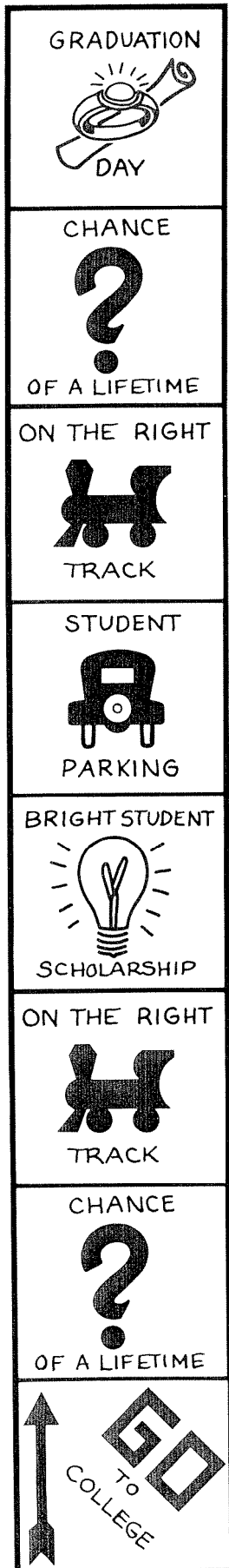




# THE TEACHING GAME



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The participation of the learner in an instructional setting has long been accepted as an enhancement for effective learning. A frequently utilized indicator of participation is the learner's overt response to instructional material. Allen (1957) writes that "the conditions for participation require that some kind of overt activity consciously be engaged in by the learner as he is exposed to the communication" (p. 423). A long-established and reasonably well-documented principle is that overt responding facilitates learning (Byers & Davidson, 1967; Gates, 1971; Henderson & Swanson, 1978; Hovland, Lumsdaine & Sheffield, 1943; Piaget, 1952).

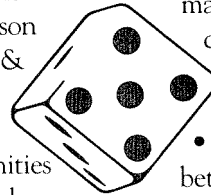
In the typical classroom at Kennesaw College, most learners have few opportunities to actively participate in the instructional process. Aside from discussion and occasional debate, the teaching process in our classrooms most frequently involves the one-way transmission of information by lecture. Large class sizes, the absence of teaching assistants, and the unpredictability of alternate methods all contribute to the lecture's durability as our teaching technique of choice.

This article discusses methods used in my psychology classes to bring students into active participation with course material. The methods are board games and audiovisual lesson production. Board games actually involve two pedagogical processes: the *production* and the *use* of the game. Both of these processes can provide students with a stimulating and challenging approach to considering the course material. On the other hand, viewing student audiovisuals can be an instructive process, but it is the student's involvement in lesson research, planning and delivery of the audiovisual that lights the educational spark. I often hear comments attesting, "I got into this project so much that I think I'd like to do this again."

## GAMES

The production and use of board games have unlimited possibilities given the fertility of student imagination and the breadth of the content of most courses. Aside from the benefits of active participation, the use of board games offer other advantages (cf., Olivas and Newstrom, 1981):

- **Change of Pace** — Games provide an alternative instructional set that may enhance motivation of the instructor and the students because it is different.
- **Modified Learning Climate** — The instructional climate changes from a formal and passive one to a more informal one. Under these more relaxed conditions, some students are more attentive and receptive to course content.
- **Peer Interaction** — Students are often better able to teach certain concepts to each other because of their perspective on the material. Games provide a nonthreatening atmosphere.

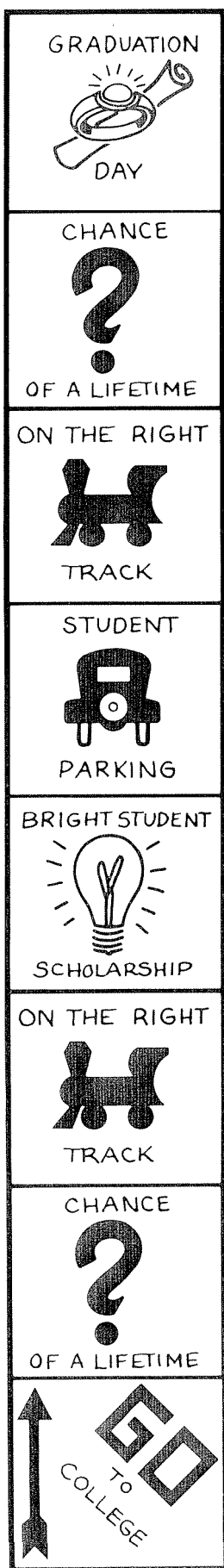


## PRODUCTION OF GAMES:

### Outcomes for Students

The actual student production of games can provide some degree of the same benefits as those just listed for the use of games. The greater benefit of the production process for students, however, may accrue in the following areas:

- **Critical Thinking:** Students acquire experience in gathering information gained in the course; analyzing its relevance to the course; and synthesizing important or pertinent aspects for inclusion in the game.
- **Planning and Problem-solving:** The creation and production of a game requires a great deal of planning, particularly when a team of students are working together. The steps necessary for project completion must be delineated; tasks must be allocated and



assigned a deadline; and materials must be anticipated and located. Inevitable snafus in the production process must be compensated for or corrected.

