

## TOOLKIT FOR DOCTORAL STUDENTS TAKING THE QUALIFYING EXAM

The purpose of this toolkit is to provide general resources for the School of Nursing Doctoral Students in preparation for the Qualifying Exam. Students should consult with their Chair/Advisor regarding questions or specifics about their exam.

Doctoral students must pass an examination after successful completion of a certain number of courses in the PhD program. **Details about the exam are found in the PhD Student Handbook**, but in brief, in the School of Nursing the exam includes both a written and oral component. Successful completion signifies the student's potential and the faculty's commitment to provide scholarly resources needed to complete continuing course work and the dissertation.

The deadline for defending the examination is October 15th (or March 15th for students in alternate sequences, such as part-time students). To meet this deadline, students are strongly encouraged to begin preparing at least 3-4 months before the exam. Students typically prepare a substantive discussion of a relevant concept (a formal concept analysis) or a substantive exposition of the state of the science in an area of inquiry and research, a historical case study, or other methods paper appropriate for their area of interest. The written component of the exam is a scholarly paper that may not exceed 20 double-spaced, typed pages of text (references not included). The oral component of the exam involves an oral defense of that paper by the student for the Examining Committee. The criteria for grading both the written and the oral examination are:

- Form and organization of the written examination
- Relevance, critique, and integration of the supporting literature, and the student's synthesis and conclusion
- The student's ability to communicate both in writing and orally on an abstract level
- The student's ability to translate specifics to a higher level of generalization, and develop ideas for future direction

This is an exam, so the Chair is limited in what s/he is able to provide. The Chair can guide you in the following ways:

- Review your timeline
- Discuss relevant literature, and the general structure and specific planned content of the paper
- Review your search strategy
- Review an outline of your paper
- Review your table of evidence
- Review and comment on (only) one complete draft of the written examination
- No other person may read the paper prior to formal submission of the examination to the Chair
- You may receive writing assistance from one of the Penn writing centers for structure but not content of the examination
- The Chair may help you to prepare for the oral examination

The faculty have identified poor synthesis, lack of a logical organization of document content, insufficient depth, and failure to use the appropriate reporting guidelines as the major issues in prior exams. To assist students we have compiled a list of websites and references. In addition, we will be inviting the librarian to hold a preparatory session focused on literature searches at

least once annually. Faculty hopes to offer a QE Boot Camp event at least once annually. This Boot Camp will be devoted to the process of writing, offering an environment (space, time and quiet) for focused writing time associated with the QE.

### **Synthesis**

Ross, V. (2013). Analysis and synthesis. A Brief Guide to Critical Writing, University of Pennsylvania. (Used with permission of Dr. Valerie Ross).

### **Concept Analysis**

Walker, L.O. & Avant, K.C. (2011). Strategies for theory construction in nursing (5<sup>th</sup> ed.). Prentice Hall.

### **Systematic and Integrative Reviews**

1. Cook D.J., Sackett D.L. and Spitzer W.O. (1995). Methodologic guidelines for systematic reviews of randomized control trials in health care from the Potsdam Consultation on Meta-Analysis. *J Clin Epidemiol*;48:167-71.
2. Higgins J, Thompson S, Deeks J and Altman D. (2002). Statistical heterogeneity in systematic reviews of clinical trials: a critical appraisal of guidelines and practice. *J Health Serv Res Policy*;7:51-61.
3. Whittemore R and Knaf K. (2005). The integrative review: updated methodology. *J Adv Nurs*; 52:546-53.
4. Kuehn BM. (2011). IOM sets out "gold standard" practices for creating guidelines, systematic reviews. *JAMA*;305:1846-8.
5. Li T, Vedula SS, Scherer R and Dickersin K. (2012). What comparative effectiveness research is needed? A framework for using guidelines and systematic reviews to identify evidence gaps and research priorities. *Ann Intern Med*;156:367-77.
6. Michael Borenstein, Larry V. Hedges, Julian P. T. Higgins, Hannah R. Rothstein.(2009). Introduction to Meta-Analysis. Wiley.
7. Khan, K.S., Kunz, R., Kleijnen, J. & Antes, G. (2003). Five steps to conducting a systematic review. *J Royal Society of Med*; 96:118-121.

### **Reporting Guidelines**

PRISMA statement: <http://www.prisma-statement.org/>. Transparent reporting of systematic reviews and meta-analyses

Welch V, Petticrew M, Tugwell P, Moher D, O'Neill J, Waters E, White H and group PR-EB. (2012). PRISMA-Equity 2012 extension: reporting guidelines for systematic reviews with a focus on health equity. *PLoS Med*. 2012;9:e1001333.

