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ABSTRACT

This learning module, which is part of a staff development program for health occupations clinical instructors, discusses various creative teaching techniques that can be used in teaching students to find information, use opportunities to learn, assume responsibility for self-learning, solve problems, apply skills learned to new situations, communicate effectively, become observant, and grow professionally. It includes learning activities dealing with the following: conferences, seminars, buzz groups, and brainstorming sessions; case analysis, case incident study, and role play; tours, journals, and self-directed learning; and selection of appropriate and effective teaching techniques. Besides the learning activities, the module also includes directions for completing the module, an introduction, module objectives, pre- and posttests and answer keys, definitions of key terms used in the module, a module summary, and references. (MN)

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Health Occupations Clinical Teacher Education Series for Secondary and Post-Secondary Educators

Illinois State Board of Education

Adult, Vocational and Technical Education

Teaching Skills in the Clinical Setting: Incorporating Creative Teaching Techniques

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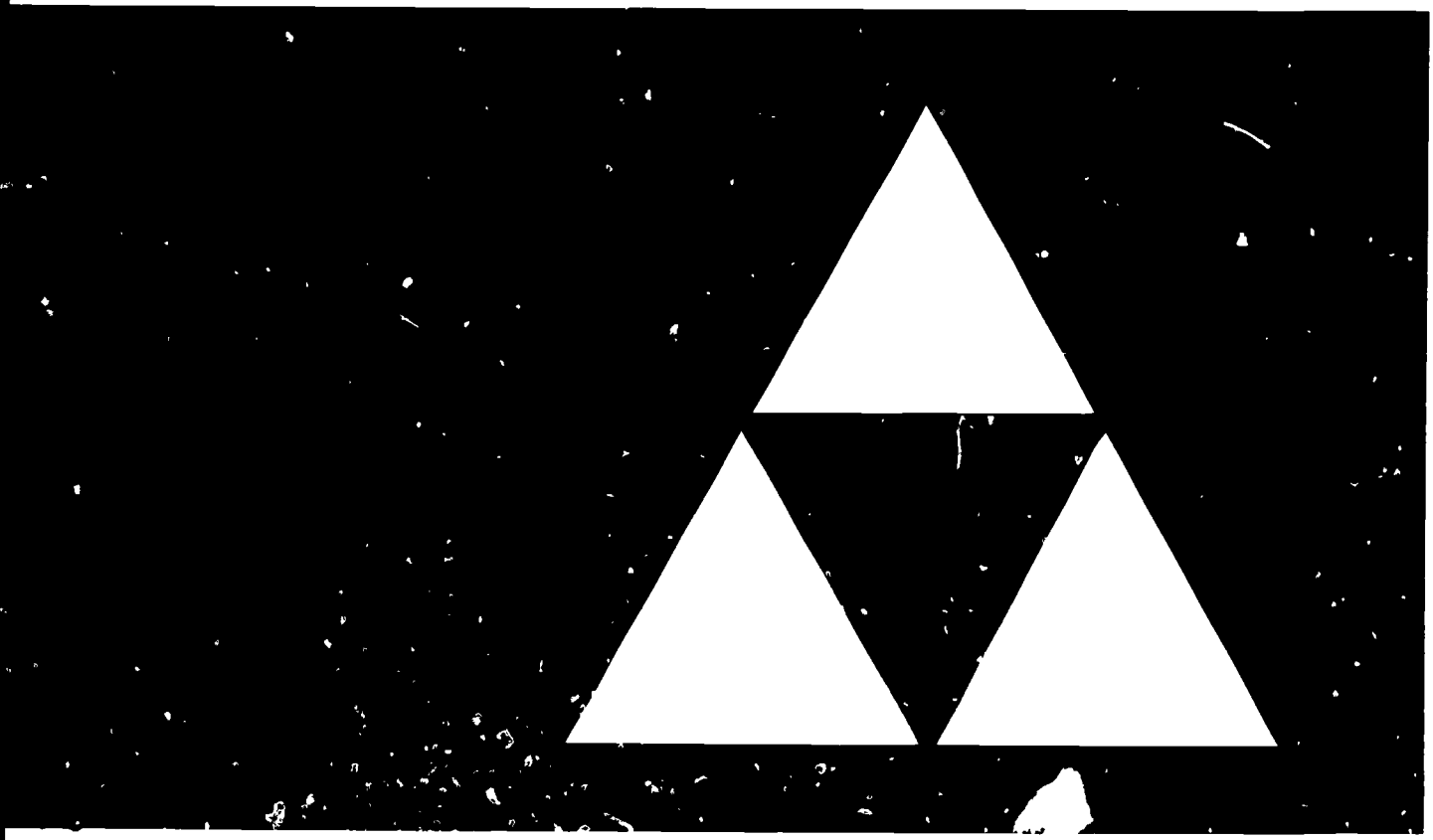

HEALTH OCCUPATIONS CLINICAL TEACHER EDUCATION SERIES FOR SECONDARY AND POST SECONDARY EDUCATORS

Teaching Skills
in the Clinical Setting:
Incorporating Creative
Teaching Techniques

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1985

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Development Section

TEACHING SKILLS IN THE CLINICAL SETTING:

INCORPORATING CREATIVE TEACHING TECHNIQUES

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TEACHING SKILLS IN THE CLINICAL SETTING:

INCORPORATING CREATIVE TEACHING TECHNIQUES

DIRECTIONS FOR COMPLETING THE MODULE

This module includes the following parts:

1) Introduction, Objectives, and Definition of Terms
2) Pre-Test and Pre-Test Answer Key
3) Learning Activities 1-5 and Self-Check Exercises
4) Post-Test and Post-Test Answer Key

Following review of the Introduction, take the Pre-Test and use the key to determine your score. The Pre-Test is intended to help you identify the Learning Activities on which you should place primary focus.

Then proceed to complete the Learning Activities. Even if you have had experience in selecting and/or using teaching techniques, completing the Learning Activities will provide good practice and review. It is important that you complete the Self-Check following each activity.

The final part of the module, the Post-Test, is intended to measure your achievement of the objectives of the module. Complete the test without using the key or the module itself. You may use the Selection Grid where indicated. You may score your own test. If you had more than 3 incorrect answers, you should review the module.

Regardless of your score, remember that selecting and incorporating appropriate teaching techniques requires continuous practice. The best place to practice is in your own program. Your program director or supervisor should be able to help you if needed.

INTRODUCTION

As a health occupations instructor, you must be concerned with providing students with learning activities that help them to become professional, avid, and competent workers. In order to present an activity, you must choose a basic method of teaching.

The teaching methods you choose for presenting your learning material can be conducted by using various types of techniques. Creative use of these techniques heightens learner motivation and interest toward the topic. Carefully chosen teaching techniques provide the variety in presentation of learning material to suit any number of learning styles (see module, "Teaching Skills in the Clinical Setting: Assessing Students' Learning Styles"). In addition, these teaching techniques should be chosen to help your students become first-class professionals. These techniques will teach your students how to: 1) find information; 2) utilize opportunities to learn; 3) assume responsibility for self-learning; 4) solve problems; 5) apply learned knowledge and skills to new situations (Schweer, 1976); 6) communicate effectively with people; 7) become observant; and 8) grow professionally.

The purpose of this module is to provide you with examples and information about teaching techniques that will help you to incorporate them into your own clinical teaching. The teaching techniques presented here are those which can be utilized by any health occupations clinical instructor. There are other techniques specific only to particular health occupations which are not presented here. (They can be found in the References at the end of the module.) The techniques presented are in their most basic format. These formats may be changed slightly to fulfill your own teaching needs. Be creative in incorporating these techniques! Try new ones not listed here. Create your own variation of a technique. This kind of creativity makes your role as a teacher more interesting and fun!

(Note: This module is an extension of the module, "Teaching Skills in the Clinical Setting: Planning Teaching Methods." It is highly recommended that you complete that module before completing this one.)

Proceed to the Objectives.

OBJECTIVES OF THE MODULE

Terminal Objective: Following completion of this module, select appropriate and effective teaching techniques for clinical instruction.

Enabling Objectives

1. Following a description of the Conference, Seminar, Buzz Groups, and Brainstorming, compare the various components of each of these teaching techniques.

2. Following a description of the Case Analysis, Case Incident Study, and Role Play, compare the various components of each of these teaching techniques.

3. Following a description of Simulation and Peer Teaching, discuss the various components of each of these teaching techniques.

4. Following a description of the Tour, Journals, and Self-Directed Learning, discuss the various components of each of these teaching techniques.

5. Given a teaching situation, select the appropriate and effective teaching techniques for the situation, using the provided grid.

Go on to the Pre-Test.

PRE-TEST

Complete this test prior to beginning the Learning Activities. Utilize the key to score your own test.

Directions: Answer True (T) or False (F) to the following:

T or F 1) The term "Patient Care Conference" is synonymous with the term "Pre-Conference."

T or F 2) The "Seminar" is most effective as a continuous series of meetings over a period of time.

T or F 3) At the start of the "Brainstorming" session, you are interested in the quality of suggestions given by students and not the quantity.

T or F 4) The "Case Analysis," "Case Incident Study," and "Role-Play" teaching techniques help your students practice problem-solving skills.

t or F 5) "Peer Teaching" is a teaching technique that involves students in teaching other students a task.

T or F 6) The "Case Incident Study" involves students in critiquing the case history of an actual patient.

T or F 7) A "Tour" can be either guided or nonguided.

T or F 8) In an "Experiential Diary," students record the speed, progress, and/or performance of something which relates to the objectives of a course of study.

T or F 9) During "Role Play," students act out a situation.

T or F 10) The "Buzz Groups" teaching technique is highly effective and most appropriate for use with the "Demonstration-Performance" method of instruction.

Using the Answer Key on the next page, determine your score.

PRE-TEST ANSWER KEY

1) False. The Patient Care Conference is a single occasional meeting for the discussion of a patient care problem. The Pre-Conference is a meeting held to make plans for the day's experiences or activities.

2) True

3) False. At the beginning of a "Brainstorming" session you are interested in gathering a great amount of suggestions and ideas about a problem from your students. Later, you evaluate the suggestions to select those of highest quality.

4) True

5) True

6) False. The "Case Incident Study" involves students in solving a problem related to a single, open-ended, fictitious incident, usually pertaining to human relations.

7) True

8) False. An "Experiential Diary" is a personal account of the student's thoughts and feelings about the events of the day. The definition in statement #8 describes the "Learning Log."

9) True

10) False. The "Buzz Groups" teaching technique is most effective and appropriate for use with the "Discussion" method.

The score you achieve should indicate how much you know or do not know about the teaching techniques presented in this module. Even if you scored 100%, completion of the Learning Activities will help you in your selection of appropriate and effective teaching techniques. It is advised that you complete the entire module.

Go on to the Definition of Terms.