- **Creative Thinking:** Students are encouraged to develop game content using information directly from the text and lectures. By including this information in the context of a game, students must think about course content in an entirely different way. Grading is partly based on how imaginatively the subject matter is thematically linked to the game board, rules, and course of play.
- **Knowledge Application:** An obvious benefit of student game production is that they are challenged to apply their knowledge of the subject matter in simulated situations, question construction, and other areas demanded by game development.
- **Teaching as Learning:** The experience of teaching a subject to others usually requires a depth of understanding that results in enhanced learning.
- **Motivation:** While producing or using games does not have universal appeal to all students, most students who select this project have an enjoyable experience. As a result, the task becomes less a labor for grades, and more a labor to create an enduring product that often engenders a sense of personal accomplishment.

#### Guidelines

Students in my Psychology classes are given tremendous latitude to develop game concepts. The basic rules are:

1. The game must teach.
2. Content should be based on a discrete or manageable area of course content.
3. The game must be interesting to play.

Students are advised to review other commercial board games for ideas on principles of play and structure. In many students' minds, a board game represents an "easy" project option: develop a colorful square **Monopoly**-type board, generate questions and answers directly from the text, buy or make game pieces, and voila! These students are frequently daunted when informed

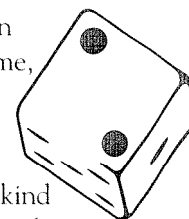
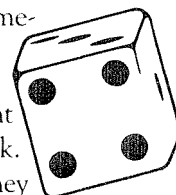
that the game must go beyond the "answer-move" sequence of play. A good grade depends on how well the action and structure of the game relates to topic area being taught.

In psychology, for instance, dreams and other states of consciousness are popular topics. To guide students away from a bland or pedantic **Monopoly** or **Trivial Pursuit**-type treatment of the subject, I review their preliminary formats and make suggestions like:

"Have you considered including questions of difficulty and then allowing bonus 'moves' for correctly answering them? Or perhaps providing the bonus in terms of a 'Free Dream Interpretation' card that could be used later in the game for advancement or getting out of trouble?"

"It might be more challenging to the players if you structured the board with various areas such as 'Nightmare Alley,' or 'R.E.M. States.' Then draw cards with questions or tasks related to these topics. Or designate penalty zones where turns are lost or something is forfeited."

"Your game provides an excellent vehicle for a problem-solving task. Players could pick up clues as they move along the board. When they have enough clues, they could venture a guess to a particular question or problem. A correct guess could win or provide advancement in the game, while a wrong guess could incur a penalty or loss."

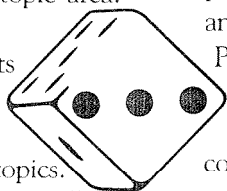


Students invariably appreciate this kind of advice and usually quickly see the value to their game development. This monitoring of the game production process could end up being a time consuming process. I have learned over the years, therefore, to provide substantial advice at the beginning of the project's planning phase. It is also helpful to allow students to see previously-developed games as concrete models for their efforts.

An effective game requires considerable planning and adequate research and testing. To assist students in cultivating these skills,

I provide the following guidelines:

1. Read the chapter(s) on your topic area.
2. Make lists of the following:
  - a. Main theories and concepts
  - b. major theorists
  - c. key terms
3. Read other sources on your topics.
4. Select the information that you will include in your project.
5. Divide topic into discrete areas and assign group members to develop information in those areas. This must be presented to instructor before proceeding.
6. Brainstorm ideas on how to develop the game. Record these ideas.
7. Sort through ideas and decide on a format.
8. Decide how to incorporate the information into the format you selected.
9. Develop a list of specific tasks involved in completing your game. Assign these to group members.



Board, rule book, and other major pieces must have title of the game and name(s) of developers on them. Plastic bags, gigantic boxes, and paper clips are generally not acceptable housing or binding for game components.

Do not use all true-false questions. Do not make answers (or definitions) too long and/or too specific.

Game boards should not be rolled, but they may be folded flat.

For each person in group, a separate deck of questions is required. (This helps to equalize the work and grading criteria.)

Submit an abstract of game, with names of developers, date, course name. This helps professor to keep track of grades, because this information can be kept with term papers and other conventional assignments.

Incidentally, these guidelines apply to the development of other kinds of projects as well. There are additional game requirements that I have developed as a result of my experience with games. These requirements help to preserve the instructor's sanity and improve the quality of the final product. They include:

Obtain prior approval before beginning development of the game. Notify instructor of substantial changes.

Vary the level of difficulty of the game questions or problems.

Include a sufficient number of question/problem cards to sustain a long game.

Formatively test the game before finalizing it.

Board must be visually appealing and durable (no paper bags) and reasonably sized (preferable, but not necessary that it folds into box).

Clearly interpretable game rules must be included. (This comes as a total surprise to some students.)

All game components must be housed together in as small a box as possible.

### Disadvantages

The disadvantages of this type of project should also be considered by the instructor. Among them, the probability of receiving shoddy projects (on the back of a Rich's box); the inability of some students to see the shortcomings of their efforts; the insecurity of some students to participate in classroom play (team play can sometimes remedy this); too much imposition of your own ideas into a game's development; logistical difficulty in monitoring the game's development, and resounding boredom in the classroom when a game is played.

### Conclusion

While the student development of instructional games is a complex and potentially time-demanding process for both students and professor, the rewards can far outweigh the costs. There is not much that can match the satisfaction of student players immersed in the subject matter and enjoying it. Similarly, the student developers have mastered an area of knowledge and produced a product that can enhance their self-esteem and earn the respect of classmates. ●

