A project developed a model Master of Science in Education for health professionals that was based on principles of adult learning. The completed curriculum included course content, instructional alternatives, an implementation plan, and an evaluation plan. The following methods were used: a review of literature on adult education and health occupations education; telephone interviews of hospital staff development personnel and health program instructors; focus groups of health professions educators and current students in health professions education; course offerings and degree requirements; catalogues of graduate education programs; and internal and external experts from regional institutions. Adult learning principles, learning needs, and barriers were identified. Four courses were developed: learning theory, teaching methods, measurement and evaluation, and research methods. The proposed degree requirements were 30-48 semester or 40-72 quarter units. The model for the project expanded Davis' (1993) model into eight components: student, learning preferences, content, teacher, teaching styles, environment, outcomes, and assessment. Students would be provided theory and opportunities to develop skill in both areas of assessment in health professions education: classroom performance and clinical competence. (An attachment of the developed curriculum includes educational philosophy, educational outcomes, and curriculum design.) (YLB)
A MASTER OF SCIENCE IN EDUCATION FOR HEALTH PROFESSIONS EDUCATORS

A MODEL

BY

ELLEN SAXE CLYMER

A Roundtable Workshop presented to the American Association for Adult and Continuing Education in Charlotte, NC: October 31, 1996
PRESENTATION OUTCOMES:

1. Participants will recognize one method for blending principles of adult learning into a professional education program.

2. Participants will confirm the appropriateness of use of adult learning principles in health professions education.
THE PROBLEM:

Health care reform issues are driving the need for change in the way health professionals are educated. Although the need for change has been recognized over the past several decades, little has been done, overall, to initiate program changes called for by a rapidly changing workplace (Schön, 1987; Curry & Wergin, 1993). Cervero, in 1988, asserted that professional education programs will only effectively facilitate learning to the extent they consistently use a model of learning that is based on adult learning principles.

PURPOSE OF THE PROJECT:

The purpose of the project was to develop a model Master of Science in Education curriculum for health professionals that was based on principles of adult learning. The completed curriculum includes course content, instructional alternatives, an implementation plan, and an evaluation plan.
RESEARCH QUESTIONS:

1. What are the learning needs of educators of health professionals?
2. What are the barriers that interfere with an educator of health professionals' pursuit of a graduate degree in education?
3. What content should be included in a Master of Science in Education for Health Professionals curriculum?
4. What instructional alternatives are appropriate for use in a Master of Science in Education for Health Professionals?
5. What educational delivery systems are available that will make the program accessible to educators of health professionals?
6. What is a feasible implementation plan for a Master of Science in Education for Health Professionals' curriculum?
7. What evaluation plan (student, faculty, and program) would best accommodate a graduate program for educators of health professionals?
METHODS:

1. Review of literature of adult education and health professionals education.
2. Telephone interviews
   a. Hospital staff development personnel
   b. Health program instructors
3. Focus groups
   a. Health professions educators
   b. Current students in health professions education
4. Course offerings and degree requirements
   a. Adult education graduate programs
   b. Schools of Allied Health graduate education programs
5. Catalogues
   a. Traditional graduate education programs
   b. Nontraditional graduate education programs
6. Internal and external experts from regional institutions
FINDINGS:

A summary of the pertinent findings is provided below:

ADULT LEARNING PRINCIPLES
Students are open to learning
Students come from diverse educational, experiential, and ethnic backgrounds
Students want to apply learning to their everyday life
Students are pragmatic
Students want immediate feedback

LEARNING NEEDS
Leadership skills
Management and administration
Instructional design in classroom and clinical teaching
Evaluation methods
Research Methods
Computer-assisted instruction

BARRIERS
Lack of time
Lack of money
Rigid work schedules
Energy
Accessibility
COURSE OFFERINGS
Learning theory
Teaching methods
Measurement and evaluation
Research Methods

DEGREE REQUIREMENTS
Semester units  30-48
Quarter units  40-72
RESULTS:
The model that evolved from the study was adapted from a model offered by Davis (1993). In his book Davis provided a model that includes four components; subject, setting, student and teacher. The model for this project expanded Davis' model into eight components; student, learning preferences, content, teacher, teaching styles, environment, outcomes, and assessment. The schematic below graphically displays the model.

STUDENT ———— TEACHER

LEARNER PREFERENCE ———— TEACHING STYLE

CONTENT ———— ENVIRONMENT

| OUTCOMES |

| ASSESSMENT |

The model offered by Davis (1993) centered on students and learning rather than on teachers and teaching. Davis said that the setting, (environment) in many ways, determines what can be done and what cannot be done in a learning situation. He described students as "anyone the teacher is trying to influence through teaching" (p. 60). The subject was defined as "such things as skills and abilities, thinking processes, and values and attitudes related to the content" (p.25). Finally, Davis (p.6) defines teaching as ". . .the interaction of a student and a teacher over a subject".

