Planning Instruction in Schools of Nursing: A Basic Instructional Development Approach

Christine M, German
Mary F, Kennedy

Abstract: The level of instructional development knowledge and its use in the instructional development process on the part of nurse educators was the subject of an ethnographic study in the province of Newfoundland. The study, completed in the summer of 1993, used a case study approach, interviewing five nurse educators, one selected randomly from each of the five provincial Schools of Nursing. Unstructured interviews of three to five hours with each subject, permitted subjects to set the interview agenda and to respond in their own term inology. Based on the selected sample, results of the study indicate that nurse educators in Newfoundland have a functional knowledge of instructional development, despite never having formally studied in the area, and that they plan instruction using a systematic approach. Their knowledge-base of instructional development, and their use of instructional development in the instructional planning process is, in fact, more consistent than that of teachers in the formal education system.

Resume: Les connaissances en pedagogie et leur application a l'enseignement des soins infirmiers ont fait l'objet d'une etude ethnographique a Terre-Neuve, a l'ete de 1993. Les auteures ont employe la methodologie de l'etude de cas pour interviewer cinq enselgnantes, choisie chacune au hasard au sein des cinq grandes ecoles provinciates de soins infirm iers. Des rencontres informelles de trois d cinq heures ont eu lieu avec chacun des sujets en vue d'arreter le plan general de ('interview et de leur permettre de repondre dans leurs propres mots. A partir de cet echantlllon, les auteures ont etabili que les professeurs-res de soins infirmiers d Terre-Neuve ont une connaissance pratique des grands principes pedagogiques sans avoir jamaissuivide cours dans le domaine, et qu'ils suivent une approche systematique pour la planificaiton de leur enseignement. Leur base de connaissances en pedagogie et la mise en pratique de principes pedagogiques dans la planification de leur enseignement sont, en fait, plus coherentes que celles de certains ensiegnants du reseau d'education de la province.

INTRODUCTION

A common concern among nurse educators is how to facilitate the students' application of knowledge to the clinical setting, and the utilization by nursing students of conceptual and factual knowledge in problem-solving and critical thinking processes. Until recently, nursing education was referred to as training, and was grounded in the apprenticeship system. *The Concise Oxford Dictionary* defines training as the bringing to a "desired state or standard of efficiency by instruction and practice" (p. 1354), and apprenticeship as "learning a craft, bound to service, and entitled to instruction from [an] employer for a specified term" (p.

55). Keddy and Lukan (1985) note that until the past half-century nursing education was not even well-grounded in apprenticeship, since novices learned from their peers, and not from skilled masters.

According to Griffin and Griffin (1969), the first real nursing school was established in 1860 in England by Florence Nightingale. She stressed the necessity of women being educated, and she had the insight to know that specialized training was needed to care for the sick. Her aim was to establish a career for women similar to that of medicine for men. "Nightingale contributed to the foundation of a knowledge-base unique to nursing, and stressed the importance of education for the nurse" (Cull-Wilby & Pepin, 1987, p. 516).

The first training school for nurses in Canada was established at St. Catherine's, Ontario in 1874. By 1900,20 hospital training schools of nursing had been established in Canada. This number escalated to 70 by 1909 (Duncanson, 1970). While ostensibly modelled on the Nightingale School in England, the underlying belief system of the Canadian schools differed from that of the Nightingale School. In the Nightingale School the training of nurses as professional women was paramount. In the Canadian schools service to the hospitals to which they were attached took precedence over educational concerns.

Mussallem (1965) quotes Adelaide Nutting, the first professor of nursing at Columbia University:

> Heavy demands of the wards made it impossible for all students to attend their weekly lectures and it was always arranged that some students would choose to take very full notes and read them later to the assembled group of the less fortunate. Lectures came under the category of privileges like hours off duty to be granted, hospital duties permitting, (p. 6).

