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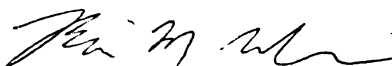
MULTIMEDIA PROJECT OF A CHINESE FANTASY-
JOURNEY TO THE WEST

presented by

YI-JU (KAY) CHEN

has been accepted towards fulfillment
of the requirements for the

M.A. degree in TELECOMMUNICATION



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**MULTIMEDIA PROJECT OF A CHINESE FANTASY
- JOURNEY TO THE WEST**

By

YI-JU (KAY) CHEN

A THESIS

Submitted to
Michigan State University
In partial fulfillment of the requirements
For the degree of

MASTER OF ARTS

Department of Telecommunication

2004



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ABSTRACT

MULTIMEDIA PROJECT OF A CHINESE FANTASY - JOURNEY TO THE WEST

By

YI-JU (KAY) CHEN

The purpose of this project was to make an interactive multimedia presentation aimed at the children of Chinese immigrants who were born or raised in America. This project was geared towards helping them understand part of their Chinese heritage by introducing them to one of the oldest and most popular texts in Chinese mythology. The desired goal was to cultivate enough interest with this presentation so that they would want to seek out other historical texts in Chinese literature. It would also help them put an ancient story into a modern day context. Young children today are more likely to use the computer to learn information rather than by reading storybooks. By giving them a multimedia format, it creates a modern-day, multi-faceted experience.

Journey to the West is one of the most famous masterpieces of Chinese mythology stories around the world. It has been widely diffused within Asia and has affected lots of children and adults with its inspiring storyline and characters. To introduce this story to the target children (American born/raised Taiwanese children), and to make a product unique to other previous products such as TV series, movies and children's illustration books, I combine several multimedia technologies to help deliver the story in a new, innovative approach.

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ACKNOWLEDGEMENTS

Before I attended the Telecommunication Department at Michigan State University, I used to be a naïve computer user. I was never involved in any multimedia design, and to be honest, my knowledge level toward computers only included how to write emails and to type a document in Microsoft Word. Though I had several experiences in the mass media such as Advertising and Radio before I came to Michigan State University, I was looking for an opportunity to extend my knowledge to the new media.

As a first year graduate student in the Information Technology Management (ITM) student in Telecommunication Department, I took several courses in the Digital Media Art & Technology (DMAT) program and I found out what I wanted to do with my life. Design was so much more fun than I ever expected. I decided to transfer to the DMAT program that combined the technology and beauty. Now I am glad to prove to myself that was a great decision. This learning experience truly inspired me, and the take-away from this program is precious and unforgettable. I would like to thank Brian Winn for being so nice and supportive while I was working on my project. His support and knowledgeable inputs helped me all the way through. I could have been very lost in the technical part without his kindly help. I would like to thank Carrie Heeter for her insightful advice on the research and the guidance for producing this educational product. Bob Alber's guidance was very stimulating when I was

taking his video classes. From his teaching, there were several concepts that I have been keeping in mind while I was doing the production-to develop a “vision”.

I would like to thanks to Jason Tye for the narration of the story. He has been very patient and nice to me in digesting such a huge volume script. Without his pleasant voice, the audio performance would not have come up as the way it is now.

I would also like to thank my friends: Lynette Lim for proofreading my thesis content and supporting me during my tense production period; Sherlin Hsu and Chiao-Hui Hsieh for voluntarily contributing many creative ideas for my project. Thanks to my parents, my elder brother and sister’s support. They were always there when I was in a hard time. Without their financial and spiritual support, I could never hold my faith to this point and accomplish my master's degree.

Lastly I would like to take this opportunity to thank Chin-Kwan Chen, my grandpa who passed away while I was intensely working on my project. I have been really regretful that I could not come back to see him when he was terribly sick. I would like to dedicate my project to my grandpa and send my love to him.

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INTRODUCTION

Chinese mythology extends beyond the boundaries of a person's imagination. It has greatly influenced Chinese culture on many levels. The body of mythological work focuses not only on central idealism but also literary works such as novels, poetry, and historical context. Its fantasy and romance features are the most distinct. For example, most Chinese mythology is based on animism, and it contains many Therianthropic creatures (half-human and half-monster creatures) that are a combination of animal and human. The Gods in Chinese Mythology are portrayed as playful and witty. Some of the concepts can also be applicable to western culture such as singing the praises of labor and creation, or encouraging good deeds and warning against sin.

The novel 'Journey to the West', attributed to Wu Cheng'en (c.1500-1582), is one of the most famous Chinese mythologies that contain all of the distinguishing features mentioned above. This story was written based on an actual journey undertaken by the monk named Tang San Zung in the 7th century (629 - 646 AD). He faced lots of danger along the way to get across the desert of central China to reach India to collect a Buddhist sutra. Though the hero seems to be Tang San Zung in the story, it is the monkey who plays the most important role in contributing to the entertainment level of the story. With the wit, humor and dynamism between Monk, Monkey and two other pilgrims – Pig and Shawu, this story has captivated countless generations of readers. In addition, it has given rise to numerous productions of modern arts, comics, film animations, television series, dramas and operas. According to

its rich content and history, "Journey to the West" is a great starter for American Taiwanese children to explore their Chinese culture and heritage.

The production mainly focuses on the animation of the story and the interaction features. Macromedia Flash MX is the major tool used to create the animation. Combined with the image editing software-Adobe Photoshop 7.0 and Illustrator 10.0, and the sound editing software-Goldwave, SoundTrack, and Premiere, children can experience this ancient literature masterpiece in a whole different, interesting and interactive way.

CHAPTER ONE: DESIGN BACKGROUND

1.1 NEEDS

According to the report of the United States Census Bureau in 2000, there are more than 144,795 Taiwanese residents now living in the States¹. This group is huge and a large number of them are immigrants who moved to the States with spouses or kids as dependents. These families raise their children here. Therefore, these American Taiwanese children are educated within the American society, yet are engaged in Chinese/Taiwanese culture by their parents or relatives. At their early age, influenced by their surrounding environment, they are bilinguals who can usually speak English and Chinese both. However, as they get older, they often start to lose the sources that engage them in Chinese culture. As a result, there is a critical need to produce educational products for them to learn more about their cultural heritage.

Some publications in the United States, such as historical literature (Jeniffer W.J.F., 2001, *Journey to the West*) and illustration books (Ed Young, 2001, *Monkey King*), contribute to the introduction of Chinese mythology to the western society, however they are seldom presented in an interactive multimedia form. The advantages of applying multimedia technology to a learning experience are obvious. First, the stories become more vivid and entertaining with the help of video/audio tools than plain drawings or literary descriptions. Second, with the support of Internet platform - an approachable and powerful medium - the

1. Asian Population 2000 (<http://www.census.gov/prod/2002pubs/c2kbr01-16.pdf>)

audiences who are interested in Chinese mythology can have easy access to the content, which helps the diffusion of the Chinese mythology to these American Taiwanese children.

1.2 TARGET AUDIENCE

The primary audience is 9-12 year-old American Taiwanese children born or raised in the United States. The secondary audience is their parents that came from Taiwan who are concerned with their child's education about Chinese/Taiwanese culture.

1.3 PERSONAS

1.3.1 Primary Persona

Chiao-Wen is a nine-year-old girl. She was born in Los Angeles after her parents immigrated to the United States. Her parents are both Taiwanese who have moved to the States after getting married in Taiwan. Now her dad is a Real Estate agent and her mom is working in a bank as an accountant. Chiao-Wen lives with her parents, an elder sister and her grandpa in a northbound community in L.A. She is smart and outgoing. Since she went to a public elementary school at 7, she has lots of friends in school including her Taiwanese or American neighbor's kids. She speaks English fluently just like other American kids. Her parents use both English and Chinese to talk to her, but she cannot read many Chinese characters. She is a Cartoon Network fan. She often laughs out loud while watching it. In addition, she loves to read storybooks, play computer games and get on Internet.

1.3.2 Secondary Persona

Yi-Jen Hsu is a 38 year-old workingwoman who works in a bank as an accountant. 15 years ago, she moved to America with her husband, Kevin, and became a citizen of the United States. Her husband and herself both consider the education system and environment of the States as better for kids. Therefore, they settled down in L.A. near other relatives' homes. Now they have two daughters: one is 13 years old; one is 9 years old. Both of them were born in the United States and went to public schools in their neighborhood. They are very concerned with their children's education. To keep their children involving in Chinese/Taiwanese culture, they have taught Chinese to them since they were young. In addition, they send their kids to Chinese school in summer time. They would buy books, movies or comic books in Chinese version for their children. They have reached an agreement that it is good for their children to learn more Chinese since their kids are already deeply involving in western culture.

They often use computers at work, but not frequently at home. They have purchased a desktop for their elder daughter with a broadband Internet connection. They are positive about their children's involvement in computer technology and Internet activities, but they are highly concerned with the online safety for children.



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1.4 PROJECT OBJECTIVES

The project objective is to design a multimedia product that improves the audiences' knowledge of Chinese mythology and increases their interest in it. Since my prospective audience is children, the project content aims to satisfy their expectation yet fulfill an educational goal. The completed product is fun and easy for the audience to view and interact with, allowing them to absorb the essence of the story rather than dealing with the interface. Macromedia Flash MX is regarded as a popular platform for developing animation in the present day. Any user who has a Flash player plug-in can easily get access to view an animated story with his/her computer. To meet the objective of creating a user-friendly interface, Flash was selected as a primary platform for users to view the completed project. Concerned with the distribution, the final product will be presented both in a website and a CD-ROM.

1.5 PERSONAL OBJECTIVES

Multimedia design has become my learning emphasis during the period of studying in Digital Media Arts master program. My personal interest lies in two-dimensional animation and graphic design. Thus, I want to use this graduate project as an opportunity to apply my design skills that I have been developing in the previous two years. My primary personal objective is to learn more about how to integrate multimedia technology for accomplishing the task of a successful storytelling. In addition, games have been regarded as useful applications to support children' learning experiences. My secondary objective is to increase my knowledge in interactive game design.

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CHAPTER TWO: PRE-PRODUCTION DEVELOPMENT

2.1 BACKGROUND RESEARCH

2.1.1 SECONDARY RESEARCH ON POPULATION OF TARGET GROUP

According to a report from the United States Census Bureau (1999):
“Asian and Pacific Islander population in the United States numbered 10.9 million, constituting 4 percent of the total population. “

2.1.2 SECONDARY RESEARCH ON CHILDREN'S INTERNET ACCESS AND USE

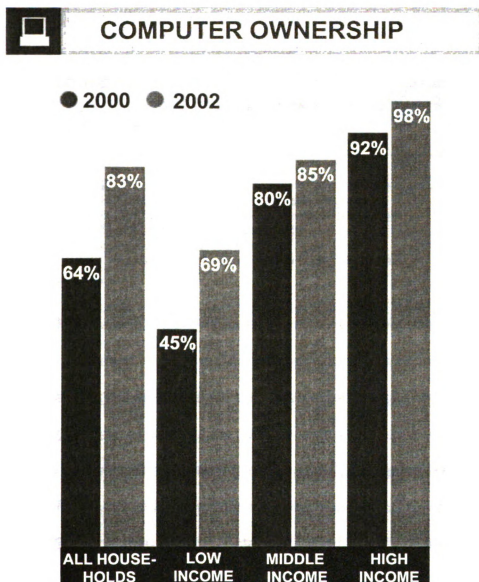
According to a report on children's internet use by The Corporation for Public Broadcasting² (The Corporation for Public Broadcasting, 2003, Connected to the Future), in 2002, 83 percent of American family households (with at least one child aged 2-17) owned a computer, and 78 percent of children lived in a home in which either they or a parent used the Internet from home (refer to Figure 1).

Not only did access increase, but so did volume. This report indicated that in 2002, online ages of children between 6-17 spent an average of 5.9 hours per week on the Internet. The older the child, the more time they spend online: children 9–12 reporting 4.4 hours, and children ages 6–8 reporting 2.7 hours per week. Moreover, most of the Children ages 6–17 that were online at home ranked educational activities (such as homework, and learning not related to

² <http://www.cpb.org/ed/resources/connected/>

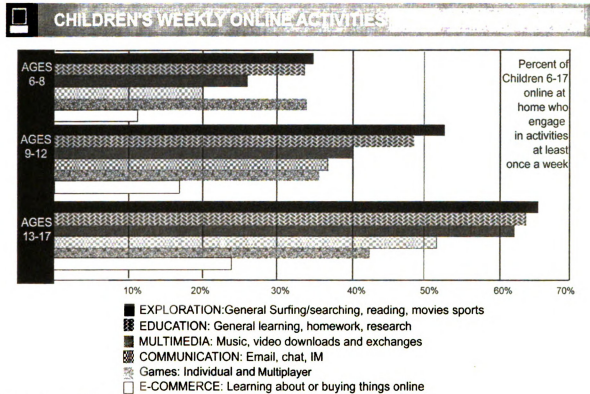
schoolwork) among their top five everyday uses of the Internet. The educational pursuits were strong activities among the children ages 6 to 17 years old. In addition, Multimedia Use (for exchanging music) and Game Playing also played important roles in children's online behavior (refer to Figure 2).

Figure 1: Computer Ownership



Source: Grunwald Associates

Figure 2: Children's Weekly Online Activities



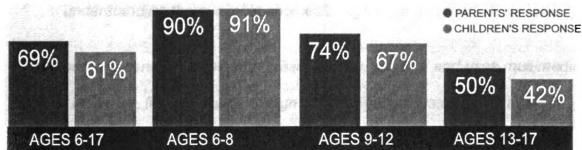
Source: Grunwald Associates

Cheskin's research also indicated the current Internet use of children. The Youth population (including children and minors) has been exposed to computer and digital devices since they were quite young. They are more tech-savvy, and are already familiar with the technology such as Internet, computers or multimedia products (Cheskin, 2002, Designing Digital Talking to parent's influence on children's online activity, in the report by The Corporation for Public Broadcasting, high percentages of parents and children believe that parents have influence over which Web sites children visit (refer to Figure 3).

