required was 11.89. Again, one faculty stated "it depends" and one faculty did not know how many core course credits were required for students.

Next, faculty were asked to rate their familiarity with the ECPE and the CES frameworks on a five-point Likert scale ranging from not at all familiar (scored as zero) to extremely familiar (scored as four). On average, the thirteen faculty were moderately familiar (2.0) with the ECPE and slightly to moderately familiar with the CES (1.46). The majority of faculty interviewees stated they were moderately familiar with the ECPE framework (n = 4 or 31%). However, the majority of faculty (n = 4 or 31%) also stated they were not at all familiar with the CES framework. A total of five faculty (38%) stated they were either very familiar or extremely familiar with the ECPE framework, while a total of three faculty (23%) stated they were very familiar or extremely familiar with the CES competency framework. Please see Table 7 below for more detailed information regarding faculty familiarity with the competency frameworks.

Table 7 Faculty Familiarity with ECPE and CES Frameworks

	ECPE Framework ***N*** **(%)**	**CES Framework** ***N*** **(%)**
Not at all familiar	3 (23)	4 (31)
Slightly familiar	1 (8)	3 (23)
Moderately familiar	4 (31)	3 (23)
Very familiar	3 (23)	2 (15)
Extremely familiar	2 (15)	1 (8)

To address research question 1b, which inquires about the types of competencies taught by faculty and program coordinators, themes from faculty interviews were analyzed using the process of analytic induction. Six faculty (46%) discussed teaching the ECPE and four faculty (31%) discussed teaching the competencies identified in the Joint Committee Standards on Educational Evaluation. Moreover, three faculty (23%) mentioned the AEA Guiding Principles for Evaluators were being taught. In addition to these competencies, a variety of other competencies were also mentioned. These competencies were grouped into the following categories; Ethics; Evaluation Analysis, Planning and Design; Data Collection; Data Collection, Analysis and Interpretation; Interpersonal Communication and Reflective Practice; and Project Management. Four faculty (31%) stated ethical issues were taught to students. For example, one faculty stated, "In our intro to program evaluation course, we cover dealing with stakeholders and ethical issues."

The majority of the other competencies stated fell under the category of Evaluation Analysis, Planning and Design. All thirteen professors (100%) discussed teaching the competencies of evaluation design and methods to students. For example, interviewees stated, "We teach cost-benefit analysis, statistics, criteria for drawing causal inference, research design, evaluation design aimed at drawing causal inferences and measurement." Five faculty (38%) stated introducing students to concepts in evaluation. One interviewee reported, "I teach two courses in program evaluation. The first course is an introduction to program evaluation. Students learn what program evaluation is and how it compares to research". Moreover, three faculty each (23%) reported teaching

evaluation theories, the history of program evaluation, and research design. Also, two faculty (15%) reported teaching the competency of creating logic models. This was illustrated by the statement, “Our assignments include logic models, cost analysis and case studies.” Finally, one faculty each (8%) reported teaching students about the competencies of randomized controlled trials and criteria for drawing causal inferences.

Falling under the category of Data Collection, Analysis and Interpretation was the competency of statistics, mentioned by four (31%) teachers. One interviewee described this competency in the statement, “In other courses, students learn more practical aspects as well, such as instrument development, statistical analyses and design.” In addition two faculty each (15%) described the competencies of cost-benefit analysis and measurement. For instance, one faculty said “Our assignments include logic models, cost analysis and case studies.” Finally, One faculty (8%) highlighted the competency of collecting data.

Falling under the category of Interpersonal Communication and Reflective Practice were non-technical skills, which were mentioned by seven faculty (54%). This was followed by dealing with stakeholders (n = 5 of 38%), cultural competence (n = 3 or 23%) and presenting findings (n = 2 or 15%). One faculty discussed non-technical skills in the statement, “We also help students learn non-technical skills, as we force them to do apprenticeship project in some courses.” Another faculty discussed cultural competence in the statement, “our advanced course touches on the more salient issues in the field of evaluation, such as cultural competence,…”

Under the category of Project Management, three faculty each (23%) discussed the competencies of planning evaluations and conducting evaluations. One faculty stated, "Then students conduct the evaluation and they receive feedback intermittently from the clients." Another faculty mentioned, "Later students may conduct entire evaluations of programs." This was followed by writing an evaluation report, which was mentioned by two faculty (15%). Finally, the competencies of creating and action plan and developing conclusions and recommendations were mentioned by one faculty each (8%). Please see Table 8 for a complete list of types of competencies taught in doctoral programs.

Table 8 Types of Competencies Taught

Competencies	N (%)
ECPE	6 (46)
Joint Committee Standards on Educational Evaluation	4 (31)
AEA Guiding Principles for Evaluators	3 (23)
Ethics	
Ethical Issues	4 (31)
Evaluation Planning and Design	
Evaluation Design and Methods	13 (100)
Introduction to Concepts in Evaluation	5 (38)
Evaluation Theories	3 (23)
History of Program Evaluation	3 (23)
Research Design	3 (23)
Creating Logic Models	2 (15)
Randomized Controlled Trials	1 (8)
Criteria for Drawing Causal Inferences	1 (8)
Data Collection, Data Analysis and Data Interpretation	
Statistics	4 (31)
Cost-Benefit Analysis	2 (15)
Measurement	2 (15)
Collecting Data	1 (8)
Interpersonal Communication and Reflective Practice	
Non-Technical Skills	7 (54)
Dealing with Stakeholders	5 (38)
Cultural Competence	3 (23)
Presenting Findings	2 (15)
Project Management	
Planning Evaluations	3 (23)
Conducting Evaluations	3 (23)
Writing an Evaluation Report	2 (15)
Creating an Action Plan	1 (8)
Developing Conclusions and Recommendations	1 (8)

Competencies addressed in Syllabi.

To address research question 1c, direct references to the ECPE and the CES competency frameworks and their overarching categories were counted in the 85 syllabi. Only one syllabus directly referenced the ECPE framework (1.2%). All other syllabi did not directly reference the competency frameworks or their overarching competency categories.

As discussed in the Methods section of this paper, to count the indirect references to overarching categories of the ECPE and the CES competencies, the 12 categories were collapsed into 5 categories due to overlap of competencies within each category (Figure 6). Next, indirect references to these five categories were counted for each type of teaching area on syllabi. Specifically, indirect references to the categories were counted for the syllabi areas of lectures, course descriptions, assignments, activities, experiences (Practical or Field), internships, practicum and advising.

The competency category of Ethics was discussed on 36 (42.4%) syllabi in connection with lectures and on 26 (30.6%) syllabi in connection with course descriptions. Moreover, Ethics were discussed on 20 (23.5%) syllabi under activities and on 4 (4.7%) syllabi under practical or field experiences. Finally, Ethics were listed on one syllabus (1.2%) under practicum. Ethics were not addressed as part of internship or advising on syllabi. Thus, the competency category of Ethics was discussed a total of 87 times on the 85 syllabi.

The competency category of Evaluation Analysis, Planning and Design was discussed on 66 (77.6%) syllabi under lectures and on 71 (83.5%) syllabi under course

descriptions. Moreover, this category was also mentioned on 57 (67.1%) syllabi as part of assignments and on 37 (43.5%) syllabi as part of activities. Evaluation Analysis, Planning and Design was listed on 8 (9.4%) syllabi as part of practical or field experiences and on 2 (2.4%) syllabi as part of internships. Finally, this competency category was also listed on one (1.2%) syllabus each under practicum and advising. Thus, the competency category of Evaluation Analysis, Planning and Design was discussed a total of 243 times.

The competency category titled Data Collection, Analysis and Interpretation was listed on 77 (90.6%) syllabi under lectures and again on 77 (90.6%) syllabi under course descriptions. In addition, this category was discussed on 71 (83.5%) syllabi as part of assignments and on 52 (61.2%) syllabi as part of activities. Next, Data Collection, Analysis and Interpretation were mentioned on 10 (11.8%) syllabi under practical or field-experiences and on one (1.2%) syllabus each under internships, practicum and advising. Hence, the category of Data Collection, Analysis and Interpretation was listed a total of 290 times on the 85 syllabi.

The following competency category of Interpersonal Communication and Reflective Practice was discussed on 46 (54.8%) syllabi under lectures and on 25 (29.4%) syllabi under course descriptions. The category was also discussed on 67 (78.8%) syllabi under assignments and on 62 (72.9%) syllabi under activities. Next, Interpersonal Communication and Reflective Practice were discussed on 5 (5.9%) syllabi as part of practical or field experiences and on one (1.2%) syllabus each as part of internships, practicum and advising. Thus, the competency category of Interpersonal Communication and Reflective Practice was mentioned a total of 208 times on the 85 syllabi.

The final competency category of Project Management was listed on 21 (24.7%) syllabi under lectures and on 12 (14.1%) syllabi under course descriptions. Project Management was also stated on 21 (24.7%) syllabi under assignments and on 12 (14.1%) syllabi under activities. This category was listed on five (5.9%) syllabi under experiences and on one (1.2%) syllabus under practicum. Project Management was not listed under internships or advising on syllabi. Thus, the category of Project Management was listed a total of 72 times on the 85 syllabi collected.

Results for Research Question 2

The second research question inquires, how evaluator competencies are taught in doctoral programs in evaluation across the United States.

Competencies Encountered by Students.

To address research question 2a, inquiring about the locations where students learned about competencies during their graduate studies, frequency counts were conducted. Students most frequently encountered the ECPE in required lectures (28.9%), followed by required in-class activities (26.0%). Students also learned about the ECPE in required course assignments (24.0%) and in professional development or training (24.0%). This was followed by nearly 19 percent of students, who stated they have learned about the ECPE in elective lectures and required out-of class activities.

When asked about areas where the CES competencies were encountered, students most frequently stated required lectures (13.4%). This was followed by required course assignments, required in-class activities, advising and professional development or training, which were each listed by nine percent of respondents. Eight percent of students

reported learning about the CES competencies in elective lectures. Moreover, around seven percent stated they had learned about the CES competencies in elective course assignments, elective in-class assignments and in their assistantships.