DEFINITION OF TERMS USED IN THIS MODULE

Attitude - predisposition to perceive, feel or behave toward specific objects or certain people in a particular manner. (Page & Thomas, 1977)

Brainstorming - a popular nontechnical term for certin techniques for the stimulation of creative thinking in the development of new ideas. (Good, 1973)

Buzz Groups - small discussion groups within a larger class or group which usually assemble after a general session for the purpose of discussing a presentation, analyzing a problem, or preparing questions for the larger group. (Good, 1973)

Case Analysis - group analysis of a case history for the purpose of developing skill in reflective thinking by defining problems to be solved, discussing relevant data and various sides of issues, and verifying facts to make judgments. (Schweer, 1976)

Case Incident Study - a teaching-learning situation built around a single incident or event. (Cooper, 1981)

Concept - Any general or abstract intellectual representation of a situation by which groups or classes may be distinguished. (Good, 1973)

Conference - a meeting of two or more persons of common interest who come together primarily for consultation, discussion, and interchange of opinions and ideas.

Demonstration-Performance Method - a presentation of an act or procedure explicated by the instructor, which allows for return-performance by the students.

Discussion Method - an interaction between students and/or an instructor in order to explore, analyze and/or debate an issue, topic, or problem. (Dept. of Air Force, 1978)

Experiential Diary - a personal account of the student's thoughts and feelings about the events of the day. (Cooper, 1982)

Free-Wheeling - relatively needless of formalities, rules, responsibilities, or consequences. (Woolf, et al., 1979)

Guided Tour - an orientation to a new facility, department, area, or piece of equipment conducted by an expert.

Journals - accounts or records of daily transactions or events.

Learning Log - a record of sequential data on the speed, progress and/or performance of something which relates to the objectives of a course of study. (Cooper, 1982)

DEFINITION OF TERMS USED IN THIS MODULE (continued)

Learning Style - a student's habitual manner of problem-solving, thinking, or learning.

Nonguided Tour - a self-directed orientation to a new facility, department, area, or piece of equipment with the help of explicit instructions.

Objective - an aim, end in view, or purpose of a course of action or belief.

Patient Care Conference - a single occasional meeting for the discussion of a patient care problem.

Peer Teaching - the instruction of students, conducted by a student who is proficient in the procedure to be instructed.

Post-Conference - a meeting used as a follow-up to the pre-conference for the discussion and evaluation of daily activities.

Pre-Conference - a meeting used to plan students' activities.

Problem-Solving Process (problem-solving method) - a manner of dealing with that which is problematic.

Procedure - a traditional or established way of doing things. (Woolf, et al., 1979)

Role-Play - an instructional technique involving a spontaneous portrayl of a situation, condition or circumstance by selected members of a learning group. (Good, 1973)

Self-Directed Learning - the use of resources developed by others, but pursued at the time, place and pace of the learner. (Cooper, 1978, vol. 9, no. 1)

Seminar - an instructional technique common in, but not limited to higher education in which a group of students engaged in research or advanced study meets under the general direction of one or more leaders for a discussion of problems of mutual interest. (Good, 1973) Usually, a series of meetings over a period of time.

Simulation - in learning and training, making the practice and materials as near as possible to the situation in which the learning will be applied. (Good, 1973)

Task - a unit of work activity which constitutes logical and necessary steps in the performance of a duty. A task has a definite beginning and ending point in its accomplishments and generally consists of two or more definite steps. (V-TECS, 1980)

Teacher Exposition Method - an orderly presentation of organized subject matter involving student-teacher interaction.

DEFINITION OF TERMS USED IN THIS MODULE (continued)

Teaching Activities - any learning or teaching situations which are characterized by participation on the part of the learner. (Page & Thomas, 1977)

Teaching Method - standard procedure in the presentation of instructional material and the content of activities. (Page & Thomas, 1977)

Teaching Technique - a specific way of presenting instructional material or conducting instructional activities. (Page & Thomas, 1977)

Tour - an orientation to a new facility, department, area, or piece of equipment through first-hand observation.

Values - those principles and standards which, if accepted by the individual and applied in human behavior, exalt life and bring it into accord with approved levels of conduct. (Good, 1973)

LEARNING ACTIVITY #1

TEACHING TECHNIQUES: CONFERENCE, SEMINAR, BUZZ GROUPS, AND BRAINSTORMING

Enabling Objective. Following a description of The Conference, Seminar, Buzz Groups, and Brainstorming, compare the various components of each of these teaching techniques.

In order to become professional workers, your students must learn to communicate effectively. One way in which your students can practice their communication skills is through discussion. You can change the form of the basic discussion session in different ways by incorporating various teaching techniques. The form can be changed to a large group discussion by incorporating the Conference, Seminar, or Brainstorming sessions. By using the Buzz Group technique, you can involve small groups of students in discussion. It is important to vary the basic discussion in order to have your students develop skill in a variety of communication modes.

CONFERENCE

A conference is a group learning experience that occurs as an integral part of the clinical learning experience. (Carpentino, 1981) A conference can be one of three types. It can be a single, occasional meeting for the discussion of a patient care problem (called "patient care conference"); or it can be two separate conferences--a "pre-conference" and a "post-conference"--held on a daily basis. The function of a pre-conference is to make plans for the day's experiences or activities; whereas the post-conference is designed to follow up the day's experiences or activities with an evaluation and discussion session.

FORMATS FOR CONFERENCES

The following outline identifies the recommended formats for each of the three types of conferences:

I. Patient Care Conference

A. Introduction

1) Create a relaxed atmosphere for discussion

2) Present the patient problem (or have the students do this)

3) Raise questions and pose ideas for discussion

B. Body

1) Take students through the problem-solving approach to solve the patient care problem (refer to the module "Teaching Skills in the Clinical Setting: The Use of Questioning and Problem-Solving Strategies")

2) Encourage students to discuss the problem

3) Respect every student's opinion and suggestions

4) Relate previously learned concepts and principles to what is being discussed

5) Clarify the students' solutions to the problem

6) Have the students write a care plan according to the solutions

C) Conclusion

1) Restate the patient problem and the suggested solutions

2) Summarize the main concepts and principles brought up during the discussion

3) Have the students state their plan for care of the patient

An Example of a Patient Problem for a Patient Care Conference:

Patient Problem: Marsha, a 25-year-old patient, is 5'11" tall and weighs 100 pounds. She was always overweight as a child. At age 15, she weighed 150 lbs. Last month her average weight was 125 lbs. She believes that she should always be on a diet because she is "too fat." Even though her doctor told her she must have three balanced meals a day, she refuses to eat.

Conference Approach: Use the problem-solving approach to encourage your students to write an effective patient care plan for Marsha.

II. Pre-Conference

This is used to plan your students' daily activities. Remember that the day may not always go according to plan, so be flexible when the planned activities do not materialize. Plans may have to be revised or changed at mid-day.

A. Introduction

1) Create a relaxed atmosphere for discussion

2) Present to the students their plan of action

3) Pose ideas and raise questions for discussion

B. Body

1) Encourage students to discuss their plans among each other (if time permits)

2) Ask students if they feel their plan of action is realistic

3) Pose any problems students may encounter during their experiences

4) Suggest revisions or additions to any of the plans

5) Relate previously learned concepts and principles with what is being discussed

6) Ask questions of students about the procedures of the day (refer to the module, "Teaching Skills in the Clinical Setting: The Use of Questioning and Problem-Solving Strategies")

7) Respect every student's opinions and suggestions

8) Clarify each student's response to questions

C. Conclusion

1) Have students reread their plan of the day, including any revisions made

2) Summarize any main concepts or principles brought up during the discussion

3) Plan the time for the post-conference

III. Post-Conference

A. Introduction

1) Create a relaxed atmosphere for discussion

2) Have students briefly state their plan of action and actual experiences of the day

3) Pose ideas and raise questions for discussion

B. Body

1) Have students compare the plan of action with their actual experience

2) Relate any similarities of experiences among students

3) Ask students how their experiences could have been improved

4) Encourage interaction between students

5) Relate any concepts or principles previously learned with what is being discussed

C. Conclusion

1) Summarize any key concepts or points brought up during the discussion

2) Make plans for their next pre-conference (If no time can be allotted for a pre-conference, hold a mini pre-conference to let students present their plans for the next clinical day)

An Example of a Plan of Action:

A plan for a student in Respiratory Therapy may look like this:

Schedule for the day

I. For the entire day, take complete care of Mr. Jones's respiratory needs. He is a patient who is on a ventilator in the ICU (Intensive Care Unit).

- change the ventilator circuit
- make 4 checks of the ventilator every hour
- monitor the respiratory condition of the patient every 15 minutes
- give chest physical therapy
- perform any respiratory procedures ordered by the physician
- chart any treatments you give to the patient
- compile a history of the patient for a case study to be presented at the post-conference
- give your case study presentation during the post-conference at the end of the day

II. Administer oxygen to Mrs. Henson, who is also in ICU, through a mask as ordered by the physician. Record any necessary notes on the patient's chart.

III. Thoroughly clean any equipment used during the day.

Alternate Schedule

If any of the above planned activities cannot be performed for some unforeseen reason, meet with me to work out an alternate plan of action.

SUMMARY OF THE CONFERENCE TECHNIQUE

Conference - a group learning experience that occurs as an integral part of the clinical learning experience. (Carpentino, 1981) Usually, a meeting to either discuss a patient care problem or to plan and eveluate dialy experiences.

Use and Purposes

1) to share care plans, techniques, and ideas (Carpentino, 1981)

2) to let students consult with each other about a patient problem

3) to enhance students' problem-solving skills

4) to discuss goals

5) to provide direction for learning

6) to ask and answer questions about daily plans

7) to evaluate the experiences

Factors and Limitations

1) best coupled with the discussion method

2) ideal for discussing values and attitudes about experiences

3) not recommended for lecture or demonstration-performance methods

4) not effective for presenting facts or practicing motor skills

5) time may not allow for utilization of a pre-conference (discuss these plans at the end of the post-conference)

6) if the plan of action for the day does not materialize, be prepared to plan at alternate schedule

7) if time does not allow for daily pre- and post-conferences, make these weekly events

SEMINAR

A seminar is a technique in which a group of students engaging in research and advanced study meet under the general direction of a leader (instructor) for a discussion of problems of mutual interest. (Cooper, 1979, vol. 10, no. 3) It is most effective as a continuous series of meetings over a period of time. It is different than a patient care conference, because it involves formal research of a problem. Problems students choose to research may range from the clinical problems they actually encounter to the present status of the health-care delivery system as a whole. Your key job is to make sure that the problem they identify is one that can be researched.

