

WANDERING TALES

An Interactive Narrative Application for
Parent-Child Communication.



A Thesis Project developed by Ashley Kenawell at the
Pennsylvania State University.

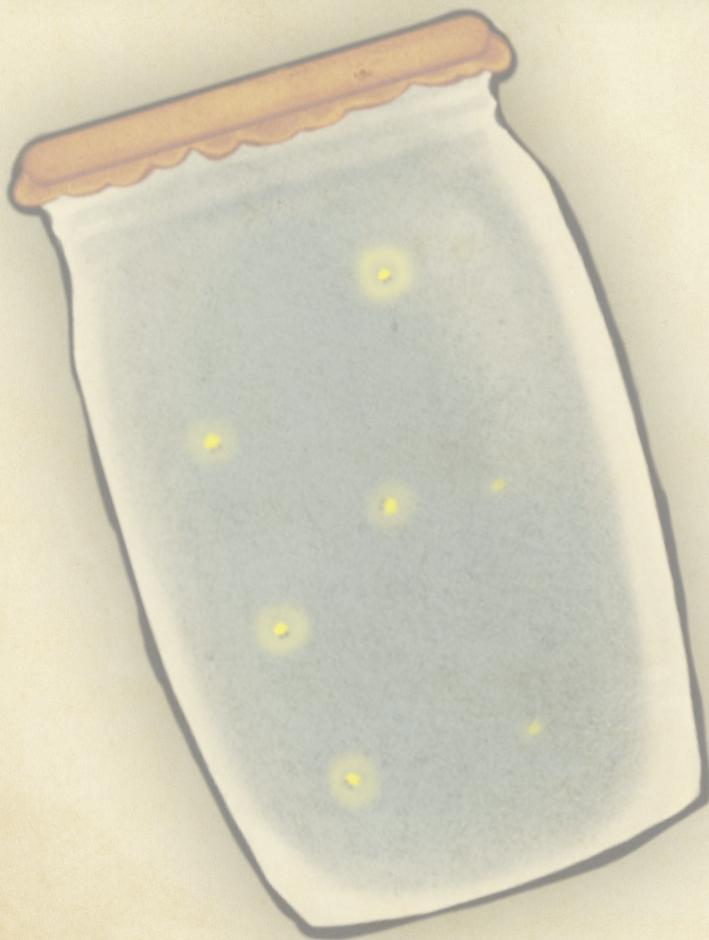


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VOCABULARY

Interactive Narration:

A story that is in some way impacted by user input.

Digital Storytelling:

A method of narrative presentation that uses a graphical user interface to convey a story.

Parent Child Communication:

The social bonding that occurs between parents and their children as a result of day-to-day interaction.

Triage-Style Questionnaire:

A diagnostic series of questions used to determine the appropriate actions for the program to take.

Communication:

This thesis uses the term “communication” specifically to refer to the passing on of value systems and social behaviors used to strengthen the relationship between two people.

Forking-Path Narrative:

A method of interactive narrative that uses a multiple-choice system to determine the outcome of a story.

Compartmentalization:

The strategy of using characters to personify specific themes or topics in order to make a topic a more tangible asset in conversation.

ABSTRACT

Parents often leave children to learn to use technology independently (with Gameboys, one-player games, etc). This interactive application is designed to promote conversation and cooperative technology by developing a script through which parents can communicate with children about difficult or highly personalized topics. This project will create an interactive narrative environment conducive to parent-child communication.

I will be exploring ways to generate personalized fables based on parent-inputted topics. These short stories will be used to communicate concepts as well as facilitate a conversation between adult and child users.

By opening a dialogue about difficult topics, I hope to strengthen the relationship of children to their parents or guardians. Furthermore, I intend to use this program legitimize the use of technology as a resource for communication and social development in a way that has not been seen before.

Even in a world with growing educational platforms for technology, many parents see technology as an unconstructive pastime. By involving parents in the fundamental foundation of the program I hope to bring new light to interactive educational outlets.

