

Who Wants To Be Healthy?

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Games and simulations can play an integral part of health education by creating a productive and enjoyable learning environment. Television and board games requiring various degrees of knowledge and skill can be adapted to present key health concepts,¹ to allow students to interact with and personalize health information, and to assess personal risk.² Within a game format, strategies include simulations creating real-life situations and experiences in a non-threatening environment. By using games and simulations, “students must make decisions, solve problems, and react to the results of their decisions,”³ thus enhancing their personal and social competence. Moreover, with technology at the forefront of educational innovations, computer simulations of popular games are easy to create^{4,5} and may be available for use in the classroom setting. For example, access http://www.abc.go.com/primetime/millionaire/mill_home.html.

Popular games such as “Jeopardy,” “Family Feud,” and “Wheel of Fortune” can be adapted to address one or more National Health Education Standards.⁶ Depending on the game, key health concepts can be reinforced. Likewise, critical thinking, problem-solving, decision-making, and communication skills can be strengthened. In games requiring teamwork, students as active participants can learn to work cooperatively. Games and simulations can clarify key concepts, increase student involvement, improve peer relationships, and increase motivation to learn.⁷ Health-related simulations can provide a realistic sense of where students stand as well as an authentic assessment of knowledge and skill level.^{8,9}

Key to incorporating a game format with classroom instruction is its relevance to course and student objectives. Games and simulations must meet pre-identified instructional objectives and include clear directions, procedures, and rules so the game itself does not become an obstacle to learning.

Objectives

This instructional strategy adapts the format, procedures, and rules of the game show “Who Wants To Be A Millionaire?”TM At the end of this instructional strategy, students will: 1) understand key health concepts previously presented in class lectures, discussions, readings, or written assignments, and 2) use critical thinking skills to determine appropriate options for potential success.

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Teacher Preparation

Develop several sets of questions, including one “fastest finger” qualifying question and 15 “main round” multiple-choice questions with increasing levels of difficulty. If the game is used as a final assessment of health knowledge and skills, questions should integrate all health content areas. If the game is used after specific curricular units, such as substance use prevention or human growth and development, simple to more in-depth questions should be developed based on curriculum objectives.

Ideally, question sets can be developed as PowerPoint presentations with alternate slides presenting the “correct” answer and the printed “host” copy designating 50/50 options. If computers/projectors are not available, questions can be printed on transparencies or written on index cards with 50/50 options and correct answers previously marked on “host” cards.

The “fastest finger” qualifying question should have four responses that could be placed in chronological, increasing, or decreasing order. For example: “Place the following methods of administering drugs from the quickest to the slowest way of feeling the drug’s effects: a) ingestion; b) inhalation; c) injection; and d) absorption;” or “Put the following steps of decision making in the correct order: a) gather information; b) identify consequences of possible solutions; c) define the problem or decision to be made; and d) identify possible solutions.

Prepare the chalkboard as indicated in Figure 1. Position “Who Wants To Be Healthy” banner at the top center of chalkboard. Tape cards indicating “Question Values” and “Lifelines” on the left and right of center, as shown. Secure equipment to project PowerPoint presentations or overhead transparencies on a screen at the center of the chalkboard. Prepare small pieces of scrap paper for use in the “fastest finger” qualifying round and in the “Ask the Audience” option.

For each “audience,” prepare sequentially numbered cards (one for each student) and tape the cards to pencils or sticks to produce “auction-like” indicators that can be raised when students complete “fastest finger” responses. Finally, design and print several checks for each monetary award level.

Procedures

Divide the class into two teams or “audiences,” and ask students to turn their desks so that audiences face each

other. If there are more than 30 students in class, add "audiences" so that no more than 15 students are in an "audience." Review rules of "Who Wants To Be Healthy?"

Explain that "fastest finger" qualifying round alternates between teams or "audiences." Flip a coin to determine which audience goes first. Students in the selected audience are given the opportunity to participate in the "main round" by correctly sequencing responses to this question in the fastest time. Students use scrap paper at their desks to write answers to the "fastest finger" question in correct order, and then they raise their numbered "auction-like" numbered signs to indicate they are finished. The teacher and/or "host" sequentially records the order in which students raise their numbers. The student with the correct sequence in the least amount of time advances to the main round. If no one has the correct order, ask students to raise hands if they got the first response correct, second response, and so on until one student remains. In the event of a tie, flip a coin to see who advances to the main round.

