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USING DIGITAL STORYTELLING
FOR INTERMEDIATE JAPANESE LANGUAGE LEARNING

presented by

ASUKA NAKAGAWA

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of the requirements for the

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USING DIGITAL STORYTELLING
FOR INTERMEDIATE JAPANESE LANGUAGE LEARNING

By

Asuka Nakagawa

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

MASTER OF ARTS

Department of Telecommunication, Information Studies and Media

2004

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ABSTRACT

USING DIGITAL STORYTELLING
FOR INTERMEDIATE JAPANESE LANGUAGE LEARNING

By

Asuka Nakagawa

The project of the production thesis is an intermediate Japanese language tool using the storytelling animation for college students who study Japanese in the United States. The purpose of this project was to create an effective multimedia learning software with various interactive features. With a cartoon-type animation of one of the Japanese folklore stories, Urashima Taro, the web site provides users with a new prospective opportunity of effective online learning.

Urashima Taro is one of the most famous and popular folklore stories in Japan. It has been read to children in Japan for decades, and includes a lot of Japanese cultural aspects. The web site with the storytelling animation of Urashima Taro helps Japanese learners reinforce their language skills and makes the learning process more enjoyable.

This thesis is dedicated to my wonderful parents

Keiichi and Mikiko Nakagawa.

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ACKNOWLEDGEMENT

I majored in business when I was an undergraduate student in a Japanese university. I was always interested in designing when I was in college, however I had few experiences dealing with digital media arts and technology.

I would like to say special thanks to Professor Brian Winn. He was my mentor who helped me go through difficult times and shared memorable times with me. He is a caring professor, who is always involved in his students' interests, opinions, and ideas. I would not have been able to complete my thesis project and the DMAT program without his help. I would also like to thank Dr. Carrie Heeter, who gave me valuable advice on my research projects.

My special gratitude also goes to friends of mine, Su Kwak, Jason Tye, Heidi Chen, Luis Rosero, and Patti Banyas who helped me keep going and taught me never to quit. I would not have been able to accomplish what I did in the past two years without their help either.

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CHAPTER 1

Introduction

Background

The number of people who learn the Japanese language is increasing in the United States. Many universities or academic institutions offer Japanese language programs. An increasing number of junior high and high school students are also learning Japanese as an elective class.

There is also a growing need for alternative ways of learning Japanese. One method of learning Japanese is online resources available through the Internet. Another way is by watching Japanese movies, animations, TV shows and/or books. These approaches provide great benefits not only because they offer combined ways of learning languages, but also because learners can take their own pace, learning in their convenient time with easy access.

The project was inspired by my own experience as a second language learner of English. I myself have watched movies, TV shows, soap operas and cartoons to improve my English as many foreign language learners do. I especially use DVDs as a language learning tool because the rewind and pause features allow me to review the scenes which I could not understand. However, the drawback of this approach is that one needs to look up words in the dictionary at the same time, which can sometimes be annoying.

However, learning by culture is still more entertaining and engaging than by traditional language textbooks. This idea has generated my interest in creating a web-delivered digital storytelling software for learning Japanese. This project will feature the play and pause functions of DVD, incorporating dictionary and language learning features in the same screen.

Problems

There are many resources for learning the Japanese language outside the regular classrooms. As mentioned above, the primary way is online resources. They teach Japanese characters, grammars, pronunciations, basic conversations, and reading. A lot of these web sites share common problems.

First, there are not enough resources for the intermediate level students. Most of the online resources out there are for the beginners. Advanced learners, meanwhile, may enjoy web sites created in the Japanese language for the native Japanese people to improve their language proficiency.

Second, most of the web sites lack multimedia resources. They are based mainly on text, which might make users lose their interest in learning the language. There are a few web sites that contain audio clips, but most of them have a file size problem of not considering

the download speed. Furthermore, few web sites offer long clips of conversations or dialog.

Beside online resources, Japanese movies, TV shows, mangas, and animations can be a fun way of learning the Japanese language. However, most of them are not created for learning purposes. English speakers may find it difficult to learn from these media products, because these products use conversational Japanese language, which may not be suitable for intermediate learners. Furthermore, learners may encounter new grammars and vocabulary, which they need to look up in the dictionary, disrupting their experience with the media.

Solution

Based on the problems of the both online and media resources for learning the Japanese language, a website containing a storytelling animation with DVD features would contribute to intermediate students learning Japanese. It will be a listening learning tool mainly for intermediate learners who don't have many listening resources on the internet.

Because movies, animated TV shows and mangas from Japan are very popular in the US, animation was chosen as the vehicle to tell the story, hopefully making the learning process more enjoyable.

Objective

The objective of this project is to design an effective and enjoyable language learning

tool that encourages users to reinforce their language skills by themselves. With a

cartoon-type storytelling animation related to Japanese culture, users can enjoy learning

Japanese on the web site.

CHAPTER 2

Pre-Production

Secondary Research

According to the Survey Report on Japanese-Language Education Abroad from the Japan

Foundation Japanese Language Institute, Urawa (1998), the number of Japanese language

learners at the higher educational level in the United States is 31,159. The report also

says that the number of institutions of higher education offering Japanese language

courses in the United States is 576, and the total number of institutions is 1,522. The

report also shows the number of U.S. students learning Japanese increased more than

twice compared to the survey conducted in 1993.

