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Walden University

Professional Doctorates

Literature, History,
and Recommendations

WALDEN UNIVERSITY
A higher degree. A higher purpose.

Walden University

Professional Doctorate Working Group

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Overview

Introduction

The purpose of this paper is to guide the Walden University academic community toward a consistent understanding of the standards and scope for our doctoral degrees, with a focus on the professional doctorates. The specific purpose of the findings in this paper is to help shape future development and assessment of professional doctorates within the University. Tools within this document can be used for guidance and criteria to help demonstrate that Walden is upholding basic agreed-upon standards of doctoral education.

In 2011, a working group met weekly across the spring and summer to discuss current readings on professional doctorates and doctoral scholarship—along with Walden’s history with professional doctorates—and to come to consensus on some recommendations for doctoral expectations. It is our belief that from this effort, we can more effectively communicate our general approach to professional doctorates in relation to doctoral research standards and Walden’s mission of positive social change.

Because the work of this group naturally evolved into discussions of our professional doctorates in comparison to our Doctor of Philosophy (Ph.D.) offerings, this white paper reflects a certain level of pragmatic dichotomous thinking in its approach. Our exploration certainly revealed that doctoral degrees, in general, are neither so discreet nor easily categorized, however, and even the notion of a continuum might not capture all the nuances of some dimensions. We would hence stipulate at the outset that the conclusions and recommendations are designed to clarify our general thinking about these degrees, while leaving the specific details to the academic leaders of these programs.

A History of Graduate Education

Doctoral education has a long history that is tied directly to the longer histories of academic areas, many of which can be dated back to the emergence of scientific thinking in the Dark Ages. Fortunately, this diversity prompted Biglan (1973) to create a taxonomy of academic disciplines and later, the Carnegie Foundation for Advancement of Teaching (Walker, Golde, Jones, Conklin-Bueschel, & Hutchings, 2009) to develop a model for all individuals who hold doctoral degrees within them. These two lines of scholarship provide good points of entry into the important question about the differences between academic and professional doctorates.

At Walden University, almost all the doctoral areas could be labeled as applied, life-focused disciplines in the Biglan (1973) model, which makes the distinctions between degree types even more subtle. We do not offer programs in the hard, basic, non-life sciences, such as mathematics or physics (although professional doctorates can be found in these areas at other universities, such as the Doctor of Engineering). Rather, the disciplines represented by Walden’s academic programs are largely focused on the functioning of individuals and groups of people who require particular types of support and interventions to thrive and be successful in society. Additionally,

consistent with the Walden University mission of positive social change, our programs specifically address strategies to improve the human condition—aligning well with assertions that it is wrong to award a doctoral degree without any “service to community” aspect (Bourner & Simpson, 2005).

Individuals with a terminal degree are granted a certain level of “independence,” as are all types of professionals (e.g., medical doctors, lawyers). Terminal degrees mark the end of explicit instruction, and individuals are perceived

- a. to understand fully all the necessary information about their field of study, and
- b. to be in possession of a distinct skill set that is consistent with the degree that they hold.

To retain this independence, a group of professionals must be responsible for articulating the standards for admission into the group, maintaining and “enforcing” those standards, and training future professionals. In academic disciplines, the Ph.D. has historically served as the gateway into the profession, as well as the credential to speak for the profession and to teach other professionals. That landscape has been changing with the advent of professional doctorates, however, such as the ones currently offered at Walden University (i.e., the Doctor of Education or Ed.D., the Doctor of Business Administration or D.B.A., and the Doctor of Nursing Practice or D.N.P).

It is not difficult to find examples of doctoral programs that have changed from a professional doctorate to an academic doctorate (e.g., from an Ed.D. to a Ph.D. in Education), often for no other reason than to make their graduates more “marketable” in an increasingly competitive environment where the Ph.D. is still perceived as preferable. As a matter of fact, since the working group originally explored this topic, Harvard University made the decision to teach-out the country’s oldest Ed.D. and to begin offering a Ph.D. in Education (Basu, 2012). Conversely, institutions have begun to offer a variety of professional doctorates, often in conjunction with their Ph.D. programs, to respond to the emerging role of knowledge worker and shifting expectations of professional fields within the global knowledge economy (Usher, 2002). Walden University is one such institution.

In some universities, a professional doctorate is only distinguished from the Ph.D. in the number of credit hours in research training. In other schools, the program tracks are completely distinct, as is currently the case at Walden University. Further complicating this discussion is the fact that professional doctorates at some institutions are as “academically dense” and research-focused as Ph.D.s at other schools (e.g., an Ed.D. from Columbia). The scholarship on doctoral education also reveals that this challenge is global, as these degree types are being researched and discussed in countries such as Australia and Great Britain. Much of the scholarship cited herein is from writers in these countries.

Discussed more fully on page 5, one broad way to view these changes within any one discipline is that two types of doctoral-level professionals are emerging: one that maintains a focus on continuing to develop the “science of understanding” (academic) and another that is focused on the “science of implementation” (professional). For example, in education, developing an understanding of the core nature of student learning is different than understanding the process of implementing and evaluating that information in real-time settings; but even with this simple distinction, there is much overlap based on the history and goals of particular degrees. In some

instances, such as the Ph.D. in Clinical Psychology, the scientist-practitioner or Boulder model was created to prepare professionals with both skills sets.

