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AN ANALYSIS OF POPULAR GAMES AS EXPERIENTIAL MODELS FOR CORPORATE AND COLLEGIATE MANAGEMENT EDUCATION

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ABSTRACT

A variety of TV game show and board game formats are reviewed, and explored for their applicability to management education in both corporate and collegiate settings. The major characteristics that pervade them are identified, and the underlying motivational and structural elements contributing to their success are presented. Student reactions (positive and negative) are reported. Examples of classroom use are presented, and the paper concludes with a set of suggested guidelines for potential users.

INTRODUCTION

The major television networks continually search for the right mixture of programs that will appeal to the viewing public, as well as capture the advertising dollars of corporate sponsors. Individual programs come and go with great rapidity, and only rarely do specific programs survive their first full year of programming. However, distinct classes of programs do emerge and sustain themselves across time. Examples of these prevailing categories include soap operas, talk shows, sporting events, news coverage, "how-to-do-it" presentations, religious programs, comedy shows, and drama. Yet one of the most successful categories of all on TV (as judged by number of alternative formats, average viewership, prime-time scheduling, and advertising rates) remains the general class of game show.

Similarly, adults have been infatuated in recent years with playing a number of board games. These range from the 'grandparent' of all--Monopoly--to more recent phenomena such as Trivial Pursuit (and its several adaptations), Scruples, Charades, Scrabble, Twenty Questions, Password, and Pictionary.

This paper explores the potential for adapting TV game shows and board game formats to corporate and collegiate management education. It does so by addressing these questions: 1) what are the dominant formats in use? 2) What are the underlying elements that make them likely to succeed in corporate and collegiate environments? (e.g., why do they work so well?) 3) What operational guidelines can be offered to facilitate their adaptation to corporate and collegiate settings?

POPULAR GAMES IN USE

For the uninitiated, this paper will include (as an appendix) a brief, and necessarily simplified, overview of several of the more popular game shows and board games: specifically, Jeopardy, Family Feud, Wheel of Fortune, Pictionary, Concentration, Crossword Puzzles, Trivial Pursuit, and Scruples. A set of major elements contributing to their success will then be derived from this review.

The dominant characteristics exemplifying most of the above shows and games are 1) team competition, 2) a challenging intellectual assignment that can be fairly objectively scored, 3) the accumulation of 'points' by contestants, and 4) the eventual designation of winners and losers after crossing a final hurdle or within a certain time period.

Keys to success appear to be the speed of responding, capacity to concentrate intensely for short bursts of time, depth and/or breadth of knowledge or vocabulary, and some degree of complementarity within a team (one person's strengths in one domain complementing another's strengths in a different area) The ability to see/think/communicate in a manner consistent with either one's partners or the game's originator often contributes to success.

UNDERLYING ELEMENTS

Casual, informal observation of participants in most of the above activities (with the possible exception of crossword puzzles) indicates that they predictably become intensely involved in the game process. Players visibly demonstrate highly intense emotions, and even exhibit child-like behaviors inconsistent with their normal "adult-like image" For example, they may shout for joy, raise a clenched fist, hug/kiss fellow contestants or the master of ceremonies, or even jump into the air upon answering a question correctly (or winning the game) . In home and social environments, players participating in board games are not always as physically demonstrative, but still often become intensely caught up in the spirit of the "game." This is evidenced by the apparently rapid passage of time during play, the fact that they frequently forego informal conversation, and the fact that they exhibit intense facial expressions, strained body postures, and wild gestures/raised voices.

What factors contribute to these participant responses? The answer seems to lie within a combination of motivational needs (intra-individual) and structural factors (environmental) within the games themselves. One or more of these items, and especially their interaction, may produce the demonstrated effect on a participant.

Motivational needs

Even holding aside an individual's desire to win financial rewards from a TV game show (which the board games don't typically provide), there are several powerful internal drives that are awakened by such games. In particular, individuals are known to have, in varying degrees, drives (needs) for achievement, affiliation, and competence (in addition to power, which will not be discussed) Achievement motivation characterizes those persons who like to accomplish challenging goals, tend to take moderate risks, prefer to receive personal credit for their efforts, and hunger for feedback about their past performance. Affiliation motivation is present in those who receive inner satisfactions from working on tasks with friends and compatible colleagues, and value cooperative efforts. Competence motivation characterizes people who seek mastery of their environment, desire to develop and demonstrate problem-solving skills, are innovative, and typically profit from their experiences. They have high levels of esteem needs which can be satisfied through either the inner satisfaction of a job well done, or the feedback received from others. The games described here have the capacity to satisfy one or more of these needs.

