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Going the Distance:
A Recipe for Success
Distance Education Program Delivery

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Pioneer Valley-- our TM picture

Background: Progress of DNP Program

- Launched DNP, 2006; entry PB-DNP and PM-DNP

- Full 5 Year CCNE accreditation, 2010

- "Tweeked" /refined programmatic aspects and curriculum formatively in response to consultants, students, faculty, and administrative feedback

- Entered whole program refinement phase 2012, we are in final phase this spring through fall 2013, in preparation for CCNE CIPR Report

- Results of proposed DNP Program Revisions are presented with "recipe" in Primer during Workshop

What We Did: Maximized Resources

- Used existing dwindling Expert Faculty resources within the SON

- Constantly reviewed Workload issues: Advising, Chair, Course load, Cap for courses, etc.

- Drew on Interdisciplinary Resources: School of Public Health and Health Sciences, Isenberg School of Management

- Coherence and Efficiency of resources was essential
  - Closed our current MS APN role options

- Built DNP program on the foundation of the <u>baccalaureate</u> degree in nursing

- Post Masters entry through Portfolio Review Process for admission and placement into program is still the "Gold Standard" for PM placement

What We Did: Post Baccalaureate PB to DNP

- Paradigm shift necessary for a practice doctorate:
  a "new" prototype for Nursing is essential

- Change in pedagogical thinking regarding sequencing of courses and content;
  - Think: "What if an APN MS degree _never existed_?" (ex. MD model)

- Streamlined curriculum sequence initiated: foundation core offered EARLY in plan of study with advancing core and role specialization courses over time

Teaching Common Courses Across Graduate Degree Programs: DNP, CNL, PB-PhD

- Common Graduate level CORE content applied in each equivalent Graduate level course across Graduate programs

- Foundation didactic and care core courses chosen to launch early—contain AACN Essentials knowledge, skills, and competencies—offered in first calendar year of FT programs

- DNP level core and role courses launch later in second and third years of FT program of study
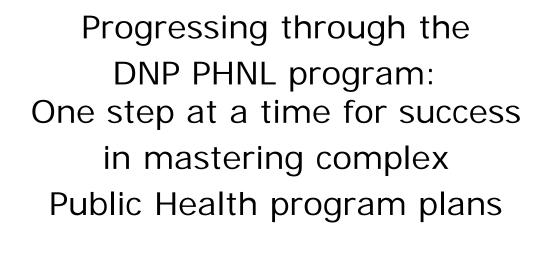
DNP Curriculum Revision

- 2006-2011: As everyone must—we moved and refined individual courses and course sequencing from beginning

- 2012-2013: Time came for "whole" program/curriculum revision
  - Offered more current courses in summer sessions
  - Re-conceptualized our UMass Graduate School Requirement for Comprehensive Examination
  - Revised and advanced content and sequence of FNP and PHNL Role Option courses to seamlessly advance students
  - Reduced overall semester credits while ensuring > 1000 direct and indirect practicum contact hours
  - Revised Capstone Project development and actualization for seamless progression, more consistent faculty oversight, and to help Chairpersons lead candidates through Capstone

- Workshop review of Primer Outlining Curriculum Revision

Exemplars for Workshop Presentation

- Innovative Role Option curriculum considerations
  - Exemplar--Public Health Nurse Leader; Presented by Dr. Kalmakis
  - Workshop Q & A and comments
- Common Core Courses Across Graduate Degree Programs
  - Exemplar—Informatics Dr. Choi- Present by Dr. Kalmakis with assist of Dr. LeBlanc and Dr. DeMartinis
  - Workshop Q & A and comments
- Making the Connections: Advising DNP Students
  at a Distance--Exemplar—Presented by Dr. LeBlanc
  - Workshop Q & A and comments
- Programmatic Challenges for DE Delivery
  - Exemplars--Solving the Placement Puzzle and Reality of State Authorization Requirements; Presented by Dr. DeMartinis
  - Workshop Q & A and comments

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Innovative Role Option:
Public Health Nurse Leader

Progressing through the

DNP PHNL program:
One step at a time for success

in mastering complex

Public Health program plans

Presented by

Dr. Karen Kalmakis, PhD, FNP-BC, MPH

School of Nursing

CDC 10 Essentials of Public Health Service

- **Monitor** health status to identify and solve community health problems.
- **Diagnose** and investigate health problems and health hazards in the community.
- **Inform**, educate, and empower people about health issues.
- **Mobilize** community partnerships and action to identify and solve health problems.
- **Develop** policies and plans that support individual and community health efforts.
- **Enforce** laws and regulations that protect health and ensure safety.
- **Link** people to needed personal health services and assure the provision of health care when otherwise unavailable.
- **Assure** competent public and personal health care workforce.
- **Evaluate** effectiveness, accessibility, and quality of personal and population-based health services.
- **Research** for new insights and innovative solutions to health problems.

