

INTRODUCTION

The students' learning experience provides greater insight to develop an effective teaching strategy in nursing education. Student attaches more meaning to learning they gain from experience than those they acquire passively. Learning experiences should be organized around competency-development categories (*Spencer, 2003*).

Nurses are differentiated from other health care providers by their approach to patient care, training and scope of practice. Nursing students must acquire the skills necessary to achieve competency, participate in clinical education, training and assessment in order to ensure that they can apply their knowledge in a competent manner for the care of their patients (*Chung, 2011*).

The theoretical and practical training provided to learners with the purpose to prepare them for their duties as nursing care professionals is what is included in the nursing education. The practice of nursing requires not only a good theoretical understanding of health, diseases and their management, but also the ability to demonstrate competence in technical skills, critical thought processes, time management and other associated responsibilities (*Kelin, 2006*).

Evaluation of learning is an integral component of educational program. Various concepts, models, processes and research findings provide evidence to design best practices for evaluating learning and program outcomes (*Menix, 2007*).

Evaluation of students learning experiences is that the evaluation reflects current thoughts about the educational process and the practice of teaching students. Thus, evaluation is a necessary and constant process, going on minute by minute (*Taylor & LeMone, 2005*).

Evaluation provide “feed back” for the teacher to inform him whether a group of students has not understood what he has been trying to explain. This enables him to modify his teaching where necessary. Also evaluation helps students focus on their individual strengths and progress in school. The students’ perception about the program can provide highly valued comments that can contribute to the improvement of nursing programs and provide nursing students the chance to express their perceptions and satisfaction towards the educational programs (*Abdul Aziz, 2006*).

Role of the nurse educator is crucial in the evaluation process. She has a responsibility to provide nursing students with clinical instruction that is most effective at facilitating learning. However, nurse educator should be consulted about the evaluation process because they are ultimately responsible

for translating its objectives into specific lessons, assess students at all ability levels and report their progress. When decisions are made about changes in content, nurse educator can provide feedback based on their direct interaction with students (*Kube, 2010*).

Nursing learning experience plays a vital role in the educational process. It provides greater insight to develop an teaching strategy in nursing education. However, the researcher sought to evaluate the nursing learning experience that occurs for nursing students throughout their nursing courses. The purpose of the study was to evaluate if the student's learning needs were satisfied and to identify positive and/or negative attitude of nursing students towards their nursing learning experience (*Koontz et al., 2010*).

AIM OF THE STUDY

This study aimed to:

Evaluate the nursing learning experience of nursing students at technical nursing institutes.

Research questions:

Is the educational program of Technical Nursing Institute satisfying the students' learning needs?

What are the opinion and attitude of nursing students towards their nursing learning experience at Technical Nursing Institute?

PART I: NURSING EDUCATION IN THEORY AND PRACTICE

Nursing education consists of theoretical and practical training provided to students with the purpose to prepare them for their duties as nursing care professionals. This education is provided to students by experienced nurses and other medical professionals who have qualified or experienced for educational tasks. Most countries offer nurse education courses that can be relevant to general nursing or to specialized areas such as mental health nursing and pediatric nursing (*D'Antonio & Patricia, 2010*).

During the 20th century nursing education underwent revolutionary changes from apprentice training to faculty responsibility, free labor work to educational accountability and from teachers' authority role to students claiming rights have all affected nursing education particularly the teachers' role (*Tang et al., 2005*).

Nursing education concentrate on the transmission of nursing knowledge and assisting nursing students to acquire the necessary skills and attitudes associated with nursing practice. Nursing education encompasses the three domains of learning; cognitive, affective and psychomotor. Development of nursing education can be achieved through the evaluation of the effectiveness of teaching in nursing programs (*Salsali, 2005*).

Clinical education is a vital component in the curricula of nursing courses. It provides nursing students with the opportunity to combine cognitive, affective and psychomotor skills. In order to maximize nursing students' clinical learning outcomes, there is a need to examine the clinical learning environment (**Chan, 2006**). The clinical practice stimulates the students to use their critical thinking skills for problem solving. Nursing student's experiences of their clinical practice provide greater insight to develop effective clinical teaching strategies in nursing education (**Sharif & Masoumi, 2005**).