Strengthening reporting of observational studies in epidemiology (STROBE) <http://strobe-statement.org/index.php?id=available-checklists>

- STROBE checklist for **cohort, case-control, and cross-sectional studies** (combined)
- STROBE checklist for **cohort, case-control, and cross-sectional studies**
- Checklist for **cohort studies**
- Checklist for **case-control studies**
- Checklist for **cross-sectional studies**
- Draft STROBE checklist for **conference abstracts**

Meta-analysis of Observational Studies in Epidemiology <https://www.equator-network.org/reporting-guidelines/meta-analysis-of-observational-studies-in-epidemiology-a-proposal-for-reporting-meta-analysis-of-observational-studies-in-epidemiology-moose-group/>

CONSORT (CONSORT stands for Consolidated Standards of Reporting Trials) website:  
<http://www.consort-statement.org/>

### **RESOURCES FOR SELECTED METHODS**

Holly C., Salmond, S.W., & Saimbert, M.K. (2012). *Comprehensive Systematic Review for Advanced Nursing Practice*. New York: Springer Publishing Company.

Harden, A. & Gough, D. (2012). Chapter 8: Quality and Relevance Appraisal (pp. 153-178). In Gough, D., Oliver, S., & Thomas, J. (2012). *An Introduction to Systematic Reviews*. New York: Sage.

Newhouse R, Dearholt S, Poe S, Pugh LC, White K. The Johns Hopkins Nursing Evidence-based Practice Rating Scale. 2005. Baltimore, MD, The Johns Hopkins Hospital; Johns Hopkins University School of Nursing.  
<http://www.mc.vanderbilt.edu/documents/CAPNAH/files/Mentoring/Section%206/JHNEBP%20Evidence%20Rating%20Scale.pdf>

Bruce, J. & Mollison, J. (2004). Reviewing the literature: Adopting a systematic approach. *Journal of Family Planning and Reproductive Health Care*, 30(1), 13-16.

Bartels, E.M. (2013). How to perform a systematic search. *Best Practice & Research Clinical Rheumatology*, 27, 295-306.

McGrath, J.M., Brown, R.E., & Samra, H.A. (2012). Before you search the literature: How to prepare and get the most out of citation databases. *Newborn and Infant Nursing Reviews*, 12(3), 162-170.

Brunton, J., & Thomas, J. (2012). Chapter 5: Information Management in Reviews (pp 83-106), in Gough, D., Oliver, S., & Thomas, J. (2012). *An introduction to systematic reviews*. New York: Sage.

Moher, D. et al. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLoS Medicine*, 6(7), e1000097.

Lorenzetti, Diane L.; Ghali, William A. Reference management software for systematic reviews and meta-analyses: an exploration of usage and usability. *BMC Medical Research Methodology*, Nov 15, 2013, Vol.13, p.141

Dixon-Woods et al. (2006). How can systematic reviews incorporate qualitative research? A critical perspective. *Qualitative Research*, 6(1), 27-44.

Grant, M.J., & Booth, A. (2009). A typology of reviews: An analysis of 14 review types and associated methodologies. *Health Information and Libraries Journal*, 26, 91-108.

Garrard, J. (2007). *Health Sciences Literature Review Made Easy: The Matrix Method*, Fourth Edition, Chapters 5 and 6

## **Guides to using bibliographic and other software to assist with systematic review**

Endnote: [http://guides.is.uwa.edu.au/systematic\\_reviews/using\\_endnote](http://guides.is.uwa.edu.au/systematic_reviews/using_endnote)

Refworks: <https://www2.le.ac.uk/library/downloads/refworks-for-systematic-reviews/view>

Endnote and Refworks: [http://libguides.sph.uth.tmc.edu/excel\\_workbook\\_home/refworks-for-SRs](http://libguides.sph.uth.tmc.edu/excel_workbook_home/refworks-for-SRs)

Zotero: <http://screencast-o-matic.com/watch/cD6fqzjUly>

Nvivo <http://www.qsrinternational.com/blog/hone-your-nvivo-skills-with-literature-reviews>

Mendeley (free-online program and desktop management)

<https://www.mendeley.com/sign/in/?routeTo=http%3A%2F%2Fwww.mendeley.com%2Fnewsfeed%2F&acw=&utt=d76-961096177517dd192469bfb8eae04cbca48-6p2y>

Penn Libraries Citation Management tools

- includes additional information on Zotero, Mendeley, EndNote and RefWorks, including contact information for specific librarians that offer support  
<http://guides.library.upenn.edu/c.php?g=475845&p=3255041>

Sherry Morgan lecture on literature search strategies: <http://bit.ly/2Bvplst>.