Twins' Challenge

Table of Contents

A. Introduction

Twin's Challenge provides a fun way to help students of any age learn memory skills while incorporating concepts such as logical groupings, addition, square roots and matching. The goal of the game is to identify the criteria that constitutes a match and then find all the matches for each level. Each level uses a unique combination of number of matches, match types, and picture types, sometimes with pictures hidden and sometimes with pictures revealed. These unique combinations result in a game with 100 levels of play where each level is a different experience each time it is played. ⬆up

B. Objectives

1. To learn how to identify similar pictures.

2. To learn how to identify logical groups of pictures.

3. To learn how to identify numbers based on their mathematical relationship.

4. To learn strategic memory and thinking skills.

C. Methods

This manual is designed to help teachers and students understand the basic concepts and game play of Twin's Challenge. However, the simplest way to learn program game play and strategy is by experimenting with the program.

Game Play

This portion of the Teacher's Manual will describe the primary aspects of game play. For more detailed information on each screen, please refer to the "Game Interface" section below.

In Twin's Challenge, students will combine mathematical, logical, and memory skills. In order to advance through the program's 100 levels, the student will identify the element that constitute a match for each level and then click on consecutive pictures to group the matches together.

The student should begin game play by choosing a level of difficulty or by simply starting at Level 1. The program will advance to the next level after each previous one is completed. The level may be selected by clicking on one of the blue arrows in the lower right-hand corner of the first main screen. Once the student has chosen a level, he or she should click on the "game play" button which appears as a big blinking arrow in the middle of the screen. Alternatively, game play can begin by pressing the space bar or return key or by clicking inside the entryway in the middle of the screen.

Upon clicking on the "game play" button, the student will be taken to the Game Play screen. The primary area of game play is located in the right portion of the screen where the TV's are located. The pictures that must be matched are always located on the TV screens and can be selected by clicking on the desired TV with the mouse. (For levels with hidden matching, the TV's will display static when they are not selected. A correct match will result in the TV being turned off, and an incorrect attempt will simply make the TV return to static.)

To begin game play, the student should look at the TV's on the screen. If the pictures are revealed, the student must simply identify matching TV's and then click on the matching TV's until they are all turned off. If the pictures all appear as static, then the student must select a picture to reveal by clicking on it and then remember the picture that appears. Once all the matches have been made for a level, the board will clear and the student will be advanced automatically to the next level.

In order to successfully identify all the matches for a level, the student must first decide what factors constitute a match. There are several different types of matches in the game, and the only way to figure out the specific

type that is required for a level is to examine the pictures for that level and observe how the pictures appear to relate to one another. The different types of matches are the following:

- Identical match (Levels 1-30) - This is a match where the two pictures are exactly the same.
- Addition match (Levels 31-40) - This is a match where the two pictures are numbers that add up to a third number that is displayed on the screen.
- Square root match (Levels 41-50) - This is a match where one number is the square root of the other number.
- Logical grouping match (Levels 51-60) - This is a match where three pictures have more in common than any of the other pictures. For example, clicking on pictures of a knife, spoon and fork will result in a successful logical match.
- Sequence match (Levels 61-100) - This is a match where two sequences of pictures are identical. For example, the two TVs that are both displaying "orange square, sail boat, stop sign", in that order, are a match. up

Game Interface
   This portion of the Teacher's Manual will describe the interface of the major screens the student will encounter during game play. For more detailed information on how to play the game, please refer to the "Game Play" section above.up

I. Main Screen

At the Main screen, the student may select a level, turn the music on or off, switch languages, access the help, start the game, or exit the program. To select a level, the student may use the blue arrow buttons in the lower right-hand corner of the screen. To toggle the background music on and off, the student should click on the "music note" button at the top of the screen. To change the language of "help" messages, the student should click on the "two-way arrow" button at the top of the screen. "Help" is available in either Spanish or English. To access help for the screen displayed, the student should click on the "question mark" button located at the top of the screen. To begin game play, the student should click on the blinking arrow in the middle of the screen or press the space bar or return key or click inside the entryway in the middle of the screen. To exit the program and gain access to the tracking features of the program, the student should click on the "back arrow" button located in the upper left-hand corner of the screen. 🔼up