As mentioned above, this project targets college students with the Internet access. "The

Internet Goes to College" by Pew Internet & American Life Project (2002) indicates 86%

of college students have gone online, and 85% of college students have their own

computer. Besides, according to the survey "Home Computer and Internet Use in the

United States: August 2000" (2000), by the United States Census Bureau, 57.7 % of

people from 18 to 24 years old have home computer access, and 41.5% use the Internet at

home.

Quantitative Research on Target Users

Objectives

The purpose of this survey is to discover what learning materials the target audience uses

to supplement and enhance their learning of Japanese and to generate ideas on how to

create more effective learning materials for this target audience.

The survey was conducted by asking participants to fill out questionnaires which

included the following five categories:

- Demographic Information - The first category on the survey asked participants

  their age, gender, and native language.

- Japanese Learning - The second category asked the participants their reason for

  studying Japanese, where they have difficulties in learning Japanese and how they

  study Japanese.

- Learning Preferences - The third category asked the participants questions related

  to their use of the Internet or CD-ROMs in their learning of Japanese. The survey

  asked whether they use the Internet or CD-ROMs to study Japanese and why. The

  survey also asked the participant's interest and reasons in the use of Internet and

  CD-ROMs in learning Japanese.

- Story Preferences - The fourth category of the survey asked the participants what

  types of stories and entertainment they would like to watch or read.

- Web Site Desires - Lastly, the fifth category asked the participants what types of

  learning materials they would like me to create and what types of features should

  be included in the learning materials.

Procedure

First of all, I contacted Ms. Yoshimi Sakakibara, a Japanese instructor at Michigan State University. I was allowed to recruit subjects to take a survey on each of the 200 and 300 level courses the instructor taught. The survey took place in a classroom of one of the Japanese Program classes at the Department of Linguistics and Languages at Michigan State University.

Findings

Demographic Information

A total of 42 students completed surveys. Two thirds of the respondents were male. Slightly more than half (55%) were from the 300 level Japanese course, and the remainder were from the 200 level Japanese course.
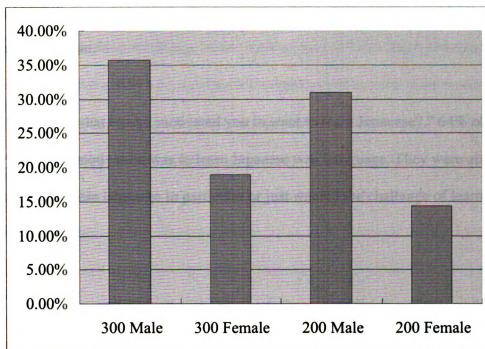
Figure 1 Demographic data

The average age of all participants was 21.4 years old. About one fifth (21%) of the Japanese language students in the survey were not native speakers of English.

The contents and features of this project will be designed to target a young adult male audience whose native language is English.

Japanese Learning

Half of the participants in the study have been to Japan before. Students in the 300 level course were more likely to have been to Japan (60%) than students in the 200 level course. We can assume that those who have been to Japan before are somewhat familiar

with Japanese customs and culture. The content of the story should not just be basic information of Japan.

For the question "what reason motivated you to want to learn Japanese?," 64% of the students' primary motivation was to learn Japanese was Language. They were either interested in Japanese language in particular or just wanted the challenge of learning a second language.

Forty percent answered "culture" as the reason for becoming interested in learning Japanese, 17% answered ""family/ relatives/ friends", and 12% answered "work." The second most popular answer, "culture" can be assumed to include interest in Japanese history, anime, comics, and the country of Japan. The results of the survey suggests that the contents of the project should be related to Japanese culture.

The answers to the question "what is the biggest challenge you have in trying to learn Japanese?" indicate what areas of Japanese language need to be addressed in the program. Forty-five percent mention Kanji[1] as the biggest challenge, 17% mentioned grammar, 17% mentioned listening, and 14% mentioned Keigo[2].

In addition to creating a software that help students improve grammar and listening, I decided to create a software that also focuses on Kanji and Keigo learning. Keigo was

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[1] A Japanese character based on borrowed or modified Chinese characters

[2] Polite expression of Japanese language

mentioned by a small minority of respondents, but it is technologically and aesthetically easy to include both Kanji and Keigo in the same manner. I intentionally used as many Kanji as possible in the story and put phonetic comment and reading aides on each Kanji character to help students read or understand them better. As for Keigo, I tried to put many Keigo words frequently used among native speakers of Japanese.

Learning Preferences

The internet is a much more common tool for language learning than CD-ROM among these Japanese language students. Among all participants, 41% of students use the Internet (38%) and/or CD-ROM (10%) to study Japanese. Fifty-nine percent do not currently use either technology to study Japanese. Thus, the proposed project would need to initiate a new behavior among student users, of turning to interactive technology experiences to learn Japanese.

Among those who use the Internet and/or CD-ROM to study Japanese, they answered question about the satisfaction of the use for the following purpose, by using a scale from 1 = strongly satisfied to 5 = strongly dissatisfied. They were asked to leave it blank if they don't use on the purpose of each items. The average score for each item is reported, followed by the number of respondents who answered, in parentheses.