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Structural factors

TV game shows and board games alike are almost a motivational expert's dream. Feedback on one's responses (correct or incorrect) is almost instantaneous; the accompanying reinforcement (embrace by a teammate, praise from the show's moderator, or applause from the audience) is typically not only audible (but almost disproportionate to the behavior that earned it!) The fact that many of these games are performed in teams or at least in front of one's peers contributes to a social facilitation effect--the established phenomenon wherein participants raise their level of performance when engaging in a task in front of other observers (or participants on similar tasks)

The self-fulfilling prophecy may also be operative--the fact that people may stimulate themselves to perform better because they believe that they are capable of doing so (based on others' communicated expectations, or one's own prior performance). The fact that some games tap into our areas of vocational or at least a vocational expertise may also help, as when a Trivial Pursuit team member can answer a "sports" question based on a lifetime of being a Yankees' baseball fan. Other structural considerations, such as the challenge implicit in a game, or the variety someone experiences (compared to the monotonous repetitiveness inherent in one's job) may also operate.

In summary, the structural factors in both the TV game shows and board games appear to tap into several facets of each of the three intra-individual drives (achievement, affiliation, and competence), thus providing participants with rich opportunities for feedback, challenge, stimulation of closer friendships, and extrinsic or intrinsic rewards. The games appear, then, to be highly motivational in the short term, at least.

STUDENT REACTIONS

Positive

A sample of 33 upper-division business students were asked to report the major reasons why these game formats contributed to their learning experience. Their answers focused primarily on:

- better application of material
- awareness of other points of view
- improved clarification of concepts
- variety made the learning process more fun
- aided in overlearning for faster recall
- competition stimulated better learning
- participative approaches made learning more interesting
- encouraged them to think about the concepts differently
- provided opportunities for teamwork
- encouraged them to categorize information into areas of similarity
- provided an appreciated change of pace
- gave an opportunity to learn from other students

Negative

The same student group was asked to report on the major problems that were associated with the use of game formats. They indicated items like the following were of concern to them:

- tendency to not take the process seriously (sophomoric)
- possibility of lowering student perceptions of instructor authority
- items focused upon don't always contribute to success on exams
- hard to get all class members involved; hard to

control (limit) others

- not all students like to be put on "the spot" in front of peers
- importance of winning sometimes dominates the goal of learning
- nature of rewards (prizes) that can be offered
- quantity of information exchanged is sacrificed for class process
- danger of students skipping class based on perception of "game day"

When asked to indicate how frequently they felt such game show formats should be used within a ten-week, 30-class period quarter, the average response was 6.5, with a modal response at S class days. They were also asked how many different formats should be used within a single quarter, and the mean response was 3.4 (out of a possible 7). Finally, when they were asked to consider which formats had the highest potential to contribute to their learning in the class, they chose Trivial Pursuit and Jeopardy (a near tie), followed by Crossword Puzzles.

ILLUSTRATIONS, ADAPTATIONS, AND GUIDELINES

It has often been argued that the key to creating a motivating job environment is to "make work more like play." Play, whether it is a sport like golf, a TV game show, or a board game for adults, typically has several central features--goals are clearly defined, the field of play is well understood, a straightforward scorekeeping system provides instant and continuous feedback, a player's performances (results) are evaluated, and winning attitudes are stimulated through competition. Employee reactions to such "playful" contexts are generally quite positive. Borrowing from the work analogy, it is probable that both University- level business school courses that are aimed at the education of future managers, and non-credit workshops and seminars designed to develop the knowledge base and supervisory skills of existing managers, could also benefit from a healthy injection of play'. Doing so incorporates the spirit and principles of experiential learning that have evolved over recent decades, but it incorporates somewhat different structures than those normally used (such as role playing, or structured experiences) Consequently, this section will offer four examples of how such games' have been used, specify some of the adaptations necessary to make them fit an adult learning environment, and offer a few guidelines for their successful use.