FORMAT FOR A SERIES OF SEMINARS

The following is the recommended format for a series of seminars:

Seminar I:

1) Create a relaxed atmosphere for discussion

2) Ask students to name several clinical problems

3) Encourage comments from all students

4) List all problems so they are visable to all students

5) Have students identify the researchable problems

6) Have students identify the one problem they would like to research

7) Assign all students to research the problem for the next seminar--suggest references for research (you may need to teach them how to use the library)

Seminar II:

1) Create a relaxed atmosphere for discussion

2) Have students restate the problem to be discussed

3) Systematically bring students through the problem-solving process to analyze the problem and to identify solutions (refer to the module, "Teaching Skills in the Clinical Setting: The Use of Questioning and Problem-Solving Skills")

4) Make sure the solutions they propose are backed by documented research

5) Encourage comments and solutions from all students

6) Relate comments to content and principles already learned

7) Use questioning to trigger thoughts on other possible solutions not mentioned

8) Assign a student or students to write a brief report on the problem and solutions (you may need to teach the students how to write a report)

Seminar III:

1) Create a relaxed atmosphere for discussion

2) Have a student or students read the written report(s) on the problem and solutions

3) Encourage discussion about the solutions gathered at the last semin

4) Take students through the problem-solving process to identify the best solution

5) Have students speculate how the solution can be applied to the clinical situation

6) If it is an actual problem your students are experiencing, ask the students to give recommendations for implementing the solution

7) You may want to assign the students to write a formal report, including the conclusions and recommendations

Seminar IV:

Start over again with Seminar I, but make sure that each student gets a chance to write the report! You may have to give suggestions of clinical problems to be researched to get the ball rolling.

The seminar is a learning experience which ties theory and practice together in a unique way. It gets your students to find documented evidence to back an argument for solving a problem they may encounter as a health-care worker.

Examples of Topics to Research for a Series of Seminars

The following list offers some suggestions for research seminar topics. This list may give you further ideas for topics which apply to your specific discipline.

- Over saturation of health-care workers in one area of the state and shortages in other areas
- Increased number of malpractice suits in the U.S.
- Extremely high rates for malpractice insurance for physicians
- An overabundance of doctors in the U.S.
- Caring for a patient who refuses any treatment ordered by the physicians
- Increased patient load with a decreased health-care work force
- Working for a physician who is often negligent
- Discrimination when hiring and promoting health-care workers
- Increased medical costs and decreased Medicare aid
- Problems associated with the unionization of health-care workers

SUMARY OF THE SEMINAR TECHNIQUE

Seminar - a technique in which a group of students meet engaging in research and advanced study under general direction of a leader for a discussion of problems. (Cooper, 1979, vol. 10, no. 3)

Uses and Purposes

1) to enrich students' problem-solving skills

2) to encourage students to think critically and analytically

3) to teach students how to research a problem

4) to teach students how to write a report

5) to actually solve a clinical problem

6) to encourage students to backup their comments with documented research

7) to let students practice appropriate interpersonal communication skills

Factors and Limitations

1) best coupled with the discussion method

2) ideal for discussing ethical and legal problems

3) not recommended for lecture and demonstration-performance methods

4) not effective for practicing motor skills

5) is limited only to presenting facts and principles related to one particular problem

6) the problem must be one that can be researched

7) time may not allow for a series of seminars (have students identify and research a problem to be orally presented at one seminar)

BUZZ GROUPS

Buzz Groups are used to divide larger discussion groups into smaller groups. (Morgan, 1976) You can use buzz groups (also called small group discussions) to stimulate student participation in spontaneous discussion of a topic. The topic you choose should be a bit controversial and one that could be discussed in a short amount of time. You may want to use buzz groups in conjunction with other techniques such as case incident study or role-play. (These are discussed later in this module.) You will find that it is best coupled with the discussion method.

RECOMMENDED FORMAT

The recommended format for conducting buzz groups is as follows:

A. Introduction

1) Create a relaxed atmosphere for discussion

2) Explain the format of the buzz group exercise

3) Split the large group into small groups of equal amounts (about 5-15 students per group)

5) Have each group assign a leader and a recorder

6) Explain to the group leader and recorder their duties:

leader - keeps the conversation going and focuses on the objective to be met
- makes sure all group members participate

recorder - writes down all important points discussed
- reports back to the group

7) Give students their time limit for discussion 5-20 minutes)

8) Pose the topic to all students in question form and give them guidelines for boundary maintenance (you may assign each group to a different aspect of the topic)

9) Make sure all students understand the topic

B. Body

1) Monitor all the groups to make sure they are discussing the topic at hand

2) Suggest any main points the groups did not cover

3) Respectfully encourage the group leader to keep the conversation on target (if needed)

4) Announce the time to "wrap up" the conversation about 2 minutes before the limit time

C. Conclusion

1) Have each recorder report their findings

2) Clarify and summarize findings from each group

3) Encourage conversation between groups

4) Compare findings among groups

5) Relate findings to content previously learned

6) Summarize the main points to the entire group

Suggested Questions for Buzz Group Discussions

The following list offers some suggestions for buzz group discussion topics. This list may give you further ideas for topics which apply to your specific discipline.

- To what extent should health-care workers empathize with patients?
- In what ways have the attitudes toward the aged changed in the last 30 years?
- In what situations does the patient have the right to die?
- What are some of the advantages and disadvantages of becoming a highly specialized health-care worker?
- In what ways can the alcoholic patient be treated?
- What events do you think contributed to the illness of the overstressed health-care worker, described in the case incident study?
- What responses could you give to a severely ill patient who asks, "Am I going to die?"

SUMMARY OF THE BUZZ GROUP TECHNIQUE

Buzz Groups - used to divide larger discussion groups into smaller groups (Morgan, 1976) for discussion of a particular topic.

Uses and Purposes

1) to stimulate spontaneous discussion of a topic

2) to encourage discussion between students

3) to let all students air their comments in a relatively short amount of time

4) to practice communication skills

5) to encourage group leadership

Factors and Limitations

1) best coupled with the "large group" discussion method

2) ideal for discussing job roles and ethics, and for employing problem-solving

3) not recommended for the demonstration method

4) may be used after a short teacher exposition

5) not effective for teaching motor skills, hard facts and concepts

6) all groups may not finish their conversation at the same time (make sure you state the limit time often)

7) discussion is dependent on what students already know (preparation may be needed before discussion)

8) if your group of students is smaller than 9, it would not be effective to split them up (have the students talk among themselves in one group instead)

BRAINSTORMING

Brainstorming is a form of creative thinking. (Morgan, 1976) It is a technique to gather suggestions and ideas from all the students about a problem or issue in a short amount of time. Problems you pick for brainstorming could range from problems in the clinical setting or department to health-care in general. The most important thing to remember about conducting a brainstorming session is to keep a positive attitude toward each suggestion or idea contributed by the students. At first, you are interested in the quantity of responses, not the quality. Reserve the temptation to use the phrase, "Yes, but it won't work." (Morgan, 1976) Save the "evaluation session" for later. Make your brainstorming session a "free-wheeling" experience into your students imagination and creativity. (Cooper, 1978, vol. 9, no. 6)

FORMAT

The recommended format for brainstorming is as follows:

A. Introduction

1) Create a relaxed, informal atmosphere for discussion

2) State the problem and write it out for all to see

3) You may assign a student as a recorder of the ideas and suggestions (or do it yourself)

4) State the rules for brainstorming (make sure all students understand that they should not judge their ideas or others' ideas until later)

5) Give students a time limit for the exercise (10-30 minutes)

B. Body

1) Start the ball rolling (ask a leading question or call on a particular student for a response)

2) Write out the list of ideas or suggestions clearly (for all to see)

3) Do not let students take notes (it will hinder the flow)

4) Encourage all students to participate

5) Discourage any signs of evaluation or criticism of an idea or suggestion (you may use a bell, mallet or verbal comment as a reminder to keep a positive atmosphere)

6) Ask some leading questions, if the suggestions slow down, or enough responses have been given, before the time limit.

7) End the session at limit time or when suggestions and ideas dwindle early

C. Conclusion

1) Start the "evaluation session" by asking students to look critically, for the first time, at all the responses listed

2) Have students eliminate unreasonable responses--usually, only 10% of the total responses are used (Morgan, 1976)

3) Have students prioritize the list with the most reasonable or most practical first

4) You may have students arrive at a tentative solution right away (if not, hand out a copy of the list of responses to review for the next meeting)

5) Have them make a final decision at the next meeting

Sample Questions for Starting a Brainstorming Session

The following list provides some suggestions for brainstorming session topics. This list may give you ideas for additional topics which apply to your specific discipline.

- In what ways can our department help you to make a smooth transition from the classroom to the clinical setting?
- How can all of the allied health departments cooperate and collaborate as a "health-care team"?
- What topics would you like to discuss at our next seminar?
- In what ways can health-care workers be encouraged to practice patient education?
- What measures should be taken to crack down on excessive student tardiness?
- What can the health-care delivery system do to become more "holistic"?
- What assertive responses would be effective in dealing with a patient or fellow worker who becomes impertinent with you?

SUMMARY OF BRAINSTORMING TECHNIQUE

Brainstorming- a form of creative thinking in which judicial reasoning gives way to creative initiative (Morgan, 1976)

-or-

a "free-wheeling" of ideas or solutions to a problem.

Uses and Purposes

1) to stimulate creative thought

2) to encourage all students to participate in an exercise

3) to possibly solve an actual clinical problem

4) to practice communication skills

Factors and Limitations

1) bast coupled with the discussion method

2) ideal for solving an actual problem or thinking up new ideas to mak he job more efficient

3) not recommended for the lecture or demonstration method

4) not effective for teaching facts, principles, or skills

5) the number of students involved should be no more than 12-15 (Morgan, 1976)

6) time should be limited to 10-30- minutes--it may be cut shorter if responses dwindle early

7) a chalkboard is ideal for listing responses (if not available, use a large sheet of paper or flip chart)

8) the problem cannot be too complex

Now proceed to the Self-Check Activity to test your knowledge of Learning Activity #1. . .

SELF-CHECK FOR LEARNING ACTIVITY #1

Multiple Choice: Circle the letter of the best response to the question.

1. Which of the following teaching techniques can also be called small group discussion?

   a) brainstorming sessions
   b) conferences
   c) seminars
   d) buzz group discussions

2. The format of the seminar is described as:

   a) a meeting scheduled at the beginning of the day to plan daily activities
   b) a series of meetings over a period of time used to research a problem
   c) a meeting scheduled at the end of the day to discuss the events of the day
   d) a meeting scheduled at the beginning of the day to discuss a patient care problem

3. Which of the following teaching techniques engages students in a "free-wheeling" of ideas in a strictly positive atmosphere?

   a) buzz groups
   b) conferences
   c) brainstorming
   d) seminar

4. Which teaching technique would most likely be used to discuss the question, "In what ways can I help you feel a part of our department?"

   a) brainstorming
   b) seminar
   c) post-conference
   d) patient care conference

Check your answers!

SELF-CHECK ANSWER KEY

1. D

2. B

3. C

4. A - This question would be discussed in a short amount of time and would involve students in giving suggestions for a department problem.

This completes Learning Activity #1. If you feel you can compare the different components of the Conference, Seminar, Buzz Groups, and Brainstorming, proceed to Learning Activity #2. . .

LEARNING ACTIVITY #2

TEACHING TECHNIQUES: CASE ANALYSIS, CASE INCIDENT STUDY, AND ROLE-PLAY

Enabling Objective 2. Following a description of the Case Analysis, Case Incident Study, and Role-Play, compare the various components of each of these teaching techniques.