- 2.1 (16) To know more about Japanese culture or trends
- 2.2 (15) To learn vocabulary
- 2.2 (15) To use dictionary or translation tool

- 2.3 (14) To learn Kanji (third Japanese alphabet from China)

- 2.4 (10) To improve conversational expressions/phrases

- 2.5 (11) To improve listening skill

- 2.5 (16) To improve reading skill

- 2.9 (11) To learn grammar

- 3.0 (9) To learn Hiragana and Katakana (syllabic Japanese alphabets)

- 3.2 (12) To improve writing skill

- 3.3 (9) To improve speaking skill

Students did NOT turn to interactive media to improve their speaking or writing skills, nor to learn grammar, Hirangan or Katakana. They did use technology to learn vocabulary, as a translation tool, to learn Kanji, and to improve conversational, listening, and reading skills.

As for the question asking about the difficulty with finding online resources appropriate to their language ability level for the same purposes described above, by using a scale from 1 = very easy to 5 = very hard, the percentage of the respondents is 81.0 to 81.3.

According to those results, it can be interpreted that not many students who use the Internet are satisfied with the quality and quantity of online materials for Japanese language learning . They have a hard time finding materials appropriate to their ability, although they are interested in using online materials.

Listening and Kanji are the categories which many students choose as the biggest challenge to learn Japanese learning. It indicated that they were interested in using online materials to improve the areas which they had difficulty with learning. As I mentioned above, those are the ones which the program focuses on.

As for the item, "To learn vocabulary," I expected to have this area which should be a part of the contents. Furthermore, the result of the score 1.8 of the item "To improve conversational phrases" shows that the story used in the software should include conversation between more than 2 people.

Story Preferences

There was a question about the types of stories which students would like to use for learning or entertainment purposes, among the following list, using a scale from 1 = like very much to 5 = do not live at all.

- (male average: 1.57 female average: 1.64) Comedy

- (male average: 2.15 female average: 2.07) Love story

- (male average: 2.15 female average: 2.36) Folklore/Mythologies/Traditional Stories

- (male average: 2.25 female average: 2.50) College campus life

- (male average: 2.37 female average: 2.36) History

- (male average: 2.46 female average: 3.00) Science Fiction

- (male average: 2.59 female average: 2.79) Mystery

- (male average: 3.07 female average: 3.50) Non-Fiction

- (male average: 3.11 female average: 3.50) Horror

The result of this question shows that male and female had very different content preferences. However, the type of story with the highest score is comedy among both of male (1.57) and female (1.64). Folklores has the second highest score (2.22) among male subjects, and the third highest score (2.36) among female. On the other hand, love story scored the second heighest (2.07) among female subjects, while it only scored the seventh highest score (2.79) among male subjects

These results made me decide the content of the story would be one of Japanese folklore stories which can include comedy elements.

Website Desires

As for the question "If there was a web site with animated Japanese stories, what features would be desirable to help you improve your Japanese, using a scale where 1 = very desirable to 5 = not at all desirable?" The average score for each item is reported.

- 1.6 Animation supplemented with Japanese audio dialog

- 1.7 Vocabulary explanation of words used in dialog

- 1.9 Grammar explanation of dialog

- 2.0 Script of entire story in Japanese text

- 2.1 Animation supplemented with Japanese subtitles

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- 2.1 Furigana with Kanji (phonetic comment and reading aid)

- 2.2 Animation supplemented with English subtitles

- 2.7 Script of entire story in English text

- 3.8 Animation supplemented with English audio dialog

The respondents were distinctly NOT interested in "Animation supplemented with English audio dialog," which had an average score of 3.8. Having the script of an entire story in English text was also unpopular (2.7) although not to the same extent.

Animation supplemented with Japanese audio dialog and vocabulary explanation of words in the dialog were highly desired.

Furthermore, in the question about the use of language subtitles and language audio of DVD for Japanese language learning, 34% of the students answered to use Japanese subtitle. 65% answered to use English subtitle. 69% asnswered to use Japanaese audio. 6% answered to use English audio.

Those results suggest NOT having English audio or audio language selection. Due to the result of the study above, I have chosen to use Japanese audio to tell the story. I decided not to create the system that allows users to select audio languages.
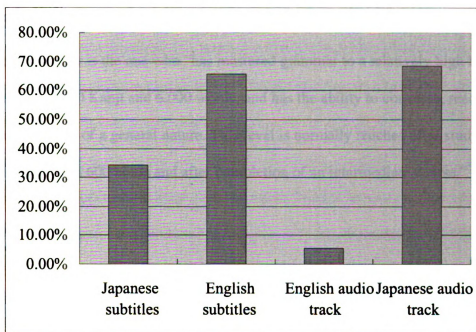
Figure 2 Use of subtitles and audio track

Target Audience

The primary audience for this project is college students in America who study Japanese. They are all native speakers of English with their Japanese language at the intermediate level. Their age may vary from 19 to 24. The secondary audience is also college students who study Japanese. Their Japanese language level is at the intermediate level as well. However, the secondary audiences are not native speakers of English. Their age may also vary from 19 to 23.

Both audience groups are involved with learning Japanese online and are also interested in Japanese media productions such as movies, TV shows, animations, and comics.