Built on the Germanic model of graduate education, the Ph.D. emerged in the 19th century but became more widespread in the 20th, as the U.S. research university grew to be the global standard for higher education. In the latter half of the 20th century, the relationship between higher education and "the public good" began to change, however. Historically, the only "client" for Ph.D.s had been the academy that produced them. With increasing credentialing and professionalization within some disciplines, the terminal degree was called upon to serve different purposes, especially in professional areas. Although always a fixture in higher education, a second wave of professional and practice doctorates began to emerge more distinctly as alternatives to the Ph.D. (and in some disciplines and schools, the only option) for a terminal degree.

At this juncture, we should note that the Ph.D. and professional doctorates are actually a subset of a larger environment for individuals seeking an advanced education. Clearly, as first-professional degrees, the M.D. for medical doctors and the Pharm.D. for pharmacists are two examples of other types of doctorates; but, although these other doctoral degree types are not offered at Walden, we should recognize the influences of the soft boundaries between these degrees and the disciplines in which they exist in shaping our offerings. For example, regardless of the type, doctorates in the health and medical areas usually involve hours and hours of closely supervised practice. Hence, disciplinary expectations (and those of accrediting bodies) put different burdens on the D.N.P. than the D.B.A. or Ed.D.

In light of the scholarship in this area and its history, within the first decade of the 21st century, the professional doctorate still seems to be viewed as a relative newcomer in higher education, which can be slow and resistant to change. Curricular innovation will only be successful when it meets the needs of its clients, increasingly the professional areas (Usher, 2002), but achievement of that goal can take much time and energy. Bourner and Simpson (2005) gave the example of the Master of Business Administration (M.B.A.) as a similar shift in approach at the master's level that took decades to emerge as a standard in the business profession. Walden University has also had its own unique history with the two types of degree.

Walden's History of Doctoral Education

Historically, Walden University has served working professionals who, for life reasons, were unable to complete a traditional program. Many of these early graduates arrived at the University as ABD (all but dissertation) and at a time when the very first computers were being connected in what would later become the Internet. As the decades passed, increasing numbers of students who were just beginning the doctoral journey and seeking to do so in the distributed environment of distance education began to enroll. As the various academic fields also evolved, the doctoral cohort diversified, and the University endeavored to offer both degree types.

Somewhat inconsistent with the historical goals of doctoral education, Walden University has not expressively had a mission of preparing future faculty, especially potential junior faculty. Instead, our service to working professionals has typically been focused on either advancing their skills as an established practitioner or as an already-practicing educator in an area. Such goals

actually align quite well with two other broader concerns with the current state of affairs in the United States: the abundance of faculty in the system and “credential creep” in the professions (i.e., the credentials needed for positions are increasing).

Currently, Walden has three professional doctorates in place with additional programs in development: the Ed.D., the D.N.P., and the D.B.A. Each of these doctorates has had distinctive journeys with important strengths and lessons learned that contribute greatly to our thinking regarding Walden University’s approach to the professional doctorate. Our current key distinguisher for professional doctorates has been an applied practitioner focus with contributions for immediate practice and current contexts. We are still working on ways to crystallize that distinction from our Ph.D. programs, however, given the history of practice orientation. That goal motivated the formation of this working group.

Core Ideas in Doctoral Education

Equal but Different

In reviewing the scholarship in this area, the somewhat paradoxical notion of "equal but different" appears in nearly every discussion of the professional doctorates in relationship to the Ph.D., in some shape or form. These authors spent some considerable time clarifying how, on particular shared dimensions, the two types of degrees are different in their approaches. This tactic also provides an appropriate structure for the discussions of these two types of degrees at Walden University. And, the logical point to start this discussion is their common status as doctoral degrees.

At their heart, all doctoral programs at Walden University should be first and foremost *doctoral level*. A doctoral degree is the terminal degree in a field, and as such, it places certain expectations and responsibilities on a person who holds it and the program that delivers it. This notion is best captured in the Carnegie Foundation's metaphor of stewardship (Walker et al., 2009, p. 11), as the actions of a person who is "entrusted with that care by those in the field on behalf of those in and beyond it" (p. 12). The central questions addressed in this white paper concern the domains of this stewardship and how they are similar and different for the two types of degrees.

Stewards of Practice and Stewards of the Discipline

The Carnegie Foundation's intention for invoking this metaphor of stewardship was to help students (and faculty) to appreciate the broader moral and ethical responsibilities of having a doctorate and to see themselves as not simply managers of their careers. To this end, they highlighted three behavioral characteristics of stewardship that apply to both types of degrees—*generation, conservation, and transformation* (Walker et al., 2009, p. 12).

- First, stewards are charged with creatively generating new knowledge for their fields; hence, both types of doctoral programs must focus on developing their students' skills at knowledge production and management. This particular topic is the focus of *Research Training* and the *Doctoral Capstone* discussions, later in this paper.
- Second, stewards must critically converse valuable and useful ideas in their domains. Whether in an academic discipline or professional field, stewards serve as leaders across time. By virtue of this status, they are also responsible for bringing a critical eye to their work, resisting fads and change for change's sake, and helping shape the legacy of their field. Therefore, as discussed below in *Educating Doctoral Students*, a comprehensive understanding of the field or discipline is essential.
- Third, stewards are responsible for transforming their knowledge and disseminating it in various venues. Knowledge has little value if it is neither accessible to the people who can utilize it nor used to transform the lives of others. In this discussion, the Carnegie Foundation echoed much of the earlier work of Boyer (1991), whose book became a manifesto for universities to broaden their views of what it means to transform

knowledge. The skills needed to transform knowledge are also discussed in *Educating Doctoral Students*.