ANA Scope of Practice

- 6 standards of practice
- 10 standards of professional performance
- Define competency in public health nursing care, education, and research.

Typical Program of Study

- PHNL Program Plan of Study framework in final revision

- Content of role courses will continue through Fall 2013

- Workshop review of current draft Plan of Study

  - see Primer to follow along with discussion

PHNL Role Concentration Courses

Advanced Public Health Nursing I

- Didactic
  - Introduction to the PHNL role
  - What is Public health nursing
  - Population based nursing care
  - Community assessment and needs assessment
    - Importance
    - Approaches
- Practicum
  - Complete Community Assessment
    - In community where student will work in subsequent practica
    - Identify public health needs in the community

PHNL Role Concentration Courses, cont.

Advanced Public Health Nursing II

- Didactic
  - Program planning using the information from the community assessment students concentrate on program planning.
    - Interventions
    - Grant proposals
- Practicum
  - Evaluation of an existing program in the community

Advanced Public Health Nursing III:

Contemporary Issues in Public Health Practice

- Didactic
  - Health communication and advocacy
  - Coalition building
  - Programs for vulnerable populations
  - Global health
- Practicum
  - Implement a pilot of the program/intervention planned in PHNL II

DE Online format – Didactic

- Weekly readings
- Faculty guided discussions
- Assignments
  - Written
  - Class presentations (using voice, video, power points)

DE Online format – PHNL Role Practica

- Practicum experience (168 clinical contact hours per role practicum course)
- Faculty lead course discussion
- Written assignments
- Journal self-reflection and Activity Time Log
- Preceptor/faculty guidance and evaluation

One Student's Journey

- **Advanced Public Health Nursing I**
  - Community
  - Large corporation
    - Community Assessment
    - Needs assessment – Hypertension/stress
- **Advanced Public Health Nursing II**
  - Planned intervention : "A Public Health Intervention to Increase the Practice of Resistance Training in an Employee Population"
  - Evaluated current hypertension education program in corporation

One Student's Journey (cont.)

- **Advanced Public Health Nursing III**
  - Implementation of resistance training program

- **Comprehensive Exam**

- **Final Capstone Scholarly Project**
  - "Lifestyle Modifiable Risk Factors for Hypertension in an Employee Population"

References

- American Nurses Association. (2006) Public Health Nursing Scope and Standards of Practice. American Nurses Association.

- The Core Public Health Functions Steering Committee, Center for Disease Control and Prevention. (2010). 10 Essential Public Health Serices:

- http://w ww.cdc.gov/nphpsp/essentialservices.html

Delivery of Common Core Courses Across Graduate Degree Programs Exemplar: Nursing Informatics

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Essentials of Doctoral Education for Advanced Nursing Practice

IV. Information Systems/Technology and Patient Care Technology for the Improvement and Transformation of Health Care

The DNP graduate should be prepared:

- To apply advanced informatics knowledge,
- To manage individual and aggregate level systems' information,
- To assess the efficacy of patient care technology appropriate to a specialized area of practice,
- To design, select, and use information systems/technology to evaluate programs of care, outcomes of care, and care systems such as practice information systems and decision supports to improve patient care.
- To be proficient in the use of information systems/technology resources to implement quality improvement initiatives and support practice and administrative decision-making.

Informatics for Nursing Practice

Course Objectives:

- Evaluate the current status of information technology within healthcare.

- Apply information theories and models to the role of technology in healthcare.

- Compare the strengths and weaknesses of standardized terminologies in their representation nursing-related data.

- Describe the basic processes of computers, computer systems and types of applications and systems used in healthcare settings.

- Use databases and informatics tools to generate evidence from practice and to retrieve and analyze data, information and knowledge.

- Evaluate consumer health information sources for accuracy, timeliness, and appropriateness.

- Describe processes and methods associated with the development, implementation, and evaluation of healthcare information systems.

- Analyze selected healthcare informatics issues.

- Discuss the major issues of patient privacy and confidentiality, and system security related to the use of information, information technology, communication networks, and patient care technology.