METHODOLOGIES

Developing the User Interface

I have developed a graphical user interface to convey a narrative using an object-oriented coding language and providing illustrations to strengthen the story. The application consists of a portion for adult users and a portion for child users with parent supervision; therefore the interface is individualized for the intended user.

In order to create a cohesive and inviting interface, I developed a frame setting that situates the user in a world removed from their own. The premise of the interactive environment features two main characters, a wagon driver and the beast that tows the wagon. These two characters tell stories by collecting and training thespian fireflies to convey the stories for them.

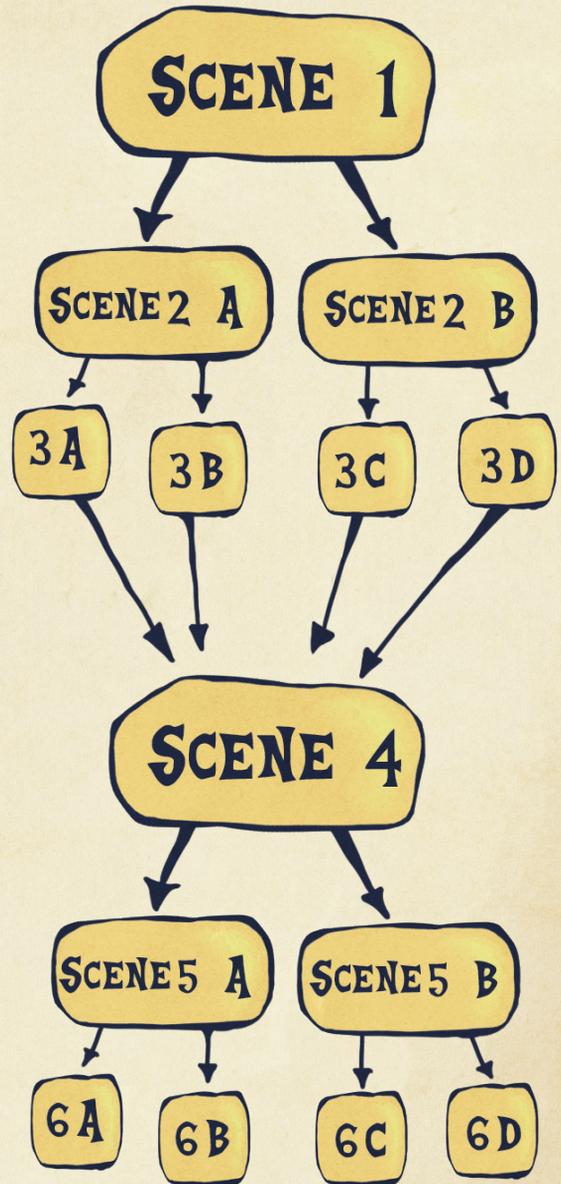
Though this information is never explicitly stated in the app, it serves as a personal aesthetic constraint and helps to guide the artistic direction of the content.



Forking Path Narratives

Forking-path narrative structure is a simple branching mechanism used to create options for the user to interact with the story. The structure has been used in many formats, the “Choose Your Own Adventure” being a prime example of the structure. Simply put, the story operates along a series of paths, with each step narrated within the story. The user chooses an option in order to progress through the story, thereby making each “play” different depending on the choices.

My project features the same logic of forking path narratives, but rather than choosing paths within the story as the character is confronted with them, the path is determined by the results of the questionnaire at the beginning of the app. Every scene within the story corresponds to the reaction the child is having towards the topic (for example if the program determines the child is shy or wary of the topic, the protagonist will exhibit these features through his actions).



A Story from a Behavioral Issue

Every question within the questionnaire is vital order to create a narrative that is as specific as possible to the parent's needs.

In order to be successful, a discussion must be engaging for both participants. To prevent this app from being a one-sided tool to bark orders at the child, the questionnaire is used to engage the parents before the story begins.

To begin the story development process, the app first asks the parent to think of a specific behavioral issue that will serve as the topic of discussion. This data will be used later to make connections between the story and the topic, but it also serves another purpose. By inputting this data at the beginning of the questionnaire, parents are forced to focus on an individual topic for the story discussion. This helps the parents think critically about the specific behavioral topic they want to address, and helps identify why the issue is important.