As a result of the exploitation of nursing students, leaders in nursing lobbied for the establishment of improved educational standards. The first iniative toward this goal was the publication of *the Standard Curriculum for Schools of Nursing* in the United States in 1917. This curriculum guide also became widely used in Canada (Mussallem, 1965).

In addition to the attempt to attain uniform educational standards, another thrust in trying to have nursing recognized as a profession has been the relocation of nursing education from hospital schools to the university setting. Mussallem (1965) notes "The purpose of a university school of nursing is to provide for the professional preparation of nurses through correlated programmes of liberal and professional education" (p. 80).

Early attempts to move nursing education to the university failed, but in 1919 the University of British Columbia established a nursing school. The program required two years of study at the university, followed by two years of nursing practice in a hospital and was completed with a final year of study at the university. Students were taught primarily by medical doctors in the university setting, and were supervised by floor nurses in their clinical experiences. Because the university had no authority over students or hospitals during the hospital experience, the non-integrated arrangement promoted discontinuity and confu-

sion among the students. This separation of knowledge and clinical practice remained a problem for university-based programs until 1942, when the University of Toronto offered the first integrated program.

With the establishment of an integrated nursing program, the issue of qualified instructors arose for the first time in nursing education. Universities could not hire faculty members lacking in academic qualifications, and no graduate programs in nursing existed in Canada until 1959, when the University of Western Ontario offered the first graduate program. Furthermore, with the establishment of schools of nursing within the university system it was assumed that academic knowledge—in this case knowledge of nursing theory and science — qualified one to teach.

Today nursing education in Canada continues to be located in two distinct settings—diploma schools, associated with hospitals or community colleges, and baccalaureate schools, located in universities. However the Canadian Nurses Association (CNA) adopted the policy, in 1982, that all nurses entering the profession as of the year 2000 must hold a baccalaureate degree. All provincial associations supported this change in policy, and the Association of Registered Nurses of Newfoundland (ARNN), has developed new curriculum guidelines in keeping with the policy.

The ARNN by-laws (1991) have identified the minimum clinical and theoretical components of a nursing program. All provincial nursing programs — in hospital schools and in the university — must be approved by the ARNN. Presently all five schools are working collaboratively with the ARNN to develop a common curriculum for future nursing education, to meet the requirements of theyear 2000 policy. Primarily this new curriculum will lead to an undergraduate degree in nursing. In 1992 the Liaison Committee on Future Nursing presented a *Strategic Plan for Future Nursing Education for Newfoundland:*

> The goal of the Strategic Plan for Future Nursing Education is to develop a curriculum model to ensure that all future nurses entering the profession are prepared at the Baccalaureate (BN) level. As a first step toward that end, a collaborative curriculum model will be developed to make BN education accessible to all beginning nursing students, (p. 2)

Systems Approach: Instructional Development and Nursing

Ludwig von Bertalanffy, the author of general systems theory (Saettler, 1990) describes the theory as "a science of wholeness or holistic entities" (p. 353). According to Logan (1982), a system is a set of parts that relate to each other, individually or collectively, and operate in an environment for a particular purpose (p. 3).

> Systems theory postulates that there are universal principles that may be applied whenever one defines a system in any discipline. A system is a set of components that mutually interact to accomplish a set of goals. The system acts as a whole but is studied in parts to provide information about its components and their relationships. (Moughton, 1982, p. 471)

Applications of the systems approach were first noted in the 1960s in the design of electronic, mechanical, military, and space systems (Romiszowski, 1981). Systems design has also been applied to instruction, and Salisbury (1989, p. 42) notes that instructional systems design is the use of systems models specifically in the production of effective and replicable instructional programs. The characteristics of instructional systems design include an integrated plan designed to solve a problem; analysis of all components in a sequential but flexible order; research-based design procedures; empirical testing followed by necessary revisions; and, evaluation of the design model (Gustafson and Tillman, 1991).

Brown and Kennedy (1988) refer to conceptual instructional development as the logical application of the notion of systems approach. They note that instructional development has been functional, rather than conceptual, in its application.