Every day we are challenged with solving problems on the job. The problems we face may be related to the technical aspects of the job or human relations with people we encouner. Through Case Analysis, Case Incident Study, and Role-Play, your students can apply the problem-solving process (See the module, "Teaching Skills in the Clinical Setting: The Use of questioning and Problem-Solving Strategies") to situations they may encounter on the job. These techniques help your students make practical applications of the theory involved in solving problems. By incorporting these teaching techniques into your teaching methods, you can help students become skillful problem-solvers.

CASE ANALYSIS

Case Analysis is a group analysis of a case history for the purpose of developing skill in reflective thinking, by defining problems to be solved, discussing relevant data and various sides of issues, and verifying facts to make judgments. (Schweer, 1976) The case itself must be written before the students analyze it. It could be written from an actual patient chart, but it is best if the students do not know the patient. The case could be about a fictitious patient. The case must contain a series of incidents pertaining to the care of a patient. Present the case to the students, then use the discussion method to encourage them to analyze the case.

RECOMMENDED FORMAT

The recommended format is a follows:

A. Preparation

1) Decide on the topic for analysis and write out the objective for the case analysis (it should fit the course objective and relate to a problem students have recently studied)

2) Either find or formulate a patient chart that contains your problem for discussion

3) Write out the case, including:

a) a short history of the patient
b) nurses' and doctors notes about patient behavior
c) symptoms and ailments related and unrelated to the problem
d) questions leading to The discussion of the problem and possible solutions

B. Presentation

1) Introduction

a) State the objective and purpose of the activity

b) Introduce the topic for discussion, without giving clues toward the solution of the problem
c) Hand out the case to review (allow 10-30 minutes)

d) You may need to review the problem-solving approach (refer to the module on questioning and problem-solving)

e) Let students know that they will be discussing the solutions to the problem

f) If the case is more complex, hand it out to students before the meeting to allow for research of the topic

2) Body

a) You may use the "large group" discussion and/or the "buzz group" discussion for analysis

b) Ask students what the problem is and what possible solutions they found

c) Write solutions out for all to see

d) Ask students why they made their choice of solution

e) Relate discussion to concepts and principles previously learned

f) Make sure all students contribute to the discussion

3) Conclusion

a) Have students use the problem-solving approach to make a final decision (refer to the module, "Teaching Skills in the Clinical Setting.. The Use of Questioning and Problem-Solving Strategies")

b) Summarize the main points discussed

EXAMPLES OF CASE ANALYSIS

Case Analysis #1

Objective - The student will analyze a case involving the intravenous pyelogram examination and hospital policy, using the problem-solving process.

Case History -

Barbara Borden was admitted to the hospital last night at 10..00 p.m. She complained of pain in her right, lower back. Last year she had a kidney stone removed. She also has a history of diabetes mellitus and hypertension. Her doctor ordered a hypertensive IVP (intravenous pyelogram) to be performed. (The hypertensive IVP is a radiologic examination involving the injection of the Patient with a large amount of contrast media containing iodine.)

Barbara went to the radiology department as scheduled. She was interviewed by Greg Goldstein, a radiologic technologist, to obtain a brief medical history before the exam. In talking with her, Greg found that Ms. Borden had a goiter five years ago. She took medication containing iodine to reduce the goiter. While on the medication, she broke out in hives and had difficulty breathing. Her doctor discovered she was allergic to the iodine contained in the medication.

Greg immediately cancelled the doctor's order for the IVP and sent Ms. Borden back to her room.

Analysis Questions -

Use the problem-solving technique to answer the following questions:

1) Were Mr. Goldstein's actions ethical and legal?

2) What alternative actions could he have taken?

3) What would be the best action for this case?

Case Analysis #2

Objective - The students will analyze a case involving medical malpractice, using the problem-solving process.

Case History -

Stanley Stevens, a 20-year-old farmer, was admitted into General Hospital on November 17th because he was having frequent headaches, occasional nasal stuffiness and thick nasal discharge. He was examined by Dr. Slip in the

emergency room and received an x-ray examination of the sinuses. Dr. Slip's diagnosis was polyps in both nostrils and chronic infectious changes of the right maxillary and right ethmoid sinuses.

On November 18th, Dr. Slip performed surgery on Stanley. He scraped out the top of the right ethmoid sinus so the sinus could drain. As he scraped, he punctured the ethmoid plate. This caused damage to the optic nerve. After recovering from surgery, Stanley was released from the hospital.

A week after surgery, Stanley complained to Dr. Slip's office nurse of a dull pain near his right eye and blurred vision in that eye. When checking the reports made in surgery, the nurse discovered that the records revealed a slight fracture of the ethmoid bone made during surgery. Apparently, Stanley was not informed of this occurrence. Furthermore, no informed consent was given to Stanley prior to surgery. The nurse told Stanley, "Dr. Slip must have slipped with his knife during surgery, but did not tell you." (Jacobs, 1978)

Analysis Questions -

Use the problem-solving process to answer these questions:

1) What were the unethical acts in this case?

2) What should Dr. Slip have done after making his "slip" in surgery?

3) What should the nurse have said to Stanley after discovering the negligence?

4) In what instance might you encounter negligence in your health-care occupation?

SUMMARY OF THE CASE ANALYSIS TECHNIQUE

Case Analysis - a group analysis of a case history for the purpose of developing skill in reflective thinking, by defining problems to be solved, discussing relevant data and various sides of issues, and verifying facts to make judgments. (Schweer, 1976)

Uses and Purposes

1) to develop skill in reflective thinking, problem-solving and communication

2) to help students make judgments and decisions

3) to "bridge" the gap between theory and practice

Factors and Limitations

1) best coupled with the discussion method

2) ideal for practicing problem-solving about patient-care issues

3) not recommended for lecture or demonstration methods

4) only effective for teaching facts, principles, and concepts of the problem at hand

5) the case must be prepared ahead of time, well-written, and contain a solvable patient problem

6) time must be allowed for analysis (if no time can be taken to read and analyze the case, have them take it home to study and research it)

CASE INCIDENT STUDY

The Case Incident Study is a Teaching-learning situation built around a single incident or event. (Cooper, 1981) The case incident study is different than the case analysis, because it centers around one incident or event that usually pertains to human relations (not necessarily about the care of a patient), the event is briefly described, and it is open-ended. Although fictitious, the event could be generalized to real-life situations.

RECOMMENDED FORMAT

The format for the case incident is based on a procedure defined by Paul and Faith Pigors, authors of Case method in human relations: the incident process (Schweer, 1976) It includes:

A. Preparation

1) Identify a "sticky situation" the student may encounter on the job

2) Write out a case incident, including:

- a description of the setting and characters
- a brief account of the incident or event
- include opinions that may sway them away from the actual facts of the incident

3) You may use a dialogue method to describe the situation

4) End the incident before the conclusion in order to leave the student "hanging"

5) Write a leading question to start the discussion

B. Presentation

1) Introduction

a) State the objective and purpose of the activity

b) Introduce the general topic of discussion

c) Present the incident or event, either written out or read aloud

d) Get students ready for discussion large group or buzz group discussion)

2) Body

a) Have students study the event or incident

b) Use questioning to help students gather the pertinent information

c) Have students formulate an issue or problem about the event

d) Help students through the problem-solving process to make a decision about the incident (refer to the module, "Teaching Skills in The Clinical Setting: The Use of Questioning and Problem-Solving Strategies")

3) Conclusion

1) Have students state their decision

2) Have students state their reasoning behind their decision

3) Use questioning to encourage students to make generalizations for future "real-life" situations

4) Summarize the main points discussed

EXAMPLES OF CASE INCIDENT STUDIES

Case Incident #1

Objective - Given a case incident study about moral conflict, the student will use the problem-solving process to determine the best solution to the problem.

Incident -

Patty Prolife works as a medical secretary at a gynecologist's office. She has enjoyed working at the office for five years and has always had great respect for Dr. Choice, the physician for whom she works. Recently, however, Dr. Choice has begun performing abortions. Patty believes abortions are morally wrong. She does not want to work at an office which practices abortions. She has lost respect for Dr. Choice and does not enjoy working at the office, but cannot afford to quit her job. She does not know what to do.

Discussion Questions -

Use the problem solving process to answer the following questions.

1) What is Patty Prolife's primary problem?

2) What alternative actions could Patty take to solve her problem?

3) What would be the best solution to her problem?

4) What would you do in this situation?

Case Incident #2

Objective - The student will use the problem-solving process to select the best solution for a case incident involving work relations.

Incident -

A medical technologist, Mary Morgood, sees another medical technologist, Theodore Thief, going home with a set of slides for his son's microscope set. Mary wonders if she should ignore the incident or report her fellow worker. (King, 1984)

Discussion Questions -

1) What is the problem Mary Morgood faces?

2) List all of the possible actions Mary could take.

3) Which action would be the best solution for this incident?

4) What similar situations might you encounter in your workplace?

SUMMARY OF THE CASE INCIDENT STUDY

Case Incident Study - a teaching-learning situation built around a single incident or event. (Cooper, 1981)

Use and Purposes

1) to develop skill in problem-solving, decision making, reasoning, and interpersonal communication

2) to force students to think about an incident or event before they encounter it

3) to teach students how to effectively work with others

4) to help students differentiate between fact and opinion about an incident

Factors and Limitations

1) best coupled with the discussion method

2) ideal for discussing human relations

3) not recommended for the teacher exposition or demonstration-presentation methods

4) the incident may be acted out or become a role-play activity (discussed later in this learning activity)

5) not effective for teaching motor skills or hard facts

6) the incident must be prepared ahead of time, be well-written, and contain a human relation problem

7) time allowed for the study could be 10-60 minutes

ROLE-PLAY

Role-Play is a spontaneous acting out of problems or situations to gain insight by placing oneself in the position (role) of another. (Cooper, vol. 11, no. 1, 1979) It involves students in playing the roles of fictitious characters in an unrehearsed scene. Like the case incident study, it requires students to use reasoning and problem-solving, in order to deal with real-life human relations. The actual "role-play" involves four phases as identified by Elizabeth King. (King, 1984)

RECOMMENDED FORMAT

The recommended format is as follows:

A. Preparation

1) Identify a "sticky situation" the student may encounter on the job

2) Identify measurable performance objectives

3) Write out the role-play script, including:

   a) a brief description of the setting and the characters

   b) make sure the "lesson to be learned" about the situations involves problem-solving and is not an obvious solution

   c) make sure the situation can be acted out

4) You may distribute the "script" before the meeting for students to review

B. Presentation

1) Introduction

   a) Introduce the general topic for discussion

   b) Explain the role-playing procedure

   c) Pass out the description

   d) Ask for volunteers to play the roles

2) Body

Phase I - prepare the players by:

1) describing the incident clearly

2) describing each of their roles

3) listing the objectives for the role-play

4) giving them encouragement to perform

Phase II - direct the enactment:

1) prepare the "set"

2) you may introduce the players and their roles

3) do not interrupt the playing until it has reached the objectives

4) cut the action at the height of the scene or when the players are at a loss for words

3) Conclusion -

Phase III - summarize the role-play:

1) review the scene

2) summarize the main points of discussion

3) make applications to real-life situations

AN EXAMPLE OF ROLE-PLAY

Objective - the student will demonstrate assertive behavior while playing a role in a role-playing session.