The Discussion

Once key aspects of the underlying issue have been identified, Wandering Tales works as a guide to facilitate a constructive conversation between both users. The discussion format mostly relies on the information the parent gave during the questionnaire to develop meaningful conversations about the topic.

The discussion starts by relating the conversation directly to the story. Each discussion section first asks the user to think about the protagonist or antagonist's motivations within the story. Once the users have observed this metaphorical version of the topic, the discussion shifts focus to the topic the parent wants to talk about.

Finally the discussion section asks the user to think only about the household topic, thereby taking attention away from the story. This method eases both users into the discussion and makes the "problem topic" easier to talk about.



“If Randy is frustrated with this issue, he or she will most likely...”

Identifying Aspects of the Issue

In order to create a balanced discussion of the issue, the program must first identify some basic aspects of it. The questionnaire is used to simplify and apply some core concepts of problem solving techniques.

The first three questions are multiple choice and are used to create a story empathetic to the child’s point of view. What motivation does the child have to disobey the parent? Does this topic make the child uncomfortable? Is he or she avoiding responsibility? These topics are considered in the first part of the questionnaire.

Additionally, the multiple choice questions are used to measure the reaction the child has to this topic once confronted with it. Does the discussion usually end in tears? Does the child become aggressive, or shut-down emotionally?

The second portion of the questionnaire describes the type of behavioral issue that will be addressed. The type of issue is defined by what or who is negatively affected. Specifically, does this issue cause harm to the child, does it cause harm to those around the child, or does it violate social norms?

These three categories are addressed in the last six questions of the questionnaire. The program applies a number range to the “agree-disagree” slider used to answer the question. It determines which of the three categories will be implemented within this instance of the story.

This system ultimately deduces an accurate representation of the discussion topic that can be applied to a story with the corresponding context.

RESEARCH & BACKGROUND

Storytelling as Communication

“Particularly for children having difficulty making friends, story creation and storytelling can create a liberating space for all children to experiment with their emotions and feelings” (Alper).

In her article *Phrases as Play: Reflection on Vivian Paley and the Story Pirates*, Meryl Alper describes storytelling as an essential form of communication within a classroom. Specifically Meryl comments on Vivian Paley’s work and how she has learned to connect to students using storytelling as a means to relate to children, and help children relate to each other. Rather than specifying a time and place for storytelling, Paley adopts the process of playwriting as a factor for her entire classroom; setting the “story table” in a prominent place in the front of the room.

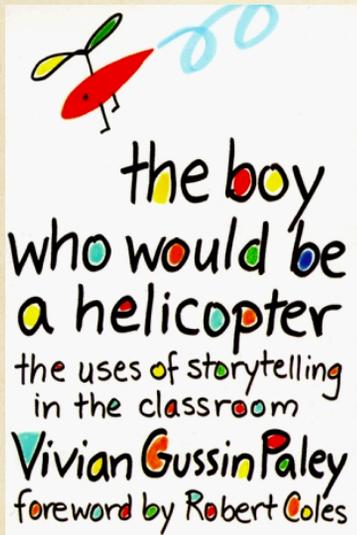
If storytelling is an essential classroom device for communication, this logic can be extended beyond the classroom. Storytelling opens a door for people to interact with others in an environment removed from their own. Fantasy and story building requires the writer to establish a relationship with their audience and communicate the needs of their characters; these core facets of narration and storytelling directly relate to the communication methods of the writers themselves.



Meryl Alper, USC at Annenberg

Vivian outlines her theory of storytelling as a shared process: an exercise in which peer-to-peer, and peer-to-adult communication can interact fluidly in order to develop a meaningful outcome.

“In storytelling, as in play, the social interactions we call interruptions usually improve the narrative. Yet I can recall a time when I would say ‘Please don’t interrupt. Let people tell their own stories.’ That was when I missed the main point of storytelling. I did not understand it to be a shared process, a primary cultural institution, the social art of language” (p. 23, *The Boy Who Would be a Helicopter*).