Illustrations of Management Education Games

A small number of the Study Guides that are used in conjunction with Management or Organizational Behavior texts, for example, have incorporated Crossword Puzzles into their set of activities for students.¹ Although they are highly simplified versions (smaller matrices, with vastly fewer total words) , these crossword puzzles, when distributed to students, have proven highly motivating. Students work feverishly to complete them, and seem to take great pride in generating each correct response. I have also designed a Trivial Pursuit format for use as an end-of-term classroom review exercise in a junior-level introductory course in Management. I adapted the Trivial Pursuit game board by sketching the general layout on an 8 " x 11" sheet of paper, and substituting the major topical areas in management (e.g., planning, organizing, staffing, communicating, controlling,

¹ See, for examples, the study guides to accompany Dunham & Pierce, Management, (Glenview, Ill.: Scott, Foresman), 1989, or Davis & Newstrom, Human Behavior At Work: Organizational Behavior, 8th ed., (New York: McGraw-Hill), 1989.

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influencing, decision-making, and motivating) for the categories from the game itself. From this I created a transparency master that I could project onto the screen in the classroom. Then I generated a few dozen questions per category, drawn largely from the more objective review questions at the end of each chapter. I divided the class into two teams (left and right side of the room, for convenience), tossed a die for each team to determine the length of their move, let a spokesperson indicate which direction they wanted to move, and read off the associated question and evaluated the quality of the response. Although I allowed the large group as a whole to generate a response for the team, alternative approaches would include rotating the response initiative within each team, or having a small set of individuals represent the entire team in front of the class. My subjective impressions were that students enjoyed the experience and remained attentive throughout. In addition it provided a fortuitous opportunity for me to expand on incomplete responses in hopes of reinforcing their knowledge base and clarifying areas of confusion.

Pictionary also lends itself well to classroom utilization. To the degree that acquiring a basic vocabulary within a field is a reasonable objective for an introductory course, the glossaries of a text can be scanned for words and terms that have some possibility of being represented visually. For example, the management terms “autonomous work groups, break-even analysis, cash cows, compressed work week, decentralization, devil’s advocate, halo effect, job enrichment, mentor, realistic job preview, superordinate goal, and team building all provide stimulating opportunities for students to use their creativity under pressure for generating graphic portraits of each.

For better or for worse, lists of items predominate in many basic texts. To the degree that these represent useful summaries of important concepts, they lend themselves well to use in a Family Feud format. A quick scan of one basic management book for example, identifies lists of the defining characteristics of organizational culture, the dimensions of a Weberian bureaucracy, Mintzberg’s identification of 10 managerial roles, the significant legislation regulating business in the past quarter century, the classical steps in the problem-solving/decision-making process, and many others (e.g., advantages and disadvantages of group decision-making, or the common strategies for preventing and overcoming group think) . These are excellent sources for the lists of answers to questions that can again stimulate teams of students to prepare for such an exercise and build on each other’s knowledge base to compete successfully.

SUGGESTED ADAPTATIONS

Purpose

One of the greatest challenges for a management educator about to embark on the use of “game” formats is to change the apparent focus from the presumed end product--winning (and its associated extrinsic prizes on TV)--to a much greater concern with the process necessary to accomplish that objective. In other words, the objective in most educational settings is the learning and demonstration of knowledge or skills. Trainers and educators have an obligation to facilitate that process, and evaluate their own success in achieving it. Thus they must emphasize the educational nature of the “game” experience to the participants.

In addition, it is beneficial to explain to both participants and outsiders (e.g., staff colleagues, administrators) your training objectives--what you are doing and how it relates to your overall learning objectives. This will help forestall the predictable criticism that you are merely entertaining the

group with such formats.

Complexity

Unless you are able to invest Large amounts of energy and time into their development, most game show formats as used in management education will necessarily be simple approximations of their TV ancestors. For example, an “official” crossword puzzle has very few shaded squares that will not contain letters; by contrast, those constructed by the average trainer or professor will have many more. The issue involved here is simply how much complexity can be sacrificed in the name of efficiency before the format loses its inherent appeal to the participants.