Table 1 highlights basic foundational differences between the types of doctorates and can help when reviewing or conceptualizing our doctoral programs.

Table 1. *Differences in Stewardship: Professional Doctorates vs. Ph.D.s*

Domain	Degree Type	
	<i>Professional Doctorate</i>	<i>Academic Doctorate</i>
Generation of knowledge	The researching professional	The professional researcher
Conservation of valuable and useful ideas	The practitioner-scholar	The scholar-practitioner
Transformation and dissemination of those understandings	"Enterprising self"	"Autonomous scholar"

Educating Doctoral Students

Beyond the Master's

A doctoral degree is a terminal degree, earned after years of academic study; hence, it's appropriate to discuss what doctoral students should "bring to the table" upon admission, with a particular focus on the master's degree. For most academic areas at Walden University, regardless of degree type, a master's degree serves as the first "practitioner degree" that someone can obtain (e.g., the M.S.Ed. or M.B.A.). Of particular note, for many practitioners, these professional master's degrees may have served as a viable terminal degree for many years. Increasingly, however, a master's degree is simply not enough to remain competitive in a market with credential creep or in a profession that is relying more heavily on knowledge production and use.

Master's degrees could rightly be the topic of another white paper. Regardless of degree type, to support the stewardship expectation of conservation, the content of a doctoral program must be more in-depth than what is provided in a related master's program. The expectation on master's students is that they are familiar with the *current* knowledge and practices within a domain. Doctoral students are focused on advancing and generating knowledge, and as such, they need to be knowledgeable of the core content and knowledge of their area and also demonstrate the ability to be the thought leaders in their domains.

In regard to master's degrees, the two degree types differ:

- Professional doctorates clearly require that incoming students have experience as a practitioner in the field in which they plan to advance their skills (Tennant, 2004). There should, therefore, be less focus on supervised practice, as is needed in the types of doctoral programs that take students earlier in their training, directly from undergraduate (e.g., the Pharm.D.).
- For academic doctorates, the expectation of scholarly exploration of a topic does not necessarily imply that a person has *direct* experience with it, although practitioner experience would certainly provide the necessary grounding in disciplines that are so clearly focused on individuals and groups. A wider range of master's training would be acceptable in applicants.

Research Training

Probably no topic in this domain is as controversial and contestable as the requisite research training for students in these types of programs. This type of content is perceived to be difficult to learn and hard to teach and supervise, and many students adopt a "just give me what I need to complete my capstone" approach. Unfortunately, such a view runs completely counter to the goals of both program types. The strongest academic researchers are the ones with the most tools in their "research tool belt," such that they can develop and answer a variety of research problems most effectively. Even more so perhaps, holders of professional doctorates need to be prepared to be flexible and responsive to challenges that are transdisciplinary in the emerging knowledge economy (Usher, 2002). Only knowing how to compute a student's *t*-test won't work for either group.

Every program area at Walden functions in an environment where the abilities to document outcomes and demonstrate accountability are key job demands. That is, understanding how to collect information and to make sense of the results, which is basically "research," transcends all these degrees. Further, to cast the Ph.D. as a research degree and then remove research training as a curricular aspect to a professional doctorate, to help distinguish it in some way, is simply incorrect and misguided. They are all research degrees. The differences lie elsewhere.

Research is the "sharing of knowledge" (Bourner & Simpson, 2005) and, by nature, relies on some shared approaches to collecting and analyzing information, such that the knowledge from one setting can be used in others (by other researchers, practitioners, or even one's clients). This attribute does not vary between academic and professional doctorates. For example, the ability to take a patient's temperature, as a data point that is measured and understood in the same way by all medical professionals, helps assure that the knowledge produced by individuals with a D.N.P. or a Ph.D. in Nursing has both immediate and future value (or test scores in education, liquidity ratios in business, etc.).

Research Skills and Dispositions

Scientific thinking is at the core of any doctoral program, as well. A person with a doctorate needs to have the capacity to weigh competing views and to ascertain the best method to address gaps in understanding within either their academic disciplines or areas of practice. Therefore, this conversation is better focused on providing the skills that should be common to anyone in the business of producing and using knowledge (including master's students, arguably). In these discussions, three core assumptions seemed to emerge in relation to graduate degrees at Walden University:

1. Knowledge produced by research must be grounded in practice and application.
2. Practice must be informed by knowledge provided through research.
3. Both practice and research must be focused on assuring positive social change.

In 2007, the academic community at Walden advanced a comprehensive set of research competencies/dispositions that it felt needed to be central to all our doctoral students' training (Appendix A): a laudable and ambitious goal, given the amount of disciplinary and professional variance represented by these programs, even within the niche of the Biglan (1973) model where most reside. Such an approach could be viewed as especially forward-thinking, given the

disciplinary isolation and "ivory tower thinking" that has been suggested of university research, over the years. The value of this core set is that it builds a shared bridge between academic research intended to be public and generalizable and professional research that results in more action-oriented, personal, and organizational knowledge (Bourner & Simpson, 2005).

So, where is the difference? As discussed in the *Doctoral Capstone* section, the two degrees can be distinguished by their *approach* to producing knowledge. Table 2 captures some of these key difference found in the scholarship on doctoral education.