Figure 3: Parent Has Strong Influence Over Children's Internet Use

PARENT HAS STRONG INFLUENCE OVER CHILDREN'S INTERNET USE

Percent of children 6-17 and their parents who say parents have a great deal of influence over children's online use



Source: Grunwald Associates

2.1.3 SECONDARY RESEARCH ON DESIGN FOR CHILDREN

Jakob Nielson's alertbox indicated several problems of website usability and design guidelines as follows:

"Kids' Corner: Website Usability for Children", Jakob Nielson's Alertbox; 2002":

- *Unclear navigational confirmation of the user's location confused users both within sites and when leaving them.*
- *Inconsistent navigation options, where the same destination was referred to in different ways, caused users to visit the same feature repeatedly, because they didn't know they had already been there.*
- *Non-standard interaction techniques caused predictable problems, such as making it impossible for users to select their preferred game using a "games machine."*

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- *Lack of perceived clickability affordances, such as overly flat graphics, caused users to miss features because they overlooked the links.*
- *Fancy wording in interfaces confused users and prevented them from understanding the available choices”.*

“Children want content that is entertaining, funny, colorful, and uses multimedia effects. However, for homepage design and navigation systems, the user interface should be unobtrusive and let kids get to the content as simply as possible. Children enjoy exploration and games, but it should not be a challenge to operate the website itself. The content should be cool, but the design must offer high usability or kids will go elsewhere”

“Also, youngsters don’t like scrolling, do like mine-sweeping over pages to find interactive hotspots, will read instructions, and will click on adverts.”

Children, unlike adults, are easily distracted and often confused when it comes to exploring Internet content. The five problems mentioned above provide some hints to design for children: the navigation symbols should be recognizable and consistent across all of the design; avoid fancy (ambiguous) wordings and complex interface design. Though children ask for entertaining, funny, colorful design, we should avoid obtrusive effects to distract their attention while experiencing the product. We can relate to this conclusion to another study by Nielson Norman Group (Nielson Norman Group, 2002, “Usability for Young and Old”):

“Although kids do like a bit of Flash and bang on sites, they won’t hang around if your navigation’s ropey or they can’t work out what to do”.

Children like special animated effects, but they are not patient enough to wait for long download times. They do not like scrolling or enduring complicated site structure. They will read instructions and click on advertisements.

2.1.4 COMPETITIVE RESEARCH ON CURRENT STORYTELLING WEBSITES

The purpose of this study is to analyze and compare the interaction level and multimedia applications of online storytelling websites that introduce mythology/folklore in English.

a.) Sampling

The theoretical definition of an online storytelling website of mythology/folklore is: a website contains text, picture, or any other animated elements to present stories in English.

b.) Sampling Frame

I searched on Google by following the directory: Kids and Teens > Arts > Online Stories> Folk and Fairy Tales. I randomly selected five out of those 20 websites (once I found the website was not relevant to storytelling, I continued my random select till I obtained a more representative sample). The final five selected samples are:

- Grimm Fairytales (<http://www.grimmfairytales.com/en/>)
- Joe The Elf Journal (<http://www.geocities.com/joetheelfjournal/>)
- Children Stories & Folktales from Indonesia
(<http://www.geocities.com/kesumawijaya/>)
- Ezone Production (<http://www.ezoneproductions.com/>)
- The Colorful Storybook (<http://w8r.com/kidsbook>)

c.) Observation Categories

- Navigation – whether there are clickable icons, images, or text links for navigating between different stories or chapters.
- Video Elements – whether there are some animations such as Flash movies embedded into the webpage.
- Audio Elements – whether there are any audio files embedded into the webpage that could be in the form of background music, sound effects, or narration.
- Feedback Center – whether there is a main contact number, e-mail and address for further inquiries.
- Other Special Features – that are not included in any of the four categories above.

d.) Executive Summary

The most surprising finding in this study is the discovery of Grimm Fairytales. It obtains the most professional and entertaining features to demonstrate a user-friendly online storytelling. It applied the ideas of analog

publications such as storybooks with multimedia technology to create an educational and entertaining experience. It obtains video and audio elements to enhance a multimedia experience. The special effects are simple, funny, and not distracting. Viewers can control over what they want to see, when and where to play or stop. Its interaction level is high. Some interactive activities such as “Games”, “Coloring Sheets”, and “Forward to Your Friend” are highly interactive design that directly relates to the story content.

On the contrary, the other four sites still have much to be improved. Targeting young children, the online storytelling websites should be aware of children’s usability and how they experience enjoyment. When designers decide to transform those storybooks into e-books with an online form, those long-length pages with plain text do not fit with children’s needs and wants. An outstanding example for a good design for online storytelling is Grimm’s Fairytales. Its interactive design helps viewers get involved in the stories.

The above findings provide some design hints for the project of Chinese Fantasy:

- Compared with most of the storytelling websites that lack interaction and multiple media types, the project of Chinese Fantasy does obtain product strength with the support of interactive multimedia technology.
- The application of animated graphics and audio will help creating a storytelling atmosphere.
- Character design plays a crucial role for boosting children’s interest.

- Games, e-cards and coloring sheets will enhance the interaction level of a storytelling website and will result in return visits by kids.

2.2 QUALITATIVE RESEARCH ON FUTURE USERS

2.2.1 METHOD

The purpose of the observation is to gather insights for designing an interactive multimedia project, Chinese Fantasy. The whole research project was divided into two sections. The first part was conducting an observation and interview of children, and the second part was to gather the insights from these children's parents. The research objectives of the research were:

a.) Observation and Interview for Children

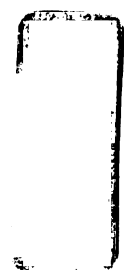
- To understand children's language levels on both Chinese and English
- To know their reading interests and storybooks collections
- To understand their computer use, Internet use, and game use

b.). Interviews for Parents

- To understand their concerns with their children's education
- To understand their use of books, Internet and multimedia products with their children
- To explore innovative ideas they may have for this new product
- To gather creative ideas and advice for the project

2.2.2 PROCEDURE

Subjects were recruited from Lansing Chinese Elementary School. Before the research was conducted, I asked for the consent from (refer to APPENDIX A: PARENTAL CONSENT FORM AND ASSENT FORM FOR OBSERVATION) from



the parents and arranged a proper time to conduct a home visit to observe their child. The observation took about 20 minutes. The observer administered an informed assent form for the child. I asked children how they used the Internet and interacted with the educational or entertaining content in books or CD-ROMs. Children were asked to show the researcher their favorite web site, favorite book, and favorite CD-ROM. I took notes and no audio or video recording occurred.

I interviewed one parent at a time. The informed consent was requested from the parent interviewees. The location of the interview was their homes. The time was chosen depending on subjects' schedule and preference. The interview lasted about 20 minutes. The main purpose of this interview was to understand parental concerns for their children to learn Chinese culture, and their rationale for choosing educational products for children (refer to APPENDIX B: INTERVIEW CONSENT FORM AND INTERVIEW QUESTIONNAIRE FOR PARENTS).

2.2.3 EXECUTIVE SUMMARY

To protect subjects' privacy, the results will not be reported with their real names in the following executive summary. Pseudonyms in the form of fictional characters will be used in place of the subjects' real names.

a.) Observation and Interviews with Children

- **Children's Language Levels on Chinese and English**

Three children subjects participated in this research: Harry Potter (8 years old), Little Mermaid Ariel (9 years old) and Power Puff Girl (11 years old). English was their first language after they went to school. They could speak Chinese, but lacked ability to read it. They can understand some simple characters with the help of “phonetic notation” (it was a tool to help them pronouncing). Two of the children had been taking a “phonetic notation” class in Lansing Chinese Elementary School during the time the obseravation was coducted. Since them, their ability of reading Chinese improved. The older kid, Power Puff Girl, almost forgot how to pronounce “phonetic notation” though she could speak Chinese pretty fluidly.

They seldom read Chinese storybooks which their parents bought for them. They would skip the difficult words and only looked at pictures. On the other hand, they read English much more fluently. They watched cartoon and played games that were in English.

- **Reading Interests and Storybooks Collections**

The older subject, Power Puff Girl loved to read, and she had displayed an excellent ability in reading English literature including fictions, historical novels and so on. When she got interested in some Chinese or Taiwanese stories, she would try to find an English edition to read. She borrowed books from school's library or would ask her parents to buy for her.

The younger children loved Disney-styled animation and storybooks that had colorful illustrations. The younger boy, Harry Potter, showed more interest in adventure storybooks. The other younger girl, Ariel, liked romantic stories such as Little Mermaid. Most of their storybooks were in English. They had some Chinese storybooks on their shelves. Sometimes, they would ask parents to read for them, or browsed the pictures in the books.

- Computer Use/ Internet Use/Game use

All of the kids had previous experience playing computer games or video games. Older children could handle complicated content like strategic games (for instance, Civilization III). In addition, older children surfed the Internet more than the younger kids.

b.) Interviews with Parents

- Concerns on their Children's education

The three interviewees were parents of the children subjects. They agreed that it was important to keep their children involving in Chinese culture. They spoke Chinese to their kids, bought Chinese books for them, and they had sent their kids to Lansing Chinese Elementary School to learn Chinese.

- Use of books, Internet and Multimedia products

Fathers played a more important role when it came to computers/technology. Mothers would read storybooks for kids when their kids were young. However, when their kids grew older, mothers would stop reading bedtime stories for kids.

The mothers seldom played computers with their children. Instead, mothers preferred to let their kids read rather than play computer games. They bought Chinese storybooks for their kids, but they gradually found out that children got many problems to read them. According to their reflection, their kids were more interested in reading or playing Games in English. Additionally, these American Taiwanese kids had been deeply influenced by cartoon or Disney movies.

Their main concern for purchasing a book, CD-ROM or game for kids was “educational or entertainment level” of the product. For younger children, parents were the gatekeepers, screening children’s media exposure. For older children, parents gave more freedom for kids to choose what they wanted to experience. Parents would leave older kids reading or experiencing the products alone (unless kids ask for their extra help).

- Innovative Ideas

According to their opinion, it was difficult for their children to read Chinese, especially for Chinese idioms. Moreover, they shared the opinion that it would be helpful to use English narration. Images and character design played an important role in a storytelling product. In addition, they all agreed that “interactive games” were a good approach to maintain kids’ attention and helped them to learn.

- Concept Tests

Their children's interests were diverse. The only similarity was all of them were interested in watching cartoons talking about adventures. According to the parents' opinion, adventure or historical stories would be better topics than ancient stories. One parent also indicated that "Journey to the West" was a great story to let his kids to explore to. (Please find the detailed report from APPENDIX C: QUALITATIVE RESEARCH COMPLETED REPORT)

2.3 TREATMENT

2.3.1 DESIGN CONCEPTS

The secondary research reveals the fact that children have experience in Internet exploration, multimedia use and game playing. Their parents are aware that Internet literacy is important for their children. These parents will guide their children and select the products for their children to explore (mostly for an educational purpose). These findings have been confirmed in my first-hand research result of interviews and observation. My target audience, Taiwanese American Children between 9 to 12 years old, can definitely handle multimedia technology quite well. However, the interface design should avoid complicated structure and ambiguous wording.

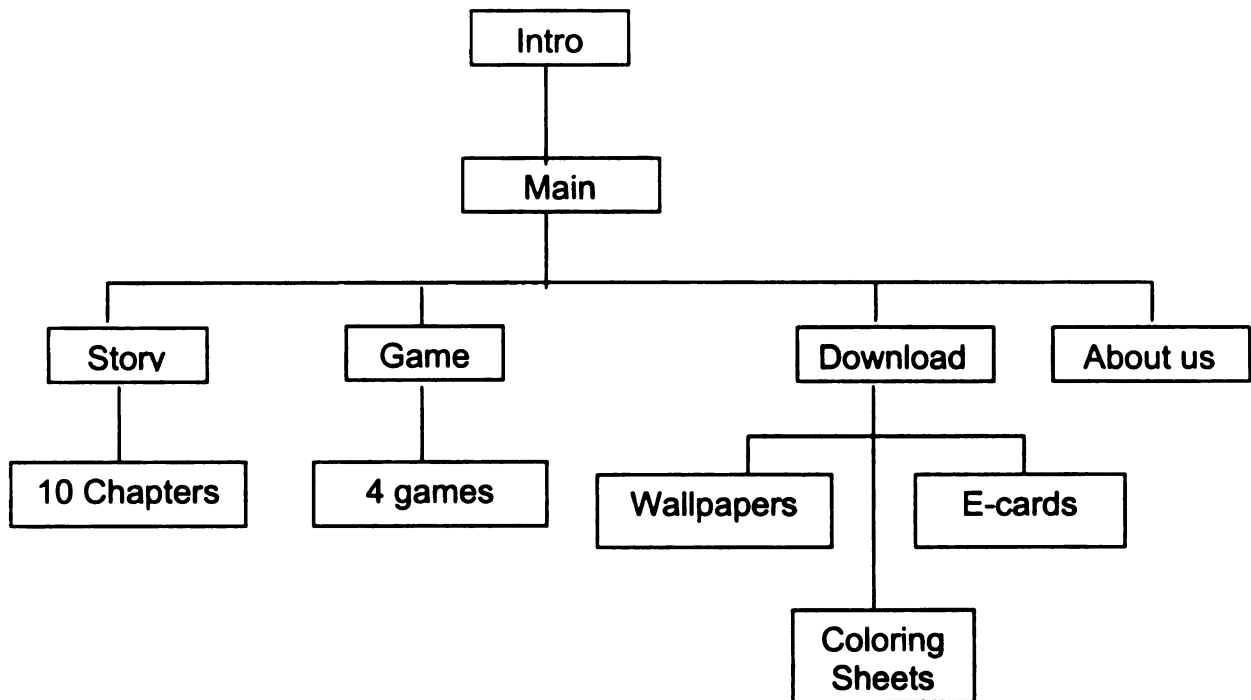
Parents are willing to have their children explore an adventure or historic story (with educational purpose). According to the distinguishing features of Journey to the West, its content will satisfy parents' expectation on a multimedia product.

Moreover, the interview and observation provided some innovative ideas for design. The characters should be entertaining and fun. The English narration will be a better choice since these children have difficulties in reading and listening to Chinese.

2.3.2 DEFINITION OF PROJECT DOMAIN

The project will be segmented to be four main sections: Story, Game, Download and About Us. Please find the below diagram of the project structure (Figure 4).

Figure 4: Project Structure



CHAPTER THREE: PRODUCTION PROCESS

3.1 CHARACTER DESIGN

3.1.1 MAIN CHARACTERS

Most of the graphic design was done with a vector illustration tool, Illustrator 10.0. In this current version, Illustrator was compatible with Flash MX. All of the vector graphics were converted and exported in a .swf format and imported into Flash MX.