Timing

Some board games may take hours to complete. Management educators must often operate within a tightly-defined time schedule (e.g., one hour, or even fractions thereof) . Therefore, trainers and educators may need to determine ways in which the length of a game can be truncated to fit their constraints. Examples would be to declare the team that has the most points, or has progressed the farthest, by a certain time to be the winner. Preparation. Presumably, game show participants rely on their general knowledge and quick wits to perform well when competing. By contrast, game participants in educational settings will typically have received the “answers” in advance, and perhaps studied them thoroughly! During the game, their challenge is to recall and present the appropriate answers. Thus, the game is really an evaluation, or test, to determine who knows what they were asked to know. The key to success here is on adequate preparation (consistent with what is known about effective learning)

Guidelines for Use of (Adapted) Popular Games

Here are some operational guidelines for selecting, adapting, and using popular game formats in the classroom. These are drawn from my own (and colleagues’) experiences and intuitive logic. Use a variety. It appears that, with a fixed group (e.g., 35 college juniors for a semester) any one format can work extremely well once, but after that its intrinsic appeal diminishes with blinding speed. So if the general process of using games makes sense to you, select a number of alternative formats to use.

Don’t expect brilliant responses. This is especially true if the participants have not been definitively briefed on the precise material on which they will be held accountable. Experience shows that, especially without pretesting of questions, lists, etc., many communication errors are made. Therefore, instructors and trainers may have to be quite flexible in the responses that they will accept so as not to kill participant interest. Attempt to incorporate extrinsic as well as intrinsic rewards. Although departmental budgets generally preclude the use of expensive prizes, nevertheless we have found that participants will compete fiercely for, and place high value on, small but meaningful rewards. Possible examples include candy or fruit for the victors, bonus points that apply toward an end-of-course grade, copies of a useful publication (e.g., controlled distribution of Business Week’s Careers magazine have been used with success), or even a small (and, fortunately) inexpensive trophy.

Use props. Simply asking questions of the class looks too much like a question-and-answer session. By contrast, if you use even simple props that illustrate your advance preparation and help get participants in the mood, the process will work better. This may require creating a “wheel” with an arrow for team members to spin; bringing along a

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poster board with the name of the “game” emblazoned in bright letters to display in front of the room; buzzers or bells to ring to identify who gets to answer a question first; and many other items (dice, a tally board, a partition to separate contestants, etc.)

Don’t ignore the non-participants. If you choose a format that uses representation (e.g., selecting two teams of five to compete for their constituents), the passive members may become bored with their inactivity after just a few minutes. Find a way to involve them as well, possibly using them as judges, critics, scorekeepers, or at least legitimizing their active role as cheerleaders.

Make the rules clear-cut. Spell out the game’s rule in advance, or the process can deteriorate into a debate over who won, or a diatribe on how the process was “unfair”. This is especially true if meaningful extrinsic rewards are allocated to the winners but not the losers. Also, consider awarding partial credit for the members of the non-winning team, so they also receive recognition for what they knew, even if it wasn’t as much as someone else.

SUMMARY

Popular games, drawn largely from TV programs and board games, offer considerable potential for use in university and corporate programs for management education. A wide variety have been developed, market-tested, and appeal to a broader segment of the population. These games incorporate a number of structural features that excite and satisfy the motivational needs of managerial trainees. Even under the constraints of modest budgets, lack of developmental expertise, and sharp time restrictions, these game formats can be adapted through the use of several guidelines to create a new dimension in experiential learning in business.

APPENDIX: OVERVIEW OF POPULAR GAME FORMATS

TV Game Shows

Jeopardy. Five categories of topics are presented, with five answers (to anticipated questions) prepared for each. The answers are arrayed in order of ascending difficulty, with an associated number of increasing dollars (to be won by contestants) attached to each. Three contestants compete, and they may win (or lose) the dollar value if they present the correct (or incorrect) question for that answer. A contestant chooses the dollar value for a topic that s/he wishes to address, all three are provided with the answer, and the first one who can correctly phrase the appropriate question is given those dollars. In effect, the contestant with the most dollars at the end of the game is declared the winner.

