PURDUE
UNIVERSITY

Doctor of Nursing Practice

EVIDENCE-BASED PRACTICE

PROJECT

INFORMATION

Introduction

All Purdue School of Nursing Doctor of Nursing Practice (DNP) Degree Plans of Study must include an evidence-based practice (EBP) project. The project is a faculty-guided scholarly experience that provides evidence of your critical thinking and ability to apply research principles through problem identification, proposal development, implementation, and evaluation of a clinical problem.

Purdue School of Nursing faculty enhance the nursing profession through research programs focusing on the history of healthcare, healthcare of adults and children, evidence-based practice, homeland security, and healthcare technical assistance projects.

The first part of your education in research involves completion of two required courses: NUR 510 Nursing Research and a Statistics course at the 300 or above level.

Prior to starting any EBP project, you must complete the Collaborative IRB Training Initiative component (CITI) at https://www.citiprogram.org/default.asp.

The Purpose of Evidence-Based Practice in the Doctor of Nursing Practice Curriculum

Research and research utilization are integral parts of evidence-based nursing practice. Nurses prepared at the DNP level provide leadership for evidence-based practice in nursing and translate evidence-based nursing research in their own practice. They are expected to disseminate and integrate new knowledge. Doctor of Nursing Practice nurses also participate as members of a research team or conduct research or research utilization projects.

As an advanced practice nurse with a Doctor of Nursing Practice degree, you will be able to:

1. Lead research teams that focus on improving quality healthcare.
2. Carry out an evidence-based practice project through problem identification, proposal development, implementation, and evaluation of the project.
3. Use analytical methods to critically appraise existing literature relevant to nursing practice.
4. Evaluate evidence to determine and implement the best evidence for practice.
5. Design processes to evaluate outcomes of practice and systems of care.
6. Inform the design of databases that generate meaningful evidence for nursing practice.
7. Use information technology systems for the storage and retrieval of data.
8. Disseminate an evidence-based research report, in writing and orally.
9. Develop strategies to translate research into practice regimens.

The EBP project is a scholarly process to address a theoretically and clinically relevant problem in nursing. This requires competence in knowledge development activities such as the translation of research into practice, the evaluation of practice, activities aimed at improving the reliability of healthcare practice and outcomes, and participation in collaborative research (DePalma & McGuire, 2005).

The EBP project committee requires three members. It is expected that the EBP project will be ready for submission for publication. However, it is not a requirement for your degree that the project be published. The submission is usually done after the completion of the project, often

with additional help from the committee chair or members, who may then be co-authors. An EBP project takes a minimum of two semesters to complete.

Types of EBP Projects

Students will follow the AACN Essentials for "Clinical Scholarship and Analytical Methods for Evidence-Based Practice." For all projects, the student first identifies a research problem in an area of interest, reviews and summarizes the literature dealing with this problem area, and refines a problem statement. The student then investigates the problem. Students will:

- Collect appropriate and accurate data to generate evidence for nursing practice.
- Analyze data from clinical practice.
- Design interventions based on evidence.
- Predict and analyze outcomes.
- Examine patterns of behavior and outcomes.
- Identify gaps in evidence for practice.
- Evaluate project to determine and implement best practices.

The Process of Writing the EBP Project

- Identify a general area of interest and a faculty advisor with expertise in this area who agrees to work with you.
    a) Clarify availability of the faculty over the period you will be working on the project (whether available during the summer, etc.).
    b) Develop a timetable and identify which semesters you will register for the EBP project hours.
- Identify the type of project and a research question with your advisor.
- Write a draft of your proposal.
- Review the proposal with your advisor and revise as recommended.
- In consultation with your advisor, identify two other committee members, and ask them to be on your committee.
- Submit the EBP Project Proposal Form to your advisor. This may be obtained from the Graduate Secretary.
- Give the revised proposal to all committee members. Committee members may approve your proposal or may want to schedule a meeting to discuss the proposal before approving it. If your committee decides to meet, you will need to schedule the meeting and reserve a room.
- If IRB approval is needed, submit the appropriate forms to the Human Research Participation Protection Program. Do <u>not</u> proceed with any type of recruitment, data collection, or analysis until you receive written approval.
- Complete the project.
- Write a complete draft of your project, submitting completed sections for review by your advisor according to the schedule you have agreed upon.
- Submit the draft of your project to your committee and schedule a meeting to discuss it. Be sure to reserve a room for the meeting and bring the completed Graduate School Form 7 ready for signatures.
- Hold the committee meeting; make any requested revisions; meet again if necessary.
- Submit your completed project for School Head approval and signature.
- Have the project bound.

