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The Basis of NURSING Education/ Educational Technology

Semester V

As per the Revised INC Syllabus for BSc Nursing

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CHAPTER

Teaching–Learning Process and Teaching

LEARNING OBJECTIVES

When you have read this chapter, you should be able to:

- Explain the concept of teaching–learning process.
- List down the elements of teaching–learning process.
- Explain the meaning of teaching.
- Define teaching.
- Define teaching in nursing.
- Recognize teaching as a science as well as an art.
- Explain nature of good teaching.
- Explain characteristics of good teaching.
- Describe maxims of teaching.
- Follow principles of teaching.
- Identify teaching skills.
- Explain competency-based teaching.
- Identify barriers to teaching.

WHAT IS COVERED IN THIS CHAPTER

In particular, this chapter covers definition of teaching–learning process, elements of teaching–learning process, meaning of teaching, definition of teaching, teaching as a science as well as an art, nature of good teaching, characteristics of good teaching, maxims of teaching, principles of teaching, teaching skills, competency-based teaching and barriers to teaching. At the end of the chapter, you have to answer questions arranged in the model of university examination.

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CONCEPT OF TEACHING–LEARNING PROCESS

Even though teaching and learning activities reciprocate each other to a certain extent, effective harmonization of teaching and learning activities are essential to ascertain the fulfilment of desired outcomes. Teaching–learning process is concerned with achieving this harmonization. By definition, teaching–learning process is a means through which the teacher, the learner, the curriculum and other variables are organized in a systematic manner, in order to attain predetermined goals and objectives. Teaching–learning process is aimed at the acquisition of knowledge, skills and attitudes which enable the students to lead a well-adjusted life. Teaching–learning process is basically an interaction between the teacher and learners, which is aimed to bring about behavior modification in learners. This interaction is characterized by a three-way

communication. In the initial communication, teacher communicates the relevant information to the learners. After receiving the information, learners process it and communicate their response to the teacher and this is regarded as the second communication. The teacher after interpreting and evaluating the students' response once again communicate to the students, through this third communication, teacher conveys the feedback information. This feedback information helps the students to assess themselves. If a student's response is not good as expected, teacher can motivate the student by giving positive feedback or reinforcement like "your answer conveys some sense, for a person like you, it is easy to give the exact answer, do not worry, try once more". Through three-way communication, teacher can carry out the teaching activity confidently in the right direction and the students can easily make out their progress in learning.

Even though the human component or human interaction in the teaching–learning activity remains unaffected, the traditional dominance enjoyed by the teacher in the teaching–learning process has come down in the recent years owing to the increased complexity of life, knowledge explosion and creation of new channels of information by the information technology. Nowadays, participatory approach is widely recognized and practiced in the teaching–learning process. In the participatory approach, the student is motivated and equipped to enjoy an active role in the teaching–learning process instead of passively quenching the thirst for knowledge by accepting the spoon-feeding offered by the teachers.

Elements of Teaching–Learning Process

An analysis of the above-discussed teaching–learning process will reveal the following elements:

- **A learner**, whose nervous system, senses and muscles operate in sequences of patterned activity, which we speak of as behavior.
- **A teacher**, selecting and organizing teaching–learning methods, consciously planning and controlling a situation directed to the achievement of optimum student learning.
- **A series of learning objectives**, related to students' anticipated and desired behavioral changes. As discussed elsewhere, objectives are intended learning outcomes, the level of attainment of which can be observed and measured.
- **A sequence of stimulus-response situations** affecting teacher and learner, resulting in persistent and observable changes in the learner's behavior from which we may infer 'learning'. That learning is directed by the teacher to enhancement of students' cognitive, affective and psychomotor abilities.
- **Reinforcement of that behavior** by 'reinforcement' we refer to an activity which increases the likelihood that some event will occur again; it may take the form of a response of the environment, an automatic response of the student or something added to the learning situation by an individual other than the student, for example, an overt expression of approval by the teacher.
- **The monitoring, assessment, and evaluation** of the learner's changes in behavior in relation to the objectives of the teaching–learning process.
- **Appropriate media and technology:** In today's teaching–learning process selection of appropriate media and technology is important.