DE Course Assignments

- Assessment of informatics competencies
- Participation in threaded discussions
- Evaluation of consumer health information website
- Evidence-based practice guideline implementation project

Assessment of Informatics Competencies

- Purpose:
  - For students, to learn the areas of competencies they need to improve
  - For instructor, to determine which areas of informatics need greater focus in the design of better educational programs and give valuable insight for informatics curriculum development.
- Self-Assessment Nursing Informatics Competency Scale (SANICS) (Yoon, Yen, & Bakken, 2009)

  SANICS is a 32-item self assessment tool to measures informatics competencies in five competency types (Clinical informatics role, Basic computer knowledge and skills, Applied computer skills, Clinical informatics attitudes, and Wireless device skills) with a rating scale from 1 (not competent) to 5 (expert).
- Students take it at the first week and receive a summary of the results arranged by the five competency types

Evaluation of
Consumer Health Information Website

- Choose 3 health-related web sites relevant to their patient care experiences through medlineplus.gov and a general search engine such as Google, Bing, etc.

- Evaluate for content and literacy level using three readability assessments (SMOG, Fry, Flesch-Kincaid)

EBP Guideline Implementation Group Project

- The purpose of this group project is to identify components of healthcare information system implementation and to develop evaluation methods as students work as a team for the selection and implementation of information system.

- Students break into groups of 4 to 5 to simulate a system selection committee and complete a proposal for a computerized evidence-based practice guideline implementation project.

- The project consists of an **online presentation** using Wimba voice board and PowerPoint slides and an accompanying **written report**.

- For a group work, three boards were created: Chat/Whiteboard (a synchronous system); Discussion board (an asynchronous system); and Wimba voice board (a synchronous system).

Integrating Competencies into Informatics Course

- Integrating informatics competencies into the course curriculum is essential for adjusting the teaching method or content of the curriculum to the students' various needs.

- Students' competencies are measured at the beginning of the semester and incorporated into course revisions.

- Example: in the 2010 fall course, the assessment findings showed students were not competent in decision-support systems nor in information literacy; thus, these two content areas were strengthened by lecture notes and course assignments, e.g., health literacy assessment of health-related web pages, a literature review on the impact of decision-support systems on health care practice, development of a proposal to design a decision support systems (Choi, & Zucker, In press).

Integrating Informatics Competencies into DNP Curricula

- Preparing DNP students to be competent in all the areas of informatics competencies during one informatics course does not seem practical or efficient.

- Instead, informatics competencies need to be incorporated into the DNP curriculum in collaboration with other DNP instructors

- For example, activities or exercises using spreadsheets, databases, and statistical software could be included in DNP courses such as nursing research or intermediate biostatistics, leadership, or health quality (Choi, & DeMartinis, in press)

Integrating Informatics Competencies into Existing DNP Curricula: Examples

- Familiarizing students with statistical software for quality improvement projects can be incorporated into leadership or health quality courses.

- Using informatics tools such as retrieving data, information, and knowledge to investigate population health can be incorporated into an epidemiology course

- Using informatics tools to evaluate knowledge for evidence based practice can be incorporated into a research method course.

- Informatics skills could be incorporated into clinical practicum courses in the DNP curriculum by applying point-of- care technologies for decision support and documentation.

- Administrative, clinical, and educational databases could be utilized in the planning and execution of the capstone project.

Intermediate Biostatistics

- Many biostatistics courses are currently offered across the programs, all with a different scope.

- For example, the biostatistics courses in public health focus on principles of statistics to prepare students as statisticians; thus, mathematical equations and hand calculations are important components of course materials.

- On the other hand, statistics course in DNP program require applying statistical techniques using software to solve clinical problems and comprehending basic statistical concepts.

Course Objectives

1. Create and manage a computerized database using SPSS statistical software package
2. Analyze the relations between research methods and statistical techniques
3. Select the appropriate statistical methods to address research questions
4. Carry out an appropriate statistical procedures
5. Interpret and analyze statistical outputs
6. Write the results section of a research report.

Course Description

- Focusing on statistical techniques frequently used in health sciences research and on the use of analytic software to create, manage and analyze data on personal computers

- Making the course student friendly by minimizing mathematical symbolism and equations

- Emphasizing on the practical application of biostatistics in nursing practice through hands-on practice with data sets and statistical software by assignments

- Students being able to utilize statistical knowledge and skills learned in the class when analyzing and interpreting their capstone project data.

Course Content

- The course content consists of:
  - Reading assignments in the course textbook, and additional readings
  - Lecture notes with examples to accompany the readings
  - Weekly computer exercise for individual practice and development of skills
- Students work weekly practice problem sets by:
  - Generating their own research questions,
  - Identifying appropriate statistical techniques, and running software (SPSS Standard GradPack),
  - Interpreting the findings, and
  - Presenting results in laymen's terms.
  - Receiving graded assignments back with instructor's comments to ensure they are on the right track.

