

Kids' Stories

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Instructional Objective

The purpose of **Kids' Stories** is to reinforce story/object/event sequencing - the idea of beginning/middle/end (b/m/e). There are several instructional objectives that fall under this purpose:

- The student will be able to find cards that go together (same event/story sequence) - demonstrated by placing in a "group" (not necessarily in sequential order).
- The student will be able to arrange the event/story cards in proper sequential order (b/m/e), given a group of cards.
- The student will be able to accurately recognize correct combinations of cards when other students lay out their story groups "in order."

We have also identified a few additional objectives for some of our variations for the game (especially to be used for enrichment or authentic assessment purposes). They are as follows:

- The student will be able to describe the story depicted in the group of sequenced cards (using b/m/e order).
- The student will be able to write a short story based on the cards.

Kids' Stories falls under two areas of the current state framework: math readiness and language arts. In the Mathematics Framework for California Public Schools Kindergarten Through Grade Twelve (1999), it states that "critical for beginning mathematical development are attributes, such as color, shape, and size; abstract concepts, such as some, all, and none; and ordinal concepts, such as before, after, yesterday, and tomorrow " (p. 124). Under the First Grade list of math objectives, one includes: "Tell time to the nearest half hour and relate time to events (e.g., before/after, shorter/longer)" (p. 38).

Along with having important influences on mathematical reasoning and problem-solving, understanding sequential order is also key within the language arts content area. Not only is this skill valuable in decoding words in reading (left to right order) but it is also crucial under the areas of writing and oral communication. Using the listening and speaking strategies of kindergarten outlined in the English&endash;Language Arts Content Standards for California Public Schools Kindergarten Through Grade Twelve (1998), the idea of describing and relating experiences in a logical and sequential order is mentioned (p. 13). In first grade, students are also expected to be able to identify "the story's beginning, middle, and ending" (p. 15). In second grade, the need for these skills is taken to the next level under writing, where students are expected to: " move through a logical sequence of events" and "describe the setting, characters, objects, and events in detail" (p. 21).

Learners & Context of Use

The learners for **Kids' Stories** are K - 2nd grade students. These students range in age from five to eight years old. Under Piaget's developmental stages, these students are in the process of moving from the pre operational to the concrete operational stage (Biehler & Snowman, 1990). This simply means that they work best with actual objects or with things that they have experienced concretely and directly. Students this age are also very egocentric, and enjoy activities which directly relate to themselves and their own experiences. However, they also enjoy role-playing, and this is one way to get them to learn content outside of their own experiences. Most students this age really enjoy school, and are beginning to see patterns of beginning/middle/end in their own lives.

Kids' Stories is designed to be used in a classroom setting. It has been designed so that students can play the game without adult supervision, making it possible to be used as an enrichment activity. In addition, it can be played with multiple students on one team and with an adult (or older student) supervising play - making it adaptable to small group activity. Students must have sufficient space around the actual playing board in order to affectively play the game. **Kids' Stories** can be played more than once, since each student will not receive all the groups of cards during one game session. Playing the game several times allows students to practice their sequencing skills over and over, solidifying their mastery.

When students have mastered the basic game, the teacher is encouraged to have

them try one of the enrichment variations to extend their learning. Prior to the game, the students should be exposed to the idea of event sequencing. Afterward, as mentioned above, the teacher can extend this idea into reading and writing through extension activities.

Object of the Game

The object of **Kids' Stories** is to be the player (or team) with the most cookies in their lunch bag at the end of the game. A player earns cookies by successfully placing their groups of event/story cards in sequential order. The game ends as soon as one player reaches the bedtime space.

Game Materials

The following are a list of objects within the game box that are needed to play the game:

- **Kids' Stories** game board
- One six-sided die (numbered 1-3 twice)
- Four different colored lunch bags (playing pieces)
- Cookies (small clay imitations of real cookies for placing in the lunch bags as the players earn them)



Kids' Stories game board, die, lunch bags, story card (at the top), and cookies (in the star bag on the right).

- One deck of basic event/story sequencing playing cards (45 cards in all - five 3-card combination groups, duplicated three times)
- One deck of advanced event/sequencing



playing cards (48 cards
in all - four 4-card
combination groups,
duplicated four times)

One of the 3-card combination groups in the basic event/story deck.

- A Master Sheet of all the card sequences (displaying all the card sequences - at a very small scale- to be used by Parent, if needed)
- One Rules sheet

The back of the event/story cards.

Time Required

Kids' Stories is designed to last approximately 12-15 minutes (keeping the attention span of these learners in mind). Set up for this game is minimal: choosing lunch bags, shuffling cards and placing into the Schoolhouse, and rolling to see which player will go first. Ideally, the entire game would take place in one session. If time did not allow a full game, a winner could still be determined by stopping and seeing which player had accumulated the most cookies.

The Rules

Object: To have the most cookies in your lunch bag at the end of the game.

Set up:

1. Place the game board onto the playing surface.
2. Choose one person to be the Parent ("Mom" or "Dad") unless an adult is present - the rest of the players are the "children." Parent is not considered a player of the game - he/she is in charge of passing out cards and judging sequences.