Monkey is the most important character in this story. He is a product of nature. He obtains a powerful golden bar and possesses magic powers such as the "thousand-league-vision", "Cloud-riding" and "the 72-ways of transformation". According to the original novel, Monkey is a rebellious creature. His personality has not changed much in my character setting though I try to add in more sense of humor on him. I enhance his facial expression to be more dramatic to deliver a feel of his lively personality (please find the visual reference in Figure 5).

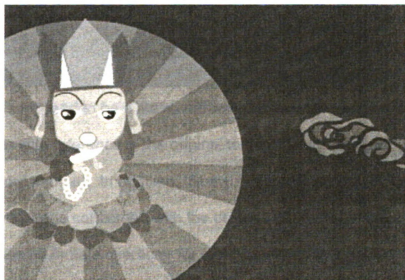
Figure 5: Character Design- Monkey



Monk, Tang San-Zung, is a Buddhist who is responsible to gather the Sutra from the west. He has three disciples: Monkey, Sha Wu, and Pig to protect him on the way to the west.

In the original novel, Monk's personality is stubborn and religious. In my project, Monk is defined as a kind yet vulnerable person who panics easily when the situation becomes bad. He can never get rid of trouble without Monkey's help (please find the visual reference of Monk in Figure 6)

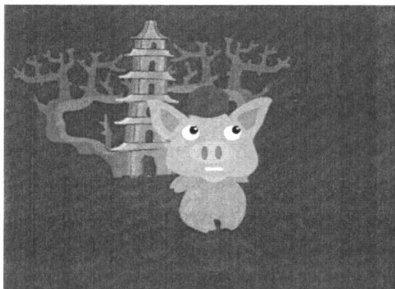
Figure 6: Character Design- Monk (Tang, San Zung)



Pig used to be a deity in heaven and he has been cast down to earth to become a pig. He likes to harass girls. He is lazy and timid. Most of the time, Pig cannot help his fellow travelers out of trouble. In the original novel, Pig is an ugly character that reflects the dark characteristics of humanity such as laziness, lust and greed. In my character setting, I tend to adjust his personality to become cute and lovely, since this product is geared towards a very young audience who

may not yet comprehend these traits to a very large extent. However, I emphasize his trouble-making characteristics (please refer to Figure 7).

Figure 7: Character Design- Pig



Shawu is supposed to be a male character based in the original text. However, there is little reference in the original text to Shawu's gender (Chinese language is gender neutral). In addition, "Shawu" is a very androgynous name in Chinese. However, I was concerned with the balance of gender of the characters because there was no female character for female children to identify with. Hence, I decided to make Shawu a female character in my project. Shawu has been cast down to earth as a monster living in Drifting Sand River. Then she surrenders to Monk to become a disciple. She is a cool girl who does not talk much. She usually stays calm when they encounter trouble. However, she is not truly a peaceful person. For example, she will take action to torture Pig because of his annoying harassment (please refer to Figure 8).

Figure 8: Character Design- Shawu



3.1.2 SUPPORTIVE CHARACTERS

There are several other supporting characters in the story. Please refer to **APPENDIX E: CHARACTER DESIGN-SUPPORTIVE CHARACTERS** for details on the supporting characters.

3.2 STORY DEVELOPMENT

3.2.1 SCRIPT WRITING

The original novel of "Journey to the West" fills a large volume. To transform its content to an online multimedia product for children, not all the characters from the original were presented. Further, I rephrased the whole story by referring to several Chinese children publications of "Journey to the West" (Chun Hua Publication, 2002, Journey to the West; Lian Gin Publication, 1990, Journey to the West- The Teenager Edition), and one English storybook (Ji-Li Jiang, 2002, The Magical Monkey King). Many modern day media renditions of the story, such

as children's books, comics and television shows, contained the abridged version. I select ten representative chapters by their popularity and dramatic story elements. Some elements of the original version that talk about very complex concepts that would be harder for children to comprehend were removed. I then rewrote the script in English and adjusted the story flow and structure. These ten chapters (including nine chapters and one character profile) contain the essence of the original text. It has a manageable number of characters that would be easy for a child to remember. Additionally, the abridged script created a manageable project scope. The following are summaries of each episode:

- **Start**

This section briefly brings over the story outline and introduces the four main characters-Monkey, Monk, Shawu and Pig. When the user clicks on each character, there is an audio introduction. The users can get a general idea of what the story is about, and get the feel of each character's personality before they start the exploration.

- **Chapter 1: Monkey's Birth**

This chapter introduces the Monkey character and talks about his birth. He was originally a piece of mountain rock that was struck by lightning. He climbs down from the mountain and meets up with another group of monkeys. Because a storm has made a tree fall, blocking off the monkeys food source, the other monkeys dare the brave Monkey to jump into a waterfall. Monkey does so, and uncovers a paradise known as "Blessed Cave of the Water Curtain." Monkey comes back to tell the other monkeys about the paradise and the monkeys move

to the Blessed Cave. Because of Monkey's discovery, all the other monkeys crown him "King of the Monkeys."

- Chapter 2: Monkey Learns about Magic

Led by the Monkey King, the tribe of monkeys has been leading a carefree life in the Blessed Cave for over 500 years. Monkey starts worrying about his own mortality and becomes afraid of dying. The other monkeys urge him to seek out the immortals. But Monkey has no idea how to do so but nevertheless begins on his quest. After searching for a long time, Monkey comes across a cave where a magic sage known as Master Bohdi lives. Master Bohdi teaches him many skills such as "thousand league vision", "cloud-riding" and "72-ways of transformation". After completing his training, he returns to the Blessed Cave and finds that Evil Havoc has attacked his tribe of monkeys. Monkey seeks out Evil Havoc for revenge. He defeats Evil Havoc, but realizes that he needs a weapon to better protect his monkeys. He seeks out the Dragon King of the East Sea and steals a Golden Pillar, which can transform itself into different lengths upon command. Dragon King is angry and reports Monkey's rebellious behavior to heaven.

- Chapter 3: Monkey Messed around the Sea and Heaven

The ruler of all heaven, the Jade Emperor is furious at Monkey's behavior. He comes up with a strategy to summon Monkey to surrender. Therefore, Monkey comes to Heaven and is given the task of feeding the horses. Monkey gets bored with his new task and starts doing a lot of felonious deeds such as stealing peaches, getting drunk, and stealing magical pills from Taishan Senior Master's

stove. Jade Emperor hears of his deeds and sends Buddha Rulai to punish him. Buddha Rulai sentences Monkey to be trapped under a mountain range known as the "Five Snow-Capped Mountains" until he learns to behave and regrets what he has done.

- Chapter 4: Monk's Mission

Monkey is imprisoned for another 500 years and it is now the time of the Tang Dynasty. The Tang Dynasty emperor decides to send Monk to the west to obtain a Sacred Sutra from today's India. The Sacred Sutra contains scriptures that can help improve the morals of society. In his travels West, Monk passes by the mountain range where Monkey is imprisoned. He hears Monkey calling out for help. Because Monk is very benevolent, he releases Monkey from his prison. Monkey gratefully acknowledges Monk as his master and offers to accompany him in his journey to the west. Monk and Monkey get waylaid by a band of robbers. Monkey kills the robbers in order to protect Monk. Despite Monkey's best intentions, Monk is extremely displeased because his religious beliefs preach peace. Suddenly, Buddha Lotus appears and gives Monk a golden hoop to put around Monkey's head. Buddha Lotus teaches Monk a spell that he can recite whenever Monkey misbehaves. The chant will cause the golden hoop to tighten around Monkey's head and cause him excruciating pain.

- Chapter 5: Pig and Shawu Join the Team

Monk and Monkey come across a cottage where a father and daughter reside and are invited in for a meal. The old man explains that a pig is harassing them. The pig has been going over to the house everyday to ask for his daughter's hand in marriage. Because the pig possesses some supernatural powers, they are afraid that they cannot say "no" to him much longer. Monkey offers to help trick the pig by transforming himself into the girl's image. The pig stops by that evening and as usual harasses the daughter. When the pig gets close enough, Monkey reveals his true identity and beats the pig up. When pig regains consciousness, he introduces himself: "I am Pig, but I was originally a deity from heaven. Because I harassed some fairies, I was punished and sent down to earth to as a pig." Pig begs forgiveness and Monk and Monkey decide to allow Pig to join in their journey to the west.

Monk, Monkey and Pig are crossing a river called the "Drifting Sand River" when a monster appears who tries to eat Monk alive. Monkey and Pig immediately go to Monk's defense. When the monster is defeated, the monster transforms back into its original form. It turns out that the monster was a female fairy, and like Pig, she was cast out of heaven for killing some people. The girl introduces herself as "Shawu" and offers to join the team in regret. The team is now complete and they continue on their journey to the west.

- **Chapter 6: Ginseng Tree Fruit**

The team comes across a Taoist temple. The head of the temple, Grand Yuan Master owns a magical Ginseng Tree that produces fruit that grants anyone that devours it longevity. Grand Yuan Master has to leave, but offers his guests two fruit as a treat before leaving. Monk refuses to eat the fruit because he thinks it looks like human infants, but upon finding out the secret of the Ginseng fruit, Monkey and Pig consume every single piece of fruit from the Ginseng fruit tree. Grand Yuan Master returns and captures them. He is very upset and attempts to cook all of them for their crime. Monkey offers to find Grand Yuan Master a resolution –he will seek out Buddha Lotus' help in reviving the Ginseng Tree. Grand Yuan Master releases Monkey, who in turn seeks out Buddha Lotus. Buddha Lotus gives Monkey some Sacred Dew that he uses to revive the Ginseng Tree. Grand Yuan Master is happy to get back his fruit and Monk punishes Monkey by reciting the chant that causes his golden hoop to contract.

- **Chapter 7: Iron Fan Princess and Bull King**

The team comes across a mountain known as “Flame Mount” which was unusually hot. Determined to get to the bottom of the heat source, Monkey seeks out the God of the Earth. The God of the Earth tells Monkey that the heat came from the ambers of Taishan Senior Master's stove when Monkey knocked it over several hundred years ago to steal the magical pills. He tells Monkey to seek out the help of Iron Fan Princess. Monkey gets to Iron Fan Princess' place, but she refuses to see him. Monkey transforms himself into a mosquito to enter her palace. However, he flies into her teacup and she swallows him unknowingly.

Once Monkey is inside the Princess' stomach, he starts jumping around, making her miserable. The Iron Fan Princess finally gives in, and passes him a fan. Monkey returns with the fan to Flame Mount, but realizes that the fan is a fake when it does not work. He returns to the princess' palace and transforms himself into the Bull King, the princess' husband and tricks her into handing him the real fan. When the real Bull King finds out, he is furious. The team gets into a serious fight with Bull King and Iron Fan Princess and emerges victorious. Bull King and Iron Fan Princess admit their wrongdoing and are taken back to heaven by Buddha Lotus. Monkey uses the real fan to cool the flames of Flame Mount and bring about a rain shower, much to the gratitude of all the residents of Flame Mount.

- Chapter 8: Spider She-devils

The team continues west and after a while they get hungry. They stop by a house and Monk approaches the residents, three beautiful girls, for some food. The girls offer Monk some tofu, but it turns out to be a trap. The girls transform themselves into their true form – spiders – and take Monk into captivity. Monkey starts getting suspicious after Monk is gone for a while. He sneaks into the house to investigate and discovers that Monk has been captured and is about to be the spiders' next meal. He tells Pig and Shawu about it and Pig volunteers to save Monk. However, Pig ends up being captured by the spiders as well. After waiting for Pig, Monkey goes off to save them. However, more spiders and a centipede appear and bite Monkey on the leg and poison him. While Monkey is feeling sick from the poison, Bi-Lan Buddha shows up, turns herself into a chicken and

devours the centipede. Monkey takes the chance and kills all the spiders. After all the spiders are dead, Bi-Lan Buddha gives Monkey the cure and leaves.

- Chapter 9: The Goal Achieved

After six months of arduous traveling, the team finally arrives in India at the Magnificent Buddha Master's temple. The Magnificent Buddha Master hand them the Sutra but tell them that it does not contain any text – only those who have the wisdom are able to read what is on the pages. The team found out that the wisdom and friendship they learnt through their travels has granted them this wisdom and they are able to read the text. They journey back to the east and hand the Tang Dynasty Emperor the Sutra. Monk reads out the Sutra to the Tang Dynasty Emperor and the Jade Emperor, Buddha Ru-Lai, and Buddha Lotus reveal themselves in the sky. The Jade Emperor forgives Monkey, Pig and Shawu for their mistakes and rewards the entire team by allowing them to be reincarnated as immortals in heaven

(Refer to APPENDIX D: STORY SCRIPT to find the completed story script)

3.2.2 SOUND EDITING

Each movie contains three audio elements: narration, sound effect and music clips. Since the narration undertakes the most important task to deliver the key messages, the tone and manner of the narration was under quality control to create a profound storytelling atmosphere. For the rest of the dialogue section, I recorded my own voice for each character and made some adjustments by a sound editing tool- Gold Wave (Version 5.3).

In addition, I utilized the soundtrack database of Soundtrack (Apple) and gathered some other music clips from FlashKit.com (<http://flashkit.com>). Most of the sound effects came from online sources that provided -free audio clips such as FlashKit.com (<http://flashkit.com>), A1 FreeSoundEffects.com (<http://www.a1freesoundeffects.com>) and FreeAudioClips.com (<http://www.freeaudioclips.com/>). Afterwards, I used Premiere 6.0 to combine everything and finished the sound editing. Concerned with the downloading time from the website, I compressed all of the audio clips in a mp3 format in Gold Wave (Version 5.3).

3.2.3 ANIMATION PRODUCTION

Flash MX was the primary tool to develop the animation. I used Illustrator 10.0 and Flash MX to draw most of the graphics. Some still images came from a CD-ROM that I purchased from Hi-Ad Image Bank (<http://hi-ad.com>), and I adjusted those images with Illustrator 10.0.

The animation editing was the most challenging part. Though it was difficult to do camera movement in a two-dimension environment, I applied the concept of shot switching that I had learned in video classes for editing my visual with the audio clips (full shots, medium shots and close-up shots).

3.2.4 FINAL DELIVERY

After the animation editing was finished, I exported them to a .swf format. Concerned with the downloading time, I segmented each chapter's content to become several short flash movies. I used the Flash ActionScript: LoadMovie command to play them in sequence.

3.3 GAME DESIGN

3.3.1 CONCEPT DESIGN

The purpose of including games in this presentation is to help users better relate to the characters and the plot of the original story of "Journey to the West". It can help enhance the learning experience and increase their recognition of the characters when they are presented in the story. According to the Corporation for Public Broadcasting (2003), in a child's online experience, playing games ranked fifth for those aged between 9-12 and ranked third for those aged between 6-8. Including games would also help round off all these three features-e-cards, wallpapers and coloring sheets in this project (For game concepts, please see appendix F).