Table 2. *Differences in Knowledge Development and Philosophy Between Professional Doctorates and Ph.D.s*

Areas	Degree Type	
	<i>Professional Doctorate</i>	<i>Academic Doctorate</i>
Source of the problem	Based on the student's experience as a working professional	Based on the student's experience as a scholar of the discipline
The role of reflection	On the outcome and the student's role in the process	On the current knowledge and student's ability to make a contribution
The context	One of immediate application that may be generalizable to other settings	One of generalizable results that may be applicable to a variety of situations
Accountability	Knowledge that serves interests of the professional area—the communities of practice	Knowledge that serves interests of the discipline—the academic community
Sources of learning	The workplace	The discipline
Type of knowledge	Working or practical knowledge	Disciplinary knowledge
Dissemination	To the profession through consulting, presentations, and teaching, where appropriate	To the discipline through journals and academic conferences, as well as preparing future stewards
Location	Distributed through the community of practice	Centralized in the academic communities
Organization of knowledge	Transdisciplinary	Disciplinary

These differences beg the question of the training needed to perform in a particular domain, however. Three conclusions of this working group, related to this topic, were as follows:

1. The shared research competencies/dispositions should not be viewed as dichotomies (i.e., the student "has it" or "does not"), but rather as a continuum. For example, a competency around measurement principles could range from an ability to understand the need to report a reliability estimate (e.g., Cronbach's alpha) for psychological test scores, to the ability to conduct psychometric studies of an instrument to strengthen its utility (e.g., with Item Response Theory).
2. Disciplinary differences lie in the types of questions that need to be answered. For example, the observational and qualitative research skills needed by an educator to study aggression in the playground dynamics of 1st graders are different than the meta-analytic skills used by a public health practitioner studying national trends in injuries to 6-year-old children. Additionally, the on-the-ground methodologies in the professional domain seem more diverse than what are generally accepted in academic circles.
3. Variances in the types of questions asked demand that competencies are stressed differently. For example, to study complex human choices on an organizational scale, such as differences in employee retention rates across corporations, may require a grounding in structural equation modeling (SEM). For a human capital professional tasked with leading an effort to retain more employees in an institution, SEM would be overkill for this research and the people with whom it would be shared.

The recommendation is that programs start with the set of research competencies and align them to the demands of their discipline and degree type (Appendix A provides an example with the D.B.A. and Ph.D. in Management). Instead of asking, "Do students need this or that?", program leaders and developers should focus on which competencies demand added attention and training for someone to be successful—not only in completing the capstone, but in the years ahead as a steward.

The Doctoral Capstone

The doctoral capstone is a key component that sets doctoral education apart from almost all other types of academic programs (Gardner, 2009; Walker et al., 2009). For many universities and regardless of degree type, the nature and scope of these capstones can vary noticeably, but the resulting document is often simply called a “dissertation.” As professional doctorates began to emerge at Walden University, a distinction was made between the two types of capstones: a dissertation for the Ph.D. and the “doctoral study” or “project study” for the professional doctorates. In some unanticipated ways, perhaps, this distinction has actually helped to clarify some of the broader differences between the two types of degrees.

As it should be, a doctoral capstone can be quite challenging. After years of traditional education, where the expectations are generally clear and the learning experiences are mostly structured, the doctoral capstone is a completely different “beast.” The typical expectations now involve students’ ability to recognize something that does not exist (the proverbial gap in the literature or solution to a problem in practice, discussed later), to design and defend a viable strategy or method that addresses it and that respects the shared knowledge of the phenomenon, *and then*, basically, to write a book about the adventure.

One key point of debate in discussions of the two types of degrees has been around the nature of the capstone experience, because it is tied so directly to the goals of the degree and expectations of stewardship. Most members of the academy are familiar with the demands and opportunities of a traditional dissertation as the capstone for a Ph.D. The newer doctoral study or project study as the capstone for the professional doctorates, however, must resolve the demands that it be a doctoral-level experience but not a dissertation—equal but different.

The confusion is further exacerbated by the fact that, at their core, these two capstones share many characteristics. Five attributes seem to be common to these two capstones.

1. Executing the capstone is seen as the final demonstration of students’ achievement in the doctoral program. Successful completion of this project is the sign that the person has achieved that level of independence that is expected of anyone with a doctoral degree. Ideally, the experience should be *cumulative* and allow these students to *integrate* various aspects of their academic training through a single project, thus allowing them to shine as new stewards. Key to their role as stewards, a capstone must contain a synthesized narrative of the germane scholarship on a topic.
2. The project itself is more than the academic exercises and course assignments that students have executed in their classes, to this point. Rather, a capstone involves the skills that they will use as a steward in the years ahead. Therefore, the capstone project should address an authentic problem with a viable solution that is grounded in both the scholarship of an area and accepted practices for knowledge production. This thinking is most clearly articulated in the *Litmus Test for a Doctoral-Level Research Question* (Appendix B), which is already being woven throughout the documents that support doctoral capstones at Walden.

