Fishing for Pharmacology Success: Gaming as an Active Learning Strategy

In the height of student-centered learning, nurse educators are consistently challenged to incorporate innovative—and often creative—active learning strategies within didactic interactions. Educational gaming is one technique that can enhance learning by stimulating student interest and motivation through social interactions with educational content. From a theoretical perspective, group educational gaming as an active learning strategy incorporates aspects of experiential learning theory, social learning theory, and cooperative learning (Rowles, 2012). Simply defined, a game can be any competitive activity with a precise set of rules that rely on players’ knowledge and skill in attempts to reach a specified goal (Rowles, 2012).

“Pharmacology Go Fish” was designed for 112 junior-level baccalaureate nursing students as an interactive way for reviewing comprehensive content in preparation for the course’s final examination. Prior to the examination review date, the author developed 72 playing cards that matched a drug name with its mechanism of action or some other important fact about the drug. Students were divided into small groups of five to eight, and each group was given a set of Pharmacology Go Fish cards. Within each group, five cards were dealt to each player, and the remaining cards were placed face down to form a stockpile. For the sake of time, a slight variation on the traditional “Go Fish” rules was encouraged—a player’s turn consisted of asking the whole group (rather than a single, specific player) for a matching piece. For instance, if the player held a card with the drug name listed, he or she needed to know (and ask) for its mechanism of action from the other players. If someone within the group had the corresponding card within their hand, he or she gave that card to the player who asked for it, and the asker then got another turn. However, if no one within the group held the corresponding card, the asker drew the top card of the stockpile and kept it. As players collected matches, the cards were shown to the group and placed aside. The game continued until someone ran out of cards or the stockpile ran out. The winner was the player with the most matching cards.

Student Results and Reactions

In the three semesters that this teaching strategy has been used, approximately 60% of students complete the course evaluation. Of that number, specific comments related to the Pharmacology Go Fish game were generally positive, demonstrating that the students enjoyed the game as an active learning strategy. The following comments confirm the positive reaction of students:

- I was feeling a bit overwhelmed preparing for the final. The [Pharmacology Go Fish] game really narrowed down my worry by hitting the high points, and I realized I knew more than I thought I did.
- Rather than yet another lecture, this game ended up being very fun way to remember and recall the drugs from earlier in the semester.

Conclusion

The challenge to promote active, student-centered learning environments does not necessarily have to be conquered by in-depth, complicated, high-tech solutions. Occasionally, a little dose of creativity and a simple back-to-the-basics gaming strategy, such as the Pharmacology Go Fish game, can often be used to help liven up educational content and stimulate learning.

Reference


Sara K. Kaylor, EdD, RN, CNE
skkaylor@ua.edu
The Capstone College of Nursing
University of Alabama

The author has disclosed no potential conflicts of interest, financial or otherwise.
doi:10.3928/01484834-20160114-12