3.3.2 GAME DEVELOPMENT

To be consistent with the story section, I used Flash MX to create and deliver the games. For the creation of the games, I referred to a books by Gary Rosenzweig (Gary Resenzweig, 2002, Macromedia Flash MX ActionScript for Fun and Games) and found some useful tips at Flashkit.com (<http://flashkit.com>). Please see the below screenshots of the four interactive games (Figure 9-12).

Figure 9: Game Design- Monkey Flying Game

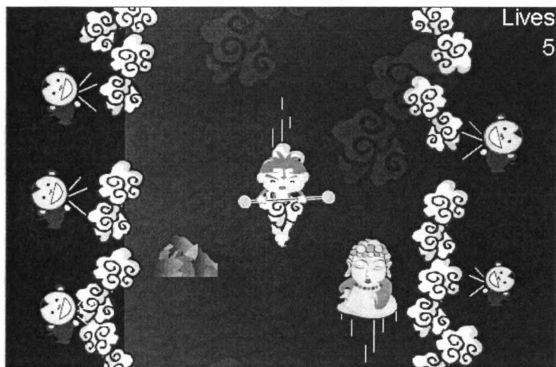


Figure 10: Game Design-Monkey Chase

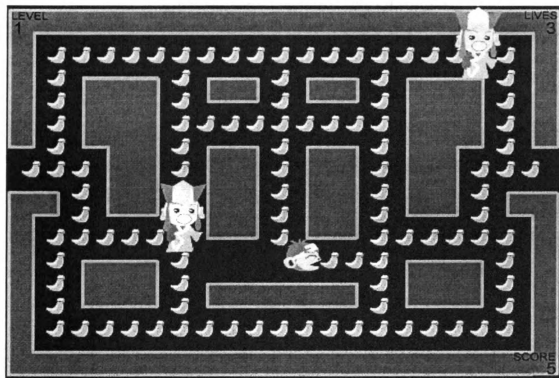


Figure 11: Game Design-Ginseng Tree Fruit

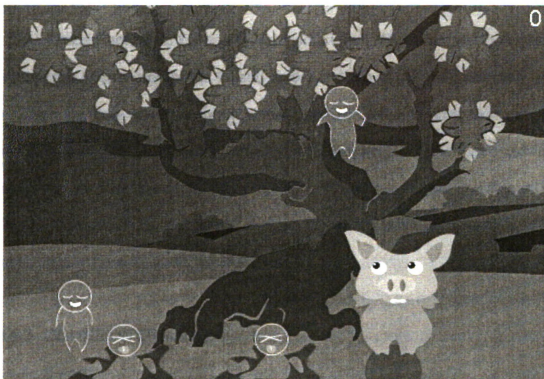
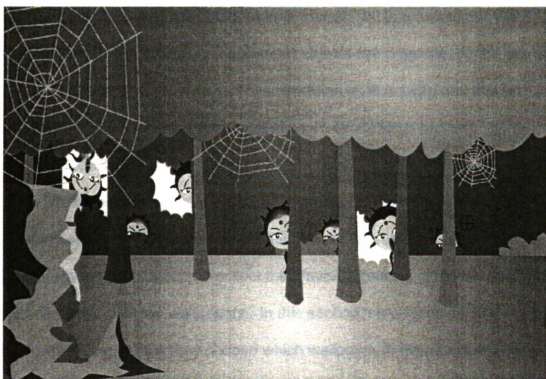


Figure 12: Game Design- Hunt a Spider



3.4 OTHER FEATURES

3.4.1 INTERFACE

Adobe Photoshop 7.0 and Macromedia Flash MX were used to design and created the interface graphics. Based on the findings in my pre-production research, my goal was to create a friendly interface for children to explore. After users enter the homepage, they would start with watching a short intro movie and exploring four main sections, including Story, Download, Game, and About Us. The interface was kept in a neat and clean design for children to easily understand where to start their journey.

3.4.2 ONLINE INTERACTION

- **E-cards**

The key idea for the e-cards section is to let the young audience customize their own greetings and mail them to their friends, yet to promote this website by a Viral Marketing approach. All appeared objects are draggable, so the users can layout their e-card as they wish. The interaction level is high, and this feature also meets the entertaining requirement as an educational product.

- **Wallpapers**

Many storytelling websites do contain this feature as a bonus for their loyal fans. Many young children do collect their favorite cartoon character graphics as their computer desktop wallpapers. In this section, I produced several wallpapers for downloading. Once they choose which wallpaper to download, a new browser

window will open separately. They can use the right mouse key to save the graphic to their computers. The goal of this feature is to enhance the loyalty of my target audience and to increase the entertainment level of this website.

- **Coloring Sheets**

Because this project targets young children, the coloring sheets will provide them an opportunity to express their creativity for the character. After they choose which coloring sheet to download, a new browser window will open separately. They can use the toolbar in their browser windows to print out the coloring sheets. After that they can use canyon, watercolor or other coloring tools to create their own artworks. The objective of this feature is to enhance the interaction between the story and the audience. This feature aims at increasing the entertainment level and loyalty to this product as well.

3.5 DELIVERIES AND DISTRIBUTION

To consider the diffusion of this product, the Internet has been chosen to be the main platform to deliver this artwork. The CD-ROM will be also available for some target users who may especially have a big interest in this project such as Chinese elementary schools and Taiwanese families within the United States. Targeting at these groups, 10 copies of the CD-ROM will be distributed for free as gifts. In addition, 3 copies of the CD-ROM will be sent to the subjects who have participated in my pre-production research as a feedback.

CHAPTER FOUR: CONCLUSION

The purpose of this project was to create a multimedia interactive presentation aimed at the children of Chinese immigrants who were born or raised in America. This project was geared towards helping them understand part of their Chinese heritage by introducing them to one of the oldest and most popular texts in Chinese mythology. The desired goal was to cultivate enough interest with this presentation so that they would want to seek out other historical texts in Chinese literature. It would also help them put an ancient story into a modern day context. Young children today are more likely to use the computer to learn information rather than by reading storybooks. By giving them a multimedia format, it creates a modern-day, multi-faceted experience.

This product is not without its limitations. As mentioned earlier in the story development section, the multimedia presentation was based on an adapted and abridged version of the original “Journey to the West” text. The original text was very long and consists of hundreds of volumes. Not all the characters from the original were presented and some portions of the original version were amended or simplified for the parsimony. In addition, there were many characters that had very complex backgrounds and they were eliminated from this story because it would have been too convoluted for young children to understand them.

Despite the fact that this story is regarded as part of Chinese heritage, it is strongly based on the Buddhist religion. It is regarded as the Chinese analog to Aesop Fables. Despite the fact that “Journey to the West” teaches many good

lessons and has many parables that could set a good example for children, Chinese-Americans who are Christian or from other religions may not want to expose their children to Chinese myths because of conflicts with their own religious beliefs.

The research, pre-production, preparation, and post-production of this project have taught me how to create a successful storytelling narrative using graphic, audio and animation. It has also shown me how to create a non-linear storyline by incorporating interactive elements such as games. I have learnt how to write scripts and adapt and translate stories from an original text without having to change the major crux of the story. From the preliminary research prior to production, I have learnt to understand what users are seeking in this type of story and the motives behind why they would want to use or even purchase such software for their kids. The research has also taught me how to adapt and cater a multimedia presentation to the needs and comprehensibility of young users.

On the technical side, undertaking this thesis project has also helped me gain a much deeper understanding of ActionScript programming. Even though graphic design is my strength, I was able to combine my graphic design skills with new programming skills that I have learnt so as to create visual, humorous, and entertaining games.

CHAPTER FIVE: FUTURE PROSPECTIVE

For future purposes, I would like to create a Chinese version of this presentation. This is to allow Chinese-American children who have some knowledge of their native language to be able to hear a bilingual presentation of the project. Many Chinese-American children living in America lack Chinese media sources or conversation partners outside their home and often only have a very rudimentary knowledge of Chinese by the time they reach adulthood. By allowing them to access both the English and Chinese versions, they will be able to understand the Chinese versions by comparing the English and Chinese texts. Conversely, this could also be used in Chinese-speaking countries such as Taiwan, China, Hong Kong, and Singapore, which have predominant ethnic Chinese populations. Children growing up in Chinese-speaking households wishing to learn English would also be able to use this presentation for the same purpose as Chinese Americans, but in reverse. This project can be regarded as a touchstone in the children publishing industry. This product applies multimedia technology to revolve the traditional storytelling format, and I would love to see the technology benefit children by using this approach. Once the website is publicly available and announced, I will continually monitor the traffic to the site and collect audience feedback from emails and my guestbook. This data will serve as a final evaluation of the project's effectiveness. It is my hope that this website will serve as an example to others of the power of interactive multimedia in children's storytelling. The site will serve as a reference to promote the idea of introducing other Chinese mythology stories to western society.

APPENDIXA: UCRIHS PARENTAL CONSENT FORM AND ASSENT FORM FOR OBSERVATION AND INTERVIEW

Informed Consent Form-for Parents Page 1 of 2 Multimedia Project “Chinese Fantasy”

Dear _____:

We're glad you have been chosen to participate in the multimedia project “Chinese Fantasy”. In the Project, you will have the opportunity to engage in a design process for an educational, interactive multimedia product for you and your children to benefit from it.

There is no cost for participating in the project. The Project will be designed by teachers and students from Telecommunication Department of Michigan State University.

The first part we would like to have a 20-minute interview with you to learn more about parents' perspectives on the value of teaching Chinese culture and the value of CD-ROM technology for this purpose.

The second part will be an observation for you and your children together. Within the following 3-5 months, I will provide you with a free copy of the Chinese Mythology CD-ROM. It is yours to keep whether or not you continue to participate in the study. If you are willing to be interviewed one last time, I would like to observe you and your children exploring the CD-ROM and ask a few more questions.

This camp has a strong research component. In other words we would like to better understand how children learn, what technologies and ways of learning interest them and how their interest plays out as they actually design digital game environments for learning. In particular we are interested in how your children understand the stories in the product, what interests them and, how they approach the game design process.

If you agree to participate in the design of Multimedia Project “Chinese Fantasy”, you are agreeing to the following:

- 1) You will be interviewed by the teacher-researchers.
- 2) You will be recorded by pen and papers, no audiotaped / videotaped / photographed will occur.
- 3) For the second part, the teacher-researchers will collect and analyze the work that you produce or the comments you give as part of the Project.

Informed Consent Form-for Parents Page 2 of 2
Multimedia Project “Chinese Fantasy”

The teacher-researchers will publish the findings of the study in professional journals and may use samples from your interview in presentations at professional conferences and classes they teach at Michigan State University. However, your real name **will not** be used in these publications or presentations. If you give your consent to be in the study, you will be asked to create your own “Story Character Name.” This made up name will be used in any written materials produced by the teachers/researchers and in public presentations they give about the Project. The project leaders (Dr. Heeter and Yi-Ju Chen,) will keep all of the records of the Project and all student work in a locked office at Michigan State University for five years. For further security, the list of which story character names correspond to which real person will be kept in a locked cabinet. Your privacy will be protected to the maximum extent allowable by law.

Consenting for yourself to be in the study is voluntary. At any time during the Project, if you do not want to be part of the study, you can tell the teacher-researchers and they will stop interviewing and recording you, and will no longer collect the work you produces in the Project for the study. You can decide to withdraw your consent at any time over the course of the Project without penalty to you.

If you have any questions or concerns about the Project now, or at any time, please feel free to contact the student researcher: **Yi-Ju Chen, (1628 Spartan Village, Apt.H, East Lansing, MI 48823, chenyij3@msu.edu)**

If you have questions or concerns regarding your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact the professor of the research course, Dr. Carrie Heeter, (2467 Funston Avenue, San Francisco, CA 94116, heeter@msu.edu). In order for us to be clear that you have read the above and agree to participate in the Multimedia Project “Chinese Fantasy” we ask you to affix your signature to the following statements:

Consent to Participate in the Study:

Your signature below indicates you give consent to participate in this study for both the initial home interview in the next week or so and again for the follow-up demonstration in about 6 months when the prototype is ready. You may change your mind and decline participation at any time. Your participation in the study is voluntary. Signing your name indicates that you are giving the teacher-researchers permission to interview, and to collect the work you produce as part of the Multimedia Project “Chinese Fantasy”.

Name (please print) _____

Signature _____ Date: _____

Participant Assent Form
Multimedia Project "Chinese Fantasy"

Dear _____:

We are so glad you are here to participate in the Multimedia Project "Chinese Fantasy".

While you have lots of fun and learning and begin to imagine your own adventure stories, or games, university researchers will be asking questions, taking notes on what you are thinking and doing.

If you have any questions or concerns about the Project now, or at any time, please tell your parents or university researchers.

If at any point you do not want to be part of the study, you can ask the researchers to stop observing and/or interviewing you.

Our reports describing your ideas will very likely read by Michigan State University and by computer animation/game companies. However, when we report the results of the project we will use your story-character name and not your real name. Your ideas are very important. Your identity and confidentiality will be protected to the maximum extent of the law.

Sincerely,

Dr. Carrie Heeter, Professor of Telecommunication

Yi-Ju Chen, Master student of Telecommunication

Because this is a university research project, we ask you to sign the following two statements:

Agreement to Participate in the Study: Your signature below indicates you agree to participate in this study now and one more time in about six months when software is ready to show you.

Name (please print)_____

Signature _____ Date:_____

APPENDIX B: INTERVIEW QUESTIONNAIRE

Interview Questions for Parent(s)

Warm-up Questions

1. How long have you lived in this country? What part of Taiwan are you from?

Concerns on their Children's education

2. What are the most important concerns you have for your children's learning experiences?
3. Is it important to you to keep your children informed about Chinese and Taiwanese culture? How do you try to do this?
4. What are the hardest and easiest things about teaching your kids about Chinese and Taiwanese culture?
5. Can your kid read, listen or speak Chinese? What language do you and your children mostly use to talk to each other? How about among the parents?

Use of books, Internet and Multimedia products

6. Have you ever bought any books for your children, which were related Chinese and Taiwanese culture? Were they in English or Chinese?
 - 6-1. Why you choose them and how did your child like those books?
7. Have you ever let your children to use Internet or Multimedia products such as Games or CD-Roms for an educational or an entertaining purpose? What kinds of Internet sites do you let them visit? What kinds of CD-ROMs or games have you bought for them?
 - 7-1. Could you talk about why you chose these products and how your children liked those products?
8. Did you often read books or use multimedia products with your children?