> While the conceptual instructional developer is involved in the usual identification of problems and the seeking of solutions through the implementation of a chosen instructional development model, (s)he is also concerned with the ongoing functioning of the system. The conceptual instructional developer is concerned with maintaining the climate for change - energies are focused on continuous monitoring of the system so that potential problems can be anticipated. The conceptual instructional developer is concerned with maintenance of the relationships established during the instructional development activity, (p. 5)

The foundation of nursing practice is known as the nursing process. It is a scientific problem-solving approach that nurses use when planning client care and making decisions in the clinical area. It is essential that nurses be able to define problems accurately, to make the best choice among possible alternatives, to safely implement a plan of care, and to evaluate the effectiveness of the intervention. The nursing process is a systematic framework composed of five phases: assessment, diagnosis, planning, implementation, and evaluation. The theoretical basis for the nursing process can be found in general systems theory, the problem-solving process, decision-making theory, the diagnostic reasoning process, and information-processing theory (Craven and Hirnle, 1992).

Nursing education must provide the opportunity for students to become proficient in the nursing process. While nurse educators have clinical competence and knowledge of nursing theory and nursing science, Kemp and Rodriguez (1992) speculate that nurse educators may not have the necessary skills to provide instruction that is consistent, systematic, and effective, since they are usually hired because of strong clinical and academic backgrounds in nursing. Reilly and Oermann (cited in Oermann & Jamison,1989) state:

> Knowledge of the subject matter and clinical competence are critical, but knowing how to teach is as important. A teacher with knowledge and expertise in clinical practice is not a teacher if unable to communicate that knowledge to students and facilitate their learning, (p. 65)

There are many benefits to using an instructional development approach in nursing education. Once applied the principles of instructional development ensure congruence of objectives, instruction, and evaluation. Instructional development increases the effectiveness, efficiency, and relevance of instruction. More of the objectives are attained; they are attained more quickly, and students are learning what they need to know. The careful sequencing of objectives assures that students have prerequisite knowledge and skills (Gustafson & Tillman, 1991). These benefits are fundamental to the process of analysing educational problems and devising solutions to those problems. The process of instructional development can enhance the ability of nursing education to meet current challenges and the future needs of students.

The Methodology of the Study

A qualitative case study approach was used in the study, specifically that of ethnography. Merriam (1988) defines ethnography as:

> ... a set of methods used to collect data, and it is the written record that is the product of using ethnographic techniques.. .to collect data about the social order, setting, or situation being investigated, (p. 23)

This study employed interviewing — specifically structured and semi-structured interviewing— in the collection of data. Structured interviews were used initially to collect demographic data, while longer, indepth interviews used the semi-structured format. Merriam (1988) notes:

> Interviewing is necessary when we cannot observe behavior, feelings, or how people interpret the world around them...Interviewing for case study research, especially qualitative case studies, may use [the] highly structured format to gather common sociodemographic data from respondents. For the most part, however, interviewingis more open-ended and less structured. In the semi-structured interview, certain information is desired from all respondents. These interviews are guided by a list of questions or issues to be explored, but neither the exact wording nor the order of the questions is determined ahead of time. This format allows the researcher to respond to the situation at hand, to the emerging world view of the respondent, and to new ideas on the topic, (pp. 73-74)

This study is one of a series of studies on instructional development knowledge, competency, and use among Newfoundland educators. To date these studies have focused on educators in the provincial school system. The interview guides developed for this study were adapted from the former studies of Graham (1991), Thomey (1991), Tobin (1989), and Gallant (1989).

The sample group consisted of five respondents. There are five schools of nursing in the province, with approximately seventy-five full-time faculty members. With the cooperation of the Director of each school, one faculty member was

randomly selected to take part in the study. The curriculum committee in each school performs a major role in the planning and development of courses. Each committee is responsible for ensuring that all content is congruent with the school's philosophy and conceptual model. The committees also ensure that pertinent subject matter is presented in the curriculum. Because all faculty members in each school must submit to the same process for course approval, it was felt by the researcher that one faculty member from each school would be a sufficient sample for this study.