Students were also asked to indicate, where they have learned about other competencies. Here, required lectures (36.0%) and required course assignments (34.2%) were most frequently mentioned by students. Twenty-eight percent of respondents reported learning about other competencies in required in-class activities. This was followed by learning about other competencies in elective lectures (26.7%) and in professional development or training (25.3%). Please refer to Table 9 for more detailed information on student areas of competency learning.

Table 9 Locations of Competency Learning

	N	**Percent of Respondents**
ECPE Framework		
Required Lectures	28	28.9
Elective Lectures	18	18.6
Required Course Assignments	223	24.0
Elective Course Assignments	17	17.7
Required In-Class Activities	25	26.0
Elective In-Class Activities	17	17.7
Required Outside-Class Activities	18	18.6
Elective Outside-Class Activities	12	12.5
Required Reflections	12	12.4
Elective Reflections	6	6.3
Required Internships	10	10.3
Elective Internships	9	9.4
Required Practicum	12	12.8
Elective Practicum	6	6.3
Advising	21	21.9
Assistantships	15	15.6
Professional Development/Training	23	24.0

Table 9 Continued
Locations of Competency Learning

	N	Percent of Respondents
CES Competency Framework		
Required Lectures	13	13.4
Elective Lectures	8	8.2
Required Course Assignments	9	9.3
Elective Course Assignments	7	7.2
Required In-Class Activities	9	9.3
Elective In-Class Activities	7	7.2
Required Outside-Class Activities	6	6.3
Elective Outside-Class Activities	5	5.1
Required Reflections	3	3.0
Elective Reflections	2	2.1
Required Internships	5	5.2
Elective Internships	3	3.1
Required Practicum	6	6.1
Elective Practicum	3	3.1
Advising	9	9.1
Assistantships	7	7.2
Professional Development/Training	9	9.3
Other Competencies		
Required Lectures	27	36.0
Elective Lectures	20	26.7
Required Course Assignments	26	34.2
Elective Course Assignments	14	18.7
Required In-Class Activities	21	28.0
Elective In-Class Activities	13	17.6
Required Outside-Class Activities	15	20.5
Elective Outside-Class Activities	11	14.9
Required Reflections	14	19.2
Elective Reflections	8	10.8
Required Internships	8	10.8
Elective Internships	6	8.2
Required Practicum	12	16.2
Elective Practicum	5	6.8
Advising	18	24.7
Assistantships	13	17.6
Professional Development/Training	19	25.3

To further address research question 2a, inquiring about areas of their doctoral study where students encounter competencies, a series of Chi-Square correlations were conducted comparing each area of competency learning with the collapsed student status variable to address the relationship of learning by time spent studying. First, areas of learning about the ECPE were correlated with the collapsed student status variable. Specifically, there was no significant relationship between ECPE encountered in required lectures and collapsed student status χ^2 (1) = 2.23, *ns*. There was no significant relationship between ECPE encountered in elective lectures and collapsed student status χ^2 (1) = 1.73, *ns*. In addition, there was no significant relationship between ECPE encountered in required assignments and collapsed student status χ^2 (1) = .04, *ns*. Again, there was no significant relationship between ECPE encountered in elective assignments and collapsed student status χ^2 (1) = .54, *ns.* Similarly, there was no significant relationship between ECPE encountered in required in-class activities and collapsed student status χ^2 (1) = .63, *ns.* There was no significant relationship between ECPE encountered in elective in-class activities and collapsed student status χ^2 (1) = .54, *ns.* Also, there was no significant relationship between ECPE encountered in required outside-class activities and collapsed student status χ^2 (1) = .54, *ns.* Moreover, there was no significant relationship between ECPE encountered in elective outside class activities and collapsed student status χ^2 (1) = .06, *ns.* There was no significant relationship between ECPE encountered in required reflections and collapsed student status χ^2 (1) = 1.56, *ns.* Again, there was no significant relationship between ECPE encountered in

elective reflections and collapsed student status χ^2 (1) = 3.19, *ns.* There was no significant relationship between ECPE encountered in required internships and collapsed student status χ^2 (1) = 3.76, *ns.* There was no significant relationship between ECPE encountered in elective internships and collapsed student status χ^2 (1) = 2.58, *ns.* There was no significant relationship between ECPE encountered in required practicum and collapsed student status χ^2 (1) = 3.72, *ns.* However, there was a significant positive relationship between ECPE encountered in elective practicum and collapsed student status χ^2 (1) = 4.60, p = .03. The magnitude of the relationship was φ = .26. According to Cohen's table of effect size magnitude, this is a small to medium observed effect. There was no significant relationship between ECPE encountered in advising and collapsed student status χ^2 (1) = .01, *ns.* Similarly, there was no significant relationship between ECPE encountered in assistantships and collapsed student status χ^2 (1) = .17, *ns.* Finally, there was no significant relationship between ECPE encountered in professional development or training and collapsed student status χ^2 (1) = .39, *ns.*

Second, areas of learning about the CES competencies were correlated with the collapsed student status variable. Specifically, there was no significant relationship between CES competencies encountered in required lectures and collapsed student status χ^2 (1) = .01, *ns.* There was no significant relationship between CES competencies encountered in elective lectures and collapsed student status χ^2 (1) = .29, *ns.* In addition, there was no significant relationship between CES competencies encountered in required assignments and collapsed student status χ^2 (1) = .05, *ns.* Again, there was no significant relationship between CES competencies encountered in elective assignments

and collapsed student status χ^2 (1) = .82, *ns.* Similarly, there was no significant relationship between CES competencies encountered in required in-class activities and collapsed student status χ^2 (1) = .89, *ns.* There was no significant relationship between CES competencies encountered in elective in-class activities and collapsed student status χ^2 (1) = .82, *ns.* Also, there was no significant relationship between CES competencies encountered in required outside-class activities and collapsed student status χ^2 (1) = 1.91, *ns.* Moreover, there was no significant relationship between CES competencies encountered in elective outside class activities and collapsed student status χ^2 (1) = 3.36, *ns.* However, there was a significant positive relationship between CES competencies encountered in required reflections and collapsed student status χ^2 (1) = 4.48, p = .03. The magnitude of the relationship was φ = .26. According to Cohen's table of effect size magnitude, this is a small to medium observed effect. Again, there was no significant positive relationship between CES competencies encountered in elective reflections and collapsed student status χ^2 (1) = 2.94, *ns.* There was no significant relationship between CES competencies encountered in required internships and collapsed student status χ^2 (1) = 3.36, *ns.* There was a significant positive relationship between CES competencies encountered in elective internships and collapsed student status χ^2 (1) = 4.48, p = .03. The magnitude of the relationship was φ = .26. According to Cohen's table of effect size magnitude, this is a small to medium observed effect. There was no significant relationship between CES competencies encountered in required practicum and collapsed student status χ^2 (1) = 1.77, *ns.* However, there was a significant relationship between

CES competencies encountered in elective practicum and collapsed student status χ^2 (1) = 4.48, p = .03. The magnitude of the relationship was φ = .26. According to Cohen's table of effect size magnitude, this is a small to medium observed effect. There was no significant relationship between CES competencies encountered in advising and collapsed student status χ^2 (1) = 2.78, *ns.* Similarly, there was no significant relationship between CES competencies encountered in assistantships and collapsed student status χ^2 (1) = .82, *ns.* Finally, there was no significant relationship between CES competencies encountered in professional development or training and collapsed student status χ^2 (1) = .89, *ns.*

Third, areas of learning about other competencies were correlated with the collapsed student status variable. Specifically, there was no significant relationship between other competencies encountered in required lectures and collapsed student status χ^2 (1) = .86, *ns.* There was no significant relationship between other competencies encountered in elective lectures and collapsed student status χ^2 (1) = .05, *ns.* In addition, there was no significant relationship between other competencies encountered in required assignments and the collapsed student status χ^2 (1) = .40, *ns.* Again, there was no significant relationship between other competencies encountered in elective assignments and collapsed student status χ^2 (1) = 1.79, *ns.* Similarly, there was no significant relationship between other competencies encountered in required in-class activities and collapsed student status χ^2 (1) = .05, *ns.* There was no significant relationship between other competencies encountered in elective in-class activities and collapsed student status χ^2 (1) = 1.92, *ns.* There was no significant relationship between other competencies

encountered in required outside-class activities and collapsed student status χ^2 (1) = .69, *ns.* Moreover, there was no significant relationship between other competencies encountered in elective outside class activities and collapsed student status χ^2 (1) = .43, *ns.* Also, there was no significant relationship between other competencies encountered in required reflections and collapsed student status χ^2 (1) = .29, *ns.* However, there was a significant positive relationship between other competencies encountered in elective reflections and collapsed student status χ^2 (1) = 4.48, p = .03. The magnitude of the relationship was φ = .26. According to Cohen's table of effect size magnitude, this is a small to medium observed effect. There was no significant relationship between CES competencies encountered in required internships and collapsed student status χ^2 (1) = .46, *ns.* There was no significant relationship between other competencies encountered in elective internships and collapsed student status χ^2 (1) = .30, *ns.* There was no significant relationship between other competencies encountered in required practicum and collapsed student status χ^2 (1) = .04, *ns.* Similarly, there was no significant relationship between other competencies encountered in elective practicum and collapsed student status χ^2 (1) = 3.69, *ns.* There was no significant relationship between other competencies encountered in advising and collapsed student status χ^2 (1) = .42, *ns.* Similarly, there was no significant relationship between CES competencies encountered in assistantships and collapsed student status χ^2 (1) = .01, *ns.* Finally, there was no significant relationship between other competencies encountered in professional development or training and collapsed student status χ^2 (1) = .01, *ns.*

Competencies Taught by Faculty.