- 8-1. What are the easiest and hardest about using the Internet and using CD-ROMs for yourself and your children?
9. Overall, what is the most important feature among these products to make you decide to let your children to have them?

Innovative Ideas for the new products

10. If there is a multimedia product to introduce Chinese mythology and folklore, what do you think it should be like?
11. Do you think it is a good idea to simultaneously put on two subtitles or two versions including English and Chinese? Why or why not?
12. What are your favorite Chinese and Taiwanese stories when you were kids?
- 12-1. From your understanding for your kids, what kinds of Chinese stories you think they are interested in?
13. Do you think it is a good idea to create some interactive games as part of my storytelling in this product? And what might good games be?

Concept Tests

14. Do you think it is interesting to introduce some Chinese ancient stories, such as "Pan-Ku"? "Ten Suns"?
15. Do you think it is interesting to talk about some adventure stories, such as "the western journey"?
16. Do you think it is interesting to introduce some historical stories, such as "Shui Hu"?

Close-up Questions

17. Do you have any further ideas or questions about this project?

Interview Questions for Kid(s)

Warm-up Questions

1. What is your name and how old are you?

Use of books, Internet and Multimedia products

2. Do you like to read storybooks? Were they in English or Chinese?
 - 2-1. Could you show me which one was your favorite and why?
3. Do you like to use computers? At school or at home?
4. Do you use Internet? At school or at home? Why did you use them? And which sites you like the most?
5. Do you play games? Could you show me which one is your favorite and why?

Concept Test

6. Have you ever heard of any Chinese or Taiwanese stories before?
Do you like them? Could you tell me a Chinese story or character you like the most?

APPENDIX C: QUALITATIVE RESEARCH COMPLETED REPORT

PART I: OBSERVATION AND INTERVIEW

◆METHODS

The purpose of the observation aims at gathering insights for designing an interactive multimedia project, Chinese Fantasy. The interviews and observation were conducted in subjects' homes. Informed Consent and Assent forms were provided before the research started. Moreover, to protect the privacy of all subjects, the result will not report their real names, but by using cartoon character names instead.

Observation and Interviews for Children

The key tasks can be divided into three main streams:

- 1) To understand children's language levels on both Chinese and English
- 2) To know their reading interests and storybooks collections
- 3) To understand their computer use/ Internet Use/game use

Interviews for Parents

The key tasks of Parent Interviews are:

- 1) Concerns on their Children's education
- 2) Use of books, Internet and multimedia products
- 3) Innovative Ideas for the new product
- 4) Concept tests

◆Key Findings

Observation and Interviews for Children

1) Children's Language Levels on Chinese and English

There are three children subjects in this research: Harry Potter (8 years old), Little Mermaid Ariel (9 years old) and Power Puff Girl (11 years old). English is their first language after they went to school. They can speak Chinese, but lack of ability to read unless those text is very simple or with "phonetic notation" to help them pronouncing. Currently, the former two younger children are taking a "phonetic notation" class in Lansing Chinese Elementary School, so their ability of reading Chinese becomes better. As to the older kid, Power Puff Girl, she almost forgot how to pronounce "phonetic notation" though she speaks Chinese pretty fluidly.

They seldom read Chinese storybooks which their parents bought for them. They would skip the difficult words and only look at pictures when reading them. On the contrary, they can read English much more faster. They like to watch cartoon or play games, and they are all in English of course.

2) Reading Interests and Storybooks Collections

The older subject, Power Puff Girl loves to read, and she has performed an excellent ability in reading English literature including fictions, historical novels and so on. When she gets interested in some Chinese or Taiwanese stories, she will find an English version to read. She borrows books from school's library or asks her parents to buy for her.

The younger children love Disney-typed stories that have colorful illustrations and vivid characters. The boy, Harry Potter, shows his interest in adventure stories, and the other young girl, Ariel, likes romantic stories such as Little Mermaid. Most of their storybooks are in English version also. However, they do have some Chinese storybooks on their shelves. They will ask parents to read for them or browse the pictures only.

3) Computer Use/ Internet Use/Game use

All of the kids have experiences of playing computer games or video games. Older children can handle with complicated content like strategic games (for instance, Civilization III). In addition, older children surfed on Internet more than younger kids do.

Interviews for Parents

1) Concerns on their Children's education

The three interviewees are parents of the above three children, Harry Potter, Little Mermaid Ariel and Power Puff Girl. They all agree that it is important to keep their children involving in Chinese culture. They speak Chinese to their kids, buy Chinese books for them, and they have sent their kids to Lansing Chinese Elementary School to learn more Chinese.

2) Use of books, Internet and Multimedia products

Father plays a more important role when it comes to computers and technology. Mothers used to read storybooks for kids when they were little kids, but not anymore when kids are getting older. They seldom play computers with their children. Instead, mothers prefer to let their kids reading than playing computers. They used to buy some Chinese storybooks, but they gradually find out that children got many problems to read them. According to their reflection, their kids are more interested in reading or playing Games in English. Additionally, these American Taiwanese kids have been deeply influenced by cartoon or Disney movies.

Their main concern for purchasing a book, CD-Rom or game for kids is “educational or entertaining level” of the product. For young children, parents are the gates that screen their media exposure or involve in their learning experiences. For older children who are 5th or 6th grade students, parents will rather give more freedom for kids to choose what they want to experience. Parents will leave older kids reading or experiencing the products alone (unless kids ask for their extra help).

3) Innovative Ideas for the new products

According to their opinion, it is difficult for their children to read Chinese, especially for Chinese idioms. Moreover, they have share the opinion that it's helpful to add English subtitles except Chinese narration. Image/character design plays an important role in a storytelling product. In addition, they all agree that “interactive games” are good approaches to maintain kids' attention and help them to learn.

4) Concept Tests

Their children's interests seem quite diverse. The only common is all of them are interested in cartoons. According to parents' opinion, adventure or historical stories seems more standing out than ancient stories.

(Please find the Appendix C- to view the detailed reports)*

PART II: TASK ANALYSIS

◆REQUIREMENTS ANALYSIS

Functional Requirements

- Provides educational content to improve their knowledge level
- Provides an entertaining multimedia experience
- To interact with users

Date Requirements

- Every link targets to the right section. No broken links.
- “Plug-in Required” dialogue box and downloading link should be provided
- English subtitles are required.

Environmental Requirements

- Suitable for a home PC platform
- Modem Speed > 64 K (Broadband Internet Connection)

User Requirements

- 3rd – 6th grade children who are not reluctant to the technology and love to spend time in front of computers to watch video and play games. They can operate computers right, and undertake the pressure of information overload.
- Parents who have willing to let their children using computers alone, or to use computers with their kids. They are concerned with children's education. They love to let their children to learn more about Chinese/ Taiwanese culture.

Usability Requirements

- To keep each animation file as smaller as possible. Users don't have to wait around the system to finish processing.
- Text should be unambiguous and readable. No idioms.
- Easy to remember how to operate it.
- Freely to explore where they like to.
- Provides instructions before users enter each journey or game.
- Provides a clear menu and indicates where the user is.
- In storytelling part, users can freely control process: to play, to pause, to replay or to stop the video and audio.
- In game section, users can launch the game or exit anytime.

◆GOALS ANALYSIS

Children's Goals

- Feeling smart for themselves
- To demonstrate their abilities or interests for Chinese culture to their parents
- To have fun
- To share the experience with their friends

Parents' Goals

- To let their children learning more about Chinese/Taiwanese culture
- To improve their interaction with kids

Children's Practical Goals

- To kill time
- To operate the product easily
- To accomplish each challenging task successfully

◆ PERSONAS

Primary Persona

Chiao-Wen is a nine-year-old girl. She was born in Los Angeles after her parents immigrated to U.S. Her parents are both Taiwanese who moved to the States after getting married in Taiwan. Now her dad is a Real Estate agent and her mom is working in a bank as an accountant. Chiao-Wen lives with her parents, an elder sister and her grandpa in a northbound community within L.A.. Her uncles and aunts who live in San Diego came to visit their house very often. She is smart and outgoing. Since she went to a public elementary school at 7, she have got lots of friends in school including her Taiwanese or American neighbor's kids. She speaks English fluently just like other American kids do. Her parents use both English and Chinese to talk to her sister and her, but she can only understand basic Chinese words. She is a cartoon network fan. She often laughs out so loud while watching it. In addition, she loves to read storybooks, play computer games and gets on Internet. She doesn't do much online chatting like her 13 year-old elder sister does. When she gets a new computer game from her relatives or find out an interesting website, she likes to play with it and show it off to her sister, parents or other visitors.

Secondary Persona

Yi-Jen Hsu is a 38 year-old workingwoman who works in a bank as an accountant. 15 years ago, she moved to U.S. with her husband, Kevin, and became a citizen of United States since then. Her husband and herself both consider the education system and environment of the States was better for kids. Therefore, with her husband's family support, they settled down in L.A where was near to other relatives' homes. Now they have two daughters: one is 13 years old; one is 9 years old. Both of them were born in U.S. and went to public schools in neighborhood. They are much concerned with children's education. To keep their children involving in Chinese/Taiwanese culture, they taught their children Chinese while these girls were quite young, and they sent their kids to Chinese school in summer time. They would buy some books, movies or comic books in Chinese version for their children. They have reached an agreement that it is good for their children to learn more Chinese since their kids are already involving in western culture very much.

They often use computers at work, but not frequently at home. They bought a desktop for their elder daughter with broadband Internet connection, but they start to worry about children have spent too much time on it. They hope to join their learning experiences, if there is a suitable product for them and their children to use together.

◆ENVISION A USE CASE SCENARIO

- Read the instruction (or a guide)
- Find a menu
- Click on each icon to what is in each section
- Stop in the Storytelling section and click on an icon to launch a story
- Watch the story a while and play with the interactive elements a bit
- Turn on and off the narration for fun
- Exit the story
- Find a related game and launch it
- Read the instruction first and play with the game for a while
- Exit the game section
- Forward the story or game to his/her friends
- Go back to Home and click on Download
- Click on each interesting picture
- Download a wallpaper to his/her desktop
- Exit the site (or the CD-Rom)

APPENDIX C-1: INTERVIEW REPORT OF FAMILY ONE

I. Subject Profiles

Subject 1(child): Harry Potter/Male/8 years old

Subject 2 (parent): Wizard Rolling/Female/34 years old

II. Interview for Children (Subject 1)

◆ Warm-up Questions

Q1. What is your name and how old are you?

A: My name is Harry Potter (to protect his privacy, the real name has been replaced by a story character name, Harry Potter). I am 8 years old.

◆ Use of books, Internet and Multimedia Products

Q2. Do you like to read storybooks? Were they in English or Chinese?

A: Yes, I love Harry Potter! (he showed the books, and they were in English). Chinese is difficult, but I can read a Chinese storybook called "Dinosaur Dan Dan" for you too. Dan Dan is a dinosaur that can blow you away with his fire! (he showed the book, which was a book with only a few pages that he borrowed from Lansing Chinese Elementary School).

Q2-1. Could you show me which one was your favorite and why?

A: Harry potter. I read them all! Have you read them yet? Harry Potter is so cool. He is the most talented witch in the world. Moreover, he is the best seeker of Quidditch. I have watched the movie too, which is good.

Q3. Do you like to use computers? At school or at home?

A: I like it, but my mom doesn't let me use computers much. I like to play PS2 with my cousin. He got one but I don't.

Q4. Do you use Internet? At school or at home? Why did you use them? And which sites you like the most?

A: Internet? I do (he seemed a bit confused in the beginning, and I encouraged him to open a website for me. He showed me Harry Potter Site).

Q5. Do you play games? Could you show me which one is your favorite and why?

A: I like games. I really want to have a PS2 or a Dreamcast. My cousin has got Street Fighter and I like playing that with him.

◆ **Concept Test**

Q6. Have you ever heard of any Chinese or Taiwanese stories before? Do you like them? Could you tell me a Chinese story or character you like the most?

A: There was about the monkey prince that my aunt Kelly bought for me. It had to do with peaches and a journey. There was a pig in it too.

III. Interview for Parents (Subject 2)

◆ **Warm-up Questions**

Q1. How long have you lived in this country? What part of Taiwan are you from?

A: Five years ago. My husband and I used to live in Taipei city.

◆ **Concerns on Their Children's Education**

Q2. What are the most important concerns you have for your children's learning experiences?

A: It is too general. I don't know how to answer that.

Q3. Is it important to you to keep your children informed about Chinese and Taiwanese culture? How do you try to do this?

A: Of course. My husband and I always talk to our kids in Chinese. We bought some storybooks for our children too. In addition, we sent Harry to the Chinese Elementary School, and it was really helpful. By the way, he will represent the school to attend a Chinese lecturing contest in Detroit next week.

Q4. What are the hardest and easiest things about teaching your kids about Chinese and Taiwanese culture?

A: The hardest part is to let him keep practicing his Chinese. He went to Chinese elementary school since he was 6. The teachers help us a lot cause they have started to teach him "phonetic notation" and he can read more Chinese by using that. In addition, through some interactive activities, he could practice Chinese more with other children.

Q5. Can your kid read, listen or speak Chinese? What language do you and your children mostly use to talk to each other? How about among the parents?

A: He used to read some Chinese storybooks in Taiwan, but he could not understand them all if we didn't read for him. He can speak Chinese of course. However, since we moved to U.S, he started to lose some vocabulary. Daily conversation is okay for him, but reading becomes pretty hard. Now he is taking "phonetic notation" courses in East Lansing Chinese Elementary School. Most of the time, we talk to him in Chinese, and he replies with English or Chinese. It depends. Sometimes we even can't follow what he is talking about. When he plays with other neighbors' kids, they all use English.

◆ **Use of books, Internet and Multimedia Products**

Q6. Have you ever bought any books for your children, which were related Chinese and Taiwanese culture? Were they in English or Chinese?

A: Yes, his Aunt Kelly, my younger sister, often buys many storybooks or toys for him since he was a little kid. He usually browsed the pictures only, but sometimes he would ask us to read them for him. Now he can read English storybooks more, and he would watch cartoon on TV or comic books that my husband bought for him.

Q6-1. Why you choose them and how did your child like those books?

A: If those books are educational or interesting, we will love to buy for him.

