

Analysis Plan

The Green Hornets

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Executive Summary

The purpose of this analysis plan is to determine the felt need of college students to relieve stress through a card game popular in China.

Existing Knowledge

Big Two is an immensely popular game in Chinese-populated regions, especially in areas like Hong Kong, Taiwan, Singapore and urban cities of China. However, this game remains relatively unknown in the USA.

With the steady influx of Chinese into the student community at Utah State University, Big Two can be used to promote interactions between Chinese and other ethnicities during social gatherings. This game is especially easy for Americans to learn as parts of the rules are adopted from the game Poker, which is a relatively common game in the USA.

Since the target audience does not have prior knowledge of Big Two, there is a need to introduce basic elements of the game. However, it is assumed that the participants have a basic background in Poker. Hence, the instructions will be designed as a basic introductory course to Big Two. An advanced-level course that focuses on strategies will be designed separately if required.

It is noted that different countries have variations in the rules of the game. The instructions to be designed will focus on the rules that are commonly adopted in Singapore.

Goals for the instruction

The overall goal for the instructions is to introduce the game of Big Two to the target audience so that they can play one game at the end of the lesson with minimal guidance from the instructor. The aims of the instructions are as follows:

1. To introduce the rules and regulations of the game of Big Two to the target audience.
2. To introduce the rankings of 1-card play, 2-card play and 5-card play to the target audience.
3. To introduce the basic steps to start and complete a round in the game.

Process to be used for this analysis

It was decided to use an analysis plan that includes a needs analysis, content analysis, and learner analysis.

According to Dick and Carey (1996, p. 72), in a needs analysis “a goal [is] identified that, in turn, [is] analyzed to determine the specific steps included in the goal.” This needs analysis confirmed the desire of students for a way to relieve much of their stress that comes along with schooling. The goal of this analysis is to help those students relieve their stress through teaching them the relaxing, soothing, tranquil, drug-like game of “Big Two.” This needs analysis has helped in understanding the steps needed to be taken in order to reach that goal.

The second part of the analysis, content analysis, was chosen because it helped identify accurate and essential information needed to learn and correctly play the game. This assures that the information provided to the students is authentic from a Chinese Big Two gaming Subject Matter Expert (SME).

Finally, learner analysis was chosen as part of the analysis plan. “Historically, educational psychologists have examined an array of individual difference variables and their relationship to learning.” (Dick and Carey, 1996, p. 73) The learner analysis provided the ability to identify some of variables that will help in the design of the instruction to match those variables as much as possible.

This particular project dictates this plan because it involves a definite need, authentic content and a somewhat specific group of learners.

For the needs analysis, a survey was conducted to assess the need for stress relief for college students. In addition to the survey, research on studies that address the impact of conceptual games on stressed students was conducted. 16 students were surveyed of different genders, nationality, and educational background. All of the surveys were administered to graduate students in the Instructional Technology department or undergraduate students from the elementary and secondary education department at Utah State University. Surveys were deemed useful because they are quick, inexpensive and efficient ways to receive a broad overview of the learners’ needs. A sample of the survey can be found attached to this document.

Needs analysis (performance)

Premise

While college students find great satisfaction in completing their studies, there is often a tendency to ignore other important aspects of life due to the large amount of time needed to succeed academically. In addition to their studies, college students have a tremendous need to relieve excess stress and develop meaningful, lasting relationships with their colleagues. “Games employ two kinds of stress management. Reactive, which reduce stress levels and proactive which protect against future stress to produce enormous benefits for health, mood, performance, relationships and organizations.” (Epstein, 2000, p.31)

Becoming well-versed in the rules and procedures of the game Big Two will enable students to learn about one another as strategy and problem-solving skills unfold. When game-play becomes automatic, the game will move forward in a fashion that is speedy and facilitates play. Big Two is infectious, and once a group

of students is observed playing the game there is a natural desire to join. Our instruction will enable students to learn the rules and procedures of the game sufficiently to join in the fun with minimal instruction.

Tools

A survey was used to assess the stress level of students, their attitudes toward interacting with others while learning and playing games, and their background with the rules of similar games.

Content analysis (task)

Because Big Two is not well-known in the United States, SMEs, Yat-Soon Lee and Perry Tan, will be heavily relied upon to ensure accurate and valid content. Both Yat-Soon and Perry are from Singapore and have been playing Big Two for at least ten years.

The designers of the instruction feel the content is valid and accurate as a result of actually playing Big Two together as a group. The group was able to experience first hand that the content provided by SMEs, produced the desired results.