Personal Background

This project follows a long history of studies in interactive storytelling. As an IDS student, interactive storytelling and authorship is my passion. Within the IDS major, I have dedicated my studies to narrative exploration and discovering new forms of storytelling. With this project I intend to use my skills as a digital storyteller and communicator and apply these abilities to a real-world outlet.

Illustrated storybooks are a fundamental tool used to communicate with young children. While children’s books provide a basis for literacy that they carry with them for the rest of their lives, I am more interested in the lessons and themes within the stories themselves. This project explores core concepts of children’s books and develop a way to communicate themes chosen by parents. This application combines the interpersonal discussion encouraged with traditional illustrated books, and the personalization that can be achieved via interactive technology.

EARLY DEVELOPMENT

Creating a Storytelling Platform

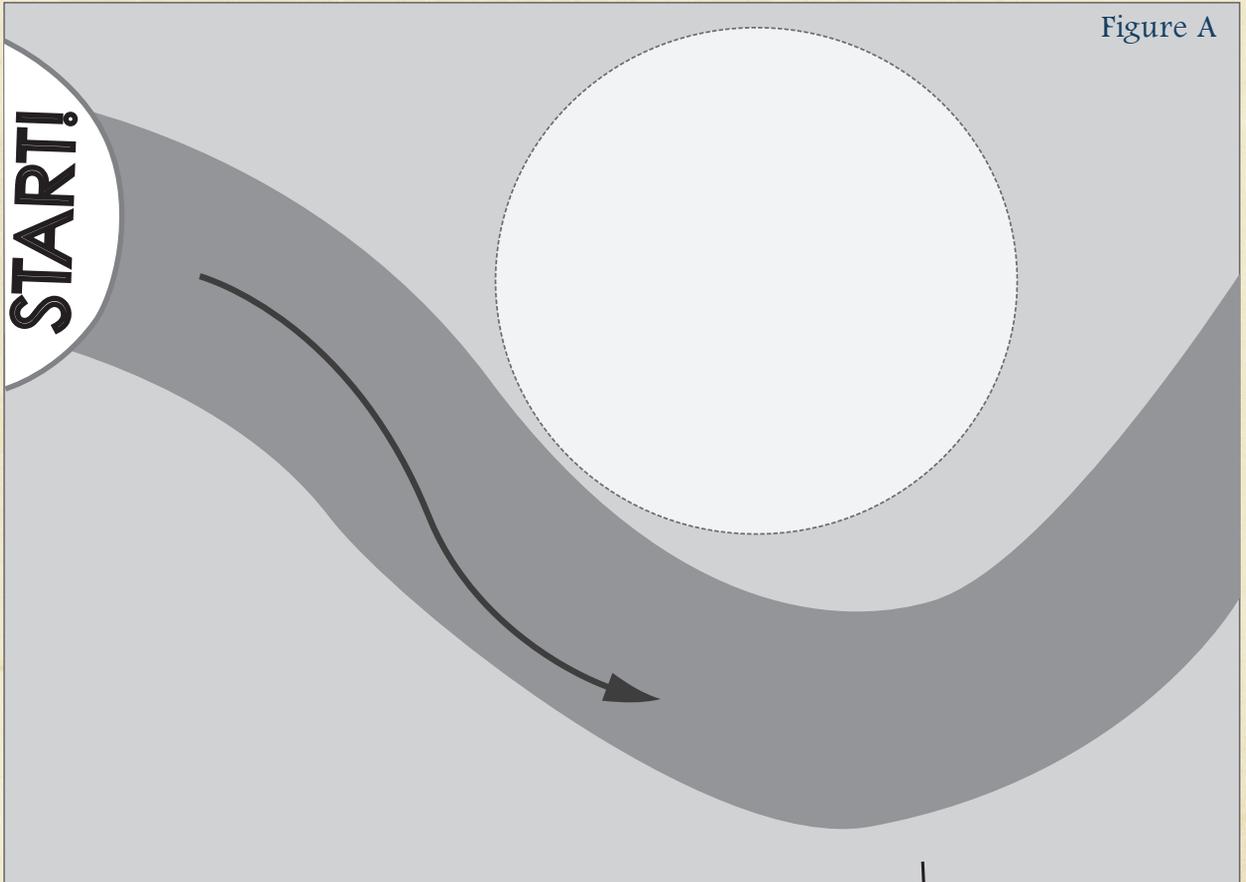
From the beginning of developing *Wandering Tales*, I had envisioned the project to be an aid for parents and children to communicate and listen to one another. The concept was to use interactive narrative and character manipulation in order to create an inviting place for parents to share time and thoughts with their children.