To address research question 2b, which focuses on how faculty teach evaluator competencies in doctoral programs in evaluation, faculty and program coordinators were asked to describe, how competencies were taught to students enrolled in doctoral programs. Here, areas or locations where students encountered competencies were discussed. In the category of lectures, faculty most frequently mentioned coursework (n = 10 or 77%) followed by coursework taken in other departments (n = 2 or 15%) and guest speakers (n = 1 or 8%) as areas where students learn about competencies. For example, one faculty described competencies taught through coursework in the following statement; "The competencies come up throughout the coursework when we talk about the history of evaluation, the politics within evaluations, the guiding principles and the standards. Also, in lectures when we talk about models and approaches of evaluation, as well as the planning of evaluations. The competencies come up mainly in lectures and activities." In the category of course assignments, faculty most frequently mentioned each class projects, writing research or evaluation papers and assignments (n = 2 or 15%). One faculty interviewee stated; " Also, students do an application project where they apply the joint committee standards to an existing evaluation report and make judgments based on the situation." These areas of competency learning were followed by student presentations (n = 1 or 8%). Another interviewee described student presentations in the following statement; "Also, the students present current evaluation approaches and how to do them to the class as teams." Next, faculty mentioned a variety of in-class activities where students learn about evaluator competencies. Most frequently mentioned were case

studies (*n* = 3 or 23%), followed by analysis of articles, teamwork, role-playing and general activities, which were each mentioned by one faculty (*n* = 8%). For example, one faculty described, "Our activities include logic models, cost analysis and case studies." Faculty also discussed various outside-class activities, where students encounter evaluator competencies. Specifically, practical experiences or field experiences were mentioned by eight faculty (62%). Portfolio comprehensive examinations were listed by two faculty (15%). Moreover, the outside-class activities of working at the university's evaluation center or working on dissertation work were each stated by one faculty (8%). For example, the importance of practical field experiences was described as, "All the soft skills, for example the interpersonal skills, are done through practical field experiences. Our students have worked all over the world for their practical experiences. Supervised by Ph.D's, of course." Moreover, five faculty (38%) discussed reflections or reflective practice, in which students engage in on their own as an area of competency learning. In addition, the category of internships or practicum was mentioned by faculty, who discussed internships (*n* = 6 or 46%), assistance with faculty projects (*n* = 4 or 31%) and faculty directed apprenticeships (*n* = 2 or 15%) as areas of learning about evaluator competencies. One faculty described internship or practicum experiences in the following statement, "As far as practicum or internship experiences go, all of our students do those in one form or another. They may be working on large scale national projects or on small local projects. But they are mandatory for all students. So here our students learn about competencies as well." Falling under the category of advising, five faculty (38%) mentioned advising and one faculty mentioned a competency-based worksheet (8%) as

an area of student learning of competencies. The competency-based worksheet used for advising was discussed in the statement, “Every year when students draft their plan of study and meet with their advisor, the competencies are discussed. Students reflect upon them using the worksheet. And the advisor's role is to show the students gaps in training. For example, some students may be reluctant to gain qualitative experience but we make sure they learn about all the required research methods.” Faculty also mentioned the category of assistantships or jobs as areas of competency encounters. Specifically, three faculty (23%) mentioned assistantships and one faculty (8%) mentioned full-time jobs. One faculty stated, “Some students hold Graduate Assistant positions where they gain competencies.” Finally, three faculty (23%) discussed conference participation and two faculty (15%) mentioned the doctoral program’s mission as area of competency learning. For instance, conference participation was described in the statement, “We also strongly encourage participation in conferences, such as AEA, where our student present and take workshops so they become professionally connected to the field.” Table 10 displays the themes and the number of faculty who stated each theme.

Table 10 Themes of Areas of Competency Learning.

Themes	***N***	***Percent of Interviewees***
Lectures		
Coursework	10	77
Coursework in other Departments	2	15
Guest Speakers	1	8
Course Assignments		
Class Projects	2	15
Writing Research/Evaluation Papers	2	15
Assignments	2	15
Student Presentations	1	8
In-Class Activities		
Case Studies	3	23
Analysis of Articles	1	8
Teamwork	1	8
Role-Playing	1	8
Activities	1	8
Outside-Class Activities		
Practical- or Field Experiences	8	62
Portfolio Comprehensive Examination	2	15
University Evaluation Center	1	8
Dissertation Work	1	8
Reflections		
Reflections	5	38
Internships/Practicum		
Internships	6	46
Faculty Projects	4	31
Apprenticeships	2	15
Advising		
Advising	5	38
Competency Worksheet	1	8

Table 10 Continued
Themes of Areas of Competency Learning.

Themes	***N***	***Percent of Interviewees***
Assistantships or Jobs		
Assistantships	3	23
Full-Time Jobs	1	8
Professional Development/Training		
Conference Participation	3	23
Other		
Mission of Graduate Program	2	15

Competencies Addressed in Syllabi.

To address research question 2c, the indirect references to five competency categories (Figure1) were counted for the syllabi areas of lectures, course descriptions, assignments, activities, experiences (Practical or Field), internships, practicum and advising. Specifically, the category of Ethics was addressed in descriptions of lectures for 36 syllabi (42.4%). Evaluation Analysis, Planning and Design were addressed in 66 syllabi's descriptions of lectures (77.6%). Data Collection, Analysis and Interpretation were listed in 77 (90.6%) syllabi's descriptions of lectures. Interpersonal Communication and Reflective Practice were addressed in 46 (54.8%) of lecture descriptions in the collected syllabi. Finally, the category of Project Management was addressed in 21 (24.7%) lecture descriptions listed on syllabi.

In course descriptions, the competency category of Ethics was listed on 26 (30.6%) syllabi. Evaluation Analysis, Planning and Design were listed in course descriptions of 71 (83.5%) syllabi. Moreover, Data Collection, Analysis and Interpretation were addressed in 77 (90.6%) course descriptions on syllabi. Interpersonal Communication and Reflective Practice were addressed on 25 (29.4%) of course descriptions on syllabi. Finally, Project management was addressed in 12 (14.1%) of course descriptions on the syllabi collected.

The competency category of Ethics was addressed in assignments on 24 (28.2%) syllabi. Evaluation Analysis, Planning and Design were discussed in 57 (67.1%) assignments on syllabi. Next, Data Collection, Analysis and Interpretation were listed on 71 (83.5%) of syllabi under assignments. Interpersonal Communication and Reflective

Practice were addressed under assignments on 67 (78.8%) syllabi. The category of Project Management was discussed on 21 (24.7%) syllabi collected.

Similarly, Ethics were addressed in 20 (23.3%) syllabi under activities. Evaluation Analysis, Planning and Design were discussed in 37 (43.5%) of syllabi in connection with activities. Data Collection, Analysis and Interpretation were listed on 52 (61.2%) of syllabi under activities. Moreover, the category of Interpersonal Communication and Reflective Practice was stated on 62 (72.9%) syllabi under activities. Finally, Project Management was addressed under activities on 12 (14.1) syllabi.

In addition, the category of Ethics was addressed in 4 syllabi (4.7%) under practical or field experiences. Evaluation Analysis, Planning and Design were discussed in 8 (9.4%) of syllabi in connection with practical or field experiences. Data Collection, Analysis and Interpretation were listed on 10 (11.8%) of syllabi in connection with practical or field experiences. Moreover, the category of Interpersonal Communication and Reflective Practice was listed on 5 (5.9%) syllabi under practical or field experiences. Project Management was addressed in 5 syllabi (5.9%) in connection with practical or field experiences.

Ethics were not addressed on syllabi in connection with internships. However, Evaluation Analysis, Planning and Design were discussed in connection with internships on two syllabi (2.4%). Data Collection, Analysis and Interpretation were listed on one syllabus (1.2%) under internships. Interpersonal Communication and Reflective Practice was also listed on one (1.2%) syllabus under internships. Similarly, Project Management was addressed in 1 syllabus (1.2%) in connection with internships.

All five categories, consisting of Ethics; Evaluation Analysis, Planning and Design; Data Collection, Analysis and Interpretation; Interpersonal Communication and Reflective Practice; and Project Management, were each mentioned on one syllabus (1.2%) in connection with practicum.

Ethics and Project Management were not mentioned on syllabi in connection with advising. However, Evaluation Analysis, Planning and Design; Data Collection, Analysis and Interpretation; and Interpersonal Communication and Reflective Practice were each listed on one syllabus (1.2%) in connection with advising.

Summary of Results for Research Question 1 and Research Question 2

Results revealed students, faculty and syllabi most frequently addressed other competencies, followed by competencies related to the Essential Competencies for Program Evaluators (ECPE) framework and the Canadian Evaluation Society (CES) framework. Moreover, students, faculty and syllabi most frequently listed teaching or learning about data collection analysis and interpretation and evaluation analysis, planning and design competencies. Project management and ethics competencies were addressed or encountered least frequently by all three sources. However, students encountered technical competencies most frequently and non-technical competencies least frequently, whereas, both faculty and syllabi most frequently mentioned teaching technical competencies and non-technical competencies related to communication. Moreover, students, faculty and syllabi listed teaching or encountering competencies most frequently in lectures and associated activities and assignments. Nevertheless, students least frequently reported learning competencies in practical/field experiences,

whereas, faculty and Syllabi stated students learned competencies through practical or field-experiences.

Chapter 5: Discussion

What Competencies are Taught?

On the survey, students most frequently indicated their encounters of other competencies, followed by the ECPE framework and the CES framework. When asked to specify the types of other competencies encountered, students most frequently stated the Joint Committee Standards on Educational Evaluation, as well as AEA's Guiding Principles for Evaluators. While these standards and principals distinguish themselves from competencies, they cover many similar principles. Thus, students may be learning about competencies, yet, they are unable to identify them as such. Thus, instruction for novice evaluators should focus on including competency-related vocabulary.

Differences in competencies encountered by student status could not be detected in this research. Nevertheless, future research should focus on understanding which competencies are taught at what stage in students' doctoral programs. This is especially important as competencies may build on each other. For example, learning about non-technical skills, such as interpersonal communication, may require a thorough understanding of evaluation methodologies and ethics. Understanding this link could provide instructors with clear directions for designing an ideal sequence of competencies to teach. Furthermore, this understanding of optimum competency sequencing could inform curriculum development of doctoral programs.