MEANING OF TEACHING

Education institutions have two core processes namely: teaching and research. The output of teaching is learning and the output of research is a contribution to knowledge. Teaching

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is an integral part of education. Special function of teaching is to impart knowledge, develop understanding and skill. Teaching is establishing harmonious relationship between the educator, educant and the curriculum or subject matter. As special skill is required to impart knowledge and to establish the above said relationship, teaching is considered as a skilled occupation. The proverb "to teach is to learn twice" clearly explains the hard-work involved in the teaching activity. Teaching is an activity in which communicating and disseminating information are significant aspects. In broad sense, teaching is the art and science of establishing objectives, selecting and organizing content, organizing teaching aids, designing learning activities and evaluating performance in ways that enable students to learn.

DEFINITION OF TEACHING

- **Flanders:** "Teaching is an interaction process. Interaction means participation of both teacher and student and both are benefited by this. The interaction takes place for achieving desired objectives." This definition is appreciated for its purpose of teaching and roles designated to the student and teacher. Nowadays, *participatory approach* is widely recognized as a worthwhile way of teaching. In participatory approach, students are allowed to actively participate in the teaching–learning process by keeping an aim or objectives in mind.
- **Burton:** "Teaching is the stimulation, guidance, direction and encouragement of learning." Burton believes that teaching is much more than imparting knowledge and he says that "teaching is a matter of helping the child to respond to his environment in an effective manner. The teacher simplifies the technique, modifies the environment, helps the children to adjust, to strengthen the knowledge and helps them to develop beginning skills, abilities and knowledge." Burton's further explanation for his simply articulated and concised definition motivated educationists to analyze the multiple aspects of teaching other than imparting knowledge.
- **Yoakam and Simpson:** "Teaching is the means whereby the society trains the young in a specific or selected environment to adjust themselves to the world in which they live as quickly as possible." This wisely coined definition conveys the real sense of teaching. Various educational programs ranging from kindergarten to postdoctoral levels exemplifies this definition. New educational programs emerging out of societal changes and technological advancements and the induction of computer training even from the primary classes justifies this definition. Considering the relevance of this definition in the coming ages, this definition can also be regarded as the "futuristic definition" of teaching.

DEFINITION OF TEACHING NURSING

In author's opinion, "Teaching nursing is a dynamic process of transforming nursing students to good human beings with qualities of a competent professional nurse through behavior modification by way of appropriate teaching–learning process."

This definition comprises three vital components:

1. **Dynamic process:** Teaching nursing is a dynamic process. Aims of nursing education change in accordance with development in cognitive neuroscience, trends in general education and trends in health care.
2. **Competent professional nurse:** Competent professional nurse is capable of promoting health, preventing illness, restoring health and alleviating suffering depending on the context of care.

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3. **Appropriate teaching–learning process:** Appropriate teaching–learning process enables nursing students to acquire relevant attitude, knowledge and skills essential to become a professional nurse.

TEACHING IS A SCIENCE AS WELL AS AN ART

For effective teaching, teacher has to follow some specific principles based on certain precise knowledge. In this sense, teaching is a science. In order to teach effectively, teacher has to adapt to varied circumstances by using different techniques. There is an element of art in the selection of proper techniques for adaptation. In fact, the art of teaching is being able to choose correct technique at the right time. When we say teaching is an art, authors believe that teaching is not a cent percent tutored art, so in addition to attending teacher training programs, teacher has to develop or cultivate his or her own style of teaching in order to become an efficient teacher.

In short, what teacher teaches is science and how teacher teaches is art.

