DEMONSTRABLE COMPETENCE: AN ASSESSMENT METHOD FOR COMPETENCY DOMAINS IN LEARNING AND LEADERSHIP DOCTORAL PROGRAM

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ABSTRACT

Through this paper, we describe how a doctoral program in Learning and Leadership combines the best of both worlds from theory based programs and applied programs. Participants work from their embedded professional practice underpinned with the theoretical constructs of the program's seven foundational competency domains.

Competencies are characterized as behaviors, knowledge, skills and abilities, exhibited in professional practice, and can be objectively measured, enhanced, and improved through learning, both formal and informal. Demonstration of competency (or lack thereof) directly impacts the success of individuals and organizations. Core competencies, for purposes of our program, are areas of focus upon which future learning and professional practice will be developed. Using core competencies as the baseline for a degree program enhances knowledge acquisition and performance. Competencies should not be static, but are continually enhanced through academic engagement, experiential learning and ongoing professional development, and serve as progress indicators for the evaluation and assessment process.

The Learning and Leadership Doctoral Program is grounded in the following seven competency areas. Upon completion of the coursework, participants are expected to exhibit demonstrable competence in each area, as well as the ability to synthesize the connections between the seven domains.

- Learning
- Leadership
- Research
- Measurement
- Organizational Effectiveness
- Technology and Innovation
- Communication

Using a process of weaving experiential learning with theoretical constructs throughout the program's core coursework, participants demonstrate their competence in the program domains in an ongoing manner that culminates with the Comprehensive Assessment; a presentation of a Digital Portfolio cataloguing their demonstration of competence through Critical Reflections on each of the program domains including artifacts to support the demonstration of competence and related experiential learning. This Comprehensive Assessment is held with a team of at least three faculty members and includes both written and oral components.

The session concludes by reviewing lessons learned, best practices, and opportunities for further program development.

KEYWORDS

Experiential Learning, Demonstrable Competence, Competency Domains

1. INTRODUCTION

In our Doctoral Program in Learning and Leadership, the Comprehensive Assessment represents the blueprint for evaluation of progress in and completion of the program. The Comprehensive Assessment is a work-in-progress evidenced by a Digital Portfolio of specific artifacts used to demonstrate competence in seven program domains, including a detailed Critical Synthesis Paper (CSP). The oral presentation of the Digital Portfolio (written components) serves as the Comprehensive Assessment in the program, prior to moving to the dissertation stage. Consequently, it is imperative that each participant's Digital Portfolio demonstrates evidence of competency weaving theoretical understanding and fluency with knowledge of and reflection on seminal works associated with the competency, specific experiential learning, best practices, and practical application in each of the competency areas. The Digital Portfolio will evolve in quality and quantity during the program. Throughout the doctoral program, each participant reviews, along with the program advisor and the core faculty, the progress being made and revises and updates the plan as needed.

2. DEMONSTRABLE COMPETENCE

This paper describes how a doctoral program combines the best of both theory based programs and applied programs and how competence in the program domains is demonstrated through core coursework, reflective practice, and the Comprehensive Assessment. Participants work from their embedded professional practice underpinned with the theoretical constructs of the program's seven foundational competency domains.

2.1 The Competency Domains

Competencies can be characterized as behaviors, knowledge, skills and abilities, exhibited in professional practice, and can be objectively measured, enhanced, and improved through learning experiences, both formal and informal. Demonstration of competency (or lack thereof) directly impacts the success of individuals and organizations. Core competencies, for purposes of our program, are areas of focus upon which future learning and professional practice will be developed. Using core competencies as the baseline for a degree program enhances knowledge acquisition and performance improvement. Competencies can serve as progress indicators for the evaluation and assessment process. Competencies should not be static or fixed, but are continually enhanced through academic engagement, experiential learning and ongoing professional development, and can serve as progress indicators for the evaluation and assessment process.

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2.2 Demonstrable Competence

Our definition of competence is the knowledge that enables a person to communicate or demonstrate a given concept or construct. Demonstrable Competence is articulating that knowledge through thoughts, actions and behaviors to indicate thorough understanding and abilities in a particular subject matter construct.

For example, if a student were studying quantitative subject matter, s/he would be expected to have the ability to select the appropriate quantitative methods, perform calculations, and then use the resulting data to perform analyses. Thus one is demonstrating competence in that subject matter by being able to do the calculations (skill demonstration) as well as to provide the analysis, which goes beyond the demonstration of skill and into competence. Competence is not only knowing how to do something; but it is also understanding what to do and why. This includes knowing why, how, and what behavior you need to engage in as a result.