Nursing education is central to enable nurses in order to improve outcomes for patients care. A better educated nursing workforce, who has equity in terms of opportunities, will lead to higher standards of patient care and improved health outcomes (**Royal College of Nursing, 2007**). Nursing education programs strive to deliver curricula that prepare and transit graduates not just to survive but to truly grow in any work place environment. It is therefore important to reach - out to those nurses whom have recently entered the nursing workforce to understand their views on educational preparation for practice (**Candela & Bowles, 2008**).

Nursing is a career that combines scientific principles and technical skills to achieve quality care. For a nurse to be effective within a dynamic complex health care system and to help patients achieve outcomes, nurses need to be knowledgeable, resourceful and able to work well with other health care practitioners. This goal achieved through nursing education (**Mgbeken & Patience, 2007**).

Nursing education should provide future nurses with knowledge and the process of decision making and critical thinking required for clinical judgment and understand their role as a nurse (*Etheridge, 2007*).

Nursing educators must provide and subject students to any situation that may arise for and face the newly nurses in the workplace. Learning to apply theory and knowledge to realistic situations while in nursing school reduces student's stress while allowing health care facilities to provide continuing education and concentrate on policies and procedures relevant to the setting (*Chang et al., 2006*).

The class room education provides students with the foundation for learning needed and information about diseases, medications, treatments and patient response to interventions. Students should be accountable for understanding the responsibilities of every aspect of being a new nurse (*Hinch, et al., 2005*). The studies also supported nursing education reform to provide students with a chance to understand how to behave competently and efficiently in any given situation. The classroom experience must support the clinical experience to provide students with the necessary information and skills for safe patient care (*Brancato, 2007*).

LEARNING THEORIES RELATED TO NURSING EDUCATION

Adult learning is the practice of training and developing skills in adults. It is also sometimes referred to as Andragogy (the art and science of helping adults learn) and takes on many forms, ranging from formal class-based learning to self-directed learning and e-learning (*Potashnik & Capper, 2007*).

Andragogy Learning Theory:

Knowles (1998) used the term **Andragogy** to describe his adult learning theory. Knowles contended that what drives adult learning are; learner's readiness, the learner's need to know, what the learner brings to the learning situation. Nursing learners attend class so they can learn something they can apply in the clinical situation. If the information presented is not relevant to the clinical situation, motivation to learn may be low.

Novice nurse educators may struggle to deal effectively when learners try to have input into their learning. A common solution is to quell classroom discussion and try to maintain a steady stream of one way information giving. Adult learners must be active in other ways. They need to participate in diagnosing their own needs, formulating learning objectives that are relevant to their needs and evaluating their own learning. To enhance learning, nurse educators should; find ways to evaluate learner's readiness and build on previous

learning, actively engage learners in the learning process, provide information that has meaning to learners and help learners integrate information in an understandable way (*Cruickshank et al., 2012*).

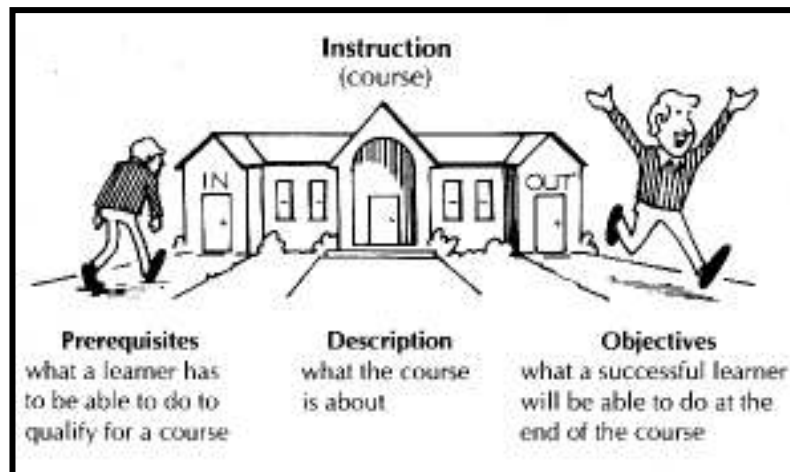
Student becomes ready to learn something when they experience a need to learn it in order to cope more with real-life tasks and problems. The educator has a responsibility to create conditions and provide tools and procedures for helping learners discover their needs to know. Learning programs should be organized around life-application categories and sequenced according to the learners' readiness to learn (*Walker et al., 2006*).