3. Parent should have:
 - o the star bag full of cookies
 - o the event/story cards
 - o the master sheet
4. Players choose a lunch bag and place it on the morning sun.
5. Parent shuffles the event/story cards, deals two cards to each player. Players keep their cards face-up in front of them during the game.
6. Each player rolls the die to see who will begin. The player with the highest roll wins. If there is a tie, the players who tied then re-roll until the tie is broken.

To Play the Game (Basic):

1. The first player rolls the die and moves their lunch bag along the game board path (from morning, through the day, until the last space - Bedtime).
2. After moving their lunch bag, the player reads the square they landed on and does what it says. There are three possible types of squares:
 - o **Green**: Draw Two Cards - Parent gives the player two cards and the player lays them face-up in front of themselves
 - o **Yellow**: Steal A Card - the player may steal a card from any other player's pile of cards
 - o **Red**: No Card! - the player does not get a card this turn
3. After the player receives a card, they may group it with other cards in their pile. Each player will want to group like cards as they proceed around the game board, looking for the "missing" cards in the sequence (NOT three-of-a-kind). It behooves a player to be aware of what other players have, in case they land on a yellow space and can steal a card that they are missing from another player.
4. Once a player has three (non-duplicate) cards in one sequence group, they need to try and arrange them in sequential order. On a player's turn (either before or after they roll), they may ask Parent to check their group of cards.
5. Play continues in a clockwise fashion.
6. The game ends when someone reaches the last square marked Bedtime. The player does not need an exact roll of the die to enter this spot.
7. Once someone reaches Bedtime, all players stop playing and count up the cookies in their lunch bags. At this time, players who have a group of cards may ask Parent to check them for additional cookies.

To Check a Group of Cards and Gain Cookies:

1. A player asks Parent to check their group of cards for correct sequential order.
 2. Parent compares the order with the Master Sheet and proceeds as follows:
 3.
 - **Correct Group And Correct Sequential Order**: Parent takes the cards from the player and keeps them. She gives the player a cookie to put into their lunch bag and the game continues.

- Correct Group But Incorrect Order: The next player has the opportunity to rearrange the cards into sequential order. If that player can do so correctly, then they receive a cookie for their lunch bag. If the second player cannot arrange the cards properly, then each player around the board (in the same order of play) has the opportunity to arrange the cards and earn the cookie. Once a player has correctly arranged the cards and earned the cookie, the game continues with the next player in line (seated to the left of the last player to roll).
- Incorrect Group of Cards(cards from different sequences together): Parent says to the player "Sorry, this is not a group. Look for another event/story grouping." The player may then break apart the grouping and start to look for other cards to "group" together.

To Play The Game (Variations):

1. Instead of individuals, have teams of students working to group and sequence the cards.
2. To extend the instructional purpose of the game, add the condition that before a player can earn a cookie from a correctly sequenced group, they must also tell the story that is depicted in the series of cards (in proper b/m/e order).
3. For students who have mastered the 3-card combinations, use the advanced set of playing cards (containing 4-card combination sets).

Design Process

The Overall Scheme

Originally, **Kids' Stories** began as an idea for a rummy-like card game, in which players would be drawing and discarding story cards, trying to find a group in order to win. Both Holly and Karen are elementary school teachers, and felt that a game dealing with sequencing would be very much appreciated and used at their school sites. Marie, as a special education aide, also saw the value of this topic from her experience working with children and adults with special needs. After meeting as a group, we decided to make it a board game and retain the card sequencing element.

We wanted to make this game very concrete and "real-life," keeping in mind that this age-group is developmentally egocentric. We played around with ideas for the game to be fantasy-centered, or centered around popular children's literature (like nursery stories). We decided against these ideas because we felt that by using already published literature, the children would not have an opportunity to describe their "own" story from the cards - they would just be reciting the already

established story. We decided to use the theme of **Kids' Stories** for the game. This would allow all students from all backgrounds a chance to identify with the theme - thus increasing relevance and applying to their egocentricity (Biehler & Snowman, 1990; Keller & Suzuki, 1988; Malone & Lepper, 1987). All the sequences portray children doing simple tasks in several settings - school, playground, and home.

Review of the Literature and Game Catalogs

We did a review of the literature to see what the research said regarding real photographs versus drawings for the story cards. We found that some research supported the use of real photographs with young learners, while other researchers indicated that elaborate colored drawings would work just as well if not better (Anglin, Levie, & Towers, 1996; Braden, 1996). Coming to the conclusion that the area of visualization and visual imagery research is still not unified on this topic, we choose to make a few sets using photographs and a few sets using colored drawings and play test the two sets for appeal, clarity, and ease of publication. The results of our testing revealed that our students liked the cards using real photographs better, and were able to distinguish needed details to correctly sequence them. [*Note: We obtained prior written parental permission for all children involved in this project.*]

We also conducted a search (via the web and through various instructional game catalogs) to see if any other games existed that focused on sequencing skills for young children. The only games we found that were somewhat similar used cards that had one side forming a complete picture as a way to self-check that the cards formed a proper group (like in matching games with addition facts, sight words, etc.). None of these games used the cards for event/story sequencing order, and we could find no board games with this instructional purpose.