Learner analysis (including context)

Dick and Carey emphasize that “Not only must the designer determine what is to be taught, but also the characteristics of the learners, the contexts in which the instruction will be delivered, and the context in which the skills will eventually be used.” (Dick and Carey, 1996 p. 72) To discover the characteristics, skills and knowledge unique to learners of Big Two, first SME Yat-Soon taught the instructional designers the game of Big Two. This was the first step because the instructional designers are graduate students, and therefore part of the target audience. Based upon the results of this activity, several assumptions were made. The first assumption is the learners will have no previous knowledge of Big Two. Because there are similarities between Poker and Big Two, it is assumed the learners may have a minimal to vast understanding of Poker that would accelerate the learning process. It can also be assumed learners will find playing Big Two an enjoyable way to interact with others.

The next step was to see if these assumptions were consistent with a larger group from the target audience. A survey was designed and distributed to 16 students. The survey results illustrated that students are interested in learning Big Two to help them relieve stress. To begin, students rated their average stress level, on a scale of 1 being the lowest and 5 being the highest, as 3.56. Of those interviewed 77% indicated they enjoy card games, over 60% are interested in learning a Chinese card game, and 75% desire interaction with other people through a card game. 13 out of 16 surveys circled the terms of flush, royal flush, full-house, straight, and four of a kind as understood general hands. However, in ranking the hands according to ascending order, only 2 responded correctly.

It is anticipated that Big Two will be played within a casual, relaxed context. Learners may play Big Two with peers after class, during a break at work, or as a way to prompt interactions between cultures. Because Big Two only requires a group of four people and a deck of face cards, Big Two is conducive to many settings.

Instructional approach and justification for the approach

Reigeluth's approach will be used to design instruction for the game of Big Two. However, as the design of instruction begins, it may be effective to incorporate parts of the minimalism approach.

Reigeluth's approach naturally lends itself to designing instruction for the game of Big Two due to the following:

- Learning the rules of a game can be a structured procedure.
- The rules can be explained step by step, incorporating enrichment as needed. This will be necessary because our target audience has no prior knowledge of Big Two.
- Examples and practice will help facilitate Big Two mastery and enable the learners to play the game with minimal prompting from an instructor, which is the final goal.
- Feedback will be immediate as learners play correct hands.

Big Two naturally has a divergence from one round of the game to the next, depending on the decisions of the individual players. These variable characteristics can be divided into equivalence classes. Examples and practice will come from the instance pool. In this way Reigeluth's approach will be an effective model to follow in designing the instruction.

Timeline and practical planning for the analysis

Below is a timeline for the completion of the analysis.

Sept. 4: Discuss and finalize the topic of instruction. SME Yat-Soon will teach us, the instructional designers, how to play Big Two. The group will also discuss the analysis report. Writing assignments of the analysis report will be based on discussion. Writing assignments are to be sent to Tory by Tuesday, September 9.

Yat-Soon, Existing Knowledge, Goals for instruction
Tom, Process to be used for analysis
Wade, Needs analysis
Lindy, Content and Learner analysis, Instructional approach, Timeline
Tory, compile and edit report

Sept. 9: Start by evaluating progress. Discuss areas needing more research. Develop a survey to better understand the learners. This survey will be distributed on September 10, to about 20 students. Yat-Soon and Tory will compile the results and send them to Lindy, who will then incorporate these findings in her Learner Analysis.

Sept. 9-11: Use track changes to make comments, suggestions, and changes to the draft.

Sept. 11: Tory will bring the compiled and edited report for the Green Hornet Group to review and make any final changes.

Sept. 12: Turn in our completed analysis report.

References

Dick, W. & Carey, L. (1996). "Analyzing Learners and Contexts" in *The Systematic Design of Instruction* (4th ed.). New York: Harper-Collins.

Epstein, R. (2000, Mar/Apr). Stress Busters. *Psychology Today*,33, 30-31.

Reigeluth, C. M. (2002). *Application Tasks (Skills): Procedure-Using*.

Survey

1. On a scale of 1 to 5, with 5 being greatly enjoy and 1 being do not enjoy at all, how much do you enjoy playing card games?

1 2 3 4 5

2. On a scale of 1 to 5, with 5 being highly interested and 1 being not at all interested, how interested are you in learning a card game that is commonly played in Chinese-populated regions?

1 2 3 4 5

3. On a scale of 1 to 5, with 5 being highly interested and 1 being not at all interested, how interested are you in interacting with other people by playing a card game?

1 2 3 4 5

4. Which of the following poker hand do you recognize? (circle all that apply)

Straight Flush Royal Flush Full house Four-of-a-kind

5. Please rank the following poker hands in ascending order:

___Straight ___Flush ___Royal ___Flush ___Full house ___Four-of-a-kind

6. Rate your current stress level on a scale from 1 to 5, where 1 is not at all stressed and 5 is highly stressed.

1 2 3 4 5