With the exception of the structured interview for demographic data collection, the interviews varied in length. In the case of the semi-structured interviews, the respondents were given the choice of having one extended interview or several short interviews. All chose the one extended interview. These interviews averaged approximately three hours per respondent. All interviews were audiotaped with the respondents' permission. The interviewer asked only broad questions to facilitate the data collection. The questions were open-ended, permitting respondents to reply in their own ways, and the interview was directed primarily by them - that is, they chose the order in which to discuss issues. There was no set order imposed by the interviewer.

DATA ANALYSIS

Demographics of Respondents

The respondents have been identified as NE 1 through NE 5, to maintain confidentiality. Likewise the specific demographic data of each respondent is not disclosed. Demographics, in terms of the group, indicate that all respondents are female, with experience as nurse educators ranging from five to twelve years. Four respondents had served on their schools' curriculum committees. Their educational backgrounds showed some variety. Four had B.N. degrees, and one had both B.A. and B.Sc. degrees. Four of the respondents had completed some graduate work, with two holding Nursing degrees at the Master's level and one currently completing the thesis for that degree, and one holding a graduate diploma in Education. Three respondents had completed Education courses in the past, with only one having completed a course in Instructional Development. All respondents had completed university courses in the last five years (See Table 1).

Instructional Development Knowledge

Respondents were asked to describe their knowledge and understanding of instructional development theory and of specific instructional models. While fairly lengthy descriptive answers were provided, these contained no evidence of the theoretical knowledge relating to instructional development, and no respondents could refer to specific models. All attempted to define instructional development in their own terms, as follows:

TABLE 1
Demographics of Case Study Respondents

Background Experiences	N=5
Teaching background	5
5 or more years	2
Teaching assignment	
Year 1	2
Year 2	2
Baccalaureate Program	1
Curriculum committee experience	4
Course development/Revision experience	5
Education background	
B.N.	4
B.Sc./B.A.	1
Graduate study	
M.N.	2
M.Ed.	1
M.ScN.	1
Completed education courses	3
Instructional development course	1
Program evaluation course	1
Completed university course in past 5 years	5

NE 1: "I've looked at the literature written, both in the past and currently, about education in general and about nursing education, and it [instructional development] is the methodologies about teaching the type of content."
NE 2: "Instructional development means if you had to teach a course, what's the best way to go about teaching the course—what's best for the students. Or the best way to get across your lecture topic, whether it's group work or straightforward lecture."
NE 3: "It means the approach you take to develop a learning session - what you're going to teach and how you are going to teach and evaluate it — whether that's a whole course or just one class."
NE 4: 'Instructional development is the process and the methodology by which the course content will be delivered...and how I would go about doing that."
NE 5: "Instructional development for me would mean that I would have to develop courses in instruction, how to teach, or what's involved in the courses you're teaching, and how you're going to go about it."

While none of the respondents were knowledgeable about the underlying theories and principles of instructional development, nor could they discuss specific instructional development models, it was interesting to note that they all felt knowledgeable about instructional development. They felt that their professional readings and their experience working with more knowledgeable educators gave them knowledge of instructional development. As can be seen from their comments, however, they erroneously equated instructional development with classroom delivery of instruction and teaching strategies.

Perceptions re Objectives. Respondents were asked to discuss their knowledge and use of instructional or behavioral objectives. All five respondents were very comfortable with their knowledge of objectives and they used them extensively in the instructional planning process. This is not surprising, since the nursing education curriculum has been organized around and based on behavioral objectives for the past two decades, with all sets of objectives having to meet the approval of the schools' curriculum committees.

NE 1 indicated that objectives are developed for all aspects of every course, and that students receive a copy of the objectives. She was unaware of any theorists in the behavioral objectives movement, but indicated that it was "all based on the Tylerian model." She noted:

> "We teach in a behaviorist system, so we teach by objectives ... Yes, I use them because I do say specifically what it is that I am intending to teach and what I want the student to get out of it."