Q7. Have you ever let your children to use Internet or Multimedia products such as Games or CD-Roms for an educational or an entertaining purpose? What kinds of Internet sites do you let them visit? What kinds of CD-ROMs or games have you bought for them?

A: We don't let our kids to use computers much cause we don't think it's beneficial for his health. We rather let him do some outdoor sports or read books instead. He loves to watch TV, we are starting to worry about Harry has watched too much TV. However, we still bought some educational CD-Roms. I can't remember them all now, but they were some educational programs regarding science. And he plays PS2 with his cousin sometimes, some fighting and adventure games.

Q7-1. Could you talk about why you chose these products and how your children liked those products?

A: It's my husband buying those CD-Roms. He said those products were educational.

Q8. Did you often read books or use multimedia products with your children?

A: I used to read books when Harry was a little kid around 3 or 4 years old. But, now he likes to read books by himself. Talking to the multimedia products, as I mentioned, we don't let him playing computers much.

Q8-1. What are the easiest and hardest about using the Internet and using CD-ROMs for yourself and your children?

A: Most of the time I used emails to contact my family in Taiwan. I will use Office to do my thesis. It's convenient to search for information on Internet. I look at News on Internet when available. Recently I am thinking to use computers to edit my DV footage but I have no idea about how to do that. I think at Harry's generation, many kids have started to learn how to use computers and Internet. They can learn faster than us. Once Harry uses the computer games, he is a quick-learner, and he can play the games over and over. That is amazing.

Q9. Overall, what is the most important feature among these products to make you decide to let your children to have them?

A: If those products are educational, we will consider to let him having them.

◆ **Innovative Ideas for the New Product**

Q10. If there is a multimedia product to introduce Chinese mythology and folklore, what do you think it should be like?

A: Games with educational elements. Maybe there are some cartoon or animation in that.

Q11. Do you think it is a good idea to simultaneously put on two subtitles or two versions including English and Chinese? Why or why not?

A: I will say Chinese text is not suitable unless it is very simple. However, Chinese narration will be great if there is English subtitle.

Q12. What are your favorite Chinese and Taiwanese stories when you were kids?

A: Can't remember them all, but I remember I read some folklore like 24 Piety Stories, The Western Journey etc. I liked to watch cartoon most of the time, but they were not Chinese stories anyway.

Q12-1. From your understanding for your kids, what kinds of Chinese stories you think they are interested in?

A: Not sure...Maybe adventure stories. He likes dinosaurs and monsters.

Q13. Do you think it is a good idea to create some interactive games as part of my storytelling in this product? And what might good games be?

A: Yes. I think kids like to play games more than viewing stories only. For Harry, maybe some adventure stories will interest him.

◆ **Concept Tests**

Q14. Do you think it is interesting to introduce some Chinese ancient stories, such as "Pan-Ku"? "Ten Suns"?

A: They are ancient stories, right? I think it is okay for him. Depends on how the story is rephrased.

Q15. Do you think it is interesting to talk about some adventure stories, such as "the western journey"?

A: That will be interesting. Harry likes to read adventure stories.

Q16. Do you think it is interesting to introduce some historical stories, such as "Shui Hu"?

A: Yes.

◆ **Close-up Questions**

Q17. Do you have any further ideas or questions about this project?

A: I will say it is a difficult task for you. Our kid is getting more and more like an American. He cannot read much Chinese right now. If the caption or narration is English, he can understand more. However, I still look forward to seeing the final product.

APPENDIX C-2: INTERVIEW REPORT OF FAMILY TWO

I. Subject Profiles

Subject 3 (child): Ariel/ Female/9 years old

Subject 4 (parent): Caroline/ Female/33 years old

II. Interview for Children (Subject 3)

◆ Warm-up Questions

Q1. What is your name and how old are you?

A: My name is Little Mermaid Ariel (to protect her privacy, the real name has been replaced by a story character name, Ariel). I am 9 years old.

◆ Use of books, Internet and Multimedia Products

Q2. Do you like to read storybooks? Were they in English or Chinese?

A: I like them. Chinese is difficult for me...

Q2-1. Could you show me which one was your favorite and why?

A: (She showed some English storybooks such as Sleeping Beauty and The Recess Queen).

Q3. Do you like to use computers? At school or at home?

A: Yes, I like it. At home or my friend's home (her friend is called Angie who was an older kid around 11 years old).

Q4. Do you use Internet? At school or at home? Why did you use them? And which sites you like the most?

A: (she seemed not interested in this question and she kept showing me some stuff animals).

Q5. Do you play games? Could you show me which one is your favorite and why?

A: I like Zoo Tycoon! It's like building your own zoo and you can feed those giraffes and tigers. My dad gave it to me at Christmas. I like Roller coaster Tycoon too, but I don't have that. My friend, Angie, has that game. I can play with her when I go to her home. Oh, and Reader Rabbit, it is funny (she showed the CD-Roms which are Reader Rabbit Math and Reader Rabbit Thinking).

◆ **Concept Test**

Q6. Have you ever heard of any Chinese or Taiwanese stories before? Do you like them? Could you tell me a Chinese story or character you like the most?

A: I have a lot (she showed me some Chinese storybooks including Taiwanese Folklore, Chinese Idiom Stories etc.) but I only look at pictures (she pointed some illustrations in the books and she likes some female characters that were in Chinese-styled dresses).

III. Interview for Parents (Subject 4)

◆ **Warm-up Questions**

Q1. How long have you lived in this country? What part of Taiwan are you from?

A: 11 and half years. We used to live in Tai-Chung County.

◆ **Concerns on Their Children's Education**

Q2. What are the most important concerns you have for your children's learning experiences?

A: Well, it's hard to answer...

Q3. Is it important to you to keep your children informed about Chinese and Taiwanese culture? How do you try to do this?

A: Definitely, we are Taiwanese. I sent Ariel to Chinese school 2 years ago cause we didn't have much time to teach her Chinese by ourselves. My husband and I are quite busy.

Q4. What are the hardest and easiest things about teaching your kids about Chinese and Taiwanese culture?

A: The hardest part is to teach them reading Chinese. They can understand what we are talking about, like some simple things. We sent Ariel to Lansing Chinese Elementary School. It provides some interesting course for Ariel to involve in Chinese culture like Chinese Dancing Class and some activities like Chinese Festival. They are all related to Taiwanese culture I think. And she has lots of fun over there.

Q5. Can your kid read, listen or speak Chinese? What language do you and your children mostly use to talk to each other? How about among the parents?

A: She can listen to Chinese cause we often talk to her in Chinese. She would reply me in Chinese too. However, if she wants to describe something more complicated, she would use English instead. That's because she does not has much Chinese vocabulary. Under an urgent situation like she wants to explain something quickly, she would naturally switch from Chinese into English.

◆ **Use of books, Internet and Multimedia Products**

Q6. Have you ever bought any books for your children, which were related Chinese and Taiwanese culture? Were they in English or Chinese?

A: Yes, we have bought a lot Chinese storybooks since she was young. Now we stop buying those because Chinese elementary School has a library and we can borrow some Chinese storybooks from it.

Q6-1. Why you choose them and how did your child like those books?

A: I used to expect her learning more Chinese, so I bought a lot books for her. She browsed pictures more often instead of "reading" those text. She likes some romantic stories. If the female characters dress like princesses, she would more like to read.

Q7. Have you ever let your children to use Internet or Multimedia products such as Games or CD-Roms for an educational or an entertaining purpose? What kinds of Internet sites do you let them visit? What kinds of CD-ROMs or games have you bought for them?

A: We bought some educational preschool CD-Roms before when she was around 3. We wanted to teach her math or vocabulary before she went to school. But, now we seldom purchase these products since she can learn more from school.
She doesn't use Internet often.

Q7-1. Could you talk about why you chose these products and how your children liked those products?

A: Preschool products helped us to teach her basic knowledge. Ariel liked Reader Rabbit serial products. Now she loves to play some computer games. Her dad bought a game for her last Christmas and she seemed happy about it.

Q8. Did you often read books or use multimedia products with your children?

A: Not often. Her dad used to play computer games with her before, but not often right now. Ariel likes to play with the other kid, Angie.

Q8-1. What are the easiest and hardest about using the Internet and using CD-ROMs for yourself and your children?

A: I seldom use computer or get on Internet. Her father does since he is a computer engineer. Frankly I don't want Ariel playing computers too much.

Q9. Overall, what is the most important feature among these products to make you decide to let your children to have them?

A: If these products are educational or fun. The most important is these products are suitable for her age.

◆ Innovative Ideas for the New Product

Q10. If there is a multimedia product to introduce Chinese mythology and folklore, what do you think it should be like?

A: We are Christians, so I will not let her read Chinese mythology stories which can confuse her recognition of the God.

Q11. Do you think it is a good idea to simultaneously put on two subtitles or two versions including English and Chinese? Why or why not?

A: I wonder she can understand Chinese text if there is no "phonetic notation" helping her to pronounce them. Narration can be Chinese. Ariel can understand by listening to it.

Q12. What are your favorite Chinese and Taiwanese stories when you were kids?

A: I like detective stories while I was young.

Q12-1. From your understanding for your kids, what kinds of Chinese stories you think they are interested in?

A: Adventures maybe. I will skip mythology stories because it will confuse her recognition of the God. It depends on the how the story structure is and how interesting the character design is. She likes to watch Cartoon on TV. She often switches to cartoon channels and watches them for a long time. If the characters look like Disney's cartoons, I think she will like it more.

Q13. Do you think it is a good idea to create some interactive games as part of my storytelling in this product? And what might good games be?

A: Yes. They can learn more through playing games.

◆ **Concept Tests**

Q14. Do you think it is interesting to introduce some Chinese ancient stories, such as “Pan-Ku”? “Ten Suns”?

A: I don’t think so. They are not realistic.

Q15. Do you think it is interesting to talk about some adventure stories, such as “ the western journey”?

A: It is okay if the structure is not complex.

Q16. Do you think it is interesting to introduce some historical stories, such as “Shui Hu”?

A: Well, it depends on how well the story structure is and how the characters interests her. As I said, the characters she likes are those humorous creatures or beautiful princesses.

◆ **Close-up Questions**

Q17. Do you have any further ideas or questions about this project?

A: Ariel likes watching cartoons very much and she can watch them all day long! If the characters are engaging with the current popular characters, I think she will like them much.

APPENDIX C-3: INTERVIEW REPORT OF FAMILY THREE

I. Subject Profiles

Subject 5 (child): Power Puff Girl/ Female/ 11 years old

Subject 6 (parent): Joan/ Female/ 37 years old

II. Interview for Children (Subject 5)

◆ Warm-up Questions

Q1. What is your name and how old are you?

A: My name is Power Puff Girl (to protect her privacy, the real name has been replaced by a story character name, Power Puff girl). I am 11 years old.

◆ Use of books, Internet and Multimedia Products

Q2. Do you like to read storybooks? Were they in English or Chinese?

A: I read a lot. I like novels the most. Chinese is too difficult.

Q2-1. Could you show me which one was your favorite and why?

A: She showed lots of books she has read including fantasy fictions and some historical stories like "Ties that bind, Ties that Break" (from her numerous book collections, I can tell she really reads a lot).

Q3. Do you like to use computers? At school or at home?

A: I like playing games (she replied my questions and kept playing a game called " Civilization III", a strategic game).

Q4. Do you use Internet? At school or at home? Why did you use them? And which sites you like the most?

A: Sure. Sometimes I used Internet to find some reference for my homework. I can show you some sites, but now I am playing Civilization...

Q5. Do you play games? Could you show me which one is your favorite and why?

A: Yes! I like Roller-coaster Tycoon and Civilization. In Roller-coaster Tycoon, if you don't construct them well or miss an end, there will cause an explosion! Very exciting. Now I think Civilization is more fun (she showed me how to play). I still got half of the territories to go for (she started some fights with the enemies and won some new territories).

◆ **Concept Test**

Q6. Have you ever heard of any Chinese or Taiwanese stories before? Do you like them? Could you tell me a Chinese story or character you like the most?

A: Umm...(she seemed busy at the game and could not think about an example).

III. Interview for Parents (Subject 6)

◆ **Warm-up Questions**

Q1. How long have you lived in this country? What part of Taiwan are you from?

A: For me, it has been 13 and half years. My husband came here earlier than me. It's been 15 years.

◆ **Concerns on Their Children's Education**

Q2. What are the most important concerns you have for your children's learning experiences?

A: (she thought the question was too general).

Q3. Is it important to you to keep your children informed about Chinese and Taiwanese culture? How do you try to do this?

A: Sure. We are Chinese! We talked to her in Chinese, and we sent her to Chinese School five years ago. Initially she could not understand much, but now it's getting better and better.

Q4. What are the hardest and easiest things about teaching your kids about Chinese and Taiwanese culture?

A: (no comments)

Q5. Can your kid read, listen or speak Chinese? What language do you and your children mostly use to talk to each other? How about among the parents?

A: She read a lot of books as you may see. Even she went to the Chinese school, she would read novels during the class (Sigh). We talk to her by using Chinese of course, and she replies with Chinese or English.

◆ **Use of books, Internet and Multimedia Products**

Q6. Have you ever bought any books for your children, which were related Chinese and Taiwanese culture? Were they in English or Chinese?

A: We bought a lot since she was a little kid. We thought she would understand, or at least be interested in, but actually she did not read them much. We also bought some storybooks that got English and Chinese when she was around 8, but she only read the English part.

Q6-1. Why you choose them and how did your child like those books?

A: As I mentioned before, we bought those Chinese storybooks for her because we expected her to read more Chinese. However, the speed she read English text is much more faster than she read Chinese text. There is no much we can do about it. Recently she has changed her interests a lot. Some books she used to love are no longer her favorites. Now if she gets interested in Chinese stories, she will find the book that has been translated into English.

Q7. Have you ever let your children to use Internet or Multimedia products such as Games or CD-Roms for an educational or an entertaining purpose? What kinds of Internet sites do you let them visit? What kinds of CD-ROMs or games have you bought for them?

A: Yes, when she was at 1st or 2nd grade, she usually played some games with her dad. Upon that time, her dad would help her setting up the computer or solving some problems she encountered. But, now she has become more independent than expected. She surfs on Internet or plays games everyday, all by herself. She seems not needing our companion anymore.

I didn't buy many games for her. I think reading is better for her. Usually it's her dad bringing her to BestBuy or Sam's to buy some for her.

Q7-1. Could you talk about why you chose these products and how your children liked those products?

A: Now she got her own opinion on choosing books or games, and she would ask her dad to buy for her. As I said, she likes reading a lot. She has borrowed lots of books from school.