Demonstrable competence is the logical way to measure evidence of learning. We view evidence of learning as showing a behavioral transformation as a result of the experience. Learning is synonymous with transformation. We believe demonstrable competence is the critical element to support stakeholder acceptance of competency-based learning versus content-based learning in graduate degree programs.

2.3 Experiential Learning Foundations

The foundation for demonstration of competence is based in the program's underlying belief that experiential learning is the basis for weaving theory with professional practice. Experiential-learning theories gained in strength and influence in the arena of educational thought starting in the late 1900's (Boud et al., 1985; Boud & Walker, 1991; Freire, 1970; Jarvis, 1987; Knowles, 1980; Kolb, 1984; Merriam & Brockett, 1997).

David Kolb (1984), in his seminal treatise on experiential learning, defined learning as "a process whereby knowledge is created through the transformation of experience" (p. 38). Kolb described this process of adaptation and transformation through a learning model in a four-stage cycle. The first stage involves the learner engaging in concrete experiences. The second stage allows the learner to use the experience as a basis for reflective observation.

From this reflection, the learner then moves to Kolb's third stage of building an idea, a generalization, or theory about the experience and reflection. The fourth stage, active experimentation, comes as the learner tests the application of the new theories in order to solve practical problems. The cycle also depicts four different kinds of learning environments, which in turn demonstrate the learning styles or preferences of the student at each stage of learning. Kolb claimed, however, that it is from the utilization of all four stages of the cycle that meaningful learning occurs (Kolb, 1984; Merriam & Brockett, 1997).

2.4 Assessment of Experiential Learning

Palomba and Banta (1999) defined assessment as "the systematic collection, review, and use of information about educational programs undertaken for the purpose of improving student learning and development" (p. 4). They advocated a view of assessment that "provide[s] students an opportunity to learn from the activities in which they engage" (p. 336). Case (1992) categorized authentic assessment into three types including performance assessment, naturalistic assessment, and portfolio assessment. There are a number of other definitions for these types of assessment. Portfolio assessment has come to be widely used in adult learning as a method that can also include performance and naturalistic assessment (Barnett & Lee, 1994). Authentic and performance assessment have often been called alternative assessment. All of the terms have two characteristics in common - first, they are all viewed as alternatives to traditional multiple-choice, standardized achievement tests, and second, they all rely on direct examination of performance on relevant, real-life tasks (Worthen, 1993). That alternative or authentic assessment emerged in the 1990s as a valuable approach to educational evaluation is evidenced by the body of research on the subject (Bol, Stephenson, O'Connell, & Nunnery, 1998; Madaus & Kellaghan, 1993; Maeroff, 1991; Meyer, 1992; Worthen, 1993).

2.5 Portfolio Assessment

Many studies describing portfolio usage in graduate education are connected to teacher education (K. Wolf, 1991). Mills and Reisetter (1995) described their experiences with authentic assessment through the use of portfolios in graduate classes in the field of education. They discussed failures and successes and the need to achieve a delicate balance between educating graduate students in what materials should be included in the portfolio, when to prescribe materials to be included, and how to encourage students to be creative in their own selection of materials. MacIsaac and Jackson (1994) also discussed the idea of balance between prescribed material and the free choice of inclusions. They advised that while learners should be permitted flexibility in constructing portfolios, the portfolio process and its products must be configured in a manner that enhances the way information is communicated to portfolio users. Further, the authors explained that structured or required materials make it easier for adult learners to substantiate the learning that has taken place, showing competencies gained in cumulative learning and demonstrating personal growth and change.

2.6 Using Demonstrable Competence to Measure Learning

From the outset of the doctoral program, participants are encouraged to begin the demonstration of competence. This is accomplished through a number of different types of course deliverables, each designed to allow the participant to weave his/her experiential learning with the concepts and constructs discovered and discussed in the various aspects of coursework.

Discussion Forums - The program utilizes a hybrid based delivery system that includes extensive use of the Virtual Classroom (Rausch & Crawford, 2012). After a preparatory broad spectrum of seminal and scholarly theoretical readings, initial face-to-face sessions are facilitated where theory is reinforced and foundations for learning established. Unlike traditional content based learning where a question based on the readings is thrown to the class from the podium, and responses can rarely be reflected upon thoughtfully and reasoned as no time is allowed for processing, imagine posing a question in a discussion forum and asking the students to pick up the discussion over the next 24 hours as they reflect upon their own life experiences and how the theoretical constructs introduced in the class may impact their current view of those experiences.

Critical Reflections - In each core course (based on seven competency domains), participants are asked to write a Critical Reflection paper. The purpose of the paper is to demonstrate competence and ultimately mastery of a specific program competency area including the specific learning about theories and concepts.