NATURE OF GOOD TEACHING

In addition to the basic information related to the subject matter, learning outcomes and previous knowledge of students, awareness regarding the nature of good teaching as explained below is essential to carry out teaching in an effective way:

- **Good teaching recognizes individual differences:** Good teaching always respect the individuality of students. Considering each student as unique individual, good teaching pay attention to the individual differences and develops strategies to cater the educational needs of the individual student.
- **Good teaching is a cause to learn:** Good teaching promotes proactive learning, i.e., the child is learning for himself as a result of intrinsic motivation instead of extrinsic motivation.
- **Good teaching provides opportunities for activity:** Good teaching keeps the student active and this will promote his physical and mental health.
- **Good teaching involves guiding learning:** In learning, direction is more important than speed. Good teaching helps the student to develop desirable learning habits to achieve the desired aims.
- **Good teaching is kind and sympathetic:** Good teaching creates an atmosphere of acceptance, sympathy and understanding. Nowadays, threat is not considered as an ingredient of teaching activity. Students should feel comfortable in the presence of teacher.
- **Good teaching reduces the distance between teacher and student:** Barriers should be kept minimum between teachers and students. Teachers have to come out of the glass tower and remain approachable by conveying a sense of trust.
- **Good teaching is flexible and not tied to any method:** There is no shortage of teaching methods and teacher is free to devise new methods of teaching without violating the basic principles of teaching. A good teacher not only selects teaching method according to the context but also individualize his method of teaching with a distinctive idea. Good teaching is always flexible. Instead of adhering to a single well-known method, teacher has to try other methods also as needed or indicated.
- **Good teaching incorporates cooperativeness and suggestiveness:** Teaching is teamwork and as team-mates, teacher and students achieve more through combined efforts. Good teacher always request cooperation and encourage the students to come up with suggestions.
- **Good teaching is democratic:** Teaching is meant for all students in the class. Irrespective of the intelligence, socioeconomic status and gender, teacher has to motivate all students to

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think and express their ideas. Freely expressed ideas will make the class atmosphere more active and interesting. Student can be compared to a kite in the hands of the teacher. Just like the kite in the sky, student is free to think and act but teacher should keep the controlling thread intact and use it appropriately to control the student.

- **Good teaching provides desirable and selective information:** Good teaching always identify desirable and needed information from the jungle of information. While sharing information, teacher should also consider the need and level of students. Even though philosophy of education is included both in the BSc (Nursing) and MSc (Nursing) syllabus, an intelligent teacher never teaches the same content for both categories and limit the explanation according to the level of students when teaching BSc (Nursing) students.
- **Good teaching helps the child to adjust himself to his environment:** This is the very aim of teaching and good teaching helps the child to overcome adverse situations by concentrating on his strengths.
- **Good teaching is progressive:** Good teaching will unleash the talents of students and enable them to reach good positions in life. Good teaching is progressive in the sense that it will contribute to the further development of the student.
- **Good teaching always considers the level of students:** In order to make the teaching more student-friendly and interesting, teacher has to consider previous knowledge of students, level of intelligence, receptivity and mental maturity.
- **Good teaching leads to emotional stability:** Good teaching not only trains the student to behave rationally than emotionally but also teaches to ventilate emotions in a healthy way.
- **Good teaching is diagnostic and remedial:** A talented teacher always diagnoses the problems of students, especially those related to the learning through proper assessment and evaluation. This is usually done in the beginning stage itself and helps the student overcome the problem by suggesting or implementing appropriate remedial measures.
- **Good teaching is stimulating:** Good teaching prepares the students for receiving the knowledge. Entry of a talented teacher into the class itself will send a wave of enthusiasm and makes the students active and receptive.
- **Good teaching should be on the basis of previous knowledge of the student:** Good teaching always correlates previous knowledge of the students with the present teaching. This will help the students to get a unified view regarding what is being taught.
- **Good teaching will develop initiative, independence in thinking and doing, self-reliance and confidence among students:** Good teaching never spoon-feed students with prefabricated knowledge, on the contrary it fosters initiative, critical thinking, hard-work and self-confidence. In short, good teaching equips the student to lead a socially and economically productive life.
- **Good teaching is carefully planned:** Planning is essential for any activity and particularly for effective teaching. When a teacher fails to take one-hour class effectively for 50 students due to inadequate preparation, total time wasted is 51 hours. Then you can imagine the enormous amount of time wasted in an academic year due to inadequate preparation from the side of a teacher. The proverb "if you fail to plan, you are planning to fail" is applicable to teaching also.