On the survey, students also indicated they most frequently encountered the ECPE category of Systematic Inquiry, followed by Professional Practice and Situational Analysis. When asked to indicate, which CES competencies they had encountered,

students most frequently mentioned the category Evaluation Planning and Design and Data Collection, followed by Data Analysis and Interpretation. The competency categories of Project Management, Interpersonal Competence and Communication and Interpersonal Skill were encountered least frequently by students. This highlights that students in doctoral programs in evaluation are more likely to learn the technical skills, such as evaluation methodology, statistics and data collection. However, students in doctoral programs in evaluation are also likely to learn about ethics and standards associated with program evaluations. Students' learning about technical skills and ethics of evaluation may ensure the accuracy and integrity of program evaluations conducted by novice evaluators.

However, these findings also suggest that the non-technical evaluation skills, such as communicating with stakeholders, resolving conflicts and managing multiple projects at once, may not be taught sufficiently in doctoral programs in evaluation. Non-technical skills are more difficult to teach in traditional lectures and in-class assignments. Specifically, teaching non-technical skills requires practical or field experiences. In these settings, novice evaluators have the chance to learn about the necessity of non-technical skills, while having the opportunity to apply these skills (Hawk & Artto, 1999). Non-technical competencies are especially important for evaluators, as evaluation work encompasses close collaboration with clients and stakeholders. For example, evaluators must establish close relationships with clients and stakeholder to ensure the use of evaluation findings (Patton, 2008). These findings and conclusions are consistent with Dewey and colleagues' (2008) findings, which state that competencies, such as

interpersonal skills and project management are often not taught in formal educational programs in evaluation. Nevertheless, these competencies are especially desired by employers. Dewey et al. (2008) also suggest the integration of real-world experiences to remedy this lack of preparedness for novice evaluators.

When asked about the types of competencies taught to students, nearly half of the faculty interviewed discussed teaching the ECPE. However, most faculty also mentioned teaching other competencies to students. Here, all faculty reported teaching competencies related to Evaluation Analysis, Planning and Design. This was followed by half of the faculty, who reported teaching competencies falling under the category of Interpersonal Communication and Reflective Practice. Next most frequently mentioned were competencies under Ethics and Data Collection, Analysis and Interpretation. Competencies falling under the category of Project Management were mentioned least frequently.

Specifically, all faculty reported teaching competencies associated with Evaluation Analysis, Planning and Design. This is consistent with students' self-reported competency encounters. Thus, all doctoral programs included in the analyses focused on the teaching of evaluation methodology and the majority of the students surveyed have encountered these competencies in their doctoral program. This further confirms novice evaluator's familiarity with the technical evaluation skills.

However, faculty second most frequently reported teaching other competencies that fall under the category of Interpersonal Communication and Reflective Practice. This is in contrast to students' encounters of this competency category. Specifically, on the

survey, students reported they encountered the Interpersonal Communication and Reflective Practice category second least frequently. These findings suggest, faculty may aim to address these competencies in their teaching. However, this may not be easily accomplished, as these skills are taught primarily through field or practical experiences (Ayas & Zenuik, 2001; Scarbrough, Bresnen, Edelman, Laurent, Newell & Swan, 2004).

Faculty least frequently discussed teaching competencies related to the category of Project Management. This is consistent with students' self-reported competency learning, where Project Management competency learning was also reported least frequently. Thus, faculty may not put sufficient emphasis on the teaching of this entire competency category. Similar to Interpersonal Communication and Reflective Practice, these skills can only be taught through practical or field experiences. For example, managing an entire evaluation project from the development of evaluation questions and logic models through the writing of an evaluation report can be best learned by actually carrying out an entire evaluation. Thus, these macro-level field experiences are again best taught through practical and field experiences. However, Skolits and colleagues (2012) suggest that micro-level field experiences, which include only parts of an evaluation as a practical experience, can also be used to teach skills such as project management. In order for students to learn project management from micro-level field experiences, these experiences must be situated, focused and grounded in the larger context of the evaluation. Thus, faculty aiming to teach students competencies related to Project Management should consider employing a variety of field experiences (Cooksy, 2008; Davis, 2006).

Based on the results of this study, the teaching on non-technical competencies should be a focus of doctoral programs in evaluation. Agreement exists in the literature that non-technical skills are taught primarily through field experiences (Ayas & Zenuik, 2001; Scarbrough, Bresnen, Edelman, Laurent, Newell & Swan, 2004). Thus, doctoral programs in evaluation should aim to incorporate additional field experiences in order to teach non-technical competencies. This is consistent with Fierro and Christie's (2011) suggestions to incorporate additional practical experiences into the training of novice evaluators. Fierro and Christie (2011) also utilized a content analysis of syllabi and found that students engaged in evaluation training in public health learned competencies mainly through lectures and associated activities. These recommendations are based on the assumption that all competencies are equally important for evaluators (Leviton, 2011; Stevahn, King, Ghere & Minemma, 2005). The recommendations for additional field-based experiences are important for program coordinators and faculty who supervise students in their practical experiences, as they must ensure that students learn about all evaluator competencies. Moreover, program coordinators may consider they use of a competency worksheets and a competency-based portfolio comprehensive examination option to ensure that students have learned all competencies prior to graduation. However, caution is warranted when generalizing results from this study to all doctoral programs due to the limited sample obtained.

Review of 85 core course syllabi revealed that the direct references to competency frameworks were made only once. Specifically, one syllabus referenced the ECPE directly. However, other competencies were coded into five competency categories. Here,

the competency category of Data Collection, Analysis and Interpretation was discussed most frequently, followed by Evaluation Analysis, Planning and Design. Third most frequently discussed were Interpersonal Communication and Reflective Practice, followed by Ethics and Project Management. These results are consistent with results from the students survey and faculty interviews, which showcased the technical evaluation skills, such as falling under the competency categories of Evaluation Analysis, Planning and Design and Data Collection, Analysis and Interpretation are taught and encountered by students more frequently than the non-technical evaluation skills. Specifically, all three data sources highlighted skills falling under the competency category of Project Management were taught and encountered by students least frequently. As the non-technical skills, such as project management and interpersonal communication are nevertheless desired by employers, faculty and program coordinators should consider adding these skills to their program curriculum and teaching. One potential way to integrate these skills is through the use of additional field or practical experiences for students (Dewey, 2008; Trevisan, 2002; Leviton, 2001). Future research should focus on gaining an understanding of when these non-technical skills can best be integrated into the program curriculum, as the learning and application of these skills may require students to already possess the technical evaluation skills.

Finally, students, faculty and syllabi most frequently mentioned learning about or teaching other competencies that could be grouped into the two existing competency frameworks. These findings suggest that students and faculty may not be comfortable with ECPE or CES competency framework vocabulary. While the literature suggests

general agreement on the ECPE competency framework in the United States, this general agreement may not actually exist. This has implications for the professionalization of the field of evaluation, as agreement on competencies is required to move forward with the establishment of an evaluator licensure or certification process. However, knowledge and use of competency-based vocabulary is also important for students, as they will showcase their evaluator competencies to their potential employers upon graduation. Dewey et al. (2008) noted a discrepancy between competencies taught and those sought by employers. This suggests that employers are seeking concrete evaluator competencies in novice evaluators. Hence, recent graduates must know the competency vocabulary in order to showcase their skills to potential employers.

How Competencies are Taught

Students reported encountering the ECPE most frequently in required lectures, followed by required in-class activities and required course assignments. Students also reported encountering both the CES and other competencies most frequently in required lectures, followed by required course-assignments and required in-class activities. Overall, students reported most frequently encountering competencies in required courses and their associated activities and assignments. Interestingly, students did not frequently state learning about competencies in elective lectures, elective assignments, field experiences, practicum, internship or advising. One possible conclusion to be drawn from these findings is that doctoral students may be engaged in these practical experiences and internships, where they learn about competencies. However, students may simply think about these practical experiences in a different manner, using non-

competency based vocabulary. Thus, students may not be aware that they are learning about a variety of competencies during these additional experiences. This explanation is inconsistent with faculty reports of competency areas. Specifically, in their interviews, faculty often reported that students learned about competencies in practical or field experiences and internships. Thus, faculty should reinforce competency-based vocabulary when discussing these experiences with doctoral students. This could help students to learn about the types of evaluator competencies and their importance, while also developing an understanding of the inter-connectedness of the evaluator competencies. Additionally, this could help foster students' evaluator self-efficacy, as they realize that they are able to apply evaluator competencies in their work (Gredler & Johnson, 2001).

In their interviews, faculty most frequently stated, students learned about competencies in their coursework, followed by practical or field experiences, internships and advising. As discussed above, this stands in contrast to areas in which students described they learned about competencies. While faculty and students both discussed learning about competencies in coursework, students reported learning about competencies mostly from required lecture-associated activities and assignments. Faculty reported students frequently learned about competencies in practical experiences, internships and advising. Another possible conclusion to be drawn from these findings is that students may actually not be learning about competencies in their practical experiences. In fact, it may be possible that internships, practicum and field-experiences are part of the curriculum or individual courses. However, being engaged in these experiences is much more demanding on students' schedules and workloads. Thus, many

students may be circumventing these experiences or requirements by substituting them with other courses. In this case, students should be introduced to evaluator competencies and their importance for their current and future work early on in their graduate careers. This way, evaluator competencies could be used to guide a student's plan of study and desired additional experiences. This in turn, would also put more responsibility on doctoral students to take ownership of their education.

In the syllabi collected from faculty, competencies are discussed most frequently in lectures, course descriptions, assignments and activities. Competencies are described much less frequently in connection with practical or field experiences, internships and advising on syllabi. These competency descriptions are consistent with students' self-reported competency encounters, which also listed lectures, assignments and activities as most frequent areas of competency encounters. This agreement with student self-reports also suggests that students may not be obtaining sufficient practical, internship or practicum experiences where they learn about evaluator competencies. However, it is also possible that areas of learning, such as internships and field experiences are described in documents other than course syllabi. For example, these requirements may be described in program handbooks or program requirements. Nevertheless, this underscores the importance of teaching students about evaluator competencies and their importance to students' current and future work early on in their graduate careers. This way, students can take ownership of their education and seek out additional experiences based on competencies they would like to learn more about. Moreover, these findings are consisted with Fierro and Christie's (2011) research, which also utilized a content

analysis methodology. Specifically, the researchers found that students engaged in evaluation training in public health learned about competencies mainly through lectures and required readings. As a result, evaluator competency learning may be lacking due to a deeper level of engagement.