NE2 noted that most of the objectives used originally came from a textbook. While she used objectives to guide her teaching, she felt that they were "too restrictive - they box you in too much." She was unable to recall any literature on objectives, but she remarked that there was "a certain way to write objectives." She also noted that they are used extensively for evaluation, particularly in the clinical setting.

> "Objectives were originally developed by the instructors, but they weren't made up by them. They came from books. Every year we fix up our objectives to go with the book we are using."

NE 3 focuses her instructional planning on objectives. She noted:

> "I'm very objective-oriented. In my Master's program I did a course on teaching. That's where I learned all about writing objectives."

She gets her objectives from various sources, most frequently from the textbooks and the instructional gu idebooks that accompany them. She also reads numerous books on her topics and cul Is them for objectives, wh ich she may modify to suit her courses. She explained that objectives are used in the evaluation of students, both in the academic and the clinical areas.

> " I try to make the objectives very outcome focused rather than process focused. I do use my objectives to set my exams, so they have to be measurable. How do you test "become sensitive to"? So I tend not to do that. They can describe, they can list, they can analyse."

NE 4 mentioned Bloom's taxonomy and recounted where she had originally learned about objectives.

> "... my initial use of objectives as an instructor was very much guided by Bloom's taxonomy. I learned about objectives by trial and error after I went to work at the school [of nursing as an instructor). When I think of objectives I automatically think of behavioral objectives although I realize that's not the only kind of objectives there are. I think of behavioral objectives whereby an instructor can outline subject matter that has to be taught or behaviors that have to be seen in order to realize that the student is actually meeting the goals of the program."

NE 5 defined objectives as " guidelines that are written in a certain way that shows exactly what it is that you want to accomplish, how you are going to accomplish it, and in what length of time you are going to accomplish it." She talked at length about the various types of objectives, including short-term and long-term objectives. She felt that objectives were necessary for lecture preparation and for the evaluation process. While unable to provide literature sources on the objectives movement she noted that she was guided by Bevis (1993) and her comments on objectives.

> "The objectives for my classroom are a guideline for my lectures. I know exactly what I want the student[s| to gain from my lecture. I don't know if they will get it all, but there is a way of knowing that later when you do the evaluation."

In all the nurse educators had extensive practical knowledge about objectives and used them regularly as a guide in the development of their courses and lectures, and as a guide in the evaluation of students. They frequently adopted or adapted existing lists of objectives, and occasionally wrote their own. While they seemed to see the benefit of using clearly defined objectives, they did not worry about the actual content or levels of the objectives, assuming that this was the responsibility of the curriculum committees who ultimately approved them.

Perceptions re Learner Analysis. The five nurse educators proved to have very little knowledge of the component of instructional development referred to as learner analysis. Other than through a recent awareness in the nursing education literature of learning styles (which typically refers to learner preferences rather than cognitive learning styles), they gave little consideration to the characteristics of their students. Only two of the five respondents seemed to be cognizant of the need for remediation or additional attention in cases where students' prerequisite knowledge was less than anticipated.

NE 1 described the change in her students over the years, noting that there is now a much greater cross-section of students entering nursing, including mature students, male students, single mothers, and various levels of post-secondary education. She considered learner analysis to be equated with learning styles:

> "Well, they all have their own learning styles... Some need the visual aspect, some need to go off by themselves, some need more direction than others. As a classroom teacher you have to be aware of all these things."

NE 2 had very little to say about learner analysis, and had no knowledge of the importance of learner characteristics. She did note a change in her students over the past several years:

> "We have more mature students now; they're not straight out of high school. Some are single parents. They are under more pressure at home. They can't give 100% because of the home pressure. The quality of their written work is not as good."

NE 3 does attempt to assess her students and uses the information obtained when planning her teaching.

> "They come from a wide variety of backgrounds. Most of them [now] have been out of school for more than 10 years. I have to consider their prerequisite knowledge, and I find that I have to do a lot of review of certain topics in class - more so than I had expected."