CHARACTERISTICS OF GOOD TEACHING

The fact that educational institutions are spending a high proportion of the budget for maintaining the teaching staff and an increased focus on the performance indicators of teaching

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quality have motivated the teachers to practice the teaching activity in an effective way. Judy, Brophy and Good suggested the below mentioned characteristics of good teaching:

- **Giving structured information:** Teaching is mainly concerned with transferring information. Students may not have the full idea regarding what they are learning or why they are learning, so teachers have to structure their instruction in order to help students in learning. Giving information in a structured way also help students to utilize the academic learning time effectively. Academic learning time is the time a student spends appropriately engaged with content.
- **Quantity and pacing of instruction:** The amount learned is related to the opportunity to learn. A successful teacher always organize the content effectively and pace the instruction in a comprehensible manner, according to the receptivity level of students. The teacher has to develop a routine pace of instruction by going fast while teaching simple topics and she should slow down when dealing with difficult areas so that students can get acquainted with the pace, follow easily and take notes if needed. By adopting a student-friendly routine pace of instruction, students will get time to interpret what the teacher has told and thereby she can ensure successful learning.
- **Teacher expectations:** Efficient teachers expect their students to learn well. They do not just accept student participation in teaching–learning process or any behavioral change but demand for participation and behavioral change. Lack of teacher expectation for learning can degrade the morale of students.
- **Teacher enthusiasm:** Nothing is infectious as enthusiasm. An efficient teacher is always enthusiastic and actively involved in the teaching activity. An enthusiastic teacher can motivate the students to learn, encourage participation of students in the teaching activity and create a student-centered classroom in an easy manner.
- **Teacher clarity:** Teacher clarity is defined as the ability to explain and demonstrate correctly. Nature of subject matter and limited audiovisual resources makes teaching clarity essential for successful teaching. In order to attain this quality, teacher has to spend considerable time to prepare lessons and to practice demonstrations.
- **Teacher feedback:** Learning is a progressive activity and in between learner has to know about his or her level of performance or achievements. Teacher has to provide timely feedback, preferably through formal ways of asking questions or conducting evaluation tests. Teacher can also set target expectation for the students so that they can know easily whether the appropriate progress is being made or not. Positive feedback always motivates the students. Efficient teachers possess good questioning skills and most of the time questions elicit correct answers. If the student's response is incorrect, they have to help the student to find the right answer.
- **Emotional climate:** Neutral or warm classroom environment is essential for effective teaching. Try to avoid negative climate. A teacher need not be worried too much or about being liked or being popular with students.
- **Teacher observational skill:** Observation is an excellent method of assessing students. Efficient teachers possess both the general and specific observational skills. Being able to observe correctly is an important skill, especially in the case of nursing teachers.
- **Handling assignments:** Assignments play a major role in today's teaching–learning process. While dealing with assignments, teacher has to state clear expectations of what is expected, how to get help and what to do when finished.
- **Management skills:** Efficient teachers are first of all effective managers. They know how to manage the classroom to achieve desirable ends.