Competency Learning and Student Status

Statistical analyses conducted to answer both research question 1a and 2a, revealed no significant differences in competencies encountered and areas of competency learning by the collapsed variable of student status. While the collapsed variable required a chi-square analysis, which is a less powerful detector of significant differences among variable pairs than a point-biserial correlation, this collapsed variable was chosen due to low sample sizes within each category of the student status. Thus, only differences in competencies encountered and areas of competency learning among students enrolled in coursework and those working on their dissertations were examined.

The results of the chi-square analyses and t-tests only highlighted few significant differences in competency learning by student status. However, these findings suggest that it is currently unclear at what stages of their doctoral studies students learn about competencies. Moreover, while the results allow us to pinpoint what competencies students learn and how students generally learn about competencies, the results do not facilitate an understanding of differences in the ways competencies are taught in each year of study. Further research should focus on gaining an understanding of what competencies are taught in each year of students' doctoral study. Moreover, additional

research is necessary to understand, how teaching strategies of competencies differ based on the number of years students have been studying.

Understanding these differences in competency learning based on students' status in their doctoral programs is especially important, as learning about competencies may require a special order of competencies or instructional techniques. For example, to effectively teach the competencies falling under the categories of Interpersonal Competence (ECPE) or Communication and Interpersonal Skills (CES), may require existing knowledge about competencies falling under the categories of Systematic Inquiry (ECPE), Data Collection (CES) and Data Analysis and Interpretation (CES). Data from the current study cannot be used to generate an understanding of these questions due to low sample sizes. Nevertheless, future research should focus on obtaining a deeper understanding of these issues.

It is especially important to understand differences in competency learning based on student status, as this information could be used to help program coordinators and faculty in their design of doctoral program curricula. In addition, this information could assist program coordinators in the sequencing of doctoral courses. Finally, information on competency learning and student status could inform faculty's advising of doctoral students. For example, this research could inform faculty when to advise students to engage in internships and practical field experiences, as well how many of these practical experiences students should seek out. Thus, future research is necessary to understand student status and competency learning.

Methodological Limitations and Recommendations

Throughout the data collection phase of this study, it was very difficult to obtain responses from faculty to interviewing email requests or reminders. Program faculty were also approached and asked to participate in this study at the AEA annual conference in Anaheim, CA. Here, the study was described again to faculty in accordance with the interview invitation. Next, faculty were asked again for participation. Despite the personal interaction, many were still reluctant to agree to participate. This was especially surprising, as faculty noted the importance of research on the teaching of evaluation at the conference.

Specifically, one faculty wrote an email stating it was outrageous to ask for syllabi and to ask faculty to forward the survey to students, as this constituted too many demands on faculty and their schedules. While this was only openly stated by one respondent, others who participated in interviews simply would not forward the student survey or supply the researcher with syllabi. These actions are consistent with the notion expressed by the faculty, who stated asking to forward the survey to students and to supply the researcher with syllabi was too demanding on time and effort of the interviewees.

As only 50 percent of faculty participated in the interviews and many did not forward the survey to students, participation on the student survey suffered greatly. While many syllabi could be obtained from other professors, who were identified through online searches, student participation could not be increased drastically. In addition, it is difficult to determine the representativeness of the syllabi obtained from doctoral

programs. Each doctoral program defines a core course differently and information regardin the number of core courses could not always be obtained through online searches. Thus, caution is warranted when generalizing the results from this study to all doctoral programs in evaluation.

Due to the difficulty obtaining faculty buy-in using interview invitations, it was especially surprising to observer faculty's positive opinions towards the study, as they were asked to provide their syllabi via email. In response to emails describing the nature of the study and requests for specific syllabi, many faculty responded with exceptionally positive emails about the nature and necessity of the study for the field of evaluation. Moreover, several faculty requested copies of the final dissertation and stated they were looking forward to a presentation of results at the next AEA conference.

In conclusion, a change in the order of faculty requests could have produced a better response rate to faculty interviews, as well as student surveys. Specifically, faculty should have been asked to supply their syllabi first, as this seemed to produce a sense of flattery among faculty. Next, those who responded positively about the nature of the study should have been invited to participate in an interview or to supply the name of a faculty contact for their program, who would consider participating. Thus, future research aiming to interview faculty should consider using this foot-in-the-door technique. This conclusion is consisted with L. A. Dexter's suggestions (2006), who when interviewing experts, suggested to begin with individuals perceived to respond most favorably to the research. However, Dexter also advises caution for unwarranted assumption, which may not be challenged quickly enough through this approach. Dexter (2006) also suggests

sending experts a written letter introducing the study and the nature of the interview, prior to calling to schedule an interview. Future research requiring faculty interviews should consider the use of an introductory letter.

As some faculty did not participate in the interviews and others simply did not forward the survey to students, the sample size on the student survey suffered. Thus, snowball-sampling methodology was used to obtain further student participation. However, it was impossible to determine what percentage of survey respondents were invited through the snowball sampling procedure. Nevertheless, as they survey only yielded usable data from 99 respondents, the snowball sampling methodology appears less effective than intended. Emery, Lee, Curry, Johnson, Sporer, Mermelstein, Flay and Warnecke (2010) suggest using a two tiered sampling methodology for snowball samples. Specifically, they suggest identification of tier one contacts, who are key informants, through online searches. Next, tier one contacts are asked for their participation and for contact information of people they believed most relevant to the study. These tier two contacts are then snowball-sampled for additional data. Thus, future research involving faculty should ask to obtain contact information for key student contacts first. For example, contact information from graduate student program representatives or especially active graduate students should be obtained first. These students could then be contacted directly and asked to take the survey and forward it to their colleagues. This methodology could also help to alleviate the burden placed on faculty interviewees, who would no longer have to forward the survey themselves.

Practical Importance and Future Directions

It is essential for the field of evaluation to understand the preparedness of those conducting evaluations. This understanding could assist the field of evaluation in its progression towards becoming a profession. Thus, it is vital to understand what competencies are taught to novice evaluators, as well as how they are taught. From this information, it can be inferred what competencies novice evaluators should learn more about. This information can then be used to develop or modify education program curricula and professional development units. Thus, this information is essential for program coordinators and faculty for the design and sequencing of their courses. Hence, this information about preparedness of evaluators can be used to increase the quality of evaluations conducted. Moreover, this information and resulting increase in quality could have a positive impact on program beneficiaries, as well as evaluation stakeholders and clients.

In addition, it is vital for the field of evaluation to focus on understanding differences in competency learning based on students' status in their doctoral programs, as individuals working in the field of evaluation may not complete their doctoral studies. Also, differences in competency learning or proficiency between evaluators who have completed a doctoral program and those who have completed a master's program should be examined in future research. This information could again be used to inform the development of graduate program curricula and professional development units.

In summary, it is essential to understand the competencies practitioners in the field of evaluation have at their disposal and how they have learned about them. Future

research should also examine the order in which competencies are taught to novice evaluators. Specifically, how competencies build on each other should be examined. For instance, in order to learn about project management, competencies related to systematic inquiry may be prerequisites. This knowledge could then be used to develop an ideal teaching sequence of evaluator competencies for graduate programs.

Finally, additional research is also necessary to understand not only the teaching of competencies but also whether novice evaluators are able to apply these competencies to their work. Closely tied to this concept of proficiency is the concept of evaluation self-efficacy. These two concepts in relation to evaluator competencies should be explored in more detail as they could assist the field of evaluation in its progression towards becoming a profession.

List of References

Altschuld, J.W. (1995). Developing an evaluation program: Challenges in the teaching of evaluation. *Evaluation and Program Planning, 18*, 259-265. doi: 10.1016/S0149-7189(95)00014-3

Altschuld, J.W. (1999). The certification of evaluators: Highlights from a report submitted to the board of directors of the American Evaluation Association. *American Journal of Evaluation, 20*, 481-493. doi: 10.1177/109821409902000307

Altschuld, J.W. (2005). Certification, credentialing, licensure, competencies, and the like: Issues confronting the field of evaluation. *Canadian Journal of Program Evaluation, 20*(2), 157-168.

American Evaluation Association (2004). *Guiding principles for evaluators*. Retrieved June 8, 2011 from www.eval.org/publications/aea06.GPBrochure.pdf

American Evaluation Association (2011). *University Programs.* Retrieved July 13, 2011 from http://www.eval.org/Training/university_programs.asp

Ayas, K., & Zeniuk, N. (2001). Project based learning: Building communities of reflective practitioners. *Management Learning, 32*(1), 61-76. doi: 10.1177/1350507601321005

Bickman, L. (1997). Evaluating evaluation: Where do we go from here? *Evaluation Practice, 18*, 1-16. doi: 10.1016/S0886-1633(97)90003-9

Canadian Information Centre for International Credentials (2006). *Guide to terminology usage in the field of credentials recognition and mobility in English in Canada.*

Retrieved June 8, 2011 from http://www.cicic.ca/en/Guide.aspx?sortcode=2.17.17#CREDENTIAL

Chevalier, R. (2010) *The Changing Role of Evaluators and Evaluation*, in Handbook of Improving Performance in the Workplace: Volumes 1-3 (eds K. H. Silber, W. R. Foshay, R. Watkins, D. Leigh, J. L. Moseley and J. C. Dessinger), John Wiley & Sons, Inc., Hoboken, NJ. doi: 10.1002/9780470592663.ch73

Cohen, L., Manion, L., & Morrison, K. (2011). *Research methods in education.* New York, NY: Routledge.