NE 4 also discussed the change in students over the years, resulting in a much larger number of mature students. But she believes that the change to admit mature students has resulted in higher academic entry levels than previously. She equated learner analysis with awareness of learning styles:

> "In terms of... their desire for instruction I would say that students want everything lectured and they want to do as little as possible through independent study. They only want the bare bones. In the last year or so I've seen a difference in the students. There has been much more interest... in group work, poster presentations, and group projects that have been assigned."

NE 5 described her students similarly to other respondents, as having a variety of backgrounds and educational experience. She deemed it important that the characteristics of students be considered when preparing instruction, but again the focus was on what she referred to as "learning styles." She noted:

> "We have to take into consideration all those backgrounds of the students because that has an effect on how the person learns. All those people with different backgrounds have different ways of learning,

> especially the adult learners. When doing up my lectures I have to look at what the student has learned before coming to my class so that I can build on that and don't repeat it. I look at what Bevis writes about learning theories and Knowles' theory of adult learning."

Perceptions re Evaluation. When the nurse educators were asked to provide information about their understanding of evaluation, all were aware of the broader context of program and course evaluation, but for the most part the focus of their responses was student evaluation. In the case of examinations set for students, all of these must be approved by the schools' curriculum committees. There are guidelines set for the percentage of examination questions allotted to each phase of the nursing process and the percentage allotted to the different dimensions of learning. Course assignments tend to evaluate the application of knowledge and critical thinking.

NE 1 noted that formal evaluation within nursing education is accomplished through examinations and assignments. For examinations, she develops the examination questions as the lectures are being prepared.

> "Hopefully you will test what is relevant so when you are writing your lecture is when you are most focused about that topic. [In the clinical area] students are evaluated based on objectives. They have certain behavioral objectives they must meet in order to be successful."

NE 2 described evaluation solely from the perspective of student evaluation through examinations. "All our evaluation is purely academics...You write the exam and you get this mark." She prefers to develop examination questions after a lecture has been given.

> "If you have to do your exam questions first, then you have to make sure you cover that material in class. I prefer to lecture first and then do my exam questions. If I do them before I lecture, I find I emphasize that material in class. If I do the lecture first, everything is given the same emphasis. All of the exam questions will come out of the objectives."

NE 3 described evaluation as testing students' knowledge in the classroom setting, while evaluation in the clinical setting is more complex, including testing of psychomotor skills and thinking skills in addition to knowledge, and self-evaluation on the part of students. She noted that her examinations are criterion-referenced:

> "When I do my tests, they're all objectives-based. When they are studying if they learn the material to answer what that particular learning objective was, then they probably know the answer to the exam question."

NE 4 described evaluation as "an internal and external overall program evaluation and then specific evaluation of your students in the formative and summative sense." She noted that the quizzes and examinations used are criterion-referenced:

> 'Tor each question we put on a quiz or exam, we have to note the objective that question is testing. I would say our tests are norm-referenced. [Researcher's note: NE 4 obviously did not understand the terms norm-referenced and criterion-referenced]. What I have said in the past is that I wish I didn't have to have the questions done before I had the topic taught, But reflecting on it now... if we are being totally objective-driven, we probably should be able to have the items developed beforehand."

NE 5 defined evaluation as a measurement of how students are meeting objectives. She does not develop examinations by herself. Several instructors have input into students' examinations.

> "I Student] Evaluation is based on objectives... We use Bloom's taxonomy for blueprints for exams and we follow the nursing process. All items are multiple choice, and we get guidance from the coordinator as to how many questions are needed on a lecture topic."

Perceptions re Course Revision. The nurse educators were asked to discuss the notion of revision, in terms of the instructional development process. Information was sought about the when, why, and how of course revision. All respondents cited two main reasons for course revision: data from student evaluations and the need to update existing courses once they have been offered a number of times.

