#### Differentiating the Research (Ph.D.) and Applied Doctoral Degrees

The document outlines various characteristics of doctoral programs and the associated research processes and resources that help to distinguish research degrees (Ph.D.) from applied degrees DrPH, DHA, DBA, EdD, DNP, DMFT.

The key research design differences between an applied and research degree is scope and significance. Both degree tracks require that the stated research design demonstrate scientific rigor. However, the applied degree will be limited in scope to the specific study context and the results should be significant to leaders and practitioners in the field. Research (Ph.D.) studies must have theoretical implications and make a contribution to the literature.

The current guidelines are that a dissertation must:

- Summarize, analyze, and integrate scholarly literature and research relevant to a topic area, focusing on developments in the area in the previous five years, and,
- Present original research in an area related to a student's program and specialization. While Ph.D. dissertations demonstrate how the research contributes to theoretical development in an area, applied doctorate dissertations typically contribute to practice.

The current standards include the non-negotiable requirement of *every* doctoral manuscript (Ph.D. or applied doctorate) to include a comprehensive, up-to-date, and critically evaluative review of the professional and scientific, peer-reviewed literature pertaining to its topic.

A Ph.D. requires *original ideas* about a specialized topic, as well as a high degree of *methodological/scientific rigor* (Nelson, & Coorough, 1994). As is traditional in higher education, a Ph.D. is only going to be awarded for a piece of work that will actually make a difference to the theoretical context of the field --- *the Ph.D. dissertation is a new contribution to the body of knowledge*.

An applied dissertation requires the practical application of scholarship (Nelson, & Coorough, 1994; Wergin, 2011). Examples of an applied investigation may include a replication study, a case study, program evaluation, or a special project (such as, for example, the creation of a curriculum, training program, clinical protocol or policy, or educational artifact), followed by an evaluation. A doctoral project for a professional degree does not have to be an original contribution to the body of knowledge that impacts the theories in the field, but typically responds to a practical problem or proposed innovation (Archibald, 2010).

The fundamental differentiation between Ph.D. research programs and professional degree research programs is that the focus of the Ph.D. is to contribute new knowledge to the field. The focus of professional degree research programs is to apply theoretical knowledge to the



advancement of practice in the field (solve complex problems) (Archibald, 2010; Corley & Giola 2011; Huba, Shubb & Shelley, 2006).

#### **Contribution of New Knowledge**

Differentiating scholarly **contribution of new knowledge** between Ph.D. and applied doctorates (e.g., DBA, Ed.D. and Psy.D.) includes two criteria to determine contribution: *originality* and *utility*.

#### Originality

Originality is measured by assessing whether the knowledge derived in the research has the quality of being either, "incremental" (appropriate for professional degrees such as a DBA, Ed.D. or Psy.D.) or "revelatory" (most sought-after for the Ph.D.). This means that the research adds value in such a way that it either *advances our understanding of prevailing theory* (incremental), or it *allows us to see something that we have never seen before* (revelatory).

#### Utility

Utility means the research must generate *knowledge* that is of either "scientific value" or "practical value." **Scientific value** (predominate measure for Ph.D.) *advances our conceptual rigor or enhances its potential for operationalization and testing, broadly.* That means the scope of a project must be great enough such that it *contributes to, extends, or facilitates extension,* of theory. **Practical value** *advances our ability to apply theory directly,* in managerial and organizational pursuits, in education and healthcare settings, or in therapeutic or counseling settings.

#### **Specific Standards within Dissertation Manuscripts**

Within each section of a dissertation manuscript are requirement variations that indicate the distinctions between the research (Ph.D.) and applied dissertations.

Examples are outlined in the following table.

Distinctions Between Research and Applied Degree Tracks		
Dissertation Section	Applied Degree Track	Research (Ph.D.) Track
Section  Problem Statement	Worthy problems must be relevant and documented beyond any particular study site; however, the study design does not necessarily require generalizability beyond the study site.  The documented problem identified is a practical problem or issue in the profession or study context for which there is not already an acceptable solution. In defining the problem, a clear discrepancy must be drawn between that which exists currently and that which is desired. A clear case of relevance should be argued and documented based on various	Research (Ph.D.) Track  Worthy problems must be relevant and documented beyond any particular study site and have clear theoretical implications in order to make a realistic, but substantive contribution to the field of study.  The documented problem identified reflects the theoretical perspective and/or level of analysis from "micro" to "macro" for example, individual, organizational or industry level to social, economic, political level analysis.  A Ph.D. dissertation problem statement indicates theories relevant to predict, explain and
	stakeholder perspectives.	understand the problem a clear discrepancy must be drawn between that which exists currently and that which is desired. A clear case of relevance should be argued and documented based on the scholarly research literature.

Distinctions Between Research and Applied Degree Tracks		
Dissertation Section	Applied Degree Track	Research (Ph.D.) Track
Purpose Statement	() provides a description of the overarching study goal that reflects and encompasses the research questions followed by a brief overview of the study design, including instrument(s) and sample, and study context.  The purpose, research questions and design must reflect an applied study goal and demonstrate validity within the context of the chosen research design and overall scientific	() provides a description of the overarching study goal that reflects and encompasses the research questions followed by a brief overview of the study design, including instrument(s) and sample and study context. The purpose, research questions, and design must reflect a Ph.D. study goal, which include theoretical implications and generalizability/transferability.
	rigor.	The study results in response to the purpose, research questions and research design must be generalizable or transferable and have theoretical implications relevant beyond any particular study site.