Role-Play Situation -

Betty Becker, a recently divorced dental assistant, is having problems coping with her boss's (Dr. Decay) constant interference in her personal life. Betty is undergoing many changes in her life style now that she is a single woman. Dr. Decay thinks he should act as a father figure or counselor to her, because he believes she is incapable of making the right decisions on her own.

Last week, Dr. Decay asked Betty where she will be renting an apartment. She said she was looking at an apartment in the Happydale area. He said that the Merriment section of town would be better for her.

He later ask her what men she was seeing. She told him she had gone out with Brad Badman to a baseball game. Dr. Decay told Betty that he was not right for her and that she should date his friend, Dr. Smilie.

Betty is now fed up with the interferring. She would like to tell Dr. Decay, in an assertive manner, that she would like to make her own decisions. She does not want to hurt his feelings or jeopardize her job, but she would like to get her message across clearly. (Smith, 1975)

Character Description

Betty Becker is a very attractive, young, shy dental assistant. She is recently divorced and is having trouble coping with single life. Although she appreciates any help or advice she receives, she believes it is about time she makes her own decisions. She has a passive personality type and finds it difficult to be assertive.

Dr. Decay is a middle-aged, married, outspoken dentist. He has two daughters who are the same age as his assistant, Betty. He likes to treat Betty as another one of his daughters. Since Betty's divorce, he has seen her make some "mistakes" in decision making. He thinks it is his duty as an older and wiser person to tell her before she make any more mistakes. He has heard that she is going to take a night course. He thinks she should take an aerobics class. He plans to tell her this the first chance he gets.

Setting

The action starts in the dental office at 7.30 a.m. Both Betty and Dr. Decay have "set up" their work area for their first patient, who is due to arrive at 8:00 a.m. They are sitting in the coffee room. Dr. Decay starts the conversation by asking Betty about the night class she intends to take. . . .

SUMMARY OF ROLE-PLAY TECHNIQUE

Role-Play - a spontaneous acting out of problems or situations to gain insight by placing oneself in the position (role) of another. (Cooper, 1979, vol. 11, no. 1)

Uses and Purposes

1) to develop skills in interpersonal communication and problem-solving

2) to promote understanding of others

3) to "warm up" students to real-life situations 'Cooper, vol. 11, no. 1, 1979)

4) to create insight into the motives of others (King, 1984)

Factors and Limitations

1) best coupled with the discussion method

2) ideal for developing attitudes and values of students

3) ideal for providing real-life experience in human relations and problem-solving

4) not recommended for coupling with teacher exposition or demonstration-presentation method

5) not recommended for presenting facts, definitions, or procedures

6) students may not want to participate (you may write out a detailed dialogue in order to minimize the apprehension)

7) the acting may not fulfill the objectives (ask students what could nappen)

8) it takes a bit of time to conduct (20-60 minutes)

9) it requires some preparation

Proceed to the Self-Check. . . .

SELF-CHECK FOR LEARNING ACTIVITY #2

Matching. Match the teaching technique on the left with the description on the right. Write The letter of the Description on the line next to the Teaching Technique.

Teaching techniques	Descriptions
1)_____ Case Analysis	A) Uses an open-ended description of a "sticky situation" to Trigger problem-solving through discussion.
2)_____ Case Incident Study	
3)_____ Role-Play	B) Involves students in problem-solving by having them act out a situation.
	C) Uses a case history to develop skill in identifying and solving a problem involving a patient.

4) For the following synopsis, indicate which problem-solving teaching technique would best be utilized:

Ms. Wright, a radiologic technologist, notices her friend and fellow technologist, Ms. Sauced, coming to work intoxicated. She is concerned about the quality of care Ms. Sauced will give her patients. Ms. Wright thinks she should report Ms. Sauced, but she does not want to jecpardize their friendship What should Ms. Wright do?

a) Case analysis
b) Case incident study
c) Role-Play

Check your answers with the Answer Key.

SELF-CHECK ANSWER KEY

1) C

2) A

3) B

4) B - The synopsis is a short, open-ended description of a single incident for Case Incident study. It is not a case history for Case Analysis, and it does not describe the characters or setting for Role Play.

This completes Learning Activity #2. Go on to Learning Activity #3 if you feel confident with the material presented here.

LEARNING ACTIVITY #3

TEACHING TECHNIQUES: SIMULATION AND PEER TEACHING

Enabling Objective 3: Following a description of Simulation and Peer Teaching, discuss the various components of each of These teaching techniques.

Motor skills should be practiced constantly throughout your students' careers, but oftentimes there are not enough opportunities for them to practice. Simulation or Peer Teaching can be used to practice these skills. You can set up a simulated situation with a fabricated setting and "props" for your students to practice examinations and procedures which are rarely done. After your students have mastered a certain skill or task, you can have them help teach other students how to do the skill or task through peer teaching. It is said that one learns something more thoroughly when he/she teaches it to someone else!

SIMULATION

Simulation is a representation of a real event in a reduced and compressed form that is dynamic, safe, and efficient. (Rockler, 1978) Role-play and case incident study have also been considered forms of simulation. (The Center for Vocational Education, 1977) Othere forms of simulation include laboratory experience and game playing. Here, simulation will be discussed as a sort of laboratory experience in the clinical setting. Often, there are exams or procedures at the clinical site which are not practiced by students, because the situations are rare or no patients are available to them for performing the procedure. For instance, students may not have a chance to experience caring for a patient with a fractured cervical spine, performing CPR on a patient with a tracheostomy, or conducting fire drill proceedings. These kinds of experiences can be simulated at the clinical site using students, personnel, or commercially available manikins to represent patients. Unavailable machinery can be fabricated for the simulation, but it should be as close to reality as possible.

RECOMMENDED FORMAT

The recommended format for the simulation is as follows:

A. Preparation

1) Identify the measurable performance objective for the simulation

2) Identify the concepts to be discussed

3) Select the roles to be portrayed by the students

4) Select the equipment or materials to be used

5) You may need to construct or improvise unavailable materials

6) Set up the room for action

B. Presentation

1) Introduction

a) State the objectives of the simulation

b) Explain what situation or procedure is to be enacted

c) Introduce the roles to be portrayed

d) Ask for volunteers to play the "roles"

2) Body

a) You may demonstrate the procedure before the students try it

b) Ask students how they will perform the procedure

c) Have students perform the procedure

d) Make sure all students have a chance to perform

e) Maintain a relaxed, nonthreatening atmosphere throughout

f) Have those students not actively performing, actively observe the procedure

g) You may stop the action at critical points to question students on why they performed the procedure a certain way

h) Also question students after the performance to clarify critical concepts related to the procedure

i) Ask students how they could have performed the simulation better

j) Use reinforcement where appropriate (refer to the module, "Teaching Skills in the Clinical Setting.. The Use of Questioning and Problem-Solving Strategies")

3) Conclusion

a) Hold a short discussion on the simulation

b) Ask students to summarize the procedure and main concepts

c) Have students relate the simulation to real-life situations

EXAMPLES OF SIMULATION

- When a patient is not available for certain nonthreatening procedures, another student could act as the patient.
- A dental hygienist may use false teeth to demonstrate proper brushing.
- A nurse may use a manikin's arm or an orange to practice injections.
- A medical laboratory student may use sample specimen slides to practice counting blood cells.
- A radiologic technologist may use a phantom head to practice skull examinations.
- An emergency medical technologist may use a manikin to practice stabilizing a fractured femur.

SUMMARY OF SIMULATION TECHNIQUE

Simulation - a representation of a real event in a reduced or compressed form that is dynamic, safe, and efficient. (Rockler, 1978)

Uses and Purposes

1) to "warm up" students to real-life situations
2) to provide an opportunity for students to learn from each other
3) to provide "hands-on" practice of an experience generally unavailable to them
4) to provide immediate feedback
5) to provide students with experience in a "safe" environment
6) to provide a means of formal evaluation for unavailable procedures, if necessary

Factors and Limitations

1) best coupled with demonstration-performance and discussion methods

2) ideal for developing motor skills and attitudes

3) not recommended for coupling with the teacher exposition method

4) not recommended for presenting new facts or concepts

5) facilities may not be available for simulation (materials can be fabricated)

6) it may take a bit of time to conduct properly (time depends on the procedure and the number of students to perform it)

7) it requires some preparation

PEER TEACHING

Peer Teaching is the instruction of a procedure to students, conducted by a student who is proficient in the procedure to be instructed. As an instructor, you probably know how much is learned through teaching others. Having your students instruct their peers can help them think through procedures and concepts thoroughly enough to teach them to others. The process will reinforce their present knowledge. They will learn how to take on responsibility. Also, the teaching of patients, students, and new employees is an important part of many health professionals' jobs. Although your students could use other teaching methods, the demonstration-performance would be best coupled with the peer teaching technique.

RECOMMENDED FORMAT

Peer teaching is handled in two main parts, the planning session and the peer teaching session. The recommended format is as follows:

A. Planning Session - meet with the student teacher to discuss -

1) the procedure to be demonstrated
2) the objectives of the activity
3) the sequence of steps within the procedure
4) the main concepts and principles to be covered
5) how long the activity should last (20-60 minutes)
6) the setting for the activity (equipment and supplies needed)
7) the format of the demonstration-performance
8) techniques of proper reinforcement and questioning (refer to the module, "Teaching Skills in the Clinical Setting. The Use of Questioning and Problem-Solving Strategies")

(Note. You must plan all of these points yourself before discussing them with the student.)

B. Peer Teaching Session- supervise your student teacher

1) Introduction

a) Make sure the student teacher is well-prepared for the demonstration-presentation (see module entitled, "Teaching Skills in the Clinical Setting: Planning Teaching Methods")

b) Create a relaxed environment for all students

c) Give the student teacher encouragement

d) Introduce the procedure to be presented

e) Explain how the procedure relates to what the students already know

f) Identify any new equipment or new terms to be used

g) Introduce the student teacher to the other students

2) Body

a) Maintain a relaxed and positive atmosphere for the student teacher

b) Encourage students to ask questions during and after the demonstration-presentation

c) Help the student teacher in the questioning session, if needed

d) Make sure the demonstration does not last longer than planned

e) Directly assist the student teacher in having the students return-perform the procedure and in giving them feedback

3) Conclusion

a) Thank the student teacher

b) Summarize any main concepts and steps involved in the procedure

(Note: Make sure you choose different students to teach each time you use peer teaching.)