The above model expands that concept to focus on learner preferences or, as frequently described, learning styles and on teaching styles. Grasha (1994) reminds that
teaching style is a multidimensional construct that results in many different teaching behaviors. Learning preferences refer to the unique ways students approach learning situations.

The literature of adult education and the literature of health professions education is replete with the need to specify learner outcomes. The model presumes well defined learner outcomes.

Assessment in health professions education has two components; classroom performance and clinical competence. In the above model, students are provided theory and experience opportunities to develop skill in both arenas.

Although the model is specifically designed for health professions educators, it is believed that it is generic enough to be adapted for any discipline.

An outline of the developed curriculum is attached.
REFERENCES


ATTACHMENT
EDUCATIONAL PHILOSOPHY

The Master of Science in Education for Health Professionals program is guided by the principle that each student entering the program is a developing adult who brings an enriched background of knowledge and skill to the classroom. Each student has unique educational goals and learning preferences. The program strives to accommodate those educational goals and preferences by planning educational experiences accordingly. When students have completed the course of instruction, they are expected to be empowered learners capable of adjusting to varied educational settings and to changing needs of the healthcare workplace. It is believed that this approach is essential to serve future educators of health professionals.

Students in the master’s program come with widely differing backgrounds. Some are teaching professionals with years of experience who want to improve their skill in classroom and clinical teaching. Others are just starting their teaching career and have minimal or no teaching preparation. Some are changing from a career in health care service to a career in health care education. Irrespective of their background, all are pragmatic in their approach to learning. They want to apply their learning to their present situation.

In order to serve students with such diverse prior education and experience and who have changing career goals, the Master of Science in Education for Health Professionals curriculum endeavors to meet the learning needs and support the career goals of each student by making flexibility an integral part of the program.
EDUCATIONAL OUTCOMES

Graduate Outcomes

Graduates will accomplish success in the master’s program by demonstrating the following knowledge, skills, and behaviors:

1. The application of selected theoretical concepts, relative to learning, by articulating a personal philosophy on adult learning that acknowledges the various roles educators of health professionals play.

2. In the design of their projects, demonstrate a recognition of how cognitive processes, such as information processing, attention, perception, memory, and critical thinking impacts an adult’s problem-solving abilities and relate it to classroom and clinical instruction.

3. Acknowledge how affective processes, such as personal value systems, self-concept, and cultural background impacts an adult’s learning preference by creating alternate ways to meet learning outcomes.

4. Develop assessment instruments that show an understanding of the value of assessment in the teaching-learning process.

5. Use teaching methods that distinguish the differences and similarities in the academic and the clinical environment.

Program Outcome

The Master of Science in Education for Health Professionals program strives to produce graduates that have entry-level skills, attitudes, and the knowledge needed to teach in a health care education program.
THE CURRICULUM DESIGN

Course Offerings

The curriculum is presented in one-unit modules to provide students and teachers the flexibility to collaboratively design a program of study to meet individual student needs. Modules are grouped sequentially to allow students to build progressively on the knowledge, skill, and values thought important to educators of health professionals.

Students are expected to complete the series of modules in sequence by demonstrating mastery of the learning outcomes identified for each module.

A minimum of 32 semester units are required for completion of the master’s degree. One semester unit represents 12 hours of instruction.

Required

Series 1: Theories of Adult Education

Module 1: Philosophical Foundations of Adult and Health Care Education
Module 2: Faculty Roles in Adult and Health Care Education
Module 3: Applied Research Development Seminar
Module 4: Ethical Issues in Teaching Adults
Module 5: Legal Issues in Teaching Adults

Series 2: Teaching and Learning Principles

Module 1: Motivation
Module 2: Transfer of Learning
Module 3: Teaching Styles
Module 4: Learning Preferences
Module 5: Statistics I
Module 6: Statistics II

Series 3: Curriculum Development (Classroom and Clinical)

Module 1: Foundations of Curriculum Development
Module 2: Planning for Instruction
Module 3: Designing Instruction I
Module 4: Designing Instruction II
Module 5: Instructional Resources
Module 6: Evaluation I
Module 7: Evaluation II
Module 8: Evaluation III
Module 9: Presentations

Electives

Series 4: Administration

Module 1: Theories and Models of Leadership
Module 2: Educational Administration
Module 3: Change Agency
Module 4: Conflict
Module 5: Administrative Roles
Module 6: Administration in Human Resource Development
Module 7: Budgetary Functions
Module 8: Societal Factors in Health Care Education
Module 9: Research I
Module 10: Research II
Module 11: Information Systems
After completing a minimum of 26 semester units from the four series of modules, the student will complete degree requirements by performing a supervised practicum in teaching and a completed project with a written report or a thesis, or a supervised practicum in teaching, three additional units from Series 4 modules, and a three-hour comprehensive examination.

**Option 1**

- Supervised Practicum in Teaching: 3 units
- Completed Project with Written Report or a Thesis: 3 units

**Option 2**

- Supervised practicum in teaching: 3 units
- Series 4 modules: 3 units
- Comprehensive 3-hour examination
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