To create a narrative platform that is both aesthetically cohesive and versatile enough to invoke complex conversations about real-world topics, the project needed to be developed on a platform that could be customized within set parameters. Earliest versions of the project were not an app at all (Figure A on the opposing page features the initial form of *Wandering Tales*).

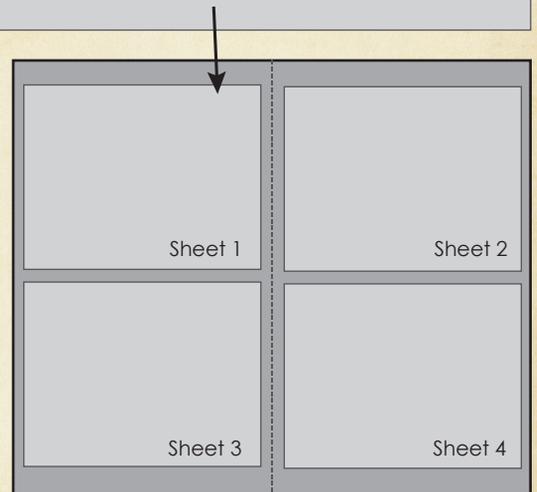
My initial inspiration for this project was the process of reading out loud to children. Sharing a big-paged illustrated book at bedtime, or at any times periodically throughout early childhood, is a developmentally crucial way for children to learn how to interact with the world. Illustrated Storybooks were an early target for research and development for this project as I focused on how reading to children opened the pathways of discussion, critical thinking and problem solving.

The creative process involves the scrapping, rethinking and reapplying of old ideas. As my project was slowly depending more and more heavily on parameter-based input from the parent, it became clear that a hard-copy board game simply couldn't be versatile enough to adjust to the individual needs of parents.

Figure A



The “storybook board game” was the earliest contrivance of Wandering Tales. The board game prototype featured a series of printable board game pages that would be fitted together to create a path through which a short story could be conveyed. Each page of the board game would feature a plot point and parents and children would explore the board as roleplaying characters within the story.

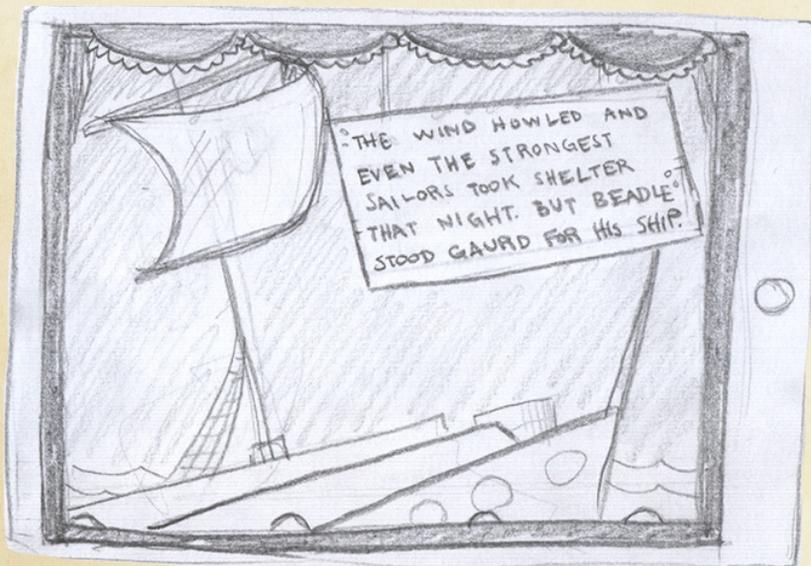


ON-SCREEN DEVELOPMENT

At this point, I started researching the use of screen-based media for storytelling. I was initially repelled by the idea. I wanted the users to interact with each other; not a screen. This was not meant to be a videogame project.