EXAMPLES OF USES FOR PEER TEACHING

Peer teaching as described here is best for demonstrating a procedure. (See the Demonstration-Presentation method described in "Teaching Skills in the Clinical Setting: Planning Teaching Methods" for further information on demonstrating.)

The Peer Teacher can demonstrate:

Admission Procedures	Handwashing
Aseptic Technique	Oxygen Administration
Backrubs	Patient Instruction Tecniques
Bandaging	Positining Patients
Charting Procedures	Vital Signs
Diapering an Infant	

. . . and many more. The list is endless!

SUMMARY OF PEER TEACHING TECHNIQUE

Peer Teaching - the instruction of students, conducted by a student who is proficient in the procedure to be instructed.

Uses and Purposes

1) to have a procedure demonstrated to students

2) to enforce responsibility upon students

3) to help students learn through teaching others

4) to teach students how to conduct an activity

5) to provide an opportunity for students to learn from each other

6) to provide an opportunity for students to learn an important teaching technique that may be used with patients and coworkers

Factors and Limitations

1) best coupled with demonstration-performance method

2) can also be coupled with the teacher exposition or discussion methods, but may be more difficult for students to conduct

3) ideal for promoting responsibility of the student teachers

4) ideal for teaching students to respect the teaching of their peers

5) not recommended for presenting complex concepts or procedures

6) the procedure may not be taught effectively (You may provide assistance without constantly interrupting. If the presentation is a total failure, you may present the procedure at another time.)

7) time must be allowed for preparing the student teacher

Proceed to the Self-Check.

SELF-CHECK FOR LEARNING ACTIVITY #3

Short Answer. Briefly answer the following questions.

1. In what instances would you want to use the simulation technique for teaching your students?

2. During peer teaching, what 4 skills can the "student teacher" learn?

3. According to the recommended format for peer teaching, state two of your duties in the "planning session," and two of your duties in the "teaching session."

Check your answers. . . .

SELF-CHECK ANSWER KEY

Your answers should be similar to the following answers.

1. The Simulation technique is used when actual examinations, equipment, or experiences are not available to students for clinical practice.

2. Student teachers can learn: 1) how to demonstrate a procedure, 2) how to speak effectively, 3) how to use reinforcement and questioning, and 4) how to monitor students. Student teachers also learn the procedure they are to demonstrate more thoroughly.

3. The clinical instructor's duties for peer teaching are:

   Planning Session (Any two of these duties are acceptable.)

   - planning the procedure before meeting with the student teacher
   - meeting with the student to discuss the plan
   - teaching the student how to teach through demonstration-performance
   - make sure the student teacher is well-prepared

   Teaching Session (Any two of these duties are acceptable.)

   - maintain a relaxed and positive atmosphere for the student teacher
   - encourage students to ask questions
   - monitor the student teacher so the demonstration does not last longer than planned
   - help the student teacher in questioning, if needed
   - directly assist the student teacher in having students return-perform
   - thank the student teacher
   - summarize the main concepts of the procedure

This completes Learning Activity #3. If you feel you can discuss these two techniques, proceed to Learning Activity #4.

LEARNING ACTIVITY #4

TEACHING TECHNIQUES: TOUR, JOURNALS, AND SELF-DIRECTED LEARNING

Enabling Objective 4: Following a description of the Tour, Journals, and Self-Directed Learning, discuss the various components of each of these teaching techniques.

Your students must become skillful observers in order to be alert to the fast-paced, health-care environment about them. A Tour will help them become aware of their environment. They also need to be alert to any malfunctions or defects in the equipment or supplies they use and, of course they need to be alert to their patients' needs. They can develop this skill by keeping track of their experiences in a Journal. And third, they need to be alert to the larger health care world around them. They must take the initiative to keep in touch with what is going on outside their immediate studies by reading books, newspaper articles, and journals related to health care. Not only can your students develop observational skills through this Self-directed Learning, but they can also develop their sense of responsibility to the fields of health care.

TOUR

The Tour is an orientation to a new facility, department, area, or piece of equipment through first-hand observation. Tours are beneficial to both students who are just visiting your facility for a field trip, and students who are assigned to your facility for clinical practice. During the tour, you must explain, clearly and concisely, each point that will be of importance to the students. Your tour may be either guided or nonguided. (Gustafson 1980) In other words, you may conduct the tour yourself, or you may have the students conduct their own tour by using explicit instructions you prepare beforehand. The following formats describe each type of tour in detail:

FORMAT OF GUIDED TOUR

A. Preparation

1) Identify main points and people of interest

2) Identify any new equipment students may not know about

3) Write out all the points to be presented

4) Do a "trial run" of the tour

B. Presentation

1) Introduction

a) Introduce all of the places to be toured to the students

b) State any points of particular importance

c) Remind them of proper conduct at the health-care facility

2) Body

a) Clearly describe points of interest to all students

b) Conduct the tour clearly and systematically

c) Use questioning to clarify comprehension (refer to the module, "Teaching Skills in the Clinical Setting: The Use of Questioning and Problem-Solving Strategies")

d) Make sure all students stay with the group

3) Conclusion

a) Summarize the important points of interest

b) Discuss students' feelings about the hospital or other health-care facility

FORMAT OF NONGUIDED TOUR

The nonguided tour is conducted by the students themselves with written instructions prepared by you.

A. Preparation

1) Identify main points of interest

2) Identify any new equipment

3) Write out explicit instructions, including the following elements.

a) directions
b) a narrative on the main points of interest
c) a description of new equipment
d) a detailed map
e) review questions for students to answer

4) Do a "trial run" to make sure your directions are complete

B. Presentation

1) Introduction

a) State the importance of the tour

b) Explain the use of the map and directions

c) Inform them that their answers to the review questions will be collected and discussed in a meeting, or checked by you and returned with comments

d) You may let the students arrange their own tour time (but if the tour involves meeting other professionals, make the time arrangement yourself)

2) Body

a) Let the students conduct their tour (but be available for assistance in case students become lost!)

3) Conclusion

a) Collect the answers to the review questions

b) Conduct a discussion on the content of the tour

c) Ask students how they felt about the experience

d) Use questioning, to assess their understanding of new equipment and points of interest

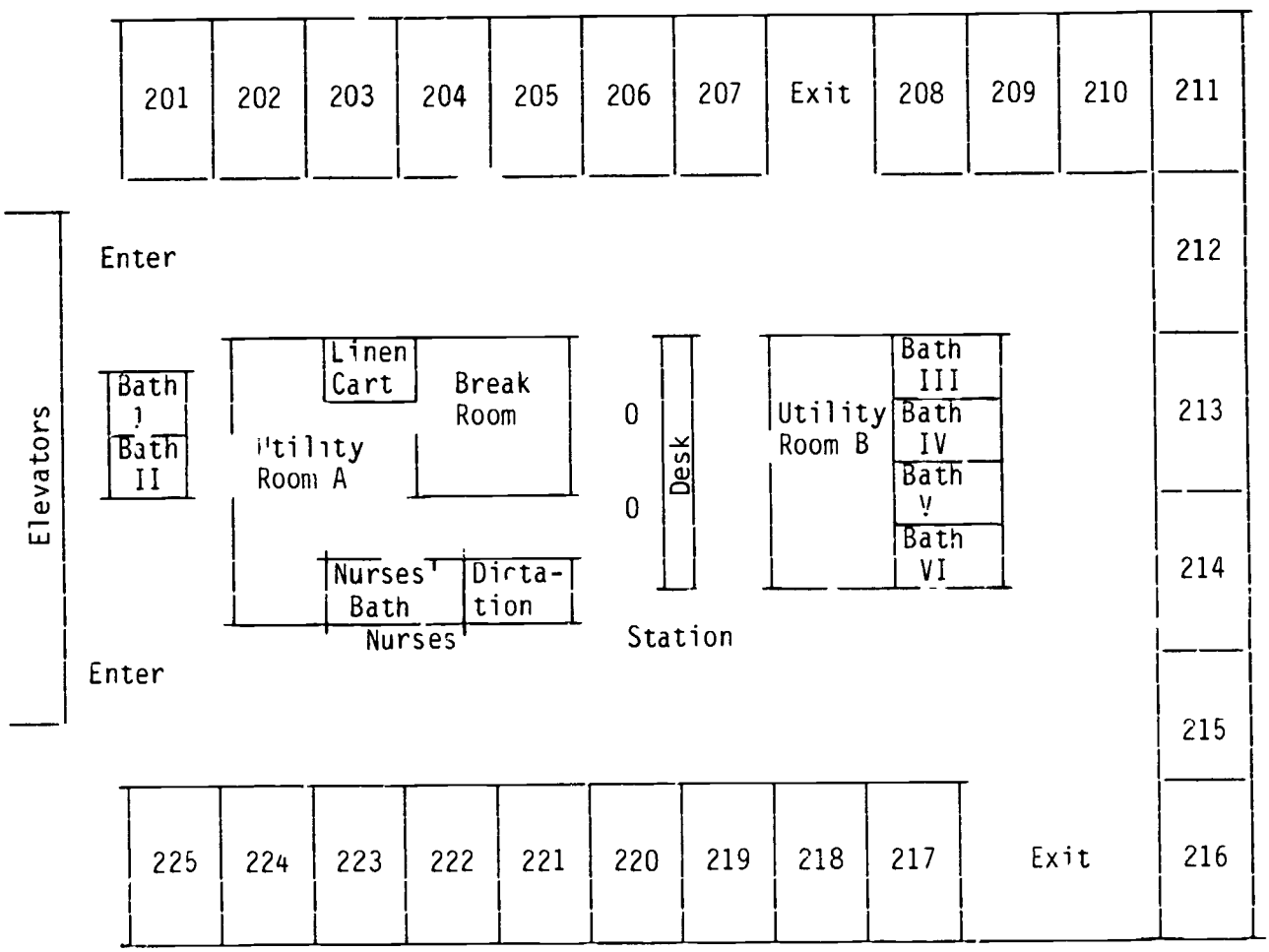
e) If a meeting is not possible, write comments on the students' papers and hand them back

AN EXAMPLE OF A NONGUIDED TOUR

Introduction:

This is a tour of the medical-surgical floor at our hospial. You will be asked to transfer patients to and from this floor. It is of great importance that you familiarize yourself with the layout and contents of the medical-surgical floor.

Map



Directions:

- Go up the elevators to the second floor

- Enter the medical-surgical unit on the east side

1) Note: two baths are on the east side of the unit--these are to be used by the patients and not employees.

2) Note: the room numbers start at the northeast end of the unit and continue to increase as you go west. Notice that the name of each patient is or the door to his/her room.

- Walk in a clockwise direction around the outer hallway of the unit.

3) Note: There are two Emergency Exits, one on the north side between rooms 207 and 208, and one on the south side between rooms 217 and 216.

- Follow the hallway to room 225.

- Now, you are back on the east side of the unit.

- Enter the inner area of the unit representing the Nurses' Station.

4) Note: Utility Room A. It contains:

- the linen cart
- two dirty laundry bins
- a utility sink
- wheelchairs
- carts
- I-V poles and I-VACS
-emergency cart #1
- crutches and walkers
- oxygen tanks

(List any other equipment you observe here under question #1 on the Answer Sheet.)