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Theoretical Framework	NOTE: This section heading is not included in some applied dissertations. It is a requirement of the Doctor of Education, Doctor of Nursing Practice, and Doctor of Health Administration. The theories identified must be	() require identification and articulation of the theoretical foundations of the study based on a review of the relevant literature.  The theories identified must be explicit as there are many different lenses, such as
	explicit as there are many different lenses, such as psychological theories, social theories, organizational theories and economic theories, which may be used to predict and explain concepts, topics or	psychological theories, social theories, organizational theories and economic theories, which may be used to predict and explain concepts, topics or phenomena.
	phenomena.  The theoretical framework must be appropriate, aligned with the topic, well-articulated and sourced. The majority of sources must be drawn from the scholarly academic literature published in peer-reviewed journals.	The theoretical framework must be appropriate, aligned with the topic, well-articulated and sourced. The majority of sources must be drawn from the scholarly academic literature published in peer-reviewed journals.

Chapter 2: Literature Review	The Literature Review should be equivalent; however, rather than necessarily a theoretical framework, the chapter should include comprehensive discussion of the relevant issues, perspectives, or controversies relative to the topic.  The literature review should	() should be equivalent in both degrees  Ph.D. studies must clearly demonstrate why the theories chosen as the study foundation are appropriate to explain the topic, research variables and/or phenomena. The chapter should include discussion of the relevant
	reflect a <u>synthesis</u> of the extant literature concerning what is known about the chosen constructs and variables relative	issues, perspectives, or controversies relative to the topic.
	to study topic.  The analysis should() should be equivalent in both degrees	The literature review should reflect a <u>synthesis</u> of the extant literature concerning what is known about the chosen constructs and variables relative
	Applied studies must include a comprehensive discussion of the study context and historical background. The chapter 2	to study topic.  The chapter 2 discussion should build upon the introductory
	discussion should build upon the introductory discussion from chapter 1 such that it clarifies the process undertaken to weigh various rationales, perspectives, solution options culminating with a compelling argument for	discussion from chapter 1 culminating with a compelling argument for proceeding with the proposed study. It should include an historical perspective. It should focus on the underlying theoretical perspectives through
	proceeding with the proposed study.  The majority of sources must be drawn from the scholarly	an insightful argument that specifies why certain constructs or variables were chosen for study.
	academic literature published in peer-reviewed journals.	The majority of sources must be drawn from the scholarly academic literature published in peer-reviewed journals.
Chapter 3: Method	() must reflect an applied study goal and demonstrate validity within the context of the	Quantitative studies must demonstrate both internal and external validity (e.g., large,

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	chosen research design and overall scientific rigor. Case studies, action research, program development, and evaluation are appropriate. Replication studies in an original context are permitted.  A clear rationale behind the chosen questions for study, the particular data gathering techniques and data analyses should be provided. Clear decision paths are provided based on the associated research method/design. Sample size and method must be appropriate and justified based on the nature of the study design. Quantitative analyses must include justified sample size determination.  Case studies, action research, program development and evaluation are appropriate.  Given an appropriate rationale for replication, replication studies in an original context are permitted.	random samples, statistical power and representativeness). Qualitative studies must demonstrate validity within the context of the specific qualitative design. Replication studies are not permitted.  A clear rationale behind the chosen questions for study, the particular data gathering techniques and data analyses should be provided. Clear decision paths are provided based on the associated research method/design. Qualitative studies must demonstrate validity within the context of the specific qualitative design.  Replication studies are not permitted.

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Chapter 4: Evaluation of Findings	Results are briefly interpreted within the study context and profession (for example, corporate or academic leadership). Findings should be identified and discussed in terms of the originality of the contribution (incremental or revelatory). Findings should/can include programmatic results, results of a change intervention, or implementation and should discuss the findings in terms of the practical utility.  It should be clear how the profession and/or field of study are affected by your inquiry.  The discussion should be expanded upon in chapter 5.	Results are briefly interpreted in light of the theory (or theories) identified in chapters 1 and 2.  As appropriate, it should be clear how the field(s) of study is/are affected by your inquiry. Findings should be discussed in terms of the originality of the contribution (primarily revelatory, but can include incremental contribution). The discussion should focus on the scientific value of the study relative extant theory and the extent to which the new knowledge advances our conceptual rigor or enhances the potential for generalization, operationalization, and testing.  The discussion should be expanded upon in chapter 5.	
Chapter 5: Implications	Implications of the study results are described in light of the literature described in chapter 2 and placed in the applied study context and profession/field of study. The contribution of practical utility should be discussed in terms of potential ways of applying conceptual frameworks, models and processes directly in real contexts, specifically related to the particular study context and to the broader social context.	Implications of the study results are described in light of the literature described in chapter 2 and placed in the theoretical context (describe how the results align with or potentially contradict the stated theories). The contribution of scientific utility should be discussed in terms of original approaches to understanding and making sense of studied phenomenon. Secondarily, implications should be discussed in terms of their relevance to practice.	

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Recommendations	Recommendations are made for the study context and for the professionals and practitioners in the field along with recommendations for future study.	Recommendations are made for the scholarly discipline along with recommendations for future study.

#### References

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