3. The capstone should challenge doctoral students to be the “advanced knowers” that they have become (Gardner, 2009). As Perry (1970) noted, the abilities to respond to order (e.g., complete assignments) and then to create disorder within it (e.g., see multiple sides of a problem) are the epistemological abilities that students often develop in their undergraduate experience. A more complex thinker, however, is able to embrace the dissonance (e.g., conflicting views of the source of a problem or how to solve it) and then create defensible positions and structure within it. The fact that completing a doctoral capstone must start from a point of “not knowing,” in some shape or form, makes the learning genuine but challenging.
4. A doctoral capstone is a supervised experience (although the nature of these relationships seems to vary). Experienced faculty members, in their role as stewards themselves, are called upon to lend their guidance and support throughout a student’s process, from initial conception of the idea to a final evaluation of the completed capstone. Unlike in a traditional classroom where the assignment outcomes are usually clearly articulated, a student’s committee does not know the scope and nature of the final product of a doctoral capstone any more than the student does at the outset. The experience is challenging for everyone involved and calls upon different skills than those used by faculty in teaching doctoral coursework. They are discussed in the next section.
5. Finally, we would be remiss if we did not acknowledge the stress and anxiety experienced by students at this point in their career, regardless of degree type. The capstone is a liminal time between “being a student” and “being a person with a doctorate,” and the ranks of ABDs in society should not be too surprising, perhaps. All Walden University doctoral students share the support provided to them through offices such as the Writing Center, the Center for Research Quality, and Academic Residencies. The hope of this white paper is to clarify the important differences in these capstones, however, to improve the service to students completing both types of degrees.

Differences in Capstone Experiences

In reviewing this topic, the distinctions related to the capstone seem to be less about the “knowledge product” and more about *how* that product is produced, valued, and used (Bourner & Simpson, 2005; Tennant, 2004). Knowledge is knowledge, after all. The academic doctoral student seeks the gap in the literature, with the ostensive goal of making the original contribution to knowledge by filling that gap (“Here’s everything we know; now, what don’t we know?”). The professional doctoral student often starts from a problem being experienced in practice and has the goal of addressing it, thus making an original contribution to practice (“Here’s a real problem; what are the solutions for it?”).

As a result, the same topic can find its way into both types of capstones in a particular discipline, because both groups of doctoral students are focused on serving the same clientele. For example, in examining the scholarship on a particular type of workplace intervention, the Ph.D. in Management student may discover that it has not been tested with a particular subpopulation of employees. The D.B.A. student, who works with that particular subpopulation, may recognize a need is not being met for these employees and is unable to find any current research to support a particular strategy. In the end, even though they may approach the problem and use the results

differently, both students may make the same conclusion about the efficacy of the intervention that they studied.

As noted above, a Ph.D. communicates to the world that the holder is a scholar who is able to conduct research that advances the discipline. The dissertation, then, is often viewed as the first step on the journey of disciplinary stewardship. To be successful, students must demonstrate knowledge of their discipline such that they can develop a research project and enough skills as a researcher to determine the best strategies to address it. Dissertation students are not held accountable for putting the knowledge into practice, even if it has relevance—not because they are lazy, but rather, the knowledge may not always be immediately applicable.

For the professional doctorate, the doctoral study signals the ability to integrate "evidence-based practice with practice-based evidence" (Bourner & Simpson, 2005). The problems and applications are immediate and relevant. Further, rather than serving as the source of the research problem, as in academic research, the literature informs the understanding of the nature of the identified problem and formulating the solution in practice, in a doctoral study. Knowledge must fit the problem that spawned the research, instead of the paradigm in which the research was conducted, as in Ph.D.

Perhaps the goals of being "not a dissertation" and more context-driven have produced an increasing diversity in the types of capstone projects conducted by students pursuing a professional doctorate (e.g., project studies, portfolios, etc.). For the Ph.D., the dissertation is the industry standard for academic degrees. For a professional doctorate, the industry provides the standard for the nature of the problems and the applicability of the solutions; hence, we might expect a different capstone model for each new professional doctorate at Walden.

Faculty Expectations and Training

Historically, a Ph.D. has served as the “teaching credential” for professors in academic programs; yet, over the past couple of decades, the academy has seen increasing criticism for turning out researchers with no formal preparation to be teachers, who are then only reinforced for a research-over-teaching value in the promotion and tenure process (Boyer, 1997). Therefore, it seemed a bit ironic in these discussions to ask whether a person who holds a professional doctorate is qualified to teach doctoral students. That is, being a strong researcher does not guarantee that someone will be a good professor anymore than being a senior-level, skilled practitioner assures that an individual is able to teach and mentor doctoral students.

What appeared to evolve from this conversation is that the faculty role at Walden University cannot be as all-encompassing as what might be found in a more traditional program in a land-based institution. Rather, given the size and goals of our doctoral programs, a range of faculty skills will be needed to support students, and this diversity will ultimately strengthen a program. For example, in a traditional program, teaching a course in assessment might be one of the four courses in a professor’s load. At Walden University, we have the ability to hire a small cadre of recognized assessment specialists to teach just that course. For professional doctorates delivered online, the ability to incorporate more teaching and mentoring faculty with a firm grounding in real-world practice (which is not always the case in some Ph.D. programs) should distinguish these programs further.

In light of this view, each doctoral program, regardless of type, needs to identify those core areas that must be addressed in the program and recognize that students’ instructors at the beginning of a program may be different than those who work with them at the end. We already see bifurcation on doctoral committees (e.g., content vs. method), and extending this thinking beyond this setting makes good sense. In the faculty cohort, we should see a continuum of competencies and experience as appropriate to academic goals, especially in regard to a balance between research and practice.