- Submit five completed bound projects, one to each of your committee members, the Director of the Graduate Program, and the Center for Nursing History, Ethics, Human Rights, and Innovations.
- Consider opportunities to disseminate project findings via poster presentation, journal article, or other forum.

Additional Considerations:
- At the beginning of the semester that you intend to graduate, be sure to submit a Plan of Study before the deadline. This will often be the semester in which you finish your project.
- Find out the date that the final project needs to be submitted in order to meet graduation deadlines. To access Purdue deadlines, see http://www.gradschool/purdue.edu/calendar/calendar.cfm?type=Deadlines.

Identifying a Topic for the EBP Project

The earlier you identify what you will do for your EBP project, the easier it will be for you to complete your work on the schedule you have chosen.

There are many different ways to identify a project advisor and a topic:

- You may discuss project ideas with your academic advisor and find that this person is willing to work with you on a project arising from your own clinical interests.
- Your faculty academic advisor may recommend that you work with a particular faculty member who shares your interests.
- Lists of faculty research interests can be found on the School websites, http://www.nursing.purdue.edu/directory/listing.php?school=nurs&list=faculty.

The Project Committee

The committee for the EBP project consists of three members: the chair and 2 other members. All members of the committee must have Graduate Appointment Status. One committee member may be external to the School of Nursing.

Writing a Proposal for Your Project

The length of proposals can vary. Students may find that they need to rework their proposal several times to achieve clarity, brevity, and completeness. Projects and formats *may vary*, especially if students are working on projects with Regenstrief Center for Healthcare Engineering scholars. In general, the format for the proposal includes:

Chapter 1: Nature of Project and Problem Identification
   a. Introductory materials with an abbreviated literature review to substantiate the choice of this problem
   b. Identify significance of problem.
   b. Paragraph called “the problem,” which is an expanded statement of purpose
   c. Hypotheses or list of research questions that further expand the problem

Chapter 2: Review of Literature (give more detail and cite more references than in Chapter 1) and Theoretical Framework

Chapter 3: Design and Methodology

a. Design
b. Sample
c. Methods
d. Data analysis
e. Reliability and validity
f. Protection of human subjects

Proposals must be succinct, direct, and free of jargon. All proposals are written in the future tense. Thus, statements should be stated as, "This proposed study will collect data using…" or Results of this study will be used to …." Also, the proposal should be written in third person, and it is seldom necessary to refer to oneself in a formal paper. A writing style that does not include a personal identification ("I", "we") or a given name ("Jane Doe") should be used. If absolutely necessary, an appropriate third person term such as "this researcher" should be used.

Obtaining Approval for Your Proposal

Some project advisors will want a meeting to review and approve the project proposal. Other advisors will allow you to proceed with your work once they approve your proposal, without a formal committee meeting.

If your advisor recommends a formal meeting to approve the project proposal, the meeting will include the advisor, the other committee members, and you. The student provides a copy of the proposal to each committee member. A date is agreed upon and a two-hour block of time should be reserved, although most meetings require much less than that. **You should give your committee members at least 2 weeks to review your proposal before the meeting.**

It is your responsibility to reserve a room for the meeting and let the committee members know the date, time, and location for the meeting. The graduate secretary can help you sign up for most conference rooms.

Before you come to the meeting, you should prepare a 5-10 minute presentation of what you propose to do and why. Usually, the committee chairperson will begin the meeting by asking you to briefly describe your research question and plan. Then the three members will discuss what issues they feel are important. You need to keep a careful record of the discussion. You can expect the committee to discuss the merits of your research question, the strengths and weaknesses of your approach to answering the question, any realistic and feasible changes they think you could make to improve it, and the limitations of what you are doing that cannot be reasonably overcome. They will also discuss any ethical and privacy concerns and the need for appropriate approvals and clearances, including Institutional Review Board (IRB) and/or Health Insurance Portability Accountability Act (HIPAA) approvals.