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- **Ability to develop appropriate progressions:** Efficient teachers not only help students to attain progress but also consider this progress while teaching them. In order to ensure appropriate progression, teacher has to teach the content in relation to the learners' background knowledge rather than blindly following the content. For instance, while teaching the impact of consumer protection act on nursing, teacher need not explain full details because students might have gained knowledge regarding the impact of consumer protection act on healthcare professions though different media like newspaper, television, etc. So, considering the progress achieved by the students in the matter of consumer protection act, teacher has to teach the topic in a discussion form by eliciting students opinion instead of simply reading out the content from a prepared note.
- **Context specific:** This is the essence of teaching. An intelligent teacher always takes into account the situations and teaches only the relevant subject matter. Revising and highlighting the importance of universal precautions just before posting the students in the operation theater exemplifies context specific nature of teaching.

MAXIMS OF TEACHING

Maxims of teaching are accepted truth or general rule of conduct or the laws which are essentially to be followed by the teacher while teaching. Maxims include:

- **Proceed from known to unknown:** The teacher has to correlate the learning of the students with their experiences and previous knowledge. Teacher has to start with something which is known to the student and then proceed to unknown. A class on geriatric nursing could be more convincing, if the teacher starts the class by inviting students' opinion regarding the peculiarities or needs of the old age people from their own experiences and then proceeding to further details which are unknown to them.
- **Proceed from concrete to abstract:** This is simply the application of commonsense in teaching. It is quite natural that students learn first the things which are seen and handled by them. Students can comprehend new ideas only when they are taught with sufficient illustration. So, every teaching activity should be enriched with sufficient illustration. For instance, while teaching central nervous system, teacher should first teach the anatomy of brain with the help of a specimen or model (concrete aspect) then teach about the afferent impulses and efferent impulses by using diagrams (abstract aspect).
- **Proceed from simple to complex:** It is always better to teach the most simple lessons first and then the complex one. While conducting classes on pediatric nursing, the teacher has to teach simple topics like differences between pediatric nursing and adult nursing before proceeding to complex procedures and disease conditions.
- **Proceed from easy to more difficult:** This is self-explanatory. When planning to teach the nursing management of cirrhosis of liver, the teacher has to arrange the different aspects of the disease condition in an increasing order of difficulty like definition, classification, etiology, pathology, pathogenesis, etc.
- **Proceed inductively:** In inductive teaching, teaching is made effective with the help of a suitable example. Usually, the topic is introduced to the students by way of stating a befitting example and through analyzing the example they would be able to understand the general rules, definitions, formulas, etc. A teacher can start the class on amputation by asking a simple question like "what do you do to save your rose plant if one of its branches is severely infected with pests or fungus and not responding to pesticides". Naturally, students suggest the cutting down of the infected branch in order to save the entire rose plant. When the

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students give their answer, teacher can correlate the rose plant with the human body and can introduce the topic as follows "just like the infected branch of the rose plant sometimes the limbs of the human body can also get infected or damaged beyond repair. In such a situation in order to save the life of the patient we have to cut down the infected limb and this cutting down of the irreparably damaged limb is simply called amputation. Let us see the details of amputation". Through this example students can be easily introduced to the topic of amputation.