The challenge of this approach to staffing a program is to maintain continuity across a student’s experience in it. When a professor serves as initial mentor, instructor for both core and advanced coursework, and dissertation advisor (as in most traditional, land-based programs), she or he becomes a one-person assessment team for student success and progress. As such, we need to continue to develop a comprehensive model of student progress articulating key benchmarks and expectations for the entire academic community. That work has been progressing in parallel to this effort to clarify the parameters of these two types of doctoral program formats (see Appendix C).

Recommendations

Conclusions and Recommendations for Professional Doctorates

Below are key conclusions and recommendations from the scholarship on doctoral education and the discussions in the working group, found to provide important guidance in considering standards and approach to current and future professional doctorate programs.

- 1. Distinction From the Ph.D. vs. Continuum of Elements Across Degree Types:** The level of "sharedness" is high between current Ph.D. programs and professional doctorate programs, which makes the challenge of distinguishing the degrees more difficult. Therefore, Walden generally needs to find ways to create greater distinctiveness for professional doctorates in areas where we also offer a Ph.D. This strategy does not preclude the unique practice-centered Ph.D.s or research-focused professional doctorates.
- 2. Importance of Flexibility and Appropriate Differentiation Across Professional Doctorates:** There is no "one size fits all" when it comes to professional doctorates. Field-based needs drive and shape the competencies that should be emphasized. At times, specialized tools and resources will be needed to support appropriate research and practice experiences. Academic leaders and product designers should be responsible for understanding and articulating these nuances within programs and curricula. Tools and resources should be easily identified and highlighted.
- 3. Standards and Vision Tied to University Mission:** Readings supported Walden University's approach to aligning doctoral programs to our mission. Applied contribution to social change that can be easily communicated in program goals and capstone experiences will be essential for professional doctorates. New programs should make these linkages clear so that each professional doctorate is clearly positioned.
- 4. Essence of Doctoral Training:** Because of the focus on preparation as stewards of practice, students in professional doctorate programs need appropriate training in data usage and management, including critical consumption, management, and data-based decision making, evaluation, and use of data to inform improvement. This training may be transdisciplinary and more diverse than what is given in the Ph.D. program.
- 5. Doctoral Quality Within the Context of Employer Focus:** Professional doctorates should be built with the employer perspective in mind and with the idea that the holder will make a substantive contribution to the professional setting. The professional doctorate graduate should be a critical consumer of research and producer of knowledge, for purposes such as recommending and designing initiatives, consulting and advising, developing grants, and so forth. This important competency must be addressed throughout the curricula.
- 6. Focus on the Practitioner-Scholar:** For professional doctorates, the job interview committee can be viewed as a parallel to a university faculty search committee for

graduates from traditional Ph.D. institutions. Programs should ask the question: What would our professional doctorate graduates be able to “sell” and “demonstrate” during such an interview process?

- 7. Doctoral Quality Within the Context of Targeted Career Work:** Currently, professional doctorates range from preparing for individuals who would develop programs/interventions, lead projects, write grants, and assess and lead change efforts to those individuals who become practice experts. These aspects are seen in all of the current professional doctorates. Programs should be designed with this sensitivity.
- 8. A Continuum of Competency Emphasis for Doctoral Research Competencies:** For professional doctorates, competencies should also be based on field needs and applied research training needs for maximum impact. (See Appendix A for D.B.A. example.)
- 9. Practice-Oriented Research Methodologies:** Certain approaches lend themselves well to doctoral-quality research for professional doctorates. Students need to be provided a clear understanding of what it means to do applied research that has a direct impact on practice and a “toolbox” to accomplish those goals. As such, approaches such as program evaluation, action research, policy analysis, and case study need to have presence in the core curriculum of specific doctorates, as appropriate.
- 10. Research in Professional Doctorate Capstones:** Data need to play a role in the capstone in varying ways depending on the doctorate. Professionals need to understand how data can be used to inform decisions and make cases, as well as what type of data needs to be collected, when, and for what purpose. How this skill set is seen and applied will vary based on the professional expectations for a doctorally trained professional within appropriate work settings. The capstone model should fit with appropriate doctoral research training as related to professional standards. As with the Ph.D. prospectus process, a student should submit an early outline of the study for review and approval to assure a feasible study that is sound from both a practice and scholarly perspective.
- 11. The Professional Doctorate Capstone:** Regardless of their focus, the professional doctorate capstone should
 - Address a gap in knowledge in practice
 - Contribute to the knowledge base for the improvement of practice
 - Be built upon current research and theory
 - Be of doctoral quality, as defined in the Litmus Test (see Appendix B).
- 12. Supplemental Competencies:** Additional or supplemental competencies, such as lab or clinical experiences, should be considered during program development for each professional doctorate programs.
- 13. Role of Residency:** A residency experience can provide a useful supplement for professional doctorate training and can support a cohort experience. Residency experiences need to be considered uniquely for each new program, however—especially the method in which they are delivered (i.e., face-to-face or virtual). Doctorates with a clinical practice component could include more field-based competencies in connection with employer needs and recommendations of professional associations. Often,

residencies support solidifying research training in preparation for capstone. In the end, program leaders must balance required training with ancillary experiences needed to deliver the program.

Program and Curriculum Development Checklist

Based on the scholarship and recommendations, below is a guidance checklist for academic program leaders and product development specialists when developing or reviewing a professional doctorate program. A document demonstrating how each of these items is addressed within a professional doctorate program should be included with the documentation for program proposals within university governance and as part of the Academic Program Review process for existing programs.