Education in the skills laboratory is hands on and relevant to direct patient care. Students are allowed and encouraged to self-evaluate their competence prior to clinical placement (*Clarke et al., 2004*). They develop self confidence in the use of psychomotor skills without fear of failure. After the students attend traditional learning presentations such as lecture, the adult learners are motivated to learn those things in the skills lab. Practice in the skills lab allows the students to cope effectively with future patient interactions. The skills lab can also provide academic assistance when a student has difficulty integrating knowledge regarding a psychomotor skill (*Martha & Arlene, 2007*).

Mager's Goal Theory:

Mager, (1997) took learning objectives a step farther. What Mager called instructional goals, Bloom and colleagues called taxonomy for classifying learning outcomes. (figure, 1) illustrates useful learning objectives contain; an audience (the learner). A terminal behavior or performance (what the learner is expected to do), test conditions under which the performance is to occur and a criterion for success (how well the learner must perform to be acceptable) (*Duan, 2006*).

Figure 1: Mager's learning objectives.



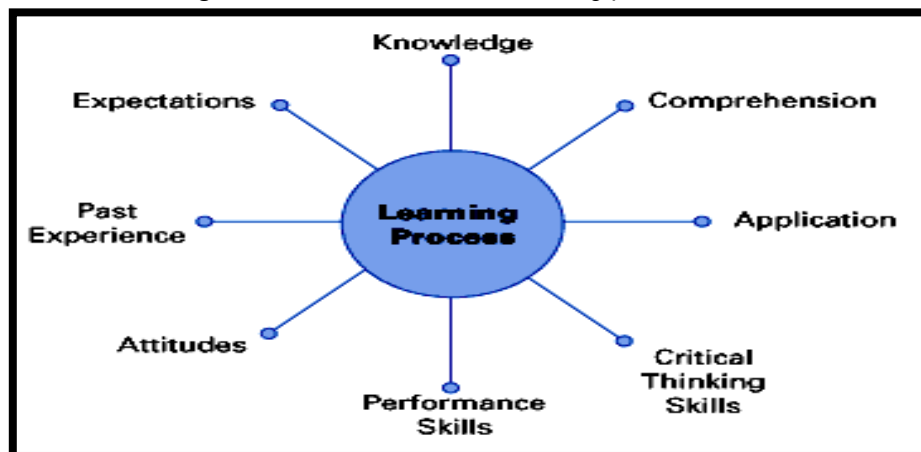
Mager, R. F. (1984): "Preparing Instructional Objectives, 2nd ed., Lake Publishing. Company: Belmont, California, p 11.

Instructional objectives are very important component of teaching system. It describes knowledge, skill, and attitude students should possess after they complete the training. It provides some basis and guidance for the selection of instructional content and procedures also provides the necessary feedback for the adjustments of curriculum and

teaching method. They help in evaluating the success of the instruction and help the student demonstrate his/her achievement of the objectives (*Candela et al., 2006*).

The instructor must understand that while learning objectives help the instructor identify elements that will contribute to an effective learning environment, a wide range of influences exist that are student dependent, all affecting a student's learning experience. These influences illustrated by *Harden (1991)* (figure, 2) includes; the student's ability to comprehend specific content, the student's ability to apply knowledge, the student's attainment of critical thinking skills necessary to effectively utilize the knowledge, the student's psychomotor skills, the student's past experience and attitude about learning as well as their expectations. These influences impact the learning environment and the student's ability to make use of the learning process (*Bergian & Herter, 2013*).

Figure 2: Information on the learning process



Harden, R.M. (1991): An introduction to outcome-based education, *Journal of Medical Teacher*, 21(1): 8-10.