Eventually I concluded that a portable device application would be most beneficial for my project. This allowed me to create a program that could be utilized by users in a way that mimicked classic storybook sharing.

Digital versions of beloved childrens books were already available on most portable devices. My goal was to reinvent a storybook application so that it facilitated conversation between users; the way a traditional children's book does every time a child points to a picture and comments on a particular character or action within the story.



A COMPELLING AESTHETIC



Developing characters that were versatile enough to cover a potentially endless (at this point I didn't know exactly what scope these stories would reach) was a challenging endeavor. Ultimately the designs I chose were meant to invoke the familiar approachability of old folktale tellers. The design was meant to imply the wisdom of a well-traveled individual willing to share his experiences with others.





Eventually I decided on a traveling pair of storytellers; a cart driver and his steed. Charlie and Ratherscudd (respectively) quickly became the model for the external platform on which my stories would be told; using their environment as a story within the story would give parents and children the opportunity to be further immersed in the storytelling environment.

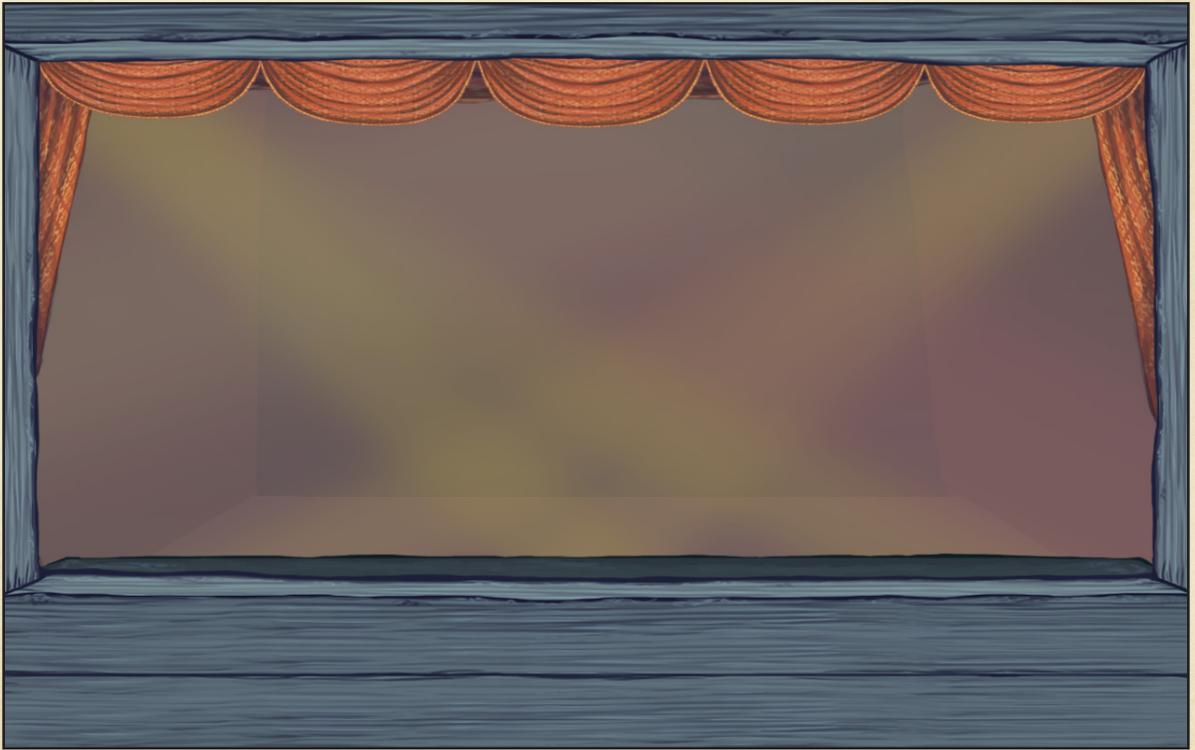
The lightning bugs came much later in the design process. I knew I wanted Charlie and Scudd to tell stories of their own invention, but I didn't know how. I spent a long time with some completely unrelated characters that could be used to visualize Charlie's story as he told it, but they seemed to be too far removed from the original setting and made the application feel less grounded in a single environment. Later I moved to puppets operated by Charlie, which were better, but I didn't feel it was a feature that made Charlie and Scudd capture imagination the way I had intended. It felt too literal. Finally, I discovered the thespian lightning bugs as the perfect balance of charm and functionality.