- _____ Connection to Walden University's **mission of social change**
- _____ Input from industry professionals in the development of **selection criteria** for future stewards of practice
- _____ Alignment to **disciplinary or professional expectations**, as embodied by groups that accredit and support professional doctoral programs in an area (please note group or body)
- _____ Linkages to **employer needs** in coursework and clinical/practice experiences
- _____ Appropriate **data literacy and usage** in the curriculum to support professional practice
- _____ Alignment of **research training** with university competencies
- _____ Academic **residency** to support student success, as balanced against the demands of the academic program
- _____ A **doctoral capstone** that links research training to **employer needs** and job skills and that aligns with university expectations for **doctoral quality**
- _____ Faculty **staffing patterns** that support a diverse **range of scholars and practitioners**, as well as a faculty who are equipped to mentor students through the entire doctoral process

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Appendix A

Example Application

Doctoral Competencies in the College of Management and Technology:
Degree of Distinguishing Focus/Application to D.B.A. Doctoral Capstone

		CMT Ph.D.	CMT D.B.A.
Competency Area 1 <i>Philosophy of Research</i>			
Empiricism	Identify the influence of empiricism on quantitative research methodology		
Positivism & postpositivism	Explain how the scientific method is based on positivism and postpositivism		
Interpretivism	Contrast interpretivism with positivism		
Constructivism	Contrast constructivism with determinism		
Deconstructivism or critical theory	Explain how critical theory research approaches use the concepts of power and justice		
Competency Area 2 <i>Research Project Design & Approaches</i>			
Formulating the research question	Utilize a gap in past research on a topic to generate a testable research question	Gap in understanding in the field of knowledge itself	Gap in practice: identify relevant research to bear
Quantitative / qualitative distinctions	Determine the types of research questions most appropriately addressed by quantitative, qualitative, and mixed-method designs		
Experimental research	Explain why the experimental method is required for determining cause-effect relationships		
Quasi-experimental	Identify the advantages and disadvantages of key quasi-		

research	experimental designs		
Nonexperimental designs (descriptive, correlational)	Determine when it is appropriate to use nonexperimental quantitative designs		
Program evaluation	Distinguish program evaluation from other approaches to research		
Case studies	Utilize case study findings to generate testable hypotheses	Only if used to build theory	
Phenomenology	Explain the purpose of research from a phenomenological perspective	Only if used to build theory	
Ethnographic methods	Contrast ethnography from other approaches to qualitative research		
Grounded theory methods	Identify the key assumptions of grounded theory research		Not appropriate
Historical research	Identify multiple sources of archival data relevant to their professional field and the limitations associated with such data		
Action research	Explain why the advantages of action research may also be limitations		
Narrative inquiry	Describe multiple forms of stories used in narrative analysis and how the "story" differs from a case study		
Competency Area 3 <i>Quantitative Research Techniques</i>			
Descriptive statistics	Know the definitions of mean, mode, and median and describe the situations where each should be used to describe the "average" value		
Probability distributions	Know the characteristics of a normal distribution and explain how those characteristics are used in hypothesis testing with reference to the Central Limit Theorem		
Hypothesis testing	Correctly test a hypothesis using quantitative data; correctly		

	interpret the results of that test with reference to Type I and II errors		
Multivariate analysis appropriate to field	Describe how multivariate analyses are used in the students' professional field		
Correlation	Correctly calculate and interpret a Pearson correlation coefficient		
Nonparametric methods	Understand the concept of rank and how it used in nonparametric statistics that test the difference between two or more groups		
Linear regression	Know the assumptions of and correctly interpret ordinary least squares linear regression		
Quantitative analysis software (e.g., SPSS)	Construct a data set using statistical software. Use that software to produce descriptive and inferential statistics		
Competency Area 4 <i>Qualitative Research Techniques</i>			
Field notes	Demonstrate skills in preparing field notes	Theory building	Application of theory to improve practice
Pilot studies / field studies	Identify different ways to collect qualitative data (e.g., individual/group interviewing, participant-observer journaling) and compare the relative tradeoffs of each approach	Theory building	Application of theory to improve practice
Document (content) analysis	Organize and analyze data through classification and coding	Theory building	Application of theory to improve practice
Observation strategies	Observe individuals, groups, objects, and settings in great detail	Theory building	Application of theory to improve practice
Interviewing	Understand how to develop an interview protocol and what is necessary for conducting effective interviews	Theory building	Application of theory to improve practice

Focus groups	Understand how to conduct focus groups in open-ended question and structured activity formats	Theory building	Application of theory to improve practice
Questionnaires	Demonstrate an understanding of conducting research using questionnaires	Theory building	Application of theory to improve practice
Journaling	Identify different ways to collect qualitative data (e.g., individual/group interviewing, participant-observer journaling)	Theory building	Application of theory to improve practice
Identifying themes in qualitative data	Analyze data for meaning and make connections across categories	Theory building	Application of theory to improve practice
Qualitative analysis software (e.g., Nvivo-NUDIST, Atlas)	Produce multiple codes for a set of documents within qualitative analysis software; use that software to show the relationship between at least two codes	Theory building	Application of theory to improve practice
Competency Area 5 <i>Quantitative Quality Assurance</i>			
Validity	Describe what is meant by validity and how to assess external and internal validity		
Reliability	Describe what is meant by reliability and how to assess external and internal reliability		
Sampling (random & deliberate)	Define a random sample and explain why a researcher may use nonrandom samples in research		
Competency Area 6 <i>Qualitative Quality Assurance</i>			
Trustworthiness	Describe specific ways in which qualitative research is judged as rigorous		
Authenticity	Discuss "fairness" in the integration of one's own and others' perspectives into the research process		