Gagne's Learning Theory:

Gagne (1995) believed that instruction should be designed to include a variety of instructional methods to meet the needs of different learners. Gagne focus on the outcomes that result from training. Four outcomes of learning included; verbal information, intellectual skills, cognitive strategies and motor skills (*Candela et al., 2006*).

Gagne identified the mental conditions that are necessary for effective learning based on information processing model and created a nine step process called: Events of Instruction. The nine steps Gagne identified are; **Gaining Attention** instructional objectives shift the attention instead to what is expected of the student in demonstrating knowledge, skills or attitudes. This shift clarifies the purpose of instruction and helps educators begin to think about how this skill is taught and how student learning is evaluated (*Kizlik, 2006*).

Informing Learners of the Objectives: it is important to discuss learner centered objectives to be achieved. These activate interest in learning, give learners a goal to strive towards and provide a more permanent reminder of what was achieved (*Gagne et al., 2004*).

Stimulating Recall of Prerequisite Learning: a topic takes on added meaning when it can be related to the learner's everyday experiences. Learners will be highly motivated to learn if they have the prerequisite skills. The nurse educator directs efforts towards specifying the prerequisite skills needed to accomplish the learning goal, identifying learners who do not have those skills and directing those learners to learning experiences that will be provided to them. Learners will be less motivated when learning tasks are set too low. For this reason, it is important to identify the current state of learner's knowledge. Some ways of achieving this are by asking the learner to tell or demonstrate what is known or by giving a written pretest. A simple way to stimulate recall is to ask questions about previous related experiences, an understanding of previous concepts, or a body of knowledge (*Northington et al., 2005*).

Presenting the Stimulus (New Content) by presenting material in small, achievable steps and organizing it in a meaningful way, learning is more susceptible to occur because motivation is increased when success is more reachable. After each small step is achieved, it is important to provide praise. During the class, skills are explained first and then demonstrated. The nurse educators use a variety of strategies to appeal to different learner styles and preferences. ***Providing Learning Guidance*** to help learners encode information for

long term storage uses the following guidance strategies: examples, case studies, role playing, simulations, graphical representations and analogies (*Gagne et al., 2004*).

Eliciting the Performance (Practice) eliciting performance provides an opportunity for learners to confirm their understanding and repetition increases the likelihood of retention and transfer to clinical practice. Role playing, simulation, simulation gaming, lived case studies, simulated clients and practicing procedures in the nursing laboratory can be helpful in this stage (*Ridley, 2006*).

Providing Feedback teacher feedback regarding student performance in practice activities is key in making practice sessions effective. At the beginning of practice, learners need many prompts, hints and directions. As learning progresses, these should gradually be withdrawn. For example, when first being taught physical assessments skills, learners require step-by-step directions or clues about what comes next. If prompts are withdrawn too quickly, learners can begin to make errors. Nurse educators must think through how to fade out learning prompts gradually to reduce errors. While learners practice new behaviors, the nurse educator provides specific and immediate feedback of their performance (*Stanford & Reeves, 2005*).

Assessing Performance after mastering the class procedures, learners complete a verbal or written post-test, demonstrate their skill or both. This assessment is not used for formal scoring. It is a method of enhancing comprehensive and encoding purposes. Learners are encouraged to ask questions and the nurse educator shares information and tips about how to improve performance (*Livesley et al., 2009*).

Enhancing Retention and Transfer the final step in the learning process is retention and transfer. It is not yet completely clear how the retention phase can be influenced, yet some learning principles may be applicable. For instance, learning is more likely when the learner takes an active part in practice that is structured to achieve the learning objectives (*Royal College of Nursing, 2011*).

The Gagne's outcomes are not entirely independent: concepts, for example, may build on factual information and involve attitudinal components. One of the main benefits of a task analysis is that it is possible to determine the separate outcomes in an overall instructional unit and to apply the appropriate strategies to each of the subtasks comprising a unit's instructional objectives. Gagne's nine levels of learning model give trainers and educators a checklist to use before they engage in teaching or training activities. Each step highlights a form of communication that aids the learning process. When each step is completed in turn, learners are much more likely to be engaged and to retain the information or skills that they're being taught (*Stark et al., 2005*).