These Critical Reflection papers serve as "cover documents" representing each competency area, and are used to weave the theoretical understanding and fluency together with knowledge of and reflection on the seminal works literature associated with the specific competency, and the participant's specific experiential learning, accompanied by practical application in each specific competency area. The Critical Reflections are set with a minimum of 1500 words and typically include three entwined elements: a) a summary of the learning experience – including what the participant has done related the competency area and what the measureable outcomes of the experience were; b) identification and explanation of the relevant theoretical constructs and how they relate to the competency domain – including a demonstration of "ownership" of the identified theory; and c) utilization of the concepts and theories to explain the learning experience – including demonstrating the ability to successfully and insightfully apply the theory to practical application.

Competency Plan - While the foundational competencies of the doctoral program are Learning and Leadership, all seven competencies are important. One way that we work with participants to better understand and articulate the integrated nature of the competencies is to encourage them to separate the seven competencies and view them in isolation through the Competency Plan and then put them together in a final synthesis as their program unfolds. The Competency Plan is organized around the following questions:

- What is my background/history relative to this competency area? Experience in the area, courses related to the area, and reflections on my current competence in this area?
- What level of competence do I want to achieve in this competency area? Published, scholarly, and leading-edge competence? Professional-practice competence?
- What is my plan to achieve the desired level of competence in this area? Academic plans, professional plans, collaborative plans, personal plans?
- How do I intend to integrate each of the program's required courses into my overall plan?

Digital Portfolio - Demonstration of competence is documented via a Digital Portfolio that the participant designs, creates and constructs throughout the program. The purpose of the Digital Portfolio is to document and assist in assessment and evaluation of the participant's level of personal growth and subject matter competence as reflected in each of the seven competency areas represented in the program, including artifacts and materials that demonstrate how the participant has developed competence and ultimately mastery through application in professional practice. The Digital Portfolio is a tool which assists the participant in the collection and organization of artifacts and materials that reflect his/her progress and achievements during the doctoral program. The specific method of how the participant collects and organizes the Digital Portfolio is a matter of his or her choice; however, most choose to organize by competency area. Each section of the Digital Portfolio includes artifacts and materials that demonstrate how the participant has developed and is developing competency in the specified domain. The Competency Plan provides an outline of the materials to be collected and organized in the Digital Portfolio. The Digital Portfolio is a practical record that chronicles the participant's growth in Learning and Leadership. The participant works closely with program faculty and advisor to determine artifacts that are relevant to the Digital Portfolio documentation. Items included in the Digital Portfolio should be carefully selected and should tie directly to the competency domains.

The Critical Synthesis Paper (CSP) is the culminating manuscript demonstrating the participant's knowledge and understanding and a complete synthesis of all seven competency areas. Its purpose is to exhibit knowledge of the academic discipline associated with the competencies and confirm effective analytical abilities and writing proficiency in a holistic fashion, not just a paper that bolts seven competencies together or is merely a report on each competency area. The CSP reflects the participant's personal journey in the Learning and Leadership program.

The Critical Synthesis Paper should be 4000 words (minimum) in length. The Critical Synthesis Paper (CSP) contains the following elements:

a. A personal reflection on the subject of learning and leadership: What your definition of learning and leadership was in the beginning, what it is now, and how it has changed.
b. Relative to "learning" and "leadership," who you were as you began the program at Induction, how you have changed, and who you are now.

The Critical Synthesis paper is where the participant weaves together his/her understanding and demonstration of competence across the seven program domains, with an emphasis on the foundational domains of Learning and Leadership. The participant's ability to intertwine and make experiential connections among the seven domains is the ultimate step in the demonstration of competency.

3. CONCLUSION

Over the past 7 years since the program begin, we have learned a number of lessons relative to adopting Demonstrable Competence as the method for assessment of learning in the program. One technique that seems to be particularly successful, as well as appreciated by the participants in the program, has been building the process of demonstrating competence from the outset of the program into each core course. By using the "rough draft" of the Critical Reflection for the program domain in the initial core topic courses, participants begin to weave their experiential learning with the theoretical constructs of the coursework from the very beginning. This serves in two ways. First, they are able to begin building the framework for the Comprehensive Assessment early, and by the time they have completed the core coursework, the structure of the written parts of this culminating deliverable is largely in place. Secondly, they are learning the process of demonstrating competence in the program domains in the earliest stages of the program and this process builds skill, competence, and confidence, allowing and even encouraging continuous success.

Program experiences reinforce that Demonstrable Competence is truly an expression of learning through thoughts, actions and behaviors that represent thorough understanding and application in a subject matter domain. We view evidence of learning (demonstration of competence) as being able to show a behavioral transformation as a result of the experience. We believe demonstrable competence is the critical element for competency-based versus traditional content-based learning in graduate programs.

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