Sampling (purposive)	Identify specific strategies within purposive sampling (e.g., extreme case, typical case, etc.) and explain why each might be used		
<i>Competency Area 7 Professional Practice</i>			
Disseminating research to professional audiences (e.g., conferences)	Identify at least two ways for disseminating research in their professional field and describe scholarly expectations associated with each	Academic audience	Professional audience
Human subjects' protection	Explain the legal and ethical basis of human subjects' protection along with the basic rights of participants participating in any research study		
Grant-writing	Describe at least two sources of grants for conducting research in their field and basic requirements for securing grants from each source	Seeking to build "threads" in the school for ongoing research	
Integrating research with social change activity	Describe past, current, and future potential contributions of research in their professional field to the public good		
Working with stakeholders (e.g., community-based research)	Identify potential nonacademic stakeholders in research from their professional field along with specific considerations in working with each stakeholder		
Professional writing	Utilize appropriate conventions for professional writing when reviewing, reporting, and interpreting research findings	For publication in peer reviewed academic journals	For publication in professional magazines or edited journals

Note: *Green = highly relevant; orange = somewhat relevant; pink = not relevant*

Appendix B

Litmus Test for a Doctoral-Level Research Problem

The *Litmus Test for a Doctoral-Level Research Problem* was designed to guide doctoral students and faculty in formulating a research problem. The distinguishing characteristic of *doctoral-level research* (versus master's-level research) is that doctoral research must make an *original contribution to the field*; however, students may struggle to identify what research will *authentically* contribute to their field or discipline. The most critical step in such a contribution is to first identify a doctoral research problem with the *four hallmarks* noted here. Identifying a doctoral-level research problem is *necessary, but not sufficient*, for producing a doctoral-level capstone.

Hallmarks of the Doctoral Research Problem

In Walden University's scholar-practitioner model, a research problem shows promise of contributing meaningfully to the field or discipline *only* if the answer to *all* of the following questions is "Yes."

1. Justified?

Does evidence support that this problem is significant to the professional field? Evidence—relevant statistics (e.g., expressing an inequality, financial impact, lost efficiency), documentable discrepancies (e.g., two models that are difficult to reconcile), or other facts—must point to the significance and urgency of the problem. The problem must be an authentic "puzzle" that needs solving, not merely a topic that the researcher finds interesting.

2. Grounded in the Research Literature?

Can the problem be framed to enable the research to either build on or counter previously published findings on the topic? For most fields, being grounded involves articulating the problem within the context of a *theoretical or conceptual framework*. Although many approaches can ground a study in the scientific literature, the essential requirement is that the problem is framed such that the new findings will have implications for the previous findings.

3. Original?

For the Doctor of Philosophy

*Does the problem reflect a meaningful **gap in the research literature**?* Addressing the problem should result in an original contribution to the field or discipline.

For the Professional Doctorates

*Does the problem reflect a meaningful **gap in practice**?* Addressing the problem should result in an original contribution to the professional field.

4. Amenable to Scientific Study?

Can a scholarly, systematic method of inquiry be applied to address the problem? The framing of the problem should not reveal bias or present a foregone conclusion. Even if the researcher has a strong opinion on the expected findings, the researcher must maximize scholarly objectivity by framing the problem in the context of a systematic inquiry that permits multiple possible conclusions.

Appendix C

Phases of Doctoral Education – Professional Doctorates							
Prospect	1	New Student	2	Continuing Student	3	Doctoral Candidate	4
Benchmarks	Benchmarks		Benchmarks		Benchmarks		
Graduate Degree	Foundations Course						
Goal Statement	Initial Coursework*		Academic Coursework*				
Professional Experience	Residency 1 DBA & EdD		Residency 2 DBA & EdD (opt)				
Application			Research Courses		Practica DNP		
Student Readiness Orientation	Research Readiness		Capstone Readiness		Proposal EdD & DBA		
	Writing Readiness		Prospectus 2.0		Capstone Project		
*indicates program specific expectations							
Milestones in Doctoral Education							
Admission to Walden							
Status as Continuing Student							
Admission to Candidacy							
Graduation							
Phases of Doctoral Education – Doctor of Philosophy							
Prospect	1	New Student	2	Continuing Student	3	Doctoral Candidate	4
Benchmarks	Benchmarks		Benchmarks		Benchmarks		
Graduate Degree	Foundations Course				Internship & Field Experiences		
Goal Statement	Initial Courses and/or First KAM*		Academic Coursework & KAMs*		Advanced Coursework*		
Professional Experience	Residency 1		Residency 2 & 3		Residency 4		
Application	First Research Course		Core Research Courses*		Advanced Research Course*		
Student Readiness Orientation	Research Readiness		Capstone Readiness		Proposal		
	Writing Readiness		Prospectus 2.0		Dissertation		
*indicates program specific expectations							
Milestones in Doctoral Education							
Admission to Walden							
Status as Continuing Student							
Admission to Candidacy							
Graduation							