- **Proceed from general to specific:** While proceeding from general to specific, general rules are explained first and from that specificity has arisen. While teaching growth and development, the teacher explains the universal phenomenon of growth in general by citing animals and plants as examples and then proceeds to the specific features of growth and development exhibited by human beings.
- **Proceed from specific to general:** In certain situations, it is imperative to proceed from specific to general. When proceeding from specific to general, first the teacher has to present the specific facts to the students before the facts are taught to them in general. For instance, the role of protein in body building and repair has to be specified before generalizing the consequences of under nutrition by showing the picture of emaciated children as an example.
- **Proceed from indefinite to definite:** The ideas of students in the initial stages are indefinite and vague. These ideas are to be made definite, clear, precise and systematic by adopting effective teaching methods. In this refining process of making definite ideas from the indefinite ideas, teacher has to employ appropriate use of AV aids and other strategies as needed. A first-year nursing student possess only some indefinite and vague ideas about nursing and a talented teacher transforms these ideas to a definite one by providing details of nursing such as definition of nursing, history of nursing, qualities of a good nurse, etc.
- **Proceed from empirical to rational:** Empirical knowledge is gained through observation and experience. One peculiarity of empirical knowledge is that it lacks scientific background. Rational knowledge is built upon a scientific basis and is more dignified than the empirical knowledge. As a result of their day-to-day life experiences students gain empirical knowledge. Teacher has to proceed from this empirical knowledge to rational knowledge by explaining the scientific aspects to the students. The first-year nursing students possess the empirical knowledge of placing a wet cloth on the forehead for reducing the temperature. While teaching the nursing management of hyperpyrexia, the teacher has to convert the above said empirical knowledge to a rational one by explaining the scientific principle of placing the wet cloth on the forehead for reducing the temperature.
- **Proceed from whole to parts:** Whole is more meaningful to students than the separate parts of the whole. The whole approach helps the students understand the relationship between different parts and the resulting correlation makes learning easier and meaningful. While teaching osteology, anatomy teacher has to give a brief description of the whole skeletal system by mentioning its functions, total number of bones, etc., before dealing with different individual bones or parts of the skeletal system like clavicle, humerus, etc. This will help the students to learn individual bones in relation to the whole skeletal system in a more meaningful way.
- **Proceed from part to whole:** In some situations, teacher has to proceed from part to whole for providing information in a meaningful way. For example, while teaching the qualities of an ideal chemical disinfectant, teacher proceeds from part to whole by explaining the qualities one by one and finally explains the whole qualities by the end of the class.

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- **Proceed from analysis to synthesis:** Analysis means breaking a problem into component parts and synthesis is the reverse, i.e., putting together this separate part into a complete whole. This approach is widely used in teaching nursing. Nursing management of a disease condition is taught to the students analytically by splitting the content into component parts like definition, etiology, pathology, clinical features, medical or surgical management, nursing management, rehabilitation, etc., then they are trained to synthesis all these different components into one whole as needed in order to provide meticulous nursing care to the patient in the clinical area. A nursing student who is taught about the different aspects of cardiac arrest can easily synthesis these aspects into a usable form while caring a patient with cardiac arrest and can possibly revive the patient quickly.
- **Proceed from overview to details:** Students can easily comprehend, if the teacher proceeds from overview to details. For example, while explaining the surgical instruments needed for performing cesarean, teacher has to introduce all the instruments by listing down their names before explaining their uses and ways of handling each instrument in detail.
- **From observation to reasoning:** The teacher has to provide an opportunity for the students to see and notice the factors involved in a particular topic or context before explaining the reasons associated with it or eliciting reasons from the students. For example, in the pediatric ward, teacher has to provide a chance to the students to observe a 10-month-old child who has been admitted with complaints of developmental delay before explaining the reason by herself or asking questions to the students regarding the hospitalization of the child.
- **Proceed from psychological to logical:** This is the fundamental approach in teaching. Some of the maxims like concrete to abstract and simple to complex are based on this approach. Psychological aspect is student-centered and concerned with the receptiveness of students, reaction of students, recalling ability of students, listening to student's needs, etc. Logical aspect is teacher-centered and deals with the systematic arrangement of the content, decision regarding when to teach, etc. During teaching, teacher has to consider the psychological aspect before proceeding to logical aspects. For example, while teaching first year students, even though the teacher possesses in-depth knowledge regarding the nursing care of dying patients, in order to teach this sensitive topic without embarrassing them, the teacher has to consider the psychological status or maturity of students before proceeding logically by explaining the needed contents only in a nonthreatening manner. Please note that the maxim of teaching is not the final word in teaching. A hard-working teacher need not be worried or preoccupied with the maxims of teaching because maxims of teaching will naturally become the part and parcel of the teaching activity in the due course of time. Moreover, most of the maxims communicate same meaning or sense even though they are spelled differently.