II. Game Play Screen

The Game Play screen contains the primary aspects of game play. The right portion of the screen contains the primary game play area; to complete any level, the student will match all the pictures displayed on the TV's in this area. The student's current score can be found in the upper left-hand corner just below the "question mark" button. To turn off the program's background music, the student may click on the "music note" button located at the top of the screen; to access a general help message, the student may click on the "question mark" button which is also located at the top of the screen. To switch the help message between Spanish and English, the student may click on the "two-way arrow" button at the top of the screen. To return to the Main screen, click on the "back arrow" button in the upper left-hand corner of

the screen.

D. Tracking

The tracking function data is stored in a text file that can be accessed by most word processing programs. (Hint: For best results, change the font of your tracking output to a monospaced font, such as "Courier.")

The tracking function is automatically activated. You will be given the opportunity to access the tracking information when you exit the program. When the user is finished using the program, click on the "EXIT" button. On the next screen that appears, there are three options: SAVE, PRINT, and EXIT. To save the tracking information, click the "SAVE" button; when the dialogue box appears, name the file, and designate where you want to save it. To print the tracking information, click the "PRINT" button, and follow the directions of your operating system. To simply exit the program without saving the tracking information, click the "EXIT" button.

E. Teaching suggestions

As you can see from the above descriptions, Twin's Challenge offers the user a unique opportunity to exercise and develop several different mathematical, logical, and memory skills. The ways you use the program will vary depending upon the individual user's needs and ability. You should begin by determining the types of skills the student needs to exercise. Because differences among some of the difficulty levels are relatively subtle, you may need to review the matches in any given level to determine the best starting point for the user.

If you would like to introduce your student to basic matching, as well as the basic concept of how to identify similar pictures, have him or her begin with Level 1. At this level, the student will encounter only simple pictures , such as colored blocks. As the student progresses through each level of difficulty, the matches will become more elaborate, and the number of required matches will increase. If you would like the student to begin at a more advanced level, try starting at Level 11; at this level of difficulty, the pictures will remain hidden until they are clicked on, thereby requiring the student to remember the location of the pictures on the board. The number and complexity of the matches required to advance to the next level are also substantially at Level 11 than at Level 1. We recommended that most students begin the game at Level 1; that way, the student can learn how the game works starting with simple examples. Having a clear understanding of the game will be crucial for mastering the most difficult levels. The highest levels of the game will be challenging for virtually any child or adult.

F. Troubleshooting Problems and Answers

Problem: The program runs slowly on my computer.
Answer: This occurs on some system configurations that have intensive use

of existing RAM. If increasing virtual memory is not effective, restarting with extensions off (by holding down the SHIFT key as the computer is turned on) or quitting all other open applications may help. To gain even more speed, you can also have a qualified technician add additional RAM.

Problem: The help buttons do not work and I can't hear the music.
Answer: All of these messages are audio. Therefore, if you have a computer that does not have a sound card, when you click on these buttons, nothing will happen. However, you should be able to operate the software without these messages by consulting the "Teacher's Manual", or simply by experimenting with the program.

Problem: The "Save" button in the "Save" dialogue box is inactive ("grayed out"), and I cannot save my game or tracking information.
Answer: You might be trying to save to a CD-ROM or locked diskette. Designate a different location for the saved document (e.g., a folder on your hard drive).

Problem: When I attempted to print my tracking information, I received an error message.
Answer: If there is no printer set up with your computer, you may receive an error message. If you do have a printer, check your printer settings and connections.

Problem: I left the program running; when I returned, portions of my screen had disappeared.
Answer: If your screen saver is activated while the program is running, a portion of your screen may disappear. If your screen saver interferes with regular game play, try disengaging the screen saver program.