Drawing to Learn and Win

Searching for creative teaching strategies beyond a case study? In the never-ending quest for alternatives to the routine lecture/discussion in our Nursing of the Adult class, we frequently use games to teach course content. Students learn in various ways, and gaming is a creative and flexible strategy that we have found extremely useful. Games can increase students’ motivation, interest, and involvement in class. They also provide for active learning in a more relaxed and relatively safe environment. This article describes the game we developed to teach students to care for clients with altered endocrine function, specifically thyroid, parathyroid, and adrenal functioning. Although we used the game Draw-Learn-Win with endocrine content, the game could easily be adapted to content of any nature.

Wolf and Duffy (1979) define a game as “an activity carried out by cooperating or competing decision making individuals seeking to achieve, within the rules, their objectives.” Draw-Learn-Win is a non-simulation game based on the popular games of Win, Lose or Draw (Milton Bradley Co., Springfield, MA) and Pictionary (Western Publishing Co., Inc., Racine WI). Students draw various aspects of the content related to the endocrine system while other students guess the picture being drawn. The disease processes associated with the endocrine system often result in obvious physical changes which are easily adapted to the object of the game. Also, in the past, students have found this content difficult to read and learn. We hoped to reduce students’ apparent frustrations and lack of interest by developing a fun, informative game played in a nonthreatening environment.

Game Development

Creating the Draw-Learn-Win game was quick and easy. The only materials needed to make the game were 3 x 5 index cards. The 3 x 5 index cards were used to show content for the students to draw and to indicate key content to include in discussions after each drawing. One side of the card had the disease process and the specific item the students were to draw (e.g., hyperthyroidism and cold intolerance). The other side of the card had content for the instructor to include in discussion after the item was guessed (e.g., physiological basis for cold intolerance, other signs and symptoms of hypothyroidism). The cards were arranged according to areas of the nursing process. Within these categories the cards were grouped according to specific disease states. In addition, each group of cards was prioritized so that key content was “drawn” during class time.

Playing the Game

Students received a content outline one week before the game was played during class. The outline was based on the individual unit objectives for the endocrine content. The purpose of the content outline was to identify key information in the required readings that would help the students prepare in advance for the class. A brief content overview was presented before the students played the Draw-Learn-Win game. The overview was based on the class outline distributed the previous week and it primarily emphasized the pathophysiological processes for each disease state. The game then acted to assist the students in applying the nursing process to the content.

The class was randomly divided into teams of four to five students and given the “Rules of the Game.” The rules were:
- Two different students from a team would draw each time;
- Students were allotted 2 minutes to name the item;
- Other teams could “steal” the item if the drawing team missed the answer;
- Points would be awarded for either a correct guess or steal;
- The game would be played for one hour;
- There would be a prize for the team with the most points at the end of the game;

The randomization of the class was done to encourage socialization. Students drew in groups of two to decrease apprehension and embarrassment.

Colored markers and a large easel with paper were used to play the game. To ensure key content was covered, we picked each item for the students to draw. Once the item was selected, the class was told the disease state and nursing process topic while the two students drew the specific item. After the item was guessed, we briefly discussed additional content related to the disease state and nursing process topic. For example, the class was told the item was a nursing intervention for hyperparathyroidism and the two students drew a nurse straining a client’s urine. After the item was guessed, we discussed the rationale for the intervention based on the pathophysiology of the disease state and additional nursing interventions for hyperparathyroidism. At the end of class time the prize—a popular candy treat—was awarded and the class evaluated the game.

Evaluation

The students were given a short questionnaire to evaluate the game. The questionnaire asked for responses on a Likert scale of excellent, good, fair, poor; forced responses of yes or no; and responses to open-ended questions. The results of the questionnaire showed the students felt the game was an excellent method to transmit information (91%), to help retain information (74%), and to help learn information...
Recommendations for Future Use

After using any teaching strategy, review is necessary to identify areas that could be strengthened. A review can also uncover additional uses of the strategy developed. Components of the Draw-Learn-Win game we plan to alter are: reducing the time allotted to guess the item, and increasing student participation in content discussions. Because the teams usually guessed the item before the end of the 2 minutes, we plan to decrease the drawing time to 1 minute. The team identifying the item, not the instructors, will then explain the relationship between the disease and the item during the second minute. This will further challenge the students' critical thinking, problem-solving, and communication skills. The nursing literature shows there has been widespread interest in games among nurse educators; however, research demonstrating the effectiveness of games as a teaching strategy has been inconclusive (Barber & Norman, 1989). To provide us with data about the Draw-Learn-Win game, we plan to compare scores on endocrine test questions between two similar classes, one taught through lecture/discussion and the other by playing the game. This will provide information regarding the effectiveness of the game as a teaching strategy.

Summary

Many games developed for use in nursing education have been very specific in nature and useful for only certain content and purposes. In contrast, Draw-Learn-Win can be reproduced easily with different groups, settings, content, and supplies. Any number of students may play the game. Clinical sites, as well as classrooms, provide environments conducive to playing the game. In addition to use with students, Draw-Learn-Win can be easily adapted for use in teaching clients of all ages. Using the game with different groups in a variety of settings challenges the creativity of all involved.

References


Using Clinical Focus Guidelines to Emphasize Processes of Learning

Teaching and learning in the clinical field are important, complex, and unpredictable (Reilly & Oermann, 1985). The clinical field is foreign and confusing to students. Sensory input is at a high level. Students are familiar with learning in classroom situations but may become perplexed and overwhelmed at how to go about learning in a situation where strange sensory input is at a high level and real people have serious health problems. Details of nursing care and the specifics of content demand the students’ attention. Yet, nursing educators are reminded of the importance of emphasizing processes of learning and decision-making over quickly outdated factual content (de Tornay, 1988).

Nursing faculties have developed skill at stating course objectives, devising innovative ways to teach technical aspects of nursing, and conducting evaluation to determine levels of achievement. Nursing faculties have recognized and developed mechanisms for dealing with student anxiety. Less attention has been devoted to an explicit description of how students can learn to be self-directed and focused in learning and achieving clinical course objectives.

A way of increasing effectiveness in clinical teaching and learning is through the use of clinical focus guidelines as described by Carpenito and Duespohl (1985) in their book A Guide to Effective Clinical Instruction (2nd ed.). Clinical focus guidelines serve to emphasize processes of learning and bring order and perspective to the exciting and stimulating learning environment of the clinical field.

Changes in Health Care Delivery

Recent changes in the delivery of health care have exerted a significant effect on clinical instruction in nursing. Diagnostic related groupings have resulted in shortened average hospital stays with subsequent increases in acuity levels of hospitalized persons. Increase in the percentage of the population who are elderly, coupled with advances in medical knowledge and skill, has been reflected in an increase in the average age of people in need of nursing care. Shortages of institutionally affiliated nurses have resulted in an increased need to call on part-time nurses and nurses from agencies. These changes have led to more pressure on the role of the primary care nurse, the person who has known the most about the patient and the system. Advancing nursing and medical knowledge and skill have brought about greater specialization in nursing care. It is no longer possible for a nursing instructor to achieve or maintain in-depth knowledge and skill in every clinical area students may be assigned.

Changes in Schools of Nursing

Applications to many schools of nursing have declined, causing some schools of nursing to dip deeper into the pool of applicants (Rosenfield, 1987). Some schools have shortened their curricula to be comparable in length with other choices of study. The contraction of curricula has often decreased the amount of clinical field...