PRINCIPLES OF TEACHING

According to J Gilbert, purposes of teaching is to help students: (a) Acquire, retain and be able to use knowledge; (b) Understand, analyze, synthesize and evaluate; (c) Achieve skills; (d) Establish habits; (e) Develop attitudes. Principles of teaching will assist the teacher to achieve these purposes. Moreover, principles of teaching will help the teacher to develop an insight regarding his strengths and weaknesses and provide information on vital elements pertaining to teaching like whom to teach, why to teach, where to teach, what to teach, how to teach and when to teach. Following principles is a combination of psychological principles and general principles of teaching:

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- **Principle of motivation:** The best teacher is one who inspires the student. The human mind is like a parachute and it works only when open, so through teaching, teacher should try to unleash the talents of the students by motivating them. Motivation is a combination of recognizing, communicating and participating. Teacher has to recognize students as individuals, encourage their participation while teaching and communicate enthusiasm. Motivation promotes proactive learning and thereby enabling students to achieve success in a systematic way. This principle holds good during the entire nursing educational program, especially during the first year period. Presence of a motivating teacher during the initial days of any nursing educational program will provide an atmosphere of confidence and help students to develop a positive attitude towards patient care.
- **Principle of activity:** Teaching is basically an active process. While teaching, teacher should be alert, smart and follow the most suitable method of teaching. Teacher should also participate in various activities along with the students like discussions or conducting research. Activity generates the drive and drive is essential to achieve more heights in life. Teacher must provide various types of activities, such as assignments or projects to enhance creative skills of students.
  In nursing foolproof repetition of an activity with a purpose will result in the development of a nursing skill. Moreover, in nursing theoretical knowledge without the corresponding skill is useless. A nurse educator who is actively involved clinical teaching besides classroom teaching will certainly help the students to attain proficiency in clinical practice.
- **Teacher should arouse interest among students:** Even though we say teaching is sharing of knowledge, knowledge will not flow from one person to another just like money. To make students receptive, teacher has to elicit interest by adopting suitable methods like telling a story, citing an example or by asking questions. For example, when teaching moist heat sterilization, teacher can elicit interest of the students by advising them to take *idli* for breakfast while travelling not only because *idli* is a combination of pulses and cereals but also it is prepared in steam, i.e., in moist heat, which is considered as one of the best methods of sterilization.
- **There should be well-defined objectives:** To attain good results, all teaching activities should be based on predetermined objectives. With an objective in mind, it is easy to prepare the content, select suitable method and evaluate the effectiveness of the teaching session. Statement of well-defined objectives in advance will make the teacher more confident and enthusiastic. If you are planning to take a class on lecture method, the following objective will serve the purpose "after attending the class students will acquire knowledge regarding the practice of lecture method, recognize its value as a teaching method and able to practice it effectively by limiting the demerits."
- **Principle of individual difference:** Good teaching always respects the individuality of students. By considering each student as a unique individual, teacher can pay attention to the individual differences and develop strategies to cater the educational needs of the individual student.
- **Principle of creativity:** By applying creativity, teacher can convert a passive teaching–learning situation into an active one. Through creativity teacher can arouse students' natural motivation to learn and this will in turn convert a usually teacher-centered classroom into a more desirable learner-centered classroom.
- **Principle of selection:** Teacher should select the appropriate content, teaching method, teaching situation, media of instruction, AV aids, textbooks and journal articles for teaching

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a particular subject matter in order to make teaching more meaningful and comprehensible to students. For example, a teacher dealing with pharmacological basis of nursing practice has to give more attention to patient care implications to be followed before, during and after the drug administration rather than the chemical structure or metabolism of the drug.