Cooksy, L. (2008). Challenges and opportunities in experiential learning. *American Journal of Evaluation, 29*(3), 340-342. doi: 10.1177/1098214008321687

Davis, M.V. (2006). Teaching practical public health evaluation methods. *American Journal of Evaluation, 27*(2), 247-256. doi: 10.1177/0198214006286422

Dewey, J.D., Montrosse, B.E., Schröter, D.C., Sullins, C.D., & Mattox, J.R. (2008). Evaluator competencies: What's taught versus what's sought. *American Journal of Evaluation, 29*, 268-287. doi: 10.1177/1098214008321152

Dexter, L.A. (2006). *Elite and specialized interviewing.* Colchester, UK: ECPR Press.

Donaldson, S.I., Christie, C.A., & Mark, M.M. (2009). *What counts as credible evidence in applied research and evaluation practice?* Thousand Oaks, CA: Sage.

Donaldson, S.I., Gooler, L.E., & Scriven, M. (2002). Strategies for managing evaluation anxiety: Toward a psychology of program evaluation. *American Journal of Evaluation, 23*, 261-273. doi: 10.1177/109821400202300303

Emery, S., Lee, J., Curry, S., Johnson, T., Sporer, A., Mermelstein, R., Flay, B., & Warnecke, R. (2010). Finding needles in a haystack: A methodology for identifying and sampling community-based youth smoking cessation programs. *Evaluation Review, 34*(1), 35-51. doi: 10.1177/0193841X09355258

Engle, M., Altschuld, J. W., & Kim, Y.C. (2006). 2002 survey of evaluation preparation programs in universities: An update of the 1992 American Evaluation Association – sponsored study. *American Journal of Evaluation, 27*, 353-359. doi: 10.1177/1098214006288787

Ghere, G., King, J., Stevahn, L., & Minemma, J. (2006). A professional development unit for reflecting on program evaluator competencies. *American Journal of Evaluation, 27*, 108-123. doi: 10.1177/1098214005284974

Goetz, J.P., & LeCompt, M.D. (1984). *Ethnography and qualitative design in educational research.* San Diego, CA: Academic Press.

Gredler, M. E., & Johnson, R. I. (2001). Lessons learned from the directed evaluation experience. *American Journal of Evaluation, 22,* 97-104. doi: 10.1177/109821400102200110

Fierro, L.A., & Christie, C.A. (2011). Understanding evaluation training in schools and programs of public health. *American Journal of evaluation, 32*(2), 448-468. doi: 10.1177/1098214010393721

Fitzpatrick, J., Christie, C.A., & Mark, M.M. (2009). *Evaluation in action; Interviews with expert evaluators.* Los Angeles, CA: Sage.

Hawk, D.L., & Artto, K. (1999). Factors impeding project management learning. *Project Management, 5*(1), 56-67.

Jacob, S. (November, 2009). *To be or not to be a profession: Pros, cons and challenges for the evaluation community*. Paper presented at the annual meeting of the American Evaluation Association, Orlando, FL.

Jacob, S., & Boisvert, Y. (2010). To be or not to be a profession: Pros, cons and challenges for evaluation. *Evaluation, 16*, 349-368. doi: 10.1177/1356389010380001

Joint Committee on Standards for Educational Evaluation (1994). *The program evaluation standards: How to assess evaluations of educational programs* (2nd ed.). Thousand Oaks, CA: Sage.

Jones, S.C., & Worthen, B.R. (1999). AEA member's opinions concerning evaluator certification. *American Journal of Evaluation, 20,* 495-506. doi: 10.1177/109821409902000308

Jupp, V. (2006). *The sage dictionary of social research methods.* Thousand Oaks, CA: Sage. doi: 10.4135/9780857020116

King, J. A., Stevahn, L., Ghere, G., & Minemma, J. (2001). Toward a taxonomy of essential evaluator competencies. *American Journal of Evaluation, 22*, 229-247. doi: 10.1177/109821400102200206

LaVelle, J. M., & Donaldson, S. I. (2010). University-based evaluation training programs in the United States 1980 – 2008: An empirical examination. *American Journal of Evaluation, 31*(9), 9-23. doi: 10.1177/1098214009356022

Leviton, L.C. (2001). Building evaluation's collective capacity. *American Journal of Evaluation, 22*, 1-12. doi: 10.1177/109821400102200102

Low, J.F. (1992). Another look at licensure: Consumer protection or professional protectionism? *The American Journal of Occupational Therapy, 46,* 373-376.

McGuire, M., & Zorzi, R. (2005). Evaluator competencies and performance development. *Canadian Journal of Program Evaluation, 20*(2), 73-99.

Morris, M. (2010). The good, the bad, and the evaluator: 25 years of AJE ethics. *American Journal of Evaluation, 000*(00), 1-19. doi: 10.1177/1098214010388267

Patton, M.Q. (2008). *Utilization focused evaluation.* Thousand Oaks, CA: SAGE Publications.

Perrin, B. (2005). How can the information about the competencies required for evaluation be useful? *Canadian Journal of Program Evaluation, 20*(2), 169-188.

Peterson, T.O., & Perterson, C.M. (2004). From felt need to actual need: A multi-method multi-sample approach to needs assessment. *Performance Improvement Quarterly, 17*(1), 5-21. doi: 10.1111/j.1937-8327.2004.tb00299.x

Scarbrough, H., Bresnen, M., Edelman, L.F., Laurent, S., Newell, S., & Swan, J. (2004). The process of project-based learning. An exploratory study. *Management Learning, 35*(4), 491-506. doi: 10.1177/1350507604048275

Schwandt, T. (2008). Educating for intelligent belief in evaluation. *American Journal of Evaluation, 29,* 139-150. doi: 10.177/1098214008316889

Skolits, G.J., Morrow, J.A., & Burr, E.M. (2009). Reconceptualizing evaluator roles. *American Journal of Evaluation, 30*(3), 275-295, doi: 10.1177/1098214009338872

Skolits, G.J., Woodard, T.W., Morrow, J.A., & Kaesbauer, S. (2012). Focusing, situating, and grounding micro-level evaluation field experiences: An instructional tool. *American Journal of Evaluation, 33*(1), 124-136. doi: 10.1177/1098214011419025

Stevahn, L., King, J. A., Ghere, G., & Minemma, J. (2005a). Establishing essential competencies for program evaluators. *American Journal of Evaluation, 26*, 43-59. doi: 10.1177/1098214004273180

Stevahn, L., King, J. A., Ghere, G., & Minemma, J. (2005b). Evaluator competencies in university-based evaluation training programs. *The Canadian Journal of Program Evaluation, 20*(2), 101-123.

Stufflebeam, D.L. (2001). Interdisciplinary Ph.D. programming in evaluation. *American Journal of Evaluation, 22*, 445-455. doi: 10.1177/109821400102200323

Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology.* Thousand Oaks, CA: Sage.

Trevisan, M.S. (2002). Enhancing practical evaluation training through long-term evaluation projects. *American Journal of Evaluation, 23*, 81-92. doi: 10.1177/109821400202300110

Trevisan, M. S. (2004). Practical training in evaluation: A review of the literature. *American Journal of Evaluation, 25*, 255-272. doi: 10.1177/109821400402500212

Wilensky, H.L. (1964). The professionalization of everyone. *The American Journal of Sociology, 70*(2).

Worthen, B.R. (1999). Critical challenges confronting certification of evaluators. *American Journal of Evaluation, 20,* 533-555. doi: 10.1177/109821409902000312

Yarbrough, D.B., Shulha, L.M., Hopson, R.K., & Caruthers, F.A. (2011). *The program evaluation standards: A guide for evaluators and evaluation users.* Los Angeles, CA: Sage.

Zorzi, R., Perrin, B., McGuire, M., Long, B., & Lee, L. (2002). Defining the benefits, outputs, and knowledge elements of program evaluation. *Canadian Journal of Program Evaluation, 17*(3), 143-150.

Appendices

Appendix A

Program Coordinator/Faculty Participation Email Invitation & Email Reminder

SUBJECT: Study on Teaching of Evaluation

Good Morning/Good Afternoon,

My name is Susanne Kaesbauer and I am a doctoral candidate in the Evaluation, Statistics and Measurement program at The University of Tennessee. I am currently conducting my dissertation research and I am interested in understanding what evaluator competencies are taught in doctoral programs in evaluation across the United States, as well as how these competencies are taught.

I would like to schedule a telephone interview with you to inquire about your teaching of the Essential Competencies for Program Evaluators in your graduate program. The telephone interview should take around 20 to 30 minutes to complete. I would like to offer you a $15 gift certificate to Amazon as incentive for your participation in this study.

To obtain a comprehensive understanding of the teaching of evaluator competencies across doctoral programs, I am also conducting a content analysis of course syllabi and a survey of current evaluation doctoral students. If you would like to participate in this research, would you please be so kind to forward me current copies of the syllabi used to teach your program's core courses? Also, would you please forward

this survey link https://www.psychdata.com/s.asp?SID=144552 or the attached survey information letter to all doctoral students enrolled in your program? Thank you!

This research has been approved by the Institutional Review Board at The University of Tennessee. There are no known risks associated with your participation in this study. However, your responses to interview questions of this study may help inform the future teaching of evaluation, as well as the professionalization of evaluation as a discipline.

If you would like to participate in this telephone interview, please email me with a date and time that is convenient for you and a telephone number where I may reach you.

Thank you for your time and consideration!

Sincerely,
Susanne Kaesbauer
Doctoral Candidate
Evaluation, Statistics and Measurement
The University of Tennessee
skaesbau@utk.edu

Jennifer Ann Morrow, Ph.D.
Assistant Professor of Evaluation, Statistics, and Measurement
The University of Tennessee
Educational Psychology & Counseling Department
530 Jane and David Bailey Education Complex
Knoxville, TN 37996-3452
Email: jamorrow@utk.edu
Phone: (865) 974-6117

Program Coordinator/Faculty Participation Telephone Invitation

My name is Susanne Kaesbauer and I am a doctoral candidate in the Evaluation, Statistics and Measurement program at The University of Tennessee. I am currently conducting my dissertation research and I am interested in understanding what evaluator competencies are taught in doctoral programs in evaluation across the United States, as well as how these competencies are taught. I have recently sent you an email stating that I would like to schedule a telephone interview with you to inquire about the teaching of evaluator competencies in your program. I am not sure if you have received my emails, but I would like to ask you to consider participating in a brief telephone interview, which should take around 20 to 30 minutes to complete. I would like to offer you a $15 gift certificate to Amazon as incentive for your participation in this study. Is this something that you are interested in?