At the end of the meeting, the committee may approve the proposal as it is or with relatively minor changes. They may ask for substantial changes and want to meet again after you make those changes. Sometimes they will agree on fairly extensive changes and have you discuss the changes with the project advisor rather than having a second meeting. You need to make sure that several things are very clear at the end of the meeting:

- What changes you need to make

- The approval process for the proposal once you have made the changes
- When you can submit your papers for IRB/HIPAA approval
- When, once IRB/HIPAA approval is obtained, you can begin your study

Statement of Purdue University Policy: Human Subjects and Ethical Considerations:

"To ensure the safe and ethical conduct of research involving human subjects at Purdue University, all Purdue faculty, staff, and students who wish to participate in the conduct of research involving human subjects must be familiar with and understand the underlying ethical principles, federal and state laws and regulations, and policies and procedures that compose Purdue University's Human Research Participants Protection Program (HRPPP). To document the necessary familiarity and understanding, all Purdue faculty, staff, and students who wish to conduct research involving human subjects must be certified as having completed appropriate formal training and education before an application and protocol in which they are named will be approved or determined exempt by one of Purdue University's Institutional Review Boards, or one of their designated subcommittees.

This education policy applies to all Purdue University principal investigators, extension educator investigators, and key project personnel, including graduate students, as well as undergraduate students, non-Purdue research personnel, and consultants who interact with subjects who participate in research involving human subjects that is reviewed by a Purdue University Institutional Review Board or one of its designated subcommittees or by another institution's IRB under an inter-institutional cooperative agreement with Purdue University regardless of the location where the research is to be conducted and regardless of the source of funds supporting the research."

The IRB office is located in HOVDE Hall, Room 307. The IRB forms are found at the website of http://www.irb.purdue.edu/forms.shtml.

The procedure for submitting IRB forms is:
- Discuss your study and the type of review it requires and any special ethical considerations with your research advisor
- Fill out the forms and have your advisor approve and sign them
- Give the signed forms to the School Head for signature
- Take the signed forms to the IRB office

When you submit forms to the IRB, we recommend that you hand-carry them to the office.

You cannot proceed with your data collection until you have written notification of IRB approval. You should give a photocopy of your IRB approval letter and the approved consent form to your project advisor.

Keeping on Schedule

When you are developing the schedule for your project, be sure to leave enough time at the end for writing and revising the paper. Unlike a course paper, your project will need to be revised until it is acceptable to your committee. This takes time, because after you prepare a draft, you have to give your committee members a reasonable amount of time to read it (a minimum of 2

weeks); and then you will almost always need to make revisions. It is probably wise to allow for at least 2 or 3 fairly extensive revisions and a final editing.

Remember that the timely completion of your project is YOUR responsibility. This includes identifying a project and faculty person to work with, persisting in working on the project through completion, and staying in touch with your project advisor along the way.

Writing the Project

There are several strategies that can help you in writing the project. *What you've already written in your proposal forms the basis for your final project.* You will need to review what you've already written, incorporate recommendations from your advisor or committee, and update and edit your work. The final report describes what was done, the findings, and the conclusions. The tense found in the proposal is changed from future (what is the plan) to past (what was done). Any deviation from the proposal must be noted and explained.

Completed Project Components

Chapter One:

1. Nature of the project
    a. Introduction
    b. Problem
    c. Purpose
    d. Significance of study
    e. Definition of terms
    f. Assumptions
    g. Limitations
    h. Project Objectives

Chapter Two:

1. Theoretical Framework
2. Related Research

Chapter Three:

1. Research Design
2. Methods
3. Instruments

Chapter Four:

1. Results
2. Discussion

Chapter Five:

1. Implications
2. Summary
3. Conclusions

References
Appendices

You may want to examine articles of similar format in the journal in which you hope to publish.

It is a good idea to divide your writing tasks into smaller parts, and focus on only one part at a time. Sitting down to "write up your project" is an overwhelming task. However, describing the

demographic characteristics of your sample and making a summary table is a task you could complete in a day.

Perhaps the hardest part for most students is writing the discussion section. You may wish to discuss this with your peers. A simple way to approach discussion is to write what you found, why it is important, what it means in terms of existing research, and the implications of your findings for future research and for clinical practice. The limitations of your findings are also addressed. Consultation with your project advisor is especially helpful during this phase of the project.