- Proceed to the south side of the Utility Room.

5) Note: the Nurses' Washroom - this is to be used by employees and not by patients.

- Enter the room on the north side of the unit, east of Utility Room A.

6) Note: the Break Room - this is where the nurses have conferences and take their coffee breaks. It contains:

- a small refrigerator
- a round table for conferences
- a chalkboard for conferences
- several charts and models for presentations during a conference
- a sink
- lockers

(List any other items you observe in the break room under question #2 on the Answer Sheet.)

- Proceed east to the work area.

7) Note: the Nurses' Desk - This is the HUB of the unit. It is where the nurses receive and transfer doctors' orders from/to other departments. This is where the nurses chart their patient notes. It contains:

- all of the patients' charts
- a computer for transferring and receiving doctors orders
- a typewriter
- patient call lights from each room on the floor

(List any other items you observe in this area under question #3 on the Answer Sheet.)

- Walk around the Desk to the west side of the department.

8) Note: the Utility Room B - it contains:

- a large refrigerator
- an ice machine (for cold packs)
- wheelchairs
- carts
- two laundry bins
- I-V poles and 1-VACS
- emergency cart #2

(List any other items you observe here under question #4 on the Answer Sheet.)

- Go out the north door to Utility Room B, to the outer hallway. Proceed clockwise around the nurses' station.

9) Note: the Baths located on the west wall of the hallway. These are patient baths and showers. They are not to be used by employees. (How many baths are there? Write the number under question #5 on the Answer Sheet.)

- Keep walking around the outer hallway in a clockwise fashion. Walk around the corner, down the south hallway, past the desk.

10) Note: the Dictation Rooms - These are soundproof rooms containing telephones. The physicians use the telephones to dictate their patients' progress and any patient orders to their dictaphone or secretary. They also use the telephones to contact anyone in the hospital. (How many dictation rooms are there? Record the number under question #6 on the Answer Sheet.)

- Proceed down the south hallway, and around the outer hallway, again.

11) Note. As you make the trip around, note the number of wheelchairs and carts stored along the walls of the entire outer hallway (How many wheelchairs and how many carts are stored in the outer hallway? Record the number under question #7 on the Answer Sheet.)

- Leave from the way you entered. Go down the elevator to our department. Finish answering the questions on the Answer Sheet We will discuss the answers when you return.

Student Answer Sheet for Nonguided Tour

1. List any other equipment you observed in Utility Room A.

2. List any other items you observed in the Break Room.

3. List any other items you observed at the Nurses' Desk.

4. List any other items you observed in Utility Room B.

5. How many Baths are along the west wall of the east hallway?

6. How many Dictation Rooms are there?

Student Answer Sheet (continued)

7. How many wheelchairs and how many carts are stored in the outer hallway?

8. If you were invited to a conference with the medical-surgical nurses, where would you go?

9. If a patient needed an extra blanket, where would you find a clean blanket for him/her?

10. If you were told to bring the patient's chart to the department along with the patient, where would you find the chart?

Answer all of these questions so that they can be discussed when you return to the department.

SUMMARY OF THE TOUR TECHNIQUE

Tour - an orientation to a new facility, department, area, or piece of equipment through first-hand observation.

Uses and Purposes

1) to orient students to a new department

2) to stimulate curiosity

3) to practice observation skills

4) to reinforce self-responsibility (nonguided tour)

5) to provide a working knowledge of how the environment is organized

Factors and Limitations

Guided Tour:

1) is best coupled with teacher exposition and discussion methods (may also be appropriate with a simple, short demonstration-presentation)

2) is ideal for developing observation skills

3) students may become passive observers

Nonguided Tour:

1) is best coupled with a discussion period

2) students may not have the initiative or motivation to conduct their own tour

3) students may become distracted or lost on the tour

4) is less disruptive to the clinical experience and to your time

JOURNALS

Journals are accounts or records of daily transactions and events. Journals can be written in many forms. Two forms specific to clinical education are:

a) Experiential Diary - a personal account of the student's thoughts and feelings about the events of the day. (Cooper, 1982) It should include:

- a description of certain events of the day
- the date of each event
- the student's feelings about the event
- how the event could have been improved

b) Learning Log - a record of sequential data on the speed, progress and/or performance of something which related to the objectives of a course of study. (Cooper, 1982) It may include:

- the objective achieved (and/or the student's own goals)
- the date of the performance
- the speed of the performance
- the patient involved in the performance (if applicable)
- the student's evaluation of his/her performance (optional)

These journals can either be written separately or together. They help students to reflect on their daily experiences and to evaluate their own learning progress. They help you, the instructor: 1) gain insight into students' reactions to experience (Cooper, 1982), 2) evaluate student progress; 3) reinforce students' actions; 4) suggest alternate actions; and 5) raise questions based on their experiences. You can use the journals as the basis for a personal one-on-one conference with the student or as a triggering device to start a group discussion. If you use it for a group discussion, make sure the students share their experiences voluntarily.

Journals should be collected periodically throughout the clinical experience (monthly or semi-quarterly) to evaluate, comment on, and make suggestions about the students' reflections and progress. It is essential that you assure the students that their journals will remain confidential.

In order to make the journal a successful learning and teaching technique, you must clearly define the objectives related to your health occupation (refer to the module entitled, "Teaching Skills in the Clinical Setting: Developing Measurable Performance Objectives"). Your objectives will guide your students through their experiences.

EXAMPLES OF JOURNAL ENTRIES

Example of an Experiential Diary Entry

2-28-85

I had a patient today who knows she is dying of cancer, but refuses to accept it. She thinks she is leaving the hospital in one month, but her doctor gave her only one month to live! She must be going through the denial stage of dying. Today, I asked her how she was doing. She said she was fine and dandy, and ready to leave the hospital to start working again. I did not know what to say, so I just agreed with her. I guess I should nave made her accept the truth.

Example of Learning Log Entries

Procedure	Patient Name	Date	Time Spent
1) Fed patient breakfast	Cobbs, Charles	2-28-85	15 minutes
2) gave patient sponge bath	Sims, Sally	2-28-85	25 minutes
3) Bandaged patient's ankle	Levine, Larry	2-28-85	10 minutes

SUMMARY OF JOURNAL TECHNIQUE

Journals - accounts or records of daily transactions and events.

Uses and Purposes

1) to have students reflect on their feelings and progress related to their clinical experiences

2) to assist instructors in gaining insights into students' reactions and progress related to their experiences

3) to provide feedback and suggestions to students on their experiences

4) to trigger private or group discussion

5) to provide the student with a record for further reference (Cooper, 1982)

Factors and Limitations

1) best coupled with the discussion method

2) ideal for discussion of attitudes and values

3) not recommended for teacher exposition or demonstration-performance methods

4) not recommended for teaching facts, principles, procedures, concepts, or skills

5) students may feel uncomfortable writing about their feelings repeatedly assure them of confidentiality)

6) students may not want to share their experiences with a group (let them initiate the sharing' but encourage them by reminding them that they may find other students have had the same experiences)

7) since it is spontaneous, the discussion would be difficult to plan in advance

8) although the journal is evaluated, it should only be used to grade students on their progress

SELF-DIRECTED LEARNING

Self-Directed Learning is the use of resources developed by others, but pursued at the time, place, and pace of the learner. (Cooper, vol. 9, no. 1, 1978) Your students should always be using outside resources to further their study in the health-care field. Often, they do not look to other resources for current information about their health occupation. You can encourage their further study through both formal and informal means of self-directed learning.

Self-directed study includes:

a) Programmed instruction--modules similar to this one!

b) Computer-assisted instruction--programmed instruction on the computer

c) Term papers--preferably on topics of students' choice

d) Special interest and correspondence courses--courses offered to the community or through the mail for self-improvement

e) Library research projects--further study on topics of interest (used with the seminar)

f) Independent viewing of educational audio-visual materials--videotapes, slides, films, etc. (used with discussion)

g) Public television, films, and books--may be viewed for later discussion

h) Journal and book clubs--students can discuss current literature in their field of study

i) Newspaper clippings--you can display current articles to read for later discussion

j) Professional conventions or society meetings--these can be independently attended for later discussion

Preferably, self-directed study should be planned and guided by the students. They should clearly define their goals. identify their learning resources, and set reasonable plans to achieve their goals. (Cooper, 1978) However, if your students are not self-motivated to do the planning on their own, you will have to help them plan their learning. But, it is important that they achieve the goals at their own pace.

All of the forms of study listed above could be used to trigger group discussion. To use them effectively you should set a due date, requiring the study to be done before the discussion session. Again, students should study at their own pace.

Self-directed study helps your students keep up with current events in the field. The most effective way to encourage this is to be a good role model. Continue your education through reading, professional meetings, and self-directed study, and your students will follow! (See the module, "Characteristics and Roles of the Clinical Instructor")

SUMMARY OF SELF-DIRECTED LEARNING TECHNIQUE

Self-Directed Learning - the use of resources developed by others, but pursued at the time, place, and pace of the learner. (Cooper, 1978, vol. 9, no. 1)

Uses and Purposes

1. to encourage students to study on their own
2. to help students keep current with their field of study
3. to provide a means to trigger discussion about current trends in their health occupation
4. to develop communication skills among students
5. to develop the self-discipline and responsibility in students to work on their own

Factors and Limitations

1. best coupled with the discussion method
2. ideal for discussing current concepts, principles, and attitudes related to their health occupation
3. not recommended for teacher exposition or demonstration-performance methods
4. not recommended for teaching hard facts, motor skills, or procedures
5. students may not have the discipline and motivation to learn on their own (stress the importance of keeping up with the ever-changing medical field)
6. if used as suggested study, students will not take the time to do it (you must encourage self-directed learning by requiring it for the discussion of current events)

SELF-CHECK FOR LEARNING ACTIVITY #4

Short Answer: Briefly answer the following.

1. Describe a nonguided tour.

2. Explain the difference between an Experiential Diary and a Learning Log.

3. List 5 different means of self-directed learning in clinical education.

Check your answers!

SELF-CHECK ANSWER KEY

1. An orientation to a new facility, department, area, or piece of equipment which the students conduct on their own, with the help of explicit instructions.

2. The Experiential Diary may be about only certain events of the day, but the Learning Log is a tally of all of the events that relate to the objectives of the day.

   The Experiential Diary includes the feelings and thoughts about events, whereas, the Learning Log includes the speed, progress, and/or the performance of the events.

3. Any 5 of the following means of self-directed learning are acceptable.

   - Programmed instruction
   - Computer-assisted instruction
   - Term papers
   - Special interest and correspondence courses
   - Library research project
   - Independent viewing of educational audio-visual materials
   - Public television, films, and books
   - Journal and book clubs
   - Newspaper clippings
   - Professional conventions or society meetings

This concludes Learning Activity #4. Do you think you can discuss these techniques? Then, proceed to Activity #5!