- **Principle of division:** Particular teaching activity should have definite divisions based on valid reasons. Teacher should be aware about the division and present the content to the students in well-organized steps. For example, nursing management of cirrhosis of liver cannot be taught in a single session. Teacher has to divide the content into clear-cut divisions like definition, classification, etiology, pathology, clinical features, investigations, line of management, complications, prognosis and nursing management and teach each division thoroughly before proceeding to the next by giving adequate weightage to the nursing management.
- **Principle of revision and practice:** During a teaching session, teacher has to revise in the middle and in the end. Revising or summarizing the content in the end of a teaching session is called *recapitulation*. In addition to the recapitulation, the teacher has to motivate the students to practice the learned lessons periodically to enhance easy recollection.
- **Principle of correlation:** The function of teaching is to share knowledge, development of understanding and skills. While teaching, teacher has to take care that the transferred knowledge will not remain segregated and as far as possible correlate with the previous or related knowledge. Correlation helps the student to develop a unified view regarding what is taught. Teaching nursing invariably require correlation because to render comprehensive nursing care, one has to correlate different branches of knowledge. For instance, when teaching the doubling of infant's weight by five months and the triplication by one year, teacher has to encourage the students to recollect the dietary requirements during infancy, which they have studied the first-year nutritional classes and correlate the nutritional requirements with the weight gaining process.
- **Principle of connecting with life:** Relationship between life and education is proved undoubtfully and teaching is an integral part of education, so all the teaching activities are connected with life. For instance, the maximum attention span of human beings at a stretch is 40–45 minutes and based on this fact, usually a teaching session is planned for 45 minutes. The aim of nursing is the preservation of life with emphasis to quality. Naturally, teaching nursing is connected to the life of the student as well as to the life of the patient. The principle of connecting with life is the reason for giving one day off once in seven days for nursing students in order to recharge their depleted energy levels and teaching students to administer diuretics, preferably in the morning hours to provide an uninterrupted sleep to the patient for maintaining his biological rhythm of life.

TEACHING SKILLS

Teaching is a complex process. For conducting teaching in a successful manner, teacher has to possess a variety of teaching skills. *A teaching skill can be defined as a set of teacher behaviors which are especially effective in bringing about desired behavioral changes in students.* The Australian Advisory Committee on research and development in education has analyzed teaching into 140 skills. Allen and Ryan of the Stanford University have suggested 14 skills. It is better to relate teaching skills with different stages of a lesson as shown in **Table 4.1**. Even though all the skills discussed in **Table 4.1** are important, some of them deserve more attention

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Table 4.1: Component of teaching skills associated with different stages of a lesson.

Stages of a lesson	*Component teaching skills*
Planning stage	• Writing instructional objectives • Selecting the content • Organizing the content • Selection of the audiovisual aids material
Introductory stage	• Creating set for introducing the lesson • Introducing the lesson
Presentation stage	**Questioning skills** • Structuring classroom questions • Fluency in questioning • Probing questions • Questions—delivery and distribution • The use of higher order questions • Divergent questions • Response management **Presentation skills** • Pacing of the lesson • Lecturing • Explaining • Discussing • Demonstrating • Illustration with examples • Using teaching aids • Stimulus variation • Silence and non-verbal cues • Reinforcement **Managerial skills** • Promoting pupil participation • Recognizing attending behavior
Closing stage	• Management of the class • Planned repetition • Giving assignments • Evaluating pupils progress • Diagnosing pupil learning difficulties and taking remedial measures

as they are used more frequently in teaching. They are: (a) Skill of stimulus variation; (b) Skill of explanation; (c) Skill of reinforcement; (d) Skill of promoting student participation; (e) Skill of using examples; and (f) Questioning skills. As we have already discussed reinforcement and promoting pupil participation elsewhere, let us discuss the remaining ones.

Stimulus Variation

The need for this skill-varying the stimulus-arises because sustained uniformity of presentation can lead to boredom and mental inactivity. Again, it is based on research evidence, which indicates that changes in perceived environment attract attention and stimulate thought. Perrot describes the behaviors associated with this skill as follows:

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