Keeping in Touch with Committee Members

The most common way committees operate is for you to work primarily with your project advisor. Usually, the two of you will set up regular meetings so that you can continue to make progress. Please request from the Graduate Secretary the form entitled Graduate Advisory Committee Form. You should show initial drafts to your project advisor and make revisions based on that person's comments. When your advisor thinks that your project is ready, you will give a copy to your other committee members and arrange a meeting to review the entire project.

The Completed Project Approval Meeting

The procedures for the final committee meeting are very much like the proposal meeting. You set a date in consultation with all the committee members and reserve a room for the meeting. You give each member a draft of the project at least 2 weeks before the meeting. You should be prepared to give a 20-minute oral summary of your project and its significance or implications for theory, future research, clinical practice, and/or health policy.

Before you come to the meeting, be sure to have Graduate School Form 7 typed and ready to be signed. This form can be obtained from the Graduate Secretary.

During the meeting you will begin with an oral summary of your project. Handouts, overhead transparencies, or PowerPoint presentations may be appropriate (you can discuss this with your project advisor before the meeting). Then, the committee members give their comments. Sometimes they will go through page by page, or sometimes each person will discuss all his/her comments and concerns at once. They may also ask you more questions regarding the purpose and overall implications and limitations of your project. Often you will discuss publication and dissemination of your findings.

Then the Level 4 (Graduate) Committee will discuss the project. The entire project will be available for review by this Committee. A consensus vote will be taken. The committee has three options: they can accept the project as is; they can ask for minor revisions to be done but go ahead and approve the project pending these changes; or they an ask you to make specific changes and review these changes before the project is officially approved. Generally, the second option is used only for minor or straight forward changes such as table format, grammatical corrections, and the like. If substantive changes are necessary, the committee will determine whether these changes are extensive enough to require another meeting. If not, they may all want to see the revised version but not meet, or they may delegate one person, usually the project advisor, to oversee the revisions. When all the requested changes have been made, the members will sign the approval form.

Grading

Performance will be graded using the following scale:

- Satisfactory – used when the student has met or exceeded requirements
- Unsatisfactory – used when the student has not met requirements and has not invested appropriate amount of effort
- Upon receipt of the second unsatisfactory grade, the student will be dismissed from the program.

Final Process

When the final project is complete and your committee members have signed the Graduate School Form 7, you need to take the completed project along with the Form 7 to the School Head for signature.

After your committee and the School Head have signed your Form 7, return it immediately to the Graduate Secretary. **Submit your completed bound project to the School of Nursing**, where it will be kept in the Center for Nursing History, Ethics, Human Rights, and Innovations. (The project can be bound at Printing Services Building or PRNT). You should also keep a copy for yourself.

Graduation Deadlines

See http://www.gradschool/purdue.edu/calendar/calendar.cfm?type=Deadlines

There are two deadlines that you must consider when preparing for graduation: the deadline for submitting your "Graduate School Form 7" and the deadline for submitting your completed, approved project.

If you want to officially **graduate** in a particular semester, you must let the Graduate Secretary know **prior to the last day to declare candidacy for degree** date. This date will be early in the semester, usually in the second or third week.

The absolute deadline for submitting your **completed, approved, bound project** is posted on the Graduate School website.

Disseminating the Results

Your first responsibility is to share your results with the clinical site and/or subjects who are interested, if this is relevant for your project. For some studies, it is appropriate to share results with participants, and if you have offered to do this, it is important to do so promptly.

To share your results more widely, you should revise your paper and send it to a journal to be reviewed for publication. Your committee will generally advise you about where they think it would be accepted. You usually will need to do some additional editing. Look in the journal you are targeting for the Guidelines for Authors to get specific requirements as to length and format.

You improve your changes for publication by having your manuscripts reviewed by others. Your reviewers can be clinical experts on your topic. You may also choose to have the manuscript reviewed for clarity by someone who is not an expert in the topic. The process of peer review is an important part of scholarship and one you will want to use whether you are preparing reports at your work site or writing for publication. You may want to negotiate with your project advisor to review your manuscripts, abstracts, and publications.

You should also submit your research to be presented as a poster or a paper at a regional or national meeting. This is a good way to disseminate findings with clinical relevance. It is also a good way for you to meet people with similar research interests and to begin to establish yourself as a master's prepared nurse with research as well as clinical skills and interests.