NE 1 noted that course revision included revising the objectives, the student evaluation procedures, the teaching strategies and the resources, as well as the content. She noted that all substantive revisions had to be approved by the curriculum committee.

> "The course would need revision if the way it is presently set up didn't seem to be working—either for me or for the students... Students write a formal evaluation of each course. Certainly we try to incorporate that."

NE 2 cited one of the most important reasons for course revision is to keep content current and up-to-date. She felt that revisions should be contemplated each time a course is to be offered. Student feedback also would dictate the need for course revision.

> "The students get to do a course evaluation after every course. They are reviewed and we make changes to the course within reason. The faculty also evaluate the course and revise based on their own evaluations."

NE 3 utilized student evaluations in revising her own courses, which she did every year. Sometimes the revisions are minor, such as adding current literature. For major content revisions she would consider that necessary every four to five years.

> "... every four to five years you need to go back and see if the whole thing is still relevant. Has it shifted from the original plan? Which is what I'm sure happens if everybody changes it a little bit every year. It looks almost the same as last year, but somehow it doesn't look anything at all like it did five years ago. Content and objectives, teaching strategies, learning resources, and evaluative methods can all be revised."

NE 4 used student evaluation information when considering course revisions. Again, all components of a course are evaluated by students.

> " The results of the course evaluations are compiled by the coordinator and then distributed and discussed at a meeting. We do look at their preferences in terms of teaching methods...! think every course needs the evaluations looked at every year and the course reviewed for possible revisions. But revisions should be done on a "need to be done' basis rather than a 'nice to be done'Ibasis]."

NE 5 made use of both student and faculty evaluations in revising her courses. She also felt that courses should be revised annually, and she started revisions with the objectives:

> "I start with my objectives first. If I want to revise my objectives, that's going to influence my content and everything else. I'm really into writing them first because I want to know what it is I want to do, what it is I want to get across."

Instructional Planning Process

The five nurse educators were asked to delineate, in considerable detail, their personal approach to the planning of instruction. It was felt by the researcher that this information would disclose any activity that could be equated with an instructional development approach, in the event that respondents tacitly knew more on the subject than they could elucidate.

NE 1 believed that planning was essential to the development of good instruction, and that considerable planning was required before the course was implemented.

> "You have to look at what you want as the end product and you have to see where the student is coming from, and I think you have to look at both ends before you can do all that stuff in the middle - looking at the prerequisite courses, looking at what courses this one is a prerequisite for."

Her planning process begins with a review of the literature and texts on her topic. She considers the philosophy, conceptual framework, and curricular threads of the school, and determimes how these can be integrated in the course she is to teach. She then reviews, revises, or sets objectives, taking into account the prerequisite knowledge of the students. She then develops course materials and specific lecture notes. She develops tests during course delivery, as each unit or topic is finished.

NE 2 notes that the curriculum! committee of her school determines the basic format of the course. The nurse edmcator then develops the lectures to meet the objectives. The faculty members aire permitted input regarding the topics and objectives of each course.

> "We talk a lot about topics. W<e have so much input, but we don't make the final decision about what <we teach and what goes into the curriculum."

Her planning process involves reading the course textbook and other textbooks, doing a literature search on the topic, and collecting community resources. She develops lecture outlines and materials, and feels that being current in the topic means that she has planned well.

NE 3 had just taught a specific course for the first time, so she used that experience as an example in describ ing her approach to instructional planning.

> "I was given some objectives anid some course topics to cover. I looked at them and then I decided what E thought the students should cover and I probably started with the topics first...Next I wrote the learning objectives...then I sat down with a calendar and mapped out the sequencing and the amount of ttime I would need for each concept."

She planned the evaluation component of the course by going back to the objectives. Using these as a basis she had to make decisions about how many tests and assignments, and when they should be scheduled. She planned due dates by collaborating with other instructors, to ensure that students would not have too many assignments or examinations at the same time. The overall course planning was done prior to the beginning of the* term. Actual class lectures and materials were developed throughout the term.