LEARNING ACTIVITY #5

SELECTING APPROPRIATE AND EFFECTIVE TEACHING TECHNIQUES

Enabling Objective 5: Given a teaching situation, select the appropriate and effective teaching techniques for the situation, using the provided grid.

Now that you have looked at several different teaching techniques, it is time to analyze them for appropriate selection. Some teaching techniques are more appropriate than others for the type of measurable performance objective you want your students to achieve. Certain teaching techniques work best with the teaching method you may intend to use. Other teaching techniques may be more effective with the type of learning styles of your students. Furthermore, teaching techniques possess certain factors and limitations which restrict their use. You must be careful to keep all of these considerations in mind when selecting the most appropriate and effective teaching technique for your situation.

To aid in your selection, the following grid has been devised:

GRID FOR SELECTING TEACHING TECHNIQUES

Key: H - high effectiveness
M - medium effectiveness
L - low effectiveness
? - depends on circumstances

	Conference	Seminar	Buzz Groups	Brainstorming	Case Analysis	Case Incident Study	Role Play	Stimulation	Peer Teaching	Tour	Journals	Self-directed Learning
A. Type of Objective												
Containing:												
facts & definitions	L	M	L	L	M	L	L	L	L	H	L	H
procedures	L	L	L	L	L	L	M	H	H	M	M	M
concepts & principles	M	M	H	H	H	H	H	M	M	L	L	M
attitudes & values	H	H	H	H	H	H	H	H	L	L	H	M
Practicing:												
problem-solving skills	H	H	H	H	H	H	H	H	M	L	L	L
communication skills	H	H	H	H	H	H	H	H	H	L	M	M
motor skills	L	L	L	L	L	L	H	H	H	L	L	L
observation skills	L	H	L	L	M	M	H	H	H	H	H	H
B. Teaching Methods:												
Teacher exposition	L	L	L	L	L	L	L	L	L	?	L	?
Demonstration-Performance	L	L	L	L	L	L	H	H	H	?	L	L
Discussion	H	H	H	H	H	H	H	M	L	M	M	?
C. Factors & Limitations:												
Meeting students' individual learning styles	M	H	M	M	M	M	M	M	M	?	H	H
Making efficient use of teaching time	L	L	M	M	L	?	?	?	?	M	M	M
Providing "hands on" experience	M	M	M	M	M	M	H	H	H	M	M	M
Providing interaction between students	H	H	H	H	H	H	H	?	H	L	M	?
Presenting content step-by-step	L	L	L	L	L	L	L	H	H	M	L	?
Presenting information with visual aids	?	?	?	M	M	M	M	H	H	H	L	?
Providing immediate assessment of learning	M	M	M	M	M	H	H	H	M	M	M	M
Letting students express their opinions	H	H	H	H	H	H	H	L	L	L	H	?
Providing a "bridge" between theory & practice	H	H	M	M	H	H	H	H	H	M	H	?
Promoting responsibility	H	H	H	M	M	M	M	M	H	?	H	H
Encouraging self-motivation	H	H	M	M	M	M	M	M	H	?	H	H
Encouraging students to think at high cognitive levels	?	H	H	H	H	H	H	M	?	L	?	?

Use of Grid

1) Classify your measurable performance objective according to type, considering:

   a) the content it contains
   b) the type of skill it has student practice

2) Look across the grid to see which teaching techniques are rated highest in effectiveness for your type of objective.

3) Select a few of these teaching techniques that are best suited for your objective.

4) Look across the grid to see which teaching techniques are rated highest in effectiveness for the teaching method you intend to use.

5) Select the possible teaching techniques that are best suited for both your objective and teaching method.

6) Identify the factors and limitations most important to your teaching situation.

7) Look down the grid to see if the factors and limitations you identified are rated high in effectiveness for the teaching techniques you selected.

8) Weigh the teaching techniques you selected according to the factors and limitations they possess.

9) Choose the best teaching technique for the type of measurable performance objective, teaching method, and factors and limitations related to your teaching situation.

An Example of Grid Use

Situation:

Paula Patterson, a clinical instructor in occupational therapy, wanted her students to learn the appropriate ways of working with an intoxicated outpatient. She decided that she wanted to use the discussion method to evaluate the different ways of handling intoxicated patients. She wanted them to practice their problem-solving and communication skills in the process. Since most of her students liked to "learn by doing," she wanted them to have "hands on" simulated experience in dealing with an intoxicated patient. She also wanted to provide interaction between her students by letting them express their own opinions on handling this type of patient.

Objective: Using the problem-solving process, the student will investigate the best possible ways of handling the intoxicated patient.

Method: Discussion

She used the grid to select the most appropriate and effective teaching technique for her situation:

1) She classified her objective in the following ways:

   a) content - principles and values
   b) skills - problem-solving and communication

2) She looked across the grid to find several teaching techniques which are effective for her objective.

3) She selected:

Conference	Role Play
Seminars	Simulations
Buzz Groups	Brainstorming
Case Analysis	Case Incident Study

4) She looked across the grid to find the teaching techniques effective for her method of teaching:

Conference	Case Analysis
Seminar	Case Incident Study
Buzz Groups	Role Play
Brainstorming	

5) She combined the list of effective teaching techniques for her objectives with the list effective for her method. She found she could eliminate the "simulation" technique. Her list looked like this:

Conference	Case Analysis
Seminar	Case Incident
Buzz Groups	Role Play
Brainstorming	

6) She identified her factors and limitations as:

   - providing "hands on" experience
   - providing interaction between students
   - letting students express their opinions

7) She looked down the grid to see which one of her teaching techniques was rated high in effectiveness for these factors and limitations.

8) She found Role-Play to be the only teaching technique to be high in effectiveness for <u>all</u> of these factors and limitations.

9) She chose the Role-Play technique to accompany her discussion method as the most effective for her teaching situation.

Now, do the Self-Check to test your skill at selecting creative teaching techniques!

SELF-CHECK FOR LEARNING ACTIVITY #5

Directions: Use the Grid for Selecting Teaching Techniques to select the best teaching technique for the situation, objective, and method described below:

Situation:

Susan Stone, a medical technologist, wants her students to research the latest developments concerning the topic of genetic engineering. After thorough research of the topic, she would like them to discuss the ethical problems related to genetic engineering. During the discussion, she wants them to use the problem-solving approach to examine possible solutions to the problems discussed. Since her students have diverse learning styles, she will have them learn the ethical elements of the topic on their own. She feels this will also promote responsibility and encourage self-motivation toward learning.

Objective: After thorough research, the student will examine possible solutions to the ethical problems related to genetic engineering.

Method: Discussion

SELF-CHECK ANSWER KEY

The best teaching technique to use for Susan's situation is the Seminar.

The objective is related, in content, to "attitudes and values." It practices both "communication" and "problem-solving skills." The techniques highest in effectiveness for this objective are:

Conference	Case Analysis
Seminar	Case Incident
Buzz Groups	Role Play
Brainstorming	Simulation

The discussion method is high in effectiveness for all of the above techniques, except simulation.

But, the seminar is the only technique of all of those listed above that "promotes responsibility," "encourages self-motivation," and "meets students' individual learning styles."

This concludes Learning Activity #5. If you feel confident in selecting teaching techniques, proceed to the Post-Test.

POST-TEST

Matching: Match the Teaching Techniques on the left with the Definitions on the right. Place the letter of the definition on the line next to the corresponding teaching technique.

Teaching Techniques		Definitions	
1. _____	Seminar	A.	used to divide large groups into smaller groups for discussion of a particular topic
2. _____	Buzz Groups	B.	a group analysis of a case history for the purpose of developing skill in reflective thinking
3. _____	Case Analysis	C.	a technique in which a group of students, engaging in research and advanced study, meet under general direction of a leader for a discussion of problems
4. _____	Role-Play	D.	the instruction of students, conducted by a student who is proficient in the procedure to be instructed
5. _____	Simulation	E.	the use of resources developed by others, but pursued at the time, place, and pace of the learner
6. _____	Peer Teaching	F.	a "free-wheeling" of ideas or solutions to a problem
7. _____	Brainstorming	G.	a spontaneous acting out of problems or situations to gain insight by placing oneself in the position of another
8. _____	Self-Directed Learning	H.	a representation of a real event in a reduced and compressed form that is dynamic, safe, and efficient

Short Answer

9. For the following synopsis, indicate which teaching technique would best be utilized:

Maggie May, an 82-year-old woman, was admitted into General Hospital on March 20th for treatment after a serious automobile accident left her in a coma for several days. As of March 25th, she has been out of the coma, but from time to time she lapses into a semicomatose state. She constantly complains about being cold and asks for hot water bottles to be placed around her lower legs and feet.

Her doctor did not write any orders to this effect. Maggie's nurse, Lorraine, was given general instructions by her supervisory nurse to keep Maggie warm. After listening to Maggie's constant complaining for several hours, Lorraine applied hot water bottles to Maggie's legs and feet while she was in a semicomatose state. A couple of hours later, Lorraine checked Maggie's condition and found second degree burns on her legs.

(Adapted from The Nurse's Liability for Malpractice: a Programmed Course, 2nd ed., by Eli P. Bernzweig. New York: McGraw-Hill Book Co., 1975)

10. Use the grid provided in Learning Activity #5 to select the most effective teaching technique for the following objective, situation, and method:

Objective: Demonstrate the proper procedure for using portable oxygen equipment in the clinical setting.

Situation:

Kyle Keating, a respiratory therapist and clinical instructor, wants his students to be able to practice the proper procedure for using portable oxygen equipment. Some of his students have already worked with the equipment. He wants the "more experienced therapists" to further

understand and practice the procedure so that it becomes "second nature." He wants them to: 1) have "hands on" experience with the procedure; 2) interact with each other about the procedure; and 3) become more responsible and self-motivated to increase their skills in performing the procedure.

Method: Demonstration-Presentation

Check your answers with the key. . . .

POST-TEST ANSWER KEY

1. C
2. A
3. B
4. G
5. H
6. D
7. F
8. E
9. Case Analysis - It is a close-ended case history of a patient which contains more than one incident.
10. Peer Teaching is the best choice for this situation, objective, and method. The Simulation technique has many of the same ratings as Peer Teaching for the factors described in the situation, but Peer Teaching is highly effective in promoting "responsibility" and "self-motivation." Peer Teaching also provided for further understanding and practice of the procedure for the "more experienced therapists" by having them become student teachers to their peers.

If you missed more than 3 answers, you should review the Learning Activities.

SUMMARY OF THE MODULE

Varying your teaching methods through creative use of teaching techniques will provide your students with activities that can heighten their interest and motivation toward the topic. These techniques can be influential in helping your students in becoming professionals in their field. Techniques which have your students practice communication skills, problem-solving skills, motor skills, and observation skills can be beneficial to their professional growth. Careful selection of teaching techniques is essential in providing effective teaching for your students. The techniques are presented in this module in their most basic form, and therefore, may not be effective in all fields of study. You my want to modify the basic techniques to suit your particular field of study.

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