Topical Outline

- Review of concepts from introductory biostatistics: Descriptive statistics and inferential statistics
- Measuring the differences among group means: t-Tests and One-Way Analysis of Variance (ANOVA)
- Analysis of Covariance (ANCOVA)
- Repeated Measures Analysis of Variance (RM-ANOVA)
- Regression & Regression Diagnostics
- Correlations
- Logistic Regression
- Factor Analysis
- Nonparametric Statistics

References

- Yoon S, Yen PY, & Bakken S (2009). Psychometric properties of the self-assessment of nursing informatics competencies scale. *Stud Health Technol Inform., 146*, 546-50. Stud Health Technol Inform

- Choi, J. & Zucker, D. (In press). Self-assessment of nursing informatics competencies for Doctor of Nursing Practice students. *Journal of Professional*

- Choi, J. & DeMartinis, E.J (In press). Nursing informatics competencies: Assessment of undergraduate and graduate nursing students. *Journal of Clinical Nursing.*

The Advising Recipe for Success

- Appointment of advisors to advisees
- *Reaching Out*
- Timely & effective communication
- Organized & tracked plan of study
- Organizational processes in improving advising for distance students & faculty

Connecting Advisors & Advisees

- Starts at the beginning of the program as new students matriculate into program
  - In-person, Skype, Telephone, Email

- Advisors/Students connect for initial introduction and then each semester, at a minimum, prior to registration for the next semester's courses.
  - Connections and communication intensify as students follow through comprehensive examination & capstone Scholarly project requirements toward graduation

- Required Record(s)of advising meetings on file

Reaching Out

- Pro-active response: Required of Advisee and Advisor
- Clarification of Role of Advisor:
  - Assist student to navigate the program expectations as needed
  - Tracks advisee progress on timeline to graduation
  - Provides for early intervention for academic or progression challenges
  - Links students with resources and services (editors, campus services)
  - Serves as Chair of comprehensive exam & capstone scholarly project
  - Provide supportive leadership through guidance

Timely & Effective Communication

- DNP Online Orientation Required
- DNP Graduate Program Office provides important updates regularly on DNP Listserve
- Communication goes both ways
- Clear expectations of when to contact advisor
- Red Flags—for Early Intervention
  - Off track with plan of study
  - Cumulative GPA less than 3.0
  - Specific concerns (writing, disabilities, professional conduct)
  - Incompletes, Withdrawals, & Failures

Organized & Tracked Plan of Study

- Plan of study on admission to program & updated each semester (see *Primer*)
- Students sign/agreement to *adhere* to plan
- Out of sequence issues addressed
- 6 Forms from pre-Comprehensive Examination to completion of Capstone Scholarly Project: (see *Primer*)

Organizational Processes for Improving Advising

- Orientation for faculty on advising by DNP Program Director and Program Manager (now we will include Role coordinators as well)

- Advisor expected to be key contact person for assigned students for progression through to graduation
  - Required connection each semester prior to registration, including anecdotal notes

- Regular faculty meetings to discuss advising issues, positives points, to share creative ideas, etc.

Programmatic Challenges for DE Delivery: Exemplars Discussed

Solving the Practicum Placement Puzzle

States Boards of Higher Education and States Boards of Nursing Requirements for authorization for DE Program Delivery

Presented by

Jean DeMartinis, PhD, FNP-C

Solving the Placement Puzzle

- Students still initiate process of inquiry for placements with improved process guidelines with assistance of Business Office Manager

- To assist with timeliness of contract acquisition: Extensive discussion with students about the difference between the larger institution-based Affiliate Agreement needs and individualized Preceptor/Faculty/Student Agreements

- Administrative layers added: Director, now role option Coordinators to assist with activities of DNP program and for placement needs.

- Hallmark of our Efforts: *Hired Placement Coordinator* who will assist Director, Coordinators, and business office personnel

Practicum Placements, continued

- Use TYPHON software student clinical placement tracking system

- Required pre-approval of preceptors by Director/ Coordinators including any needed pre-practicum discussions

- Faculty of record for each practicum section required to connect at launch of practicum by Skype (or other visual method), phone, or email

- Mid-semester and end semester contacts also required

- One face to face meeting with preceptor ideal for local and regional students and as needed for distance students

State Authorizations for DE Programs

- Extensive endeavor; Absolutely Required!
- Confusion regarding DOE mandate and Individual States' Boards of Education and of Nursing Requirements; Myths resolved
- Requires University and School or College of Nursing personnel to *work together as team* to accomplish
  - Refer to Primer during workshop
- University launched—ours through CPE
- If *Campus Response* necessary—CPE begins process; Nursing follows with needed documentation and follow-through
- Currently NCSBN initiative reviewing process