Design Issues

Our game board design began as a way to physically extend the idea of beginning/middle/end into the structure and physical look of the game. Since children at this age are working on sequencing not only objects but also events in time, their progress through a day was one obvious example of this. We visually wanted to divide the board into three sections: morning, afternoon, and night. The idea for a race track pattern went along with this theme. However, we wanted the winner to be the one who demonstrated mastery of the sequencing skill and not merely the first person to finish the game. This was where the idea of combining the two structures (the cards and the game board) came together. Even though we sectioned the board into three areas, we also didn't want a player to feel that they were looking at the board "upside down." To solve this, we came up with a circular loop during the middle of the day (representing the time they're in school).

The game board, markers (lunch bags), and the cards were purposely made large because many children still have difficulty focusing on small print and handling small objects at this age (Biehler & Snowman, 1990). We put the board on cloth, allowing the game to be sturdy (kids can be rough on game boards!) and stored compactly. Originally we were going to have long, narrow story cards, thinking that the students would be holding the cards in their hands. We quickly abandoned that idea when we realized that fine motor skills is one area of difficulty for many at this age.

Another design issue was: What to do with the pile of cards? We wanted a way to self-check the order of cards (especially if Parent were another student), and placing numbered, colored shapes on the back of the cards seemed like the easiest way to accomplish this. However, then the problem of having the players look at the backs to do the sequencing instead of using the skill became a problem. This was when we decided to provide a master sheet with all the sequences.

Also, we realized that by building the "stealing" element into the game, this would not only give the game some chance component to it (Malone & Lepper, 1987), but also keep the other players engaged throughout (by needing to pay attention to other players' cards). To add some intrinsic motivation (through challenge and control) we also decided to allow other players the opportunity to correct the sequence and thus earn the cookie (Malone & Lepper, 1987). We were thinking that we would give each player the opportunity to self-correct, but this significantly decreased the challenge element of the game.

Design Issues: A Mathematical Approach

In order to decide on the number of cards needed, the number combinations needed, and the number of various colored squares needed in order to play a 12-15 minute game (with four players), we turned to Holly's husband, a statistician/programmer for help.

By doing some mock "plays," we calculated that nine moves could be accomplished in five minutes for four people. Therefore, 22 moves would comprise a 12 minute game. Using the numbered die (1-3), we deduced that each player would average two spaces per turn. This equated to needing 14 spaces for the entire game. During a game, each player would be landing on 6-7 spaces (approximately). We wanted to make sure that green spaces comprised a majority of the board, with yellow being the second most, and only one or two red spaces. Figuring that early on in the game, the number of cards to steal would be few, we decided to place the red space sooner and leave the yellow spaces for later (to add to the excitement of the game).

We then determined that on average each player would pick up 8 cards and steal 2 throughout the course of the game. By starting with two cards, this would allow each player to average 10-12 cards for each game (depending on steals). This seemed like a reasonable amount of cards for each player to handle.

Our final task was to calculate how many cards we needed for each deck. We decided on 45 cards in all - five 3-card combination groups, duplicated three times. With five different combination groups, obtaining ten cards would be the maximum number of cards where it would be possible not to have a set. This is very unlikely and the ability to steal helps to solve this possible situation anyway. If we had six 3-card combination groups, then a player could have more cards left in their hand with a greater chance of not getting a set. We settled on five 3-card combination groups for this reason. The thinking was similar on the deck with four-card combination groups.

Prototype Testing

We met within our group and with Bernie several times to flush out our ideas. We

also tested some initial thoughts and ideas on our children and other colleagues.

Once all of the above decisions were made, we play-tested **Kids' Stories** to check on a few key elements: 1) the overall design of the game board - did it make sense? Was it motivating? Easy to setup and handle? 2) the rules - Were they clear and easy to follow? Did having Parent be in charge of the cards and the cookies work? and 3) the cards - Could students understand them? Were the different groups easy enough to distinguish? Did they like photos or drawings better?

We used kindergarten and first grade children from Hawthorne Elementary School for the play-testing. As stated earlier, the children liked the photographs better than the line drawings. They enjoyed the "race" aspect of the game and the "stealing." One area that needed more clarification was the idea that children needed to gather the entire set of three cards in a sequence, not just three identical cards. We rewrote the rules to try and emphasize this point. As Devon, a first grader, explained, "I like the game because it makes me so happy. It helped me learn about the stories."

Final Thoughts

We learned many valuable lessons from this experience. First, we now realize the enormous time and effort that goes into creating an educational game. We will not be quick to discard a product we don't like. Instead, we can use the principles we've learned to try and change the game to make it better (if possible). Also, we realize that we can take an existing game and by varying some of the elements, create a new game that will fit our instructional purposes. In fact, we plan on taking this game and utilizing some of the elements for additional variations in our classrooms. Finally, we really appreciate the team effort. Admittedly, we were all hesitant to join a group, thinking that this task would be better suited for an individual. However, we realized firsthand how valuable working in a group to design a game can be. Synergy is something we experienced - and value highly!

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