Regarding the criteria of the Japanese Language Proficiency Test[3], a Japanese intermediate learner is the one who "has mastered grammar to a relatively high level, knows around 1,000 Kanji and 6,000 words, and has the ability to converse, read, and write about matters of a general nature. This level is normally reached after studying Japanese for around 600 hours and after completion of an intermediate course."

Persona Analysis

Primary Persona

Dan

Dan is a 22 year old college student, a senior, majoring in Japanese. He goes to a 4 year college in New York city. He lives in a dorm that has a high-speed internet access. His family is originally from Iowa. He has studied Japanese for the past 2 years. Currently, he is enrolled in a 300 level Japanese language course. He understands how to read Japanese well, however he still struggles with understanding spoken Japanese. He also has a hard time memorizing the Japanese Kanji.

Dan became interested in Japanese when he was in high school. He watched Japanese animations such as Cowboy bebop, Ghost in the Shell, and Dragon Ball. Dragon Ball was his favorite TV anime among them. He frequently watched Dragon Ball on TV in

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[3] The Japanese Language Proficiency Test conducted by Association of International Education, Japan, is one of official tests to measure the ability of Japanese language for people whose mother language is not Japanese. This test is broadly known among Japanese teachers and learners. Many textbooks of Japanese are published based on the content and criteria of this test.

which characters all spoke English and came to wish he could watch the original version of Dragon Ball aired in Japanese. His interest in Dragon Ball became his motivation to study Japanese. His ultimate goal in life is to work for a Japanese animation production company.

He likes to study Japanese and takes some Japanese courses in college. However, he doesn't like the Japanese classes in school. Japanese is taught mainly by using textbooks in the classroom. He thinks that it is quite boring to study Japanese only by looking at textbooks. Thus, when he studies Japanese on his own, he often plays Japanese animation DVDs and use online resources, which he thinks is great fun.

Among the Internet resources, he especially uses online quizzes to test his vocabulary and Kanji. He uses online quizzes because he thinks taking quizzes online is just like playing games and feels he can memorize a lot of Kanji effectively. However, there are only a few materials which he can enjoy and improve his listening skill with. Most of the listening resources he has found are created to help beginners improve their listening skills and are not difficult enough to improve his listening. He wants to use more challenging and interesting online materials to improve his listening skills.

He uses DVDs of Japanese animes. Currently there are many kinds of Japanese anime DVDs sold in the US which he can find easily. His favorite genres are comedy and adventure. He enjoys watching a lot of animes, so it encourages him to learn Japanese. One of the useful features of the DVDs is the option of the subtitles. He uses the

Japanese subtitle with the Japanese audio track, so that he can catch the spoken Japanese. However, there are some disadvantages of using DVD. Most of the Japanese animes use advanced Japanese language so it's really hard for him to understand the content the first time he watches. He often needs to look up words in the dictionary. Few animes are appropriate to his Japanese level. He thinks watching animes is not the best way to learn Japanese for his current level.

Secondary persona
Michael

Michael is a 20 year old college student in Chicago. He is a sophomore with his major in Sociology. He has been studying Japanese for a year and a half year.

He was born in China and lived there until he was 15 years old. Before entering high school, his family moved to Chicago. He went to a public high school and became good at English.