Great! When would be a good time to interview you? Under what number may I reach you? I am also conducting a content analysis of core course syllabi and surveying students. If you would like to participate in this research, would you please be so kind to forward me current copies of the syllabi used to teach your program's core courses? Also, would you please forward this survey link https://www.psychdata.com/s.asp?SID=144552 or my survey information letter to all doctoral students enrolled in your program? I will email you my survey invitation letter shortly. Thank you very much for your time!

Appendix B

Program Coordinator/Faculty Interview Protocol

Hello,

Thank you for agreeing to participate in my study. Is it ok if I put you on speakerphone and have my assistant take notes during our interview? Great! Do you have any questions for me before we begin the interview?

PROGRAM BACKGROUND

- First, could you please tell me the name of your graduate program and in which department and college it is located?
- Who is the program coordinator?
- How many faculty members are affiliated with the program?
- How many courses are required for students to graduate?
    - How many of those are core/required courses?

COMPETENCIES

- How familiar are you with the Essential Competencies for Program Evaluators framework proposed by Stevahn and colleagues (2005a)?
    - Not at all familiar
    - Slightly familiar
    - Moderately familiar
    - Very familiar
    - Extremely familiar

- How familiar are you with the competency framework proposed by the Canadian Evaluation Society Project?
    - Not at all familiar
    - Slightly familiar
    - Moderately familiar
    - Very familiar
    - Extremely familiar
- What evaluator competencies are taught in your program?
    - ECPE
    - Canadian Evaluation Society Project
    - Others?
- How are evaluator competencies addressed in your graduate program?
    - Mission/Core values
    - Coursework
    - In class assignments
    - Homework assignments
    - Practicum/Internship experiences
    - Reflections
    - Advising
    - Other?

This concludes my questions for you. Thank you very much for your responses. As you may have read in my initial email, to obtain a comprehensive understanding of the teaching of the evaluator competencies across graduate programs, I am also conducting a content analysis of course syllabi and a student survey. Would it be possible for you to

forward me current copies of the syllabi used to teach your program's core courses? Also, would you please forward my survey information letter to all doctoral students enrolled in your program? I will email you my survey invitation letter shortly. Lastly, I will need an email address to which I may send your gift certificate to Amazon. Again, thank you very much for your participation in this research and this interview!

Appendix C

Doctoral Student Survey Email Invitation & Email Reminder

SUBJECT: Study on Teaching of Evaluation

Good Morning/Good Afternoon,

My name is Susanne Kaesbauer and I am a doctoral candidate in the Evaluation, Statistics and Measurement program at The University of Tennessee. I am currently conducting my dissertation research and I am interested in understanding what evaluator competencies are taught in doctoral programs in evaluation across the United States, as well as how these competencies are taught.

I would like to invite you to participate in a brief online survey about your encounters of evaluator competencies during your doctoral studies. The survey should take around 20 minutes to complete. As incentive for your participation, you may elect to participate in a drawing for an iPad2 and 5 $20 Amazon gift certificates. If you would like to forward this email you your colleagues, who are enrolled in the same doctoral program, please feel free to do so.

This research has been approved by the Institutional Review Board at The University of Tennessee. There are no known risks associated with your participation in this study. However, your responses to interview questions of this study may help inform the future teaching of evaluation, as well as the professionalization of evaluation as a discipline.

If you would like to participate in this survey, please click on the link below. If the link does not work for you, please copy and paste the link directly into your browser window. Again, please forward this email to any colleagues enrolled in your doctoral program, which you think might be interested in taking this survey.

https://www.psychdata.com/s.asp?SID=144552

Thank you for your time and consideration!

Sincerely,
Susanne Kaesbauer
Doctoral Candidate
Evaluation, Statistics and Measurement
The University of Tennessee
skaesbau@utk.edu

Jennifer Ann Morrow, Ph.D.
Assistant Professor of Evaluation, Statistics, and Measurement
The University of Tennessee
Educational Psychology & Counseling Department
530 Jane and David Bailey Education Complex
Knoxville, TN 37996-3452
Email: jamorrow@utk.edu
Phone: (865) 974-6117

Appendix D

Informed Consent Statement for Doctoral Students

Teaching of Evaluator Competencies

INTRODUCTION

You are invited to participate in a research study focusing on the teaching of evaluator competencies. This study aims to explore what competencies are taught and how they are taught to novice evaluators in doctoral programs in evaluation across the United States.

INFORMATION ABOUT PARTICIPANTS' INVOLVEMENT IN THE STUDY

You are invited to participate in a brief online survey about your experiences with evaluator competencies in your graduate career. The survey should take around 10 minutes to complete. You are also invited to forward the informational email regarding this survey to your colleagues who are also enrolled in your doctoral program.

RISKS

There are no foreseeable risks to you stemming from your participation in this research.

BENEFITS

Responses to interview questions of this study may help inform the future teaching of evaluation, as well as the professionalization of evaluation as a discipline.

CONFIDENTIALITY

Data obtained from surveys will be kept anonymous. Identifying information will not be collected on the survey. Data will be stored securely and will be made available only to persons conducting. However, if you wish to participate in the Amazon gift cards drawing, you will be asked to enter your email address. If you chose to provide this information, your responses will remain anonymous, as your contact information will be entered into a separate database. Thus, your survey responses cannot be matched to your email address. No reference will be made in the written report, which could link you as a participant to the study.

_____ Participant's initials (place on the bottom front page of two-sided consent forms)

COMPENSATION

As incentive for your participation in this telephone interview, you may elect to participate in a drawing for an iPad2 and 5 $20 Amazon gift certificates. The winners will be selected using a random number generator and notified per email upon completion of the data collection.

EMERGENCY MEDICAL TREATMENT

The University of Tennessee does not "automatically" reimburse subjects for medical claims or other compensation. If physical injury is suffered in the course of research, or for more information, please notify the investigator in charge (Susanne Kaesbauer (865) 974-3466).

CONTACT INFORMATION

If you have questions at any time about the study or the procedures, (or you experience adverse effects as a result of participating in this study,) you may contact the researcher, Susanne Kaesbauer, at 530 Bailey Education Complex, Knoxville, TN 37996, and (865) 974-6800. If you have questions about your rights as a participant, contact the Office of Research Compliance Officer at (865) 974-3466.

PARTICIPATION

Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at anytime without penalty and without loss of benefits to which you are otherwise entitled. If you withdraw from the study before data collection is completed your data will be returned to you or destroyed.

CONSENT

I have read the above information. I have received a copy of this form. I agree to participate in this study.

Participant's signature _____ Date _____

Investigator's signature _____ Date _____

Appendix E

Doctoral Student Survey

Thank you for your interest in this survey. This survey focuses on your encounters of evaluator competencies throughout your graduate career. The survey should take around 10 minutes to complete. At the end of the survey, you will have the chance to enter your email address to participate in the drawing for an iPad2 and 5 $20 Amazon gift certificates. Please review the informed consent document on the following page to begin the survey.

<Insert Informed Consent>

- o I have read the informed consent and agree to participate in this survey.

COMPETENCIES

Please select the answer that best represents your knowledge for each question below.

- Have you learned about the Essential Competencies for Program Evaluators (ECPE), identified by Stevahn, King, Ghere and Minemma (2005) in your doctoral program?
    - o Yes
    - o No
    - o Not sure

- Below is a list of the Essential Competencies for Program Evaluators (ECPE), identified by Stevahn, King, Ghere and Minemma (2005). Please rate to what extent these have been discussed in your doctoral program. If the competencies have not been discussed, please select the "Not at all" answer option.

	Not at all	Very little extent	Little extent	Some extent	Great extent	Very great extent
Professional Practice						
Applies professional evaluation						

standards						
Acts ethically and strives for integrity and honesty in conducting evaluation						
Conveys personal evaluation approaches and skills to potential clients						
Respects clients, respondents, program participants, and other stakeholders						
Considers the general and public welfare in evaluation practice						
Contributes to knowledge base of evaluation						
Systematic Inquiry						
Understands the knowledge base of evaluation (terms, concepts, theories, assumptions)						
Knowledgeable about quantitative methods						
Knowledgeable about qualitative methods						
Knowledgeable about mixed methods						
Conducts literature reviews						
Specifies program theory						
Frames evaluation questions						
Develops evaluation designs						
Identifies data sources						
Collects data						
Assesses validity of data						
Analyzes data						
Interprets data						
Makes judgments						
Develops recommendations						
Provides rationales for decisions throughout the evaluation						
Reports evaluation procedures and results						
Notes strengths and limitations of the evaluation						
Conducts meta-evaluation						
Situational Analysis						
Describes the program						
Determines program evaluability						
Identifies the interests of relevant stakeholders						
Serves the information needs of intended users						
Addresses conflicts						
Examines the organizational context of the evaluation						
Analyzes the political considerations						

relevant to the evaluation						
Attends to issues of evaluation use						
Attends to issues of organizational change						
Respects the uniqueness of the evaluation site and client						
Remains open to input from others						
Modifies the study as needed						
Project Management						
Responds to requests for proposals						
Responds to requests for proposals						
Negotiates with clients before the evaluation begins						
Writes formal agreements						
Communicates with clients throughout the evaluation process						
Budgets an evaluation						
Justifies cost given information needs						
Identifies needed resources for evaluation, such as information, expertise, personnel, instruments						
Uses appropriate technology						
Supervises others involved in conducting the evaluation						
Trains others involved in conducting the evaluation						
Conducts the evaluation in a nondisruptive manner						
Presents work in a timely manner						
Reflective Practice						
Aware of self as an evaluator (knowledge, skills, disposition)						
Reflects on personal evaluation practice (competencies and areas for growth)						
Pursues professional development in evaluation						
Pursues professional relationships in relevant content areas						
Builds professional relationships to enhance evaluation practice						
Interpersonal Competence						
Uses written communication skills						
Uses verbal/listening communication skills						
Uses negotiation skills						
Facilitates constructive interpersonal interaction (teamwork, group facilitation, processing)						
Demonstrates cross-cultural competence						

- Where have you learned about the Essential Competencies for Program Evaluators in your graduate training? Please select all that apply.