Q8. Did you often read books or use multimedia products with your children?

A: Not often. I don't like computers. I like oil painting and reading more. Her dad would use computers with her when she was little, but not now.

Q8-1. What are the easiest and hardest about using the Internet and using CD-ROMs for yourself and your children?

A: (I skipped the question).

Q9. Overall, what is the most important feature among these products to make you decide to let your children to have them?

A: If these products are educational, or she asks for them.

◆ **Innovative Ideas for the New Product**

Q10. If there is a multimedia product to introduce Chinese mythology and folklore, what do you think it should be like?

A: Images should be interesting. And, if the stories are in English, she can easily read them.

Q11. Do you think it is a good idea to simultaneously put on two subtitles or two versions including English and Chinese? Why or why not?

A: It is good to have two versions of subtitles. Narration can be Chinese, which can help her memorizing the content.

Q12. What are your favorite Chinese and Taiwanese stories when you were kids?

A: Something like idiom stories.

Q12-1. From your understanding for your kids, what kinds of Chinese stories you think they are interested in?

A: Fantasy or historical ones.

Q13. Do you think it is a good idea to create some interactive games as part of my storytelling in this product? And what might good games be?

A: Sure. She loves playing games. It's hard for her to understand the complete story by reading Chinese text only.

◆ **Concept Tests**

Q14. Do you think it is interesting to introduce some Chinese ancient stories, such as "Pan-Ku"? "Ten Suns"?

A: (No comments).

Q15. Do you think it is interesting to talk about some adventure stories, such as "the western journey"?

A: It's fun.

Q16. Do you think it is interesting to introduce some historical stories, such as "Shui Hu"?

A: Yeah, she will be interested in historical stories if they have been translated into English. Recently she read some historical storybooks, and they are in English. Plus, animation or cartoon elements can maintain her attention more.

◆ **Close-up Questions**

Q17. Do you have any further ideas or questions about this project?

A: I am glad that she likes reading, but I have started to worry about her near-sight degree. Anyways, I hope she can learn more Chinese from this project.

APPENDIX D: STORY SCRIPT

Start (Character Profile)

VO:

Journey to the West is a mythology story that takes place in ancient China. In this story a monk named Tang San Zung is sent by the emperor of the Tang Dynasty to the west to get the Buddhist sutra.

The Buddhist sutra is a very important and spiritual scripture. This journey is long and dangerous ... spanning across the desserts of central China all the way into India!

However, monk does not have to face this journey alone. Along the way, he meets several interesting individuals that join him on his journey, including Monkey, Pig, and Shawu. But, these individuals are not necessarily the best traveling companions.

Click on each to hear a little about them. When you are ready to watch this exciting adventure unfold, click on "Begin".

Monk:

Hi, my name is Tang San Zung. I am a peaceful Buddhist monk on a very important journey for the emperor.

Monkey:

Hey, I am the most magnificent monkey in the world! I know you have heard me before, haven't you? I am going to help Monk complete his journey, but I am going to have fun along the way!

Pig:

Hello, my name is Pig. I used to be a deity in heaven but I was cast down to the earth. The gods said I was harassing some fairies, but I think they were just jealous of my good looks.

Shawu:

My name is Shawu. I used be a fairy in Heaven. But, don't let that fool you. When I loose my temper, I can get pretty fierce!

Chapter 1: Monkey's Birth

[Scene 1]

VO:

Once upon a time, on top of the Mountain of flowers and fruits sat a giant rock. The giant rock had been absorbing the essence of the heavens and the earth for thousands of years. On one stormy night, lightning struck the rock and it split open. Lo and behold, out jumped a golden monkey with sparkling eyes.

[Scene 2]

VO:

As the golden monkey strolled down the mountain, he came across a group of monkeys arguing with each other. They were deciding who should jump down the waterfall to check what's on the other side. The argument went on as no one wanted to take on the task.

Golden Monkey:

I will go!

Small Monkey:

who are you and where did you come from?

Golden Monkey:

I am a product of nature," laughed the golden monkey. "If I go down the waterfall, you shall crown me your leader!

VO:

As the group of monkeys was laughing at the golden monkey, he made stretch and down he jumped, into the dangerous waterfall.

[Scene 3]

GM: Wow, what a paradise!

VO: The golden monkey swam across the waterfall and saw clusters of fruit and beautiful flowers in front of him. A marble sign caught his eye. The sign said, "Blessed Cave of the Water Curtain, the path to Paradise".

He was excited about his discovery and rushed back to inform the other monkeys.

All the monkeys were extremely pleased by the result and all moved to the Cave of the Water Curtain. They honored the golden monkey's bravery and crowned him their leader.

[Scene 4]

VO:

Before he knew it, the golden monkey lived a carefree life in paradise as the leader of monkeys for five hundred years. However, there was one thing that worried him.

GM:

I am afraid I won't live much longer.

VO:

All the monkeys got down on their knees and cried.

Other Monkeys:

That can't be true!

VO:

One brilliant monkey stepped out and said, "fairies are immortal! Why doesn't your majesty go to the fairy and ask him for the secret of living forever?"

The Golden Monkey thought it was a brilliant idea. He left the cave and took off in search for the answer to immortality.

Chapter 2: Monkey Learns about Magic

[Scene 1]

VO:

The Golden Monkey walked for a very long time through the deserts and the woods, but could not find the fairy. One day, he came upon a cave as he was becoming exhausted. As he was climbing up the tree to rest, the giant stone gate opened up and took the monkey by surprise

It turned out that Master Bodhi had been expecting the monkey. He took the monkey in as his apprentice. He wanted to pass on the philosophy of Buddha and magic power to the Monkey. The monkey was a fast learner and took on skills such as the "thousand-league-vision", "Cloud-riding" and "the 72-ways of transformation". One day, Master Bodhi called the Monkey over and said to him,

Master Bohdi: I have taught you everything I know and it is time for you to leave. Remember only to use your power for a good cause, otherwise you will regret it.

[Scene 2]

VO:

The Monkey jumped on the clouds and shortly arrived at his old cave and announced his return, "fellas! I'm back!" He looked around and found everything in ruins.

"Our king is back!" several monkeys peeked out cautiously from behind the rocks and trees. They were excited to see their king return to the cave but was sad to inform him about their home being attacked by the Evil Havoc and several of them had been kidnapped.

The Golden Monkey was furious and set off for his revenge.

[Scene 3]

VO:

The golden monkey came to the Evil Havoc's cave and started a fight. With his newly acquired skills, He plucked his golden hair and blew them into the air. "Alalalatola!" each hair turned into hundreds of tiny monkeys. These tiny monkeys swarmed all over the demon --- pulling, kicking, and even tickling him. They knocked the demon down and he couldn't get up again.

[Scene 4]

VO:

From this experience with the Evil Havoc, Monkey could not stop thinking about getting a more powerful weapon to protect his fellows. He decided to go to the Eastern Sea to borrow one from the Dragon King who lived there underwater.

Underwater was beautiful. "Wow! How beautiful!" muttered Monkey. The palace was made of white coral and studded with thousands of gleaming pearls! Hundreds of crabs mounted on the backs of seahorses stood guard.

Monkey used his magic to pass through the entrance while Dragon King was enjoying a Seaweed Dance.

Monkey:

I am the Magnificent Monkey King! I need a suitable weapon. I was told you had many magical weapons to spare."

VO:

Dragon King was so scared when he heard Monkey's sonorous voice. He didn't have the guts to say no to this crazy Monkey. Dragon King showed some weapons to Monkey.

"Too light!" Monkey tossed the weapons away. He grabbed Dragon King's beard and Dragon King cried out loud.

At this moment, Monkey's eyes were immediately drawn to a thick iron pillar right at the center of the treasure hall. It was a hundred feet long and it glowed with beams of golden light.

Monkey:

Give me that!

VO:

"No! It is the magic pillar that holds the Sacred Island above the sea level. It weighs thirteen thousand five hundred pounds!" said Dragon King. Monkey lifted the pillar easily and said..

Monkey:

Does it? It would be a perfect if it weren't so long and thick!

VO:

The weirdest thing happened, the pillar suddenly became shorter and thinner. "Wow, it's a magic pillar! Bigger! ", then the magic pillar grew bigger!

Monkey:

This is just perfect! Hahahaha.....

VO:

Monkey tested it with several thrusts and passes. It could even change its size on demand!

Monkey turned and disappeared. Dragon King cried out with sadness. He decided to report this incident to Heaven!

Chapter 3: Monkey Messed Around the Sea and Heaven

[Scene 1]

VO:

While Jade Emperor was having his breakfast, Dragon King rushed in. After Dragon King reported what Monkey had done to him, Jade Emperor was shocked. He asked an official, Thousand- League Eye, " where is this monkey from?" Thousand League- Eye answered...

Thousand League Eye:

Your majesty, I think the strange light we once saw a long time ago was the sign of this monkey's birth...."

VO:

Jade Emperor shook his head and said..

Jade Emperor:

It would be better not to mess with this monkey, since he is the product of Heaven and Earth, I would rather give him an offer to come to Heaven to work with me.

VO:

Everybody thought Jade Emperor's strategy was great. Thousand League-Eye went to the Cave of Water Curtain to inform the Monkey about this invitation.

[Scene 2]

VO:

Monkey was so excited about this good news. He leaped up happily" Haha! I must be brave and intelligent for the Jade Emperor to want me to work for him!"

[Scene 3]

VO:

Heaven is a marvelous place to live. Monkey was so happy to see so many magnificent mansions and beautiful gardens. However, Monkey was assigned to feeding horses. He started to get bored pretty soon so he decided to play around. He sneaked in the Peach Garden to steal peaches and drank wine on the trees. Besides that, he even intruded to Taishan Senior Master's room and ate his magical pills, which developed his body to be more powerful. After hearing about Monkey's rebellious behavior, Jade Emperor was extremely angry, and he decided to Send Buddha RuLai to punish Monkey.

[Scene 4]

VO:

Monkey and Buddha Ru Lai had an intense fight. Buddha Ru Lai transformed into a giant who extended his arm and grabbed the Monkey, " the only place you have to hide is in my palm!"

Monkey laughed and climbed up to a cloud and flew over a thousand leagues and thought he had left Buddha RuLai far behind. So, he stopped to pee peed on the ground. He plucked a hair and cried " Alalalatola!" The hair turned into a paintbrush. He wrote --- Magnificent Monkey King was here.

"Silly Monkey," Buddha RuLai said with laugh. "You never left my palm!" Monkey looked down and finally realized that he still stood on Buddha's hand.

Buddha Ru Lai gently flipped over his hand and trapped Monkey in his grip. Buddha's five fingers transformed into a mountain range with five snow-capped ridges. " You will stay here until you regret what you have done and learn to use your power wisely!"

Monkey:

No~~~~~

[Scene 5]

VO:

Since Monkey was trapped under the Five Snow-capped Mountain, he flashed back to his good old days. Thinking of Master Bohdi's wise guidance and his fellow monkeys, he regretted what he had done.

Chapter 4: Monk's Mission

[Scene 1]

VO:

Time went by, Monkey had been imprisoned for five hundred years. It was now the time of the Tang Dynasty. One day, the emperor of Tang Dynasty thought of sending an eminent monk to the west, to get the Sacred Sutra, from today's India, to improve the Ethics of the society. Through a careful examination, there was a monk called " Tang, San-Zung" selected to be the candidate. This monk undertook this important mission heading for the west.

[Scene 2]

VO:

While walking across a desert, Monk got to the Five Snow-capped Mountain. Suddenly, he heard something awkward.

Monkey:

Master! Help me! Help me!

VO:

Monk turned around and looked---nobody was there. Monk was scared to death. Suddenly, a monkey's head appeared under the mountain, " Master! I was the

monkey imprisoned by Buddha Ru Lai for five hundred years! If you tear off the magical fingers on the mountain tops, I will do everything to serve you!"

Monk's kind heart could not but help save this little poor thing. He tore off the fingers. All of a sudden, the mountain exploded into pieces. Monk dropped to the ground and wet himself.

"Ahaaaa~" Monkey was so excited to get his freedom back. He held Monk's hands and danced around.

Monkey:

You are my master from now on!

VO:

Monk thought, "it seems dangerous on the road. It is good to have such a powerful partner to keep me company".

[Scene 3]

VO:

After a short travel, they met a group of robbers. But before they could be robbed, Monkey beat them to death. Monk was very angry upset about it, and said...

Monk:

It is bad to kill! Bad monkey!

VO:

Monkey exploded,

Monkey:

If I didn't kill them, they would have taken your life, you stubborn Monk!

VO:

Monk felt insulted. He ran and cried. Suddenly, Buddha Lotus appeared with hundred of golden beams, " Have the monkey wear this hoop. When you read this spell, it will give the monkey a terrible headache!"

Monk thought it's a gift from Heaven. He came back and asked Monkey to wear that golden hoop. Monkey seemed confused at this, but he put it on anyway. Monk started reciting the magic spell, and Monkey got a sharp pain and rolled over onto the ground.

Monk:

Now you will listen to me, won't you?

Chapter 5: Pig and Shawu Joined the team

[Scene1]

VO:

After a long trip, Monkey and Monk started to get hungry. They came to a thatched cottage. They knocked on the door. A kind old man and a pretty girl answered the door. They invited Monkey and Monk inside to have a dinner.

While having the delicious dinner, the old man suddenly burst out in tears.
“What is wrong?” Monk worried.

Old man said “One day, a pig passed by our house and saw my pretty daughter. Ever since then, he came here everyday nagging my daughter. He has some magic power, and there's nothing I can do to send him away...”

“Shameless!” Monkey asked the old man when that pig would come again. The old man said the Pig would come later that day. Then Monkey plucked his hair and turned into the image of the beautiful daughter.

Just as expected, Pig came by later. Pig harassed the fake daughter and tried to lift her skirt.

Monkey:

See who I am!

VO:

Monkey transformed back and used his golden bar to beat upon Pig's head. Pig knelt down and cried.

Pig:

Who are you? You are good at fighting...

Monkey:

I am the most magnificent monkey in the world!

VO:

“Oh~ I know you! I used be a deity in Heaven as well! Since I harassed some fairies, I was cast down to earth as a pig. I know magic as well! Please forgive me and take me as your servant.”

[Scene 2]

VO:

"Good. Good~" Monk chanted. He was moved by what Pig said. Monk decided to accept Pig as a disciple. The Pig joined the team heading out west.