Currently, he lives with his roommate, Atsushi, at an apartment near his college. Atsushi is an international student from Japan and likes to teach the Japanese culture to Michael. As Michael heard more about Japanese culture from Atsushi, he gradually became interested in learning the Japanese language. He began to take a 100 level Japanese course when he was a freshman. Currently he is taking a 200 level class.
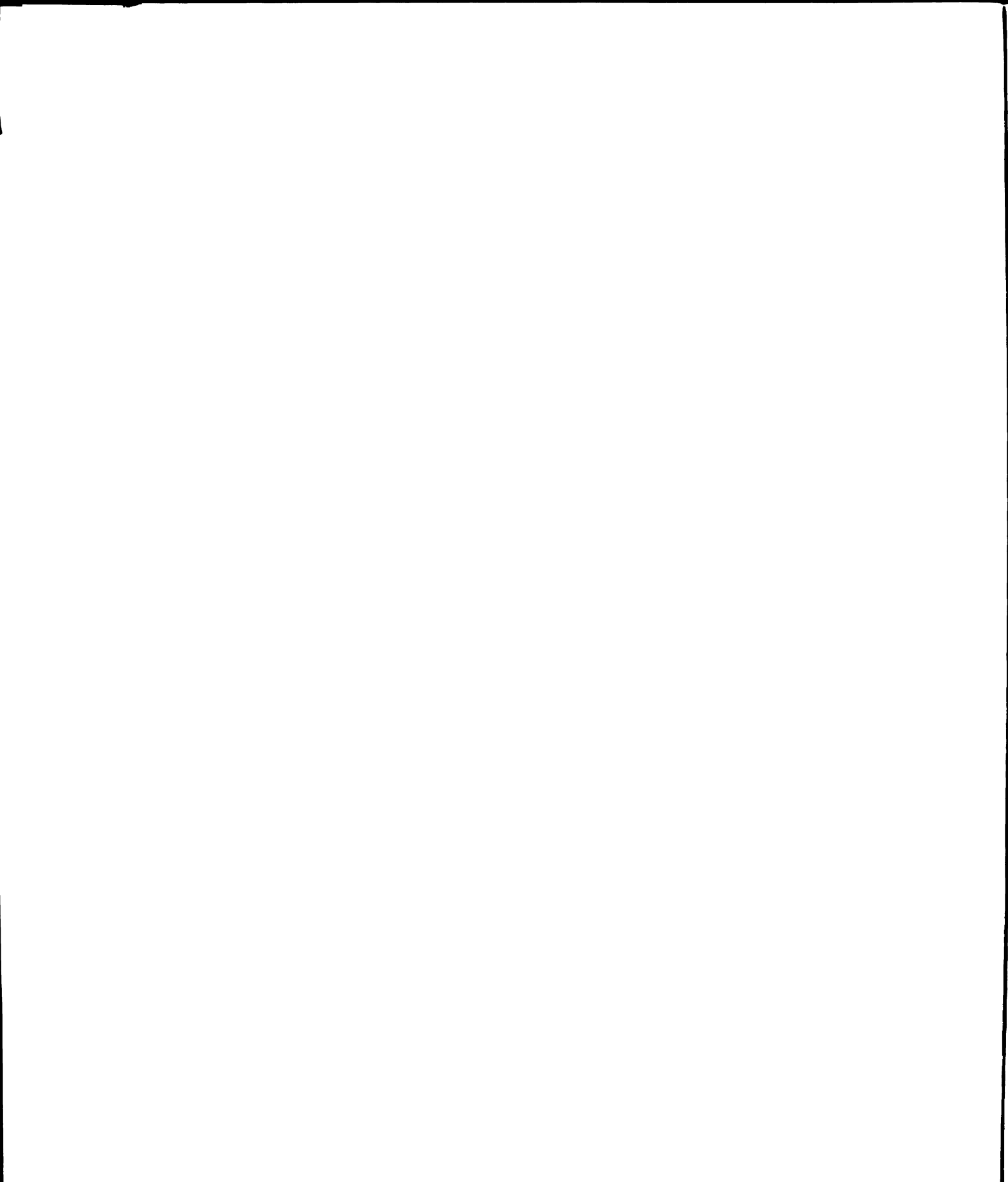
One of his interests in the Japanese culture is Japanese folklore stories. Reading folklore is very interesting because some of them are very similar to Chinese ones. Furthermore, Japanese folklore tells much about the Japanese traditional culture. So when he studies on his own, he uses some web sites to introduce Japanese folklore. He found one good web site about Japanese folklore used for an American audience. It has Japanese text as well as English text, so that he can easily compare Japanese and English words. However, the web site does not have many graphical images. He often gets bored using the web site.

CHAPTER3

Content Design

Content for Storytelling

According to a survey of pre-production research conducted in Japanese classes, comedy was selected as their most favorite genre of story and folklores as their second favorite. About 2/3 of the students who participated in the survey were male. Inspired by those results, I chose a story which carries the essence of both comedy and folklore and whose main character is male: Urashima Taro, one of the famous and popular folklores in Japan.

According to the survey result, 10 students answered the interest in Japanese culture as a reason to motivate them to learn Japanese. This reason has the highest number except answers related language itself, which has 27 students. Urashima Taro features Japanese cultures in many respects. Traditional clothing and atmosphere of the old times in Japan are well described in Urashima Taro. The words used in Urashima Taro are also important indications of the Japanese spoken languages used in today. Many words have still been used for generations.

The original story of Urashima Taro goes back to the 8th century. Urashima Taro is described in several Japanese history books as "Nihonshoki" or "Tangofudoki" written in the 8th century or "Mizukagami" in the 9th century. There is a reference book called, "Urashimamyoujinengisho" in Urashima shrine in Kyoto, Japan that addresses the story

of Urashima Taro. "Urashimamyoujinengisho" talks about Urashima Taro as a person who existed in a real life. In the year 478, Urashima Taro catches a turtle while he is fishing. The turtle he captured transformed herself into a princess. He is asked to go to Hourai-Mountain with her, which differs from the Dragon Palace described in Urashima Taro. In Chinese legend, Hourai-Mountain is located in the sea, where a hermit lives. This mountain is said to make people ageless and immortal. He goes to the Mountain and marries to the princess. He comes back home in the year 825.

In "Otogizoushi" written in the Edo period, the book describes that Urashima Taro goes to the Dragon Palace and he receives a box from the princess who lives there. After he opens the box, Taro becomes a crane and goes back to Hourai-Mountain. Taro and the princess are buried and celebrated as the god of a married couple.

Textbooks officially published by the Japanese government and used in elementary schools from 1910 to 1949, describe the story of Urashima Taro as the story told generally today. Urashima Taro is a kind man who saves a turtle from children and the turtle takes Taro to the Dragon Palace in exchange for Taro's favor. He comes back to his village with the box he was given by the princess. He then realizes that three hundred years have passed, which is the same narrative as Urashima Taro described generally today.

The basic narrative of Urashima Taro is described the same today in all regions of Japan. However, there are subtle differences in how the story is told, which indicates the

uniqueness of each district in Japan. Today there are three different endings of Urashima Taro. One ending is used in textbooks published from 1910 to 1949 where the story ends as Taro opens the box and turns into an old man. Another version of the story also describes Taro becoming an old man as he opens the box. However, the story ends with Taro's death after becoming an old man. The third version of the story is the same ending described in "Otogizoushi" where Taro changes into a crane and goes back to Hourai-Mountain where he becomes a god.

