Preparing Doctoral Students for Impactful Research through Qualifying/Comprehensive Examinations

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Overview

- Context for Roundtable focus
- 4 segments: Brief presentations & discussion

1. Competencies to prepare graduates for high impact research addressing complex challenges of our time
2. Exam structure/process: strengths & gaps (consumer perspectives)
3. GADE survey findings: Do aspirations contrast with current practices?
4. Role of doctoral exams as strategy toward equipping with these skills and competencies

- Concluding discussion: Where are we now, where do we aim to be
Context for Roundtable focus

- Well equipped contributors: complex scientific pursuits & translation; impact expectations
- SW doctoral training often limited pedagogical models, evidence to guide structure & process
- Without accreditation-type guidelines, need ongoing assessment of educational strategies to priority outcomes
- GADE & SSWR collaboration stimulate reflection, support aspirational intentionality
- Recognize ranging contexts, priorities, approaches
T-shaped Scholar: Depth + Cross-cutting Meta-competencies

- Educational models that span across (meta-competencies) but also support depth within (specialization expertise, socialization)
Getting to impact: Examples of meta-competencies

- Non-defensive reflectiveness
- Critical thinking
- Cross-disciplinary content synthesis
- Inter/trans-disciplinary communication
- Understanding & being understood
- Inter/trans-disciplinary communication
- Managing differences
- “Translation” to stakeholders, others related to impact

Educational models that span meta-competencies and depth within (specialization expertise, socialization): What does this take?
Range of Aims & Formats

- Qualifying exam, comprehensive exam & other types of formats
  - Lack of clarity about what these mean across programs
- Goals range from preparing students for high impact equity-driven research to mastery of content & gatekeeping function to prep for dissertation
- Strong interest by PhD directors to learn about others’ exam experiences
  - No “perfect” structure/process
  - Do exams have unintended negative consequences (e.g., slowing students’ progress toward completion)?
Priority competencies ➔ readiness for impactful research careers...?

- Broadly, end goals doctoral preparation for contemporary research careers? Trained to do?
- Priority competencies important to achieve these end goals?
- These features of scientific context and readiness skills: Resonate with your own/program perspectives?

Brief discussion
Exam structure/process examples: Strengths & gaps (consumer perspectives)
Student experience, perspective

Exam Structure

- Two part, take-home exam:
  1. In-depth article critique; choice of 5 published articles selected by program
  2. Analysis of a social problem of interest, similar to a Grand Challenges white paper; incorporate social justice theory

- Assessment: double blind review by faculty members
Student experience, perspective

Key Knowledge & Skills

- Perceived overall goals:
  - Demonstrate synthesis of core knowledge from coursework
  - Demonstrate critical thinking and analysis skills

- Specific content and skills assessed:
  - Comprehensive skills and substantive knowledge to evaluate strengths and weaknesses of academic research
  - Integrate understanding of a body of research with assessment of gaps in evidence and knowledge
  - Articulate specific policy, practice, and research recommendations
  - Operationalize social justice concepts through application of concrete theories of social justice to social problems
Student experience, perspective

Preparation for Future Work

- Article Critique
  - Underscored value of range of methodological & substantive knowledge
  - Encouraged specific, constructive critique of others’ research
  - Did not represent a typical form of academic research/writing
Student experience, perspective

Preparation for Future Work
- Grand Challenges paper
  - Encouraged viability of taking on “wicked” problems
  - Promoted complex, cross-competency thinking
  - Required identification of multi-domain, real world impacts
  - Asked for individual work on project that would benefit from multiple perspectives
Early career experience, perspective

Sarah Kark
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i love this message for academia

A pic with a message:
Early career experience, perspective

- Integrative Seminar
- Exam: Comprehensive Review Paper (8-10 articles; or 4-5 ethnographic books; 25-35 p. plus matrix, tables, figures, references)
- 2 months, typically between years 2 & 3 for FT students
- Benchmarks
  - June 1\textsuperscript{st}:
    - Topic or central problem
    - Central research question(s)/hypothesis(es) guide comprehensive paper
    - Search strategy, includes databases to search, keywords, inclusion/exclusion criteria
  - June 21\textsuperscript{th}:
    - Complete data matrix studies be included
  - August 1\textsuperscript{st}:
    - Complete comprehensive review paper, submit
Early career experience, perspective