	Yes	No	Not sure
Required evaluation course lectures			
Elective evaluation course lectures			
Required evaluation course assignments			
Elective evaluation course assignments			
Required evaluation course in-class activities			
Elective evaluation course in-class activities			
Required evaluation course outside-class activities			
Elective evaluation course outside-class activities			
Required evaluation course reflections			
Elective evaluation course reflections			
Required Internships			
Elective Internships			
Required practicum			
Elective Practicum			
Advising from faculty in my program			
Assistantships outside of graduate coursework			
Professional development or trainings outside of my program			
Other: please specify			

- Have you learned about the Evaluator Competencies, identified by Canadian Evaluation Society Project (Zorzi, Perrin, McGuire, Long & Lee, 2002), in your doctoral program?

    - Yes
    - No
    - Not sure

- Below is a list of the Evaluator Competencies, identified by Canadian Evaluation Society Project (Zorzi, Perrin, McGuire, Long & Lee, 2002). Please rate to what extent these have been discussed in your doctoral program. If the competencies have not been discussed, please select the "Not at all" answer option.

	Not at all	Very little extent	Little extent	Some extent	Great extent	Very great extent
Ethics						
Ethical conduct						
Competence and quality assurance						
Evaluation Planning and Design						
Understanding the program						
Assessing readiness for the evaluation						
Focusing the evaluation						
Systems theory, organizational development, and change						
Specific types of evaluation						
History of evaluation, evaluation theory, and evaluation models						
Research design						
Constructing meaning						
Selecting appropriate data collection and analysis methods						
Effective practices in applied research						
Data Collection						
Sampling						
Measurement issues						
Data collection methods						
Data Analysis and Interpretation						
Qualitative analysis						
Quantitative analysis						
Determining merit or worth						
Critical thinking skills						
Communication and Interpersonal Skills						
Interpersonal skills						
Reporting skills						
Other communication skills						
Project Management						
Managing evaluation projects						

- Where have you learned about the Evaluator Competencies, identified by Canadian Evaluation Society Project (Zorzi, Perrin, McGuire, Long & Lee, 2002), in your graduate training? Please select all that apply.

	Yes	No	Not sure
Required evaluation course lectures			

Elective evaluation course lectures			
Required evaluation course assignments			
Elective evaluation course assignments			
Required evaluation course in-class activities			
Elective evaluation course in-class activities			
Required evaluation course outside-class activities			
Elective evaluation course outside-class activities			
Required evaluation course reflections			
Elective evaluation course reflections			
Required Internships			
Elective Internships			
Required practicum			
Elective Practicum			
Advising from faculty in my program			
Assistantships outside of graduate coursework			
Professional development or trainings outside of my program			
Other: please specify			

- Have you learned about any other Evaluator Competencies, in your doctoral program?

    - Yes
    - No
    - Not sure

(**Note:** Use branching. Only those who responded yes to the previous question should see the remaining questions until the demographic items begin)

- Please specify the other Evaluator Competencies you have learned about in your doctoral program.
    - _____
      _____
      _____
- To what extent have you learned about these other Evaluator Competencies you described?
    - Very little extent
    - Little extent

- Some extent
- Great extent
- Very great extent

- Where have you learned about these other competencies in your graduate training? Please select all that apply.

	Yes	No	Not sure
Required evaluation course lectures			
Elective evaluation course lectures			
Required evaluation course assignments			
Elective evaluation course assignments			
Required evaluation course in-class activities			
Elective evaluation course in-class activities			
Required evaluation course outside-class activities			
Elective evaluation course outside-class activities			
Required evaluation course reflections			
Elective evaluation course reflections			
Required Internships			
Elective Internships			
Required practicum			
Elective Practicum			
Advising from faculty in my program			
Assistantships outside of graduate coursework			
Professional development or trainings outside of my program			
Other: please specify			

DEMOGRAPHIC QUESTIONS

Please select the answer that best represents you for each of the demographic questions below.

- Are you currently enrolled in a doctoral program or a master's program?
    - I am enrolled in a doctoral program
    - I am enrolled in a master's program

(Note: if students selected "enrolled in master's program", use branching to send them to the thank you note and the option to participate in raffle)

- Did you complete a Master's degree prior to entering into your doctoral program?
    - Yes
    - No
    - Prefer not to answer

- If you answered yes to the previous question, in what discipline have you completed your Master's degree? Please specify.
    - _____

- Please select the university, at which you are currently completing your doctoral work.
    - American University
    - Boston College
    - Brigham Young University
    - Claremont Graduate University
    - Columbia University
    - Georgia State University
    - Florida State University
    - Ohio State University
    - Oklahoma State University
    - Syracuse University
    - Tennessee Technological University
    - The George Washington University
    - University of California – Berkeley
    - University of California – Los Angeles
    - University of Connecticut
    - University of Iowa
    - University of Kentucky
    - University of Louisville
    - University of Maryland - Baltimore County

- University of Minnesota – Twin Cities
- University of North Carolina – Chapel Hill
- University of Illinois – Champaign Urbana
- University of Pittsburgh
- University of South Florida
- University of Tennessee – Knoxville
- University of Texas – Austin
- University of Virginia
- Utah State University
- Washington State University
- Western Michigan University
- Prefer not to answer
- Other_____

- How would you classify your current status in your graduate program?

    - 1st year student working on coursework
    - 2nd year student working on coursework
    - 3rd year student working on coursework
    - 4th year student working on coursework
    - 4th year student working on dissertation only/coursework completed
    - 5th year student working on coursework
    - 5th year student working on dissertation only/coursework completed
    - 6th year student or greater working on coursework
    - 6th year student or greater working on dissertation only/coursework completed
    - Prefer not to answer

- Are you currently a full-time student? (taking 9 credit hours or more per semester OR taking at least 6 credit hours in combination with a 20hour assistantship)?

    - Yes, I am a full-time student
    - No, I am a part time student
    - Prefer not to answer

- What is your gender?

    - Male
    - Female
    - Prefer not to answer

- Please indicate the year in which you were born.

    - _____
    - Prefer not to answer

- Please select the ethnicity you most identify with.
    - White or Caucasian
    - Black or African American
    - American Indian or Alaska Native
    - Asian
    - Hawaiian Native or Pacific Islander
    - Prefer not to answer

- Are you Hispanic?
    - Yes
    - No
    - Prefer not to answer

Thank you very much for your participation in this survey! Please enter your email address below to participate in the drawing for the iPad2 and the 5 Amazon $20 gift certificates. Also, please feel free to forward this survey link <INSERT SURVEY LINK> or the survey invitation email to your colleagues, who are also enrolled in your doctoral program.

- Email address: _____

Appendix F

Content Analysis Coding Sheet

CODING SYLLABI FOR COMPETENCIES INSTRUCTIONS

CODING DIRECT REFERENCES

The syllabi may contain direct references to the following two competency frameworks and competency categories.

Competency Framework	Essential Competencies for Evaluators	Canadian Competency Framework
Competency Categories	Professional Practice	Ethics
	Systematic Inquiry	Evaluation Planning and Design
	Situational Analysis	Data Collection
	Project Management	Data Analysis and Interpretation
	Reflective Practice	Communication and Interpersonal Skills
	Interpersonal Competence	Project Management

Note: Code these as 1 if they appear exactly as stated above.

CODING INDIRECT REFERENCES

1. ETHICS

- Evaluation standards
  - Joint Committee Standards
  - AEA Guiding Principles
- Respect for clients
- Respect for public welfare
- Contributing to knowledge base of evaluation

2. EVALUATION ANALYSIS, PLANNING & DESIGN

- History of program evaluation
- Evaluation theory and models
- Determine program context or organization's culture
  - Political considerations
- Identify stakeholders

- Determine program evaluability (Understanding the program & Determine if it can be evaluated)
- Evaluation use (i.e. use of findings, recommendations to make changes to program)
- Modify study in process (flexibility)
- Evaluation/Research Design
    - Selecting appropriate methods for collection and analysis of data

3. DATA COLLECTION, ANALYSIS & INTERPRETATION

- Analyzing data
    - Quantitative knowledge/skills
    - Qualitative or knowledge/skills
    - Mixed Methods knowledge/skills
- Literature reviews
- Collecting Data
- Interpreting data
    - Making judgments
    - Develop conclusions
    - Develop recommendations
- Reporting findings

4. INTERPERSONAL COMMUNICATION & REFLECTIVE PRACTICE

- Written and oral communication skills
- Facilitating interactions
- Building professional relationships
- Cultural Competence
- Aware of self – engages in reflections (an kind of journaling)
- Professional development

5. PROJECT MANAGEMENT

- Responding to RFPs (Requests for Proposals)
- Responding to client questions
- Identifying resources
- Identifying a project timeline
- Supervising and training others
- Use of technology
- Giving presentations

Note: Code these as 1, if they appear in any of the following categories:

- Lectures
- Course Descriptions
- Assignments
- Activities
- Experiences (Practical or Field)

- Internships
- Practicum
- Advising

Vita

Susanne Kaesbauer received her Bachelor's Degree in Psychology with departmental honors from Old Dominion University in 2004. Upon graduation, Susanne enrolled in the doctoral program in Evaluation, Statistics and Measurement at The University of Tennessee. Over the course of her doctoral studies, Susanne gained evaluation, research and project management experience while working on a variety of education and health-focused projects. Susanne authored and co-authored numerous technical reports and presented research at national and regional conferences. In addition, Susanne gained teaching experience during her graduate studies. Susanne graduated from The University of Tennessee with a Ph.D. in Evaluation, Statistics and Measurement in May 2012.