Family Feud. There are two teams of five persons each. One representative from one team competes against a representative from the other. A question is presented, and the first person to offer a correct answer that matches those from a rank-ordered set of answers wins a specified number of points. The other person may then venture a guess. If it is correct, whichever person had the highest-ranked acceptable answer then returns to his/her team. The members of that team individually (one at a time, without consultation) and sequentially attempt to identify additional answers to the original question, receiving points for correct answers. One “strike” is recorded for each incorrect response from the team, and when they accumulate three such strikes, the opportunity to respond shifts to the opposing team so they can accumulate points. Again, the team with most points at the end of several iterations “wins.”

Wheel of Fortune. A word, phrase, or statement is placed on a visual board in view of three contestants, with the board showing only the number of letters in each word (and their pattern). The contestants take turns spinning a wheel and receiving money associated with whichever slot on the wheel is indicated by a pointer. The first contestant then has the opportunity to guess a letter of the alphabet. If it appears once or more in the phrase, its position(s) is identified. As long as the correct letter is guessed, the contestant gets to spin again, accumulate more money, and make more guesses. At any point, the contestant may “buy” a vowel by spending some of the accumulated money. Whenever a contestant (in turn) believes that he/she can correctly complete the statement, he/she may try. If the contestant is able to do so, that person wins the money accumulated and is given the opportunity to “spend” it on a set of prizes.

Board Games

Pictionary (also known as Win, Lose, or Draw). Players are formed into two (or more) teams. One member of one team receives a card, on which a concept (e.g., person/place/animal, object, or action) is named. That person then has a short time period (e.g., 3 minutes) to draw a symbolic representation of the concept in sufficiently graphic detail to facilitate the other team members’ correct guessing of the concept. For some special cards, one member of each team draws simultaneous pictures, allowing team members to observe two or more drawings and hear the preliminary guesses from the other teams. As teams correctly guess concepts portrayed by their representatives, they progressively move a marker around a board until they complete their structured journey and are declared the winner.

Concentration (The Match Game). In the classic table version of Concentration, a large number of pairs (e.g., 25) of cards naming certain items are placed face down on the playing surface. Players take turns, with each one turning over any two cards of their choice in hopes of identifying a matched pair. If a pair appears, the cards are removed and scored for that player (or, in the TV version, they then provide a partial graphic clue to a comprehensive visual picture that must later be identified correctly). The player continues to select pairs of cards as long as matched pairs are discovered; otherwise the play shifts to the opposing player. The key to winning is to note and concentrate on (retain in memory) the exact position of all previously-exposed cards, so that when a familiar one appears, its mate can be found.

Crossword Puzzles. These consist of square matrices of almost unlimited size (number of vertical and horizontal spaces) and greatly ranging complexity. A small proportion of the total number of spaces are blacked out (unplayable), denoting the end of a prospective word. Numeric keys denote the beginning of each word (to be spelled either left to *right*, or top to bottom), and provide reference to a short clue that is provided. The objective is to complete the entire puzzle accurately, and sometimes this must be done within a time limit or in competition with other individuals or groups. Puzzles may also have a theme, with several of the words (or even short phrases) relating to that theme. Success is often contingent on a wide vocabulary, knowledge of people/places/things/events, capacity to identify synonyms, and the ability to work on small sections where interacting words provide letter clues to more obtuse words not immediately identifiable.

Trivial Pursuit. This game originates from the accumulation of a large body of highly-specific and detailed information, sorted according to various categories of knowledge (e.g., sports, geography,

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history). Players on a team roll a die to determine a category on which they will land, then draw a card and have the appropriate question read to them. They must answer correctly within a limited period of time or lose their turn. The game concludes when one team completes their circuit of the board by correctly answering questions within each category, then lands on the final square and correctly answers a question drawn from the category chosen by the opposing team.

Scruples. This game consists of individually drawing a card on which is written a dilemma of some type (e.g., 'You find a billfold containing \$10,000 with no identification inside. Would you a) keep it; b) turn it in to the police; or c) place an ad in the local newspaper?') The player then selects the alleged response (which may be either the truth or a bluff). Other players may then choose to challenge the response, and indicate why they disbelieve the player. The player then has an opportunity to justify the original response (or capitulate). If disagreement remains, the non-participating players then vote to determine who they believe the most.