- Provided structure targeted attention to topic within broader area of interest
- Critical thinking throughout
- Structured methods critique (Methodological Quality Rating Scale, Miller et al., 1995)
- Led well into dissertation proposal process year 3
  - Topic of comprehensive review: impact of teen mothers' own maltreatment
  - Topic of dissertation: experience of motherhood among teen mothers in foster care
- Led well into next steps as faculty member
  - Provided potential solo-authored manuscript product
- Advancing equity and social justice not an explicit focus
Early career experience, perspective

- Current institution’s qualifying exam structure (UMD Department of Behavioral and Community Health, not Social Work)
- Two parts over two weeks plus oral examination with review committee
  - R21 grant responding to one of two FOAs
    - Selected by committee differ from current students’ areas of interest
  - Detailed article critique
- Much more intensive (full time+ for two weeks)
- Unlikely product be directly usable, though skills are invaluable
- In common: assessment of prior literature
- Distinct: grant writing experience; distilled methods presentation

Brief discussion
GADE Survey

- Stimulus for survey administered to directors and chairs of doctoral social work programs
  - N=46

- What do program directors/chairs report be their purpose and pedagogical intentions in regard to the doctoral exam?

- Closed- and open-ended responses from survey
  - Begin with closed ended items on pedagogical intentions
Pedagogical Intentions, 9 items

In consideration of the primary pedagogical intentions of your doctoral program's exam(s), how important are each of the following?

<table>
<thead>
<tr>
<th>Competencies for Basic Knowledge</th>
<th>To assess competency in a body of social work knowledge that your program believes is fundamental to the broader social work discipline</th>
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<tbody>
<tr>
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<td>To assess competency in specific content that has relevance for each student's specialization</td>
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<td>To prepare students for a specific aspect of the dissertation process</td>
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<td>Competencies for Critical Analysis</td>
<td>To assess students' critical thinking skills</td>
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<td>To prepare students to be critical users of scientific evidence</td>
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<td>To prepare students to conduct high impact research consistent with social work ethics and values</td>
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<td>To prepare students to conduct high impact research that has potential to advance social work's equity and social justice aims</td>
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<td>To prepare students to use research for the purpose of social change and translation to policy, practice, and/or community impact</td>
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<td>To prepare students to address the Grand Challenges in Social Work</td>
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Distribution of responses, Pedagogical Intentions

- Competencies for Basic Knowledge
- Competencies for Critical Analysis
- Competencies for Impact and Action

- comp. in SW foundation
- comp. in specialization
- dissertation preparation
- critical thinking skills
- critical users of evidence
- high impact research/ethics & values
- research for social change/social justice
- address Grand Challenges

Legend:
- 1 Not at all Imp
- 2
- 3 Moderately
- 4
- 5 Extremely Imp
Purpose of Exams: Competencies for Basic Knowledge (open-ended responses)

- Assess students “mastery/synthesis of foundation or core (minimal level of) theoretical & research curriculum content (may or may not be in substantive area) to advance to next year of program”
  - Content of year 1 & 2 drives most exams: “Structure of exam based on design of course work & overall curriculum”
- Ensure “quality control”/monitor performance (“gatekeeper function”), although rarely used to remove students from program
- Ensure students are prepared for/ready for the dissertation (“springboard for dissertation proposal”)
Purpose of Exams: Competencies for Critical Analysis (open-ended responses)

- Ensure preparation to conduct independent (but mentored) research
  - "Develop a testable research question"
- Demonstrate "analytic & critical reasoning skills"
- Assess ability "to integrate & apply content from core curriculum (integrated & critical review of literature/research)"
- Demonstrate "an engagement with intellectual thought & ability to articulate that engagement through writing, oral presentation & discussion"
Purpose of Exams: Competencies for Impact & Action (open-ended responses)

- No mention of goals re: equity, social justice, translational science or impact in open-ended responses.

- A “disconnect” between open-ended responses about exam purpose & quantitative responses re: “high impact research/equity & social justice” &“research for social change/translation.”

- One mention “produce advocates for social change capable of providing leadership in communities & organizations”
  - Appears to be from a practice-oriented program

- One mention “prepare students to articulate contribution to moving the field forward”
Closing Discussion: “Where” are we now, where do we aim to be?

- Are our exams effective for complex contemporary needs?
- Are they achieving what we want?
- Are they producing the graduates we want?