Once advancing to the "main round," students are asked up to 15 multiple-choice questions increasing in difficulty. Each question is assigned a dollar value beginning with \$100 and ending with \$1,000,000 (Figure 1). If they are not sure of the correct answer, students may use one or more of three "lifelines" for assistance (Figure 2). Each "lifeline" can be used only once. Student contestants can continue to change their answers until the teacher or "host" asks if the answer is their final answer. Once contestants indicate an affirmative response, the answer is final and cannot be changed.

At any time, contestants can stop the game and accept a

check for the amount of money corresponding to their last correct response. If they correctly answer the \$1,000 or \$32,000 question, they are guaranteed to win \$1,000 or \$32,000 even if they answer subsequent questions incorrectly. Student contestants are given "checks" representing their winnings. Since "audiences" are playing as teams, the team with the most money at the end of class wins.

Potential Challenges

Since television and board games typically are adapted from original versions for classroom use, be sure to take time to clarify classroom rules and regulations before beginning the game. Unclear rules can lead to conflict and disrupt the learning experience. With classroom competition, students tend to get more excited and, occasionally, may get unruly. To facilitate classroom management, be sure to review ground rules before beginning the game.

Some students may correctly respond to "fastest finger" questions in the least time period more than once, or the same students could be selected for the "Phone-A-Friend" option by multiple contestants. To increase the number of potential students participating in the game, limit the number of times an individual student can advance to the "main round" or be selected as a "friend."

The amount of time allotted for answering questions in the main round is not limited on the television game show. In the classroom, however, consider setting time limits for student responses to questions.