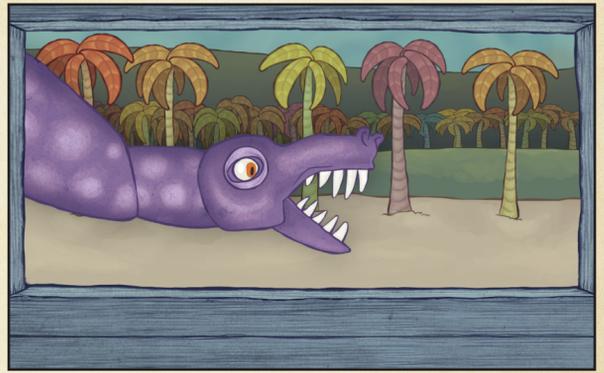
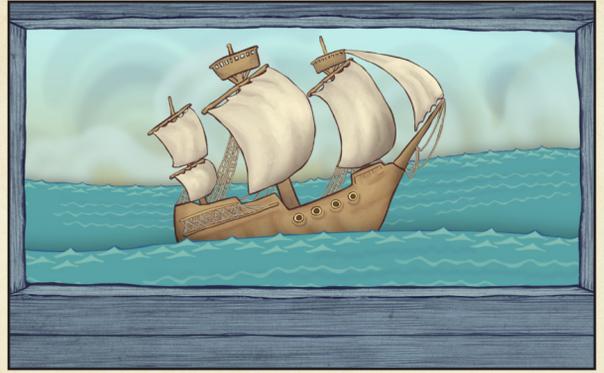
An early version of the lightning Bug



SETTING THE STAGE



The concept of using a stage setting guided my art style and production pace for creating every asset involved the storymaking process. I worked to make every asset mirror the aesthetic of an on-stage production. This constraint helped me determine how my characters would look and interact with the sets, and ultimately influenced the technique of my entire animation process.



INDEX OF SOURCES

Alper, Meryl. "Phrases as Play Objects." Web log post. Meryl Alper Blog. N.p., 17 Dec. 2011. Web. 9 Sept. 2013.

Clements, Douglas H. Young Children and Technology. Washington, D.C.: U.S. Department of Education. Educational Resources Information Center, 1998. Tufts. Web. 23 July 2013.

Gikow, Louise, and Betsy Loreda. Sesame Street: A Celebration : 40 Years of Life on the Street. New York, NY: Black Dog & Leventhal, 2009. Print.

Paley, Vivian Gussin. The Boy Who Would Be a Helicopter. Cambridge, MA: Harvard UP, 1990. Print.

Saslow, Rachel. "Digital Devices Engage Tots, but Some Experts Discourage Use before Age 2." Washington Post. The Washington Post, 18 Dec. 2012. Web. 12 Aug. 2013.

Schulze, Bianca. "How Picture Books Play a Role in a Child's Development." The Childrens Book Review. Children's Book Review, 8 Nov. 2010. Web. 17 Sept. 2013.

"Young Children, Apps & iPad." MCGRC. Michael Cohen Group, 2012. Web. 06 Sept. 2013.

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