NE 4 begins planning before the term commences. She consults with the instructor that had previously taught the course, completes a literature review, and then decides on an approach to present the topic. She notes that her planning, at least at this stage, is content-driven. The overall course plan is done in collaboration with others who are responsible for teaching the students.

NE 5 begins by looking at or setting terminal objectives for the course. This is done through a review of the literature on the topic. She describes her process as follows:

> "I look at the textbook recommended to students, then at other textbooks. I go to the journals and look at the latest information and research. I would look at the time and how I can present it to get my point across."

She did not elaborate on her decisions regarding the evaluation of students, but noted that evaluation is tied to the objectives and the content.

SUMMARY

The results of this study were compared with common elements of instructional development models as described by Knirk and Gustafson (1986).

Needs Assessment. Basic theoretical and clinical requirements in nursing education are provided by the ARNN. The schools of nursing evaluate societal trends and health/illness statistics in determining specific content areas to be included in nursing education.

Assessment of Learner Characteristics/Entry Skills. All students entering schools of nursing take the Scholastic Aptitude Test. Students entering the university baccalaureate program must complete a General Studies year before being accepted into that program. Therefore some basic academic prerequisite knowledge and skills are assessed. However it should be noted that nursing education is a post-secondary program with a discrete theory and practical base which students would not have experience with. It should be noted that in present programs there is little individualization of programs to meet the diverse needs of students.

Specification of Objectives/Performance Tests. The nurse educators all use behaviorally-stated objectives when planning the course, when planning individual classes, when evaluating students, when selecting teaching methodologies, and when revising courses. A primary focus for these nurse educators was to ensure that that selected content is delivered to students within the time limitations provided. However the content is directly linked to objectives. Students are made aware of all academic, clinical, and professional objectives at the beginning of each course.

Selecting Presentation Methods and Media. Time restraints and large classes were cited by nurse educators as the two major limitations when selecting classroom methodologies. They were concerned about their learners and the content when deciding on teaching strategies, but cited constraints as limiting their actual implementation of anything but the lecture method, augmented by audiovisual aids.

Implementation, Evaluation, and Revision Procedures. Students are evaluated frequently throughout the implementation process, both formatively and summatively. The evaluation of students, both in the academic and the clinical settings, is based on the course objectives, which all students are aware of. Courses are revised annually, based on student and faculty evaluation and on the

need to update content by including the latest research as published in nursing journals.

CONCLUSIONS

This ethnographic case study of nurse educators, their knowledge of instructional development, and their instructional planning processes indicates that they do use a systematic approach in the planning of instruction. They believe that they have their own approach to instructional development. Their approach, because of the setting in which they work, focuses heavily on the delivery of content, but objectives are heavily utilized in their instructional planning and in the evaluation of students.

Their systematic approach does resemble a rudimentary, functional application of a basic instructional development model. Most of the nurse educators were unaware that they were using an instructional development approach, and were doing so in the absence of any theoretical knowledge of instructional development, or even superficial familiarity with instructional development models. Their knowledge level was very low, and seemed to be on a par with the teachers and teacher-librarians in the formal school system (Gallant, 1989; Tobin, 1989; Graham, 1991; Thomey, 1991). However they used a very basic instructional development approach in planning instruction, which is more than that indicated by the school system studies.

Nurse educators plan their courses by committee, and they work in groups to plan instruction. They use common sets of objectives and common tests, hence their approach to instructional planning is formal, organized and structured. The use of a rudimentary instructional development process permits them to plan as a group, and to prepare instruction that is aimed at the achievemnet of specified objectives.

There are obvious similarities between instructional development and the nursing process, if considered from a systems perspective. It is probable that past use of the nursing process has enabled nurse educators to utilize a systems approach in planning instruction, in the absence of formal study in the area.

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AUTHORS

Christine M. German is Nursing Instructor, General Hospital School of Nursing, St. John's, Newfoundland.

Mary F. Kennedy is Associate Professor, Faculty of Education, Memorial University of Newfoundland, St. John's, Newfoundland.