In the story of Urashima Taro told today, Taro turns into an old man regardless of doing a favor for the turtle, which may lead some readers to feel pity for him. However, the original story does not indicate that Taro saves a turtle from children. The story describes that a turtle becomes a princess and invites Taro to go to the Dragon Palace. The princess also asks Taro to marry her as well. The story told today seems to be created so it coveys more meaning. I use an ending which I modified from "Otogizoushi" to make it easier for users to understand the story.

To make the content understandable for Japanese learners at the intermediate level, I modified the story of Urashima Taro by deliberately using vocabularies and grammar which can be recognized and understood by the intermediate level students. The instructor of Japanese program at Michigan State University, Yoshimi Skakibara, advised on the Japanese language in the script. After the Japanese script was completed, I translated it into English[4].

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[4] Refer to APPENDEX C STORY SCRIPT IN ENGLISH

Storyboard

Chapter 1: Saving the Turtle

This chapter introduces the main character, Urashima Taro and how he meets a turtle, who is another important character of the story. Urashima Taro lives by the sea and makes his living by fishing. When he is walking on the beach one day, he finds some local kids tormenting a turtle. He tells the kids to stop tormenting the turtle and let him go. The kids insist that it is okay for them to torment the turtle and do not stop bullying the turtle. Taro tells the kids that he will give away all the fish he has caught in exchange for letting the turtle go. Thanks to Taro, the turtle was let free. Before going back to the sea, the Turtle thanked Taro and tells him that he will never forget his kindness.

Chapter 2: Returning the Favor

Several days pass after the incident. The turtle that Taro saved from the kids comes to see Taro when he is fishing on a boat. The turtle tells Taro that he came back to see him to repay his favor. The turtle tells Taro that he will take him to the Dragon Palace where the turtle lives. Taro doesn't believe such a palace exists under the water, however out of his curiosity; Taro decides to go to the Dragon Palace with the turtle.

Chapter 3: Dragon Palace

Taro goes under the water with the turtle to go to the Dragon Palace. At the bottom of the sea, Taro finds a beautiful castle which the turtle calls the "Dragon Palace". A beautiful

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princess welcomes him at the entrance. The princess thanks Taro for helping the turtle

and provides Taro with plenty of delicious seafood. He enjoys the palace and stays there

for awhile. As he spends time with the princess at the palace, he gradually falls in love

with her, and she does as well. They later get married and start to live happily together.

Chapter 4: Farewell

Three years pass. Taro comes to miss home as time goes by. He decides to go home and

tells the princess his intentions. The princess asks him not to go back to his home above

the sea and tell him to live with her forever. Yet, Taro insists that he will go home, and

the princess eventually agrees to let him go back. The princess gives Taro a box and says

it will allow him to go back to where he came from. She also tells him not to open the

box no matter what happens.

Taro takes the box and begins his journey home with the turtle.

Chapter 5: Returning Home

When Taro returns, to his former village, he realizes that things have changed drastically.

He can not find his house so he asks a villager if he knows where his house is. Taro

introduces himself and explains to the villager where he used to live, yet the villager

doesn't know where his house is. However, the villager tells Taro that he has heard of a

rumor about a man named Taro disappearing from the village three hundred years ago.

Chapter 6: Opening the Box

Taro is very shocked to find out time went by 100 hundred times faster above the sea than under the sea. After thinking about what he should do now, he remembers about the box the princess gave him. Although Taro remembers the princess's warning, he still opens the box and white smoke comes out of the box.

Chapter 7: Transformation

The smoke turns him into an old man. Taro realizes that time flows much slower under the water than above the water and that the smoke changed him to his true age. When Taro is crying out of despair, the turtle appears in front of him. The turtle turns herself into the princess and tells Taro that he has saved her before so now it is her turn to do a favor for him. The princess then turns back into the turtle again while Taro himself changes into a turtle. The princess who now is the turtle suggests to Taro that they should live together under the water. Taro goes back to the sea with the turtle at the end. Taro and the turtle (princess) live happily ever after.