Figure 1
Sample of Game Set Up on Chalkboard

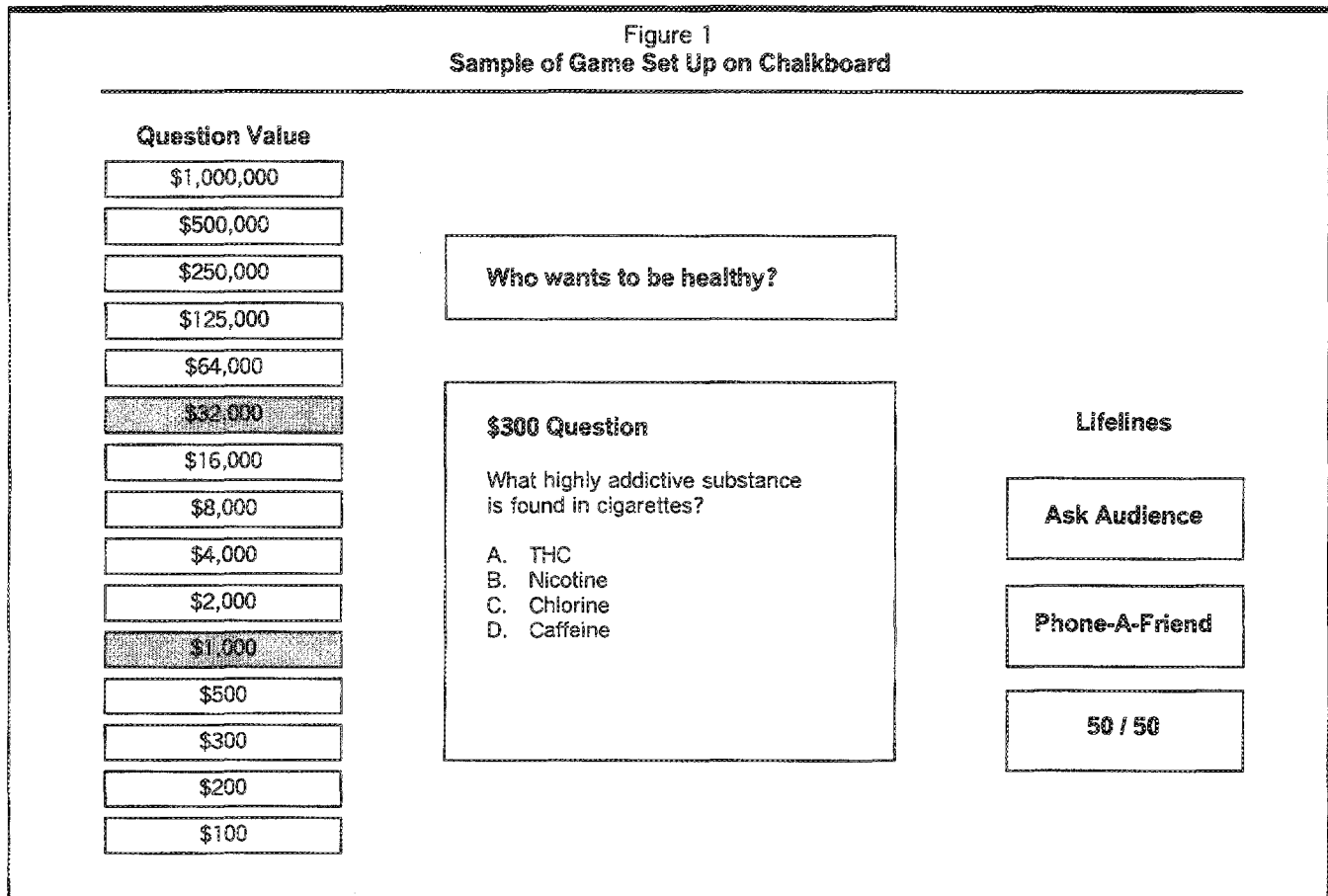


Figure 2
"Lifelines" for Who Wants To Be HEALTHY?

50 / 50

Students advancing to the main round may ask the "host" to eliminate two of the possible choices, leaving him/ her with only two choices-one of which is the correct answer. The student then has a choice of selecting one of the two answers, using another "lifeline" if available, or stopping the game and leaving with money he/she has already won.

Ask the Audience

Students advancing to the main round may ask their "audience" which answer they believe is correct. Members of their audience will indicate their choices by writing the letter on scrap paper provided to them and holding it up when asked. The "host" quickly tallies the "audience" response and shares results with the student contestant. He/ she then has the option of going with the audience, selecting another response, using another "lifeline," if available, or stopping the game and leaving with money he/ she has already won.

Phone-A-Friend

Students advancing to the main round may call on a "friend" for assistance (note: he/ she must be a member of their "audience"). The friend has 30 seconds to select an answer to the question. The student may select the answer recommended by his/ her friend, use another "lifeline" if available, or stop the game and leave with the money he/ she has won.

Variations on a Theme

If a large percentage of students already are familiar with the television game show, have student teams develop "fastest finger" and "main round" questions. This process of developing questions, in and of itself, can serve as an authentic assessment. To develop valid questions, students must use critical thinking skills while analyzing available health information. Once developed, student teams can challenge other teams using the game format.

In middle schools, where curriculum integration often is emphasized, teacher teams could develop "fastest finger"

and "main round" questions around thematic units. This approach supports students' connections across disciplines; more importantly, it facilitates integration of health education concepts with other more traditional content areas.

To increase parent involvement, this television game can be adapted for use at parent/guardian orientation nights or parent/teacher association meetings. Parent/guardian teams can compete to learn more about health needs and concerns of their children.

In professional preparation programs, questions developed by instructors/students can address functional knowledge and competencies related to the roles and responsibilities of health educators. For example, "faster finger" questions can be developed about the history of health education or steps in a program planning model. "Main round" questions can address knowledge of health education process (eg, Which of the following is not a valid source of health information?) or competence related to one or more responsibilities (eg, After providing a short case study, ask: What is the most appropriate method to collect data in this situation?).

References

1. Fetrow JV, Drolet JC. *Personal and Social Competence: Strategies for Communication, Decision Making, Goal Setting, and Stress Management*. Santa Cruz, Calif: ETR Associates; 2000.
2. Dorman S. Video and computer games: effect on children and implications for health education. *J Sch Health*. 1997;67:133-138.
3. McKeachie WJ. *Teaching Tips: Strategies, Research, and Theory for College and University Teachers*. Lexington, Mass: DC Heath; 1994.
4. Drolet JC. Games people play. *Family Life Educator*. 1991;12(3):27-30.
5. Wirth LA, Breiner J. Jeopardy: using a familiar game to teach health. *J Sch Health*. 1997;67(2):71-74.
6. Joint Committee on National Health Education Standards. *National Health Education Standards: Achieving Health Literacy*. Atlanta, Ga: American Cancer Society; 1995.
7. Nemerow LG. Do classroom games improve motivation and learning? *Teaching and Change*. 1996;3(4):356-361.
8. Jones K. Simulations as examinations. *Simulations and Gaming*. 1998;29(3):331-341.
9. Schwartzman R. Gaming serves as a model for improving learning. *Education*. 1997;118(1):9-17.