[Scene 3]

VO:

After a few days, this group of people came to a river called "Drifting Sand River". All of a sudden, a red-eyed, purple-haired monster appeared with a swirl trying to eat Monk alive.

Pig dragged balls, a handkerchief and flowers from his magic hat, and tried to beat the monster off. But he failed.

Monkey angrily pulled out his golden bar and beat the monster to make it transform into its original form. It turned out this monster was a female. She kneeled down and cried " My name is Shawu. I used to be a fairy in the heaven. I had a bad temper, and I killed some people. That's how I got cast down to be a monster on earth.

Monk said, "A wrongdoer may become a man of virtue once he does good."
"Are you willing to leave your past behind and join us?"

Shawu said yes in tears.

Chapter 6: Ginseng Tree Fruit

[Scene 1]

VO:

The team of four came to a Taoist temple in which Grand Yuan Master has a magical Ginseng Tree. This tree blossoms every three thousand years, and produces fruit another three thousand years later. Once you eat the Ginseng Fruit, you can live for over thirty seven thousand years.

Grand Yuan Master was glad to have an opportunity to have Monk and his disciples over. However, he needed to go out to handle some business. So, He told his own disciple, " they are very important guests, you can give them two of the ginseng fruits as a treat. No more than two, remember?" Then the Master left his house.

[Scene 2]

VO:

Master's disciple got on a ladder and carefully picked two fruit off the tree and placed them on a tray to serve Monk and his disciples. Monk was stunned...

Monk: The fruit look like infants! My Gosh, I will never eat them!

VO:

The disciple was upset, and he went back to tell other the students that Monk didn't know anything about the goods. "Ginseng fruit tastes like peach, and they extend your life for over thirty seven thousand years! What a fool!"

[Scene 3]

VO:

However, Pig overheard their dialogue. Pig went back to tell Monkey about the secret of Ginseng Fruits. They happily went to the garden, shook the tree heavily, and caught all of the Ginseng fruit in their mouth.

[Scene 4]

VO:

The next day, when Grand Yuan Master came back and found out what had happened, he was so angry that he captured all of them.

He heated up a wok with boiling oil to deep fry Monkey. Monkey plucked a hair, blew it, and then turned into a donut floating on the oil to make fun of the master. Grand Yuan Master got even angrier. He decided to grab Monk and Pig and throw them into the wok as well.

At this moment, Monkey transformed back to his original form. He asked Grand Yuan Master for forgiveness. He promised to find Buddha Lotus to help revive the Ginseng Tree.

[Scene 5]

VO:

Monkey hopped on his cloud and found Buddha Lotus. He asked for some Sacred Dew.

[Scene 6]

VO:

Monkey got back to Grand Yuan Master's garden and sprinkled the Sacred Dew. Ginseng Tree suddenly revived and it bore fruit again! Grand Yuan Master was very happy about it, so he picked a few Ginseng fruit to have a picnic with the troublemakers. Monk started reading the magic spell to give Monkey a headache. "Don't be naughty again!". Monkey rolled on the ground.

Monkey: Oww~

Chapter 7: Iron Fan Princess and Bull King

[Scene 1]

VO:

They traveled continuously, and came upon a mountain called Flame Mount, which was extremely hot.

"Why is it so hot here!" Shawu took out her handkerchief to wipe off her sweat. Pig rolled on the ground and complained. "Too hot!"

Monkey doubted it was usual to be this hot at the top of this mount. He pulled his golden bar from his ear and knocked the ground to call for God of the Earth.

God of the Earth: (Coughing...) How can I help you, Monkey?"

VO:

Monkey asked the god of the earth, "why is this place is so hot? God of the Earth said "it was because you messed around in Heaven and you split Taishan Senior Master's stove to eat his magical pills. The fire fell down to the Earth and resulted in such a disaster here." You have to go ask Iron Fan Princess to help.

[Scene 2]

VO:

Monkey jumped from the cloud and took Iron Fan Princess by surprise.

Monkey: Excuse me, mam, can I borrow your fan?

Princess: (Screamed)

VO:

Princess screamed at Monkey, "Where did this ugly monkey come from?" Princess grabbed her giant plantain fan and wave at him and it blew Monkey far away.

Monkey thought, “ Wow! That fan is unbelievable!”

But, he didn’t give up. He returned to Iron Fan Princess’s place knocking on her doors. Monkey plucked his hair, blew it, and became a mosquito flying into Princess’ place.

Plantain Fan Princess was drinking a cup of tea, so Monkey took the chance to fly in her cup. Princess didn’t know she had swallowed Monkey with her tea.

[Scene 3]

VO:

Once getting in Princess’ stomach, Monkey jumped around and made Princess miserable.

“ Please give me the fan!!” Monkey said. Princess rolled on the ground with stomach pain and finally passed the fan over.

[Scene 4]

VO:

After Monkey got the fan, he came back to Flame Mount. He waved the fan several times, but nothing happened. “She must have given me a fake!” Monkey exploded. Shawu said” What if you transform into Princess’s husband and borrow that fan again?”

Monkey thought this idea was awesome, and he transformed himself to be Bull King going back to see Iron Fan Princess. Princess was very happy when Bull King showed up. “My sweetie, did you hide that fan well?” Fake Bull King said.

Princess:

Why do you ask? A monkey came and asked to borrow it earlier but I have sent him away!

VO:

Fake Bull King said, “ Good. Then why don’t you show me that fan. I would like to know for sure that it is safe.”

Princess didn’t have a doubt and opened her mouth. A tiny plantain fan was hidden beneath her tongue.

Monkey was secretly stunned. He asked.” Smart girl! But, how can such a tiny fan bring down the flame of the mount?”

Princess (laughed):

My dear, what is wrong with you today? Just read this spell and it can get back to its normal size ---- Alalala baby fan!

VO:

Monkey transformed back to his original form, robbed Princess's fan and went back to find Monk. Princess was astonished. Later on, the real Bull King got back home. He was furious about what Monkey had done to his wife. He grabbed his sickle and ran out with Princess.

[Scene 5]

VO:

Monkey, Pig and Shawu used all of their power while fighting with Bull King. Bull King was a monster that could manage magic as well. After a few rounds, Bull King revealed his original form – a big white bull and held Monk in his teeth. Monkey jumped on Bull's back and attacked his head. Princess and Shawu were wrestling. Pig was a wimp who peaked out from behind the rocks and cheered them on.

Eventually, Bull King and the Princess were taken down. At this moment, Buddha Lotus showed up in the sky and said...

Buddha Lotus:

Bull King and Iron Fan Princess, do you guys regret seeing people in danger and not lifting a finger to help?

VO:

Bull King and Plantain Fan Princess regretfully replied...

Bull King and Princess:

We were wrong!

VO:

Buddha Lotus smiled, thanked Monkey and his partners' effort, and took Bull King and his wife back to the Heaven.

[Scene 6]

VO:

Monkey happily grabbed the real fan and waved it heavily, which put out the flame and brought up a rain shower. All of the residents knelt down and thank them.

Chapter 8: Spider She-devils

[Scene1]

VO:

The four of them continued on their journey and came across a wide road. Everybody was hungry. Monk got down from his horse and said, "There is a house up ahead. Let me go over and ask for some food. I will be right back."

[Scene 2]

VO:

Monk approached the house and knocked on the door. All of a sudden, the door opened automatically. He saw three beautiful girls knitting. Monk felt embarrassed, "Excuse my rudeness, would you be kind enough to feed me and my disciples some food?"

Spiders:

Not a problem! Hehehehe...

VO:

Three girls smiled strangely and brought up some plates. Monk saw the dark-colored tofu on the plates, but he smelled something strange "it's not vegetable, I can't have this."

Spiders:

You don't have a choice! Hahahaaaaaaa!

VO:

Suddenly, the door shut. These girls' belly blew up and they turned into three spiders and captured Monk in their webs.

[Scene 3]

VO:

Monk was gone for a long time. Monkey climbed up a tree to see what was going on. Shawu was torturing Pig for his annoying behavior. "Stop that! Master must be in danger. Let me go check it out!" Monkey said.

[Scene 4]

VO:

Monkey came to the house and found there were some white sticky shreds of fabric on the walls. He turned into a bird and flew into the house. A few girls were taking a bath.

One girl said, "I heard that Monk's flesh can improve our health and extend out lives! Let's steam him, or stir-fry him later on?"

"Monsters!" Monkey hurried back to tell Pig and Shawu about this discovery. Once Pig heard that these girls were undressed. He volunteered to save Monk.

[Scene 5]

VO:

Pig came to the house, jumped into the pond, and tried to act like a swimming fish.

The girls transformed to become spiders to wrap Pig with their threads. One spider placed Monk and Pig into a steamer.

[Scene 6]

VO:

After a long wait, Monkey knew something must have gone wrong. He rushed to the house and saw that spiders were waiting at the steamer with watering mouths. Monkey quickly pulled out his golden bar and smashed one spider. However, more spiders and a centipede appeared and bit his leg!

Monkey cried, "Ow~", and he thought he was finished this time. Unexpectedly, an old grandma showed up, "Hey! I am Bi-Lan Buddha, I am here to help you!"

Suddenly, this old lady turned into a chicken and ate the centipede alive! Monkey, now free, took this sweet chance and killed all the other spiders. However, it was too late, he was poisoned by the centipede!

Bi-Lan Buddha switched back to her original form and gave Monkey the cure. "Your master and Pig were also poisoned. Here are some medicine for them." Then Bi-Lan Buddha left

Shawu arrived after that, Monkey shouted, "where have you been? Shawu embarrassedly said,...

Shawu:

On the toilet....

Chapter 9: The Goal Achieved

[Scene 1]

VO:

The team had travel more than six months. One the way to the west, Monk, Monkey, Pig and Shawu encountered lots of danger, but they all overcame the obstacles. Monkey remained naughty, and Monk had to use the spell on him over and over; Pig was lazy as usual and was tortured by Shawu all the time. However, they grew into a team that helped and loved each other.

In the end, they got to the destination in the West. A small child came to welcome them, and led them to the Magnificent Buddhist Master's temple.

The Magnificent Buddhist Master knew exactly why they were there, and brought up a sutra.

"Sigh~ This Sutra that shows no handwriting is the best one. You have to use your wisdom to see through what is behind each blank page.

Monk and his fellows kneeled down and thanked to the Magnificent Buddhism Master.

These four people were glad to accomplish their mission. They returned to the central China and presented the Sutra to the Emperor of Tang Dynasty.

[Scene 2]

VO:

The emperor was very happy about this result. While Monk was asked to read the Buddhism Scripture, Jade Emperor, Buddha Ru-Lai and Buddha Lotus revealed themselves in the sky.

"You all contributed a lot of effort to accomplish this mission, which improved your spirituality and ethics. All of you were once immortals in Heaven, made mistakes and were cast down to Earth. Now you've learned your lesson and it's time for you to return to where you came from!" They then ascended into the heavens with Buddha Ru-Lai .

Jade Emperor was very pleased to see that all four of them showed such progress. Monk, Monkey, Pig and Shawu were reborn as immortals.

The end

APPENDIX E: CHARACTER DESIGN- SUPPORTIVE CHARACTERS

Master Bodhi



Dragon King



Jade Emperor



Thousand-League Eye



Buddha Lotus



Buddha Rulai



Grand Yuan Master



God of the Earth



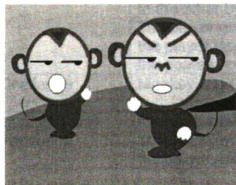
Evil Havoc



Iron Fan Princess and Bull King



Small Monkeys



Spiders



APPENDIX F: GAME DESIGN CONCEPT SHEETS

Game 1: Monkey Flying

Goal	To enhance the impression of the stories in Chapter Two (Monkey got the power to ride clouds) and Chapter Three (Monkey and Buddha Rulai's fight).
Rules	From a bird view angle, players will see Monkey riding on the cloud at the center of the screen. Players should use left-and-right arrow keys to help Monkey to reach the destination without hitting any obstacles: Buddha Rulai, Buddha Lotus and mountains. Catches are thought of as spills when Monkey hits the obstacles.
Challenge	The speed will go faster and faster, and more obstacles will appear.
Outcome and Feedback	Players who pass the trail without hitting any obstacle are considered successful. The game ends earlier if too many spills occur. On the last page, players will watch a short movie clip: Buddha Rulai flips his hand over and trapped Monkey in his grip.

Game 2: Monkey Chase

Goal	To emphasize the relationship between Monkey and Monk (Monk obtains a magical spell for punishing Monkey whenever Monkey behaves rebellious).
Rules	The concept comes from the PacMan Game. Players use left-and right arrow keys to move the object-Monkey. The bananas on the screen will disappear as Monkey passes over them. Monkey can jump from one side of the screen to the other by passing though the tunnel on either side. The player got three lives. Once Monk catches Monkey, the player loses a life. When the player loses three lives, the game is over.
Challenge	Monkey has to avoid Monk while getting all the bananas.
Outcome and Feedback	On the game-over screen, a short movie appear: Monk scold Monkey by his spell, and Monkey will have a painful headache rolling over the ground.

Game 3: Ginseng Fruit Catch

Goal	To engage with the story of Chapter Seven (Ginseng Fruit Tree)
Rules	Pig holds a basket riding on a ball, and left -and right - arrow keys control his movement. Pig would stop automatically before going beyond the left and right side of the screen. If Pig catches one ginseng fruit, the player will earn one point. There are 20 fruit for a player to catch/ The game ends when the 20 fruit have been distributed.
Challenge	Ginseng fruit fall from a random place on the top of the screen. The speed of falling will get faster and faster.
Outcome and Feedback	The score will be equal to the number of Ginseng fruit that Pig has caught. A short movie clip will show up on the ending screen: Pig's mouth is full of Ginseng fruits. His belly becomes bigger and bigger and finally explodes.

Game 4: Hunt the Spiders

Goal	To enhance users' impression toward Monkey's fighting skills; to engage with the story of Chapter Nine (spider she-devils).
Rules	Monkey is placed at the lower part of the screen holding his iron bar to aim at the target, spiders. Spiders appear randomly at different places and times in the forest. Players can scroll left and right through a larger scene to hunt the target. They can click on the left key of the mouse to trigger the fireball to hit the targets. Players will have 50 bullets to spare. Every time the player hit the target, there will be one reward point. The game will end till they spare their bullets.
Challenge	The targets move randomly. The nearby objects will move faster than the distant objects.
Outcome and Feedback	A calculated result will show on the right top of the screen. A short movie will show up on the ending-screen: spiders are steam-fried by monkey.

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