Information design

This language learning software is divided into four sections: "Introduction," "Tutorial," "Story" and "About Us." These sections are designed to use the main language learning tool effectively.
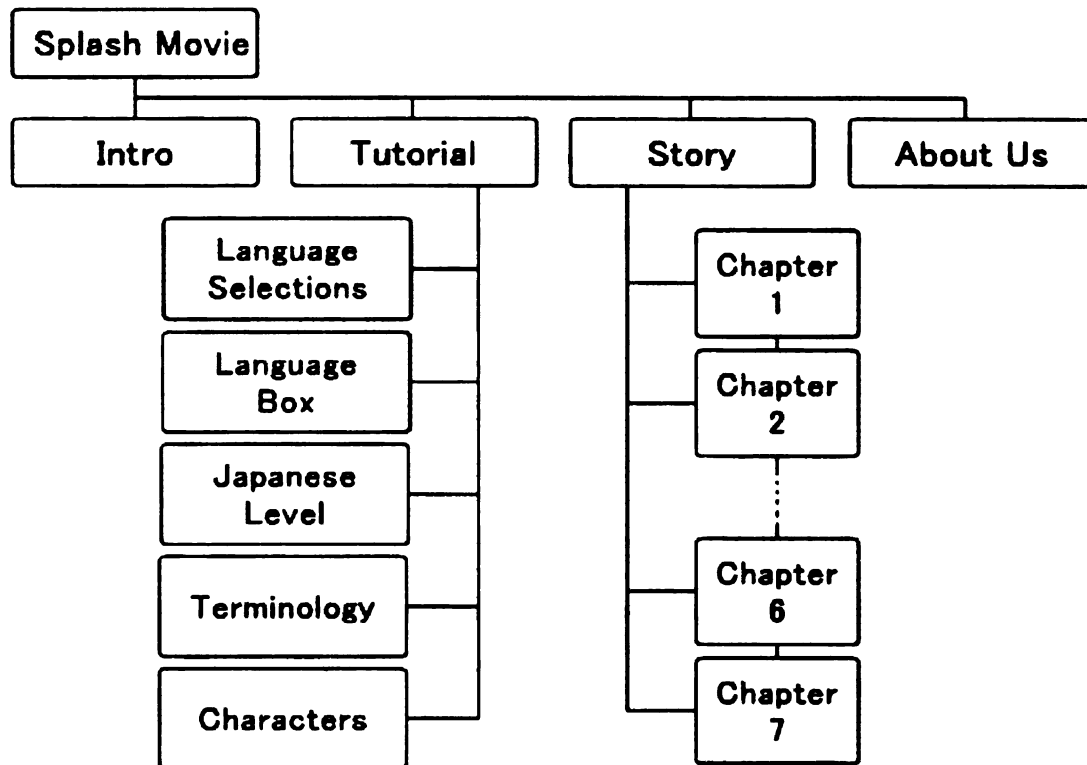
Figure 3 Information structure

1. Introduction

The first section of this language software is "Introduction". Introduction explains what the story of Urashima Taro is about.

2. Tutorial

The "Tutorial" section consists of another five subsections: Language Selections, Language Box, Japanese Level, Terminology and Characters. These subsections provide learners with information to watch the story effectively. "Language Selections" explains the subtitle option located in the "Story" section. "Language Box" explains the use of four categories: Overview, Vocabulary, Hints, and Script, which are located in the story

section as well. "Japanese Level" indicates that the software of Urashima Taro is designed for students who are at the intermediate level of Japanese learners. "Terminology" notifies users with abbreviations of words used in the "Vocabulary" and "Hints" under the Language Box. "Characters" introduces each character in Urashima Taro with visual aid.

3. Story

The "Story" section is the main content of this website. All the characters, objects and backgrounds appeared in the story are illustrated and animated by Macromedia Flash MX. The story is divided into 7 separate chapters. The whole 7 chapters take 15 minutes to play. This section begins with the scene selection to let users select a chapter they want to play. Each chapter consists of an animation screen on the left side and "Language Box" on the right side. This interface helps users watch the story effectively.

INTRO TUTORIAL STORY ABOUT US

Overview | Vocabulary | Hints | Script

着く [つく]
to arrive, to get to

立派な [りっぱな]
magnificent

城 [しろ]
castle

門 [もん]
gate

おとす
to drop
cf. ~をおとす〈Vt〉 ~がおちる〈Vi〉

やってくる

Review Vocabulary of Chapter2

‹ previous chapter 3 / 7 next chapter ›
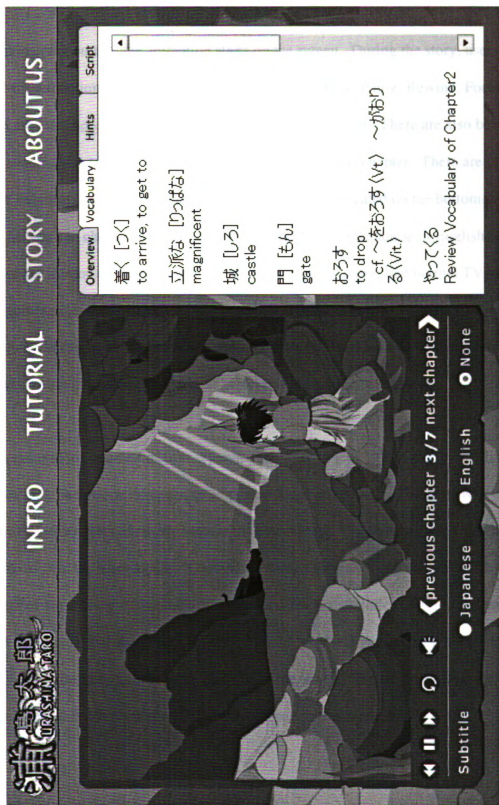
● Japanese ● English ● None

Subtitle

Figure 4 Screenshot

By clicking play button, the animation starts on the screen. During the story, users can control the animation by using the following functions; Play, Pause, Rewind, Forward, Repeat, and Mute of audio, located under the animation screen. There are also buttons which enable users to go to the next chapter and the previous chapter. There are three signs of subtitles; Japanese, English, and None, which are located on the bottom of the screen. Users can choose a subtitle language pressing either Japanese or English. Subtitles are located at the bottom of the screen during the story, like normal TV or movie subtitles. If they wish to watch the software without any subtitle, they may press none. Subtitle can be re-selected even during the story. By using this feature, learners can study for their own purpose in their preferable learning environment.

The Language Box consists of four separate tabs; "Overview," "Vocabulary," "Hints, " and "Script." Each tab is designed to help users learn effectively. The story will stop temporarily when users click any buttons to look at them. The button of play can be clickable to start the story again. "Overview" gives a summary of a chapter and a tip of grammar or vocabulary. "Vocabulary" features some vocabularies used in a chapter and explain the meaning of those vocabularies. "Hints" explains grammatical tips and proper nouns used in the story to help users understand the story. "Script" provides users with the whole script of the each chapter in both of English and Japanese.

CHAPTER4

Production

Interface and Navigation design

Adobe Photoshop CS and Macromedia Flash MX was the primary interface design

software. Design principles were considered into the layout so that anyone would feel

comfortable and aesthetically pleased while watching the screen. I used both Kanji and

English to create title logos and drew some smoke in the background of the logo in

reference to the transformation in Urashima Taro. I chose blue as a main color to

emphasize the main theme of the project, the ocean.

After users enter the web site, a short splash movie starts and jumps into the Intro page

after a few seconds. Users can skip the splash movie by clicking the SKIP SPLASH

button at the right-bottom corner of the screen. This will allow anyone – either first time

visitor or returning visitor – to use the web site easily.

Even though the navigation allows users to surf the content on their own, there is a

certain flow a first-time visitor should follow: Introduction, Tutorial, Story, and About

Us. Therefore, NEXT buttons were added at the end of each section to help users explore

the software by the sequence.

Characters and Illustrations

I began to create the characters of the story by sketching them out on a piece of paper. For creating the main character Taro, I sketched several different expressions of Taro and selected the best one which can adapt to various story situations and looks friendly to users. Six characters appear in the story beside Taro. In creating those six characters, I considered their interactions with Taro to make them fit better in the story. After deciding the designs of the characters, I used Macromedia Flash MX to illustrate the characters by using a pen mouse on the Wacom tablet.

1. Urashima Taro

Urashima Taro is a young male who is in his early 20s. The title of the story is named after him. He is a kind, earnest man. He lives by the sea and makes his living by fishing. He wears clothes which were worn by fishermen in the past. I created various facial expressions to convey senses of comedy to the audience.

Figure 5 Young Taro

When I created the old man version of Taro, I drew a white beard on his face and colored his hair white. I added some wrinkles to his face so the character would look old. However, I purposely let both the young version and the old version of Taro wear the same clothes to make them obviously seem the same person.
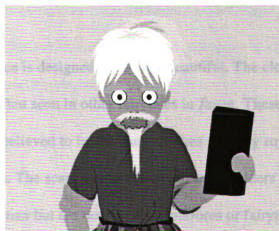

Figure 6 Old Taro

2. Turtle

The turtle is another important character of the story which later comes back to see Taro after being saved by him. The turtle takes Taro to the Dragon Palace in exchange for his kindness, and Taro meets a princess of the palace whom Taro eventually marries.
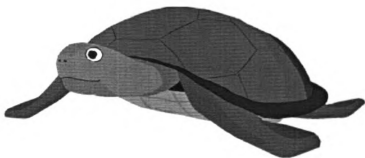

Figure 7 Turtle

3. Princess

The princess at the palace is designed to be very beautiful. The clothes which the princess wears in the story are often seen in other fairytales in Japan. These clothes used in many Japanese fairytales are believed to be the same clothes worn by royal families during the Asuka and Nara periods. The scarf wrapped around her shoulders is often worn by female characters who look human but are not, in other folklores or fairytales.
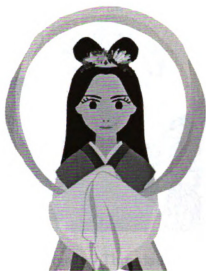
Figure 8 Princess

4. Three kids

Three children appear at the early stage of the story as bullies who torment a turtle. They wear clothes sort of like Japanese traditional clothes; "Kimono", however the kimonos that they wear are not the expensive kinds of Kimono. Their kind of kimonos were easily made from cotton. I deliberately created three different types of children with three distinctive hairstyles, facial expressions, and clothing.

Figure 9 Three kids

5. A villager

A man in a village who appears at chapter 5 does not appear in some versions of Urashima Taro. However, since there are not any new characters after chapter 5, I purposely created a villager to make the story more interesting. The villager has a hairstyle called, "chon-mage", which was the common hairstyle of warriors in Japan. The villager also wears clothes which imitates a warrior as well.

Figure 10 A villager

Animation

I used Macromedia Flash MX to develop the animation. My goal was to create the animation with the natural movement of characters and objects as cartoons on television or movies represent.

For backgrounds, I attempted to get visual effects of distance between near and far by implementing different speed to move those near and far objects.

For characters, I created various body parts of the characters in order to make the movement of characters looking natural.

Sound

The audio in the story section consists of the narration and music. The result of the quantitative research by target audience shows that improving the listening skill is the highest purpose to use the Internet and CD-ROM.

In order to help users improve their listening skill effectively, it is important to determine the right volume and narration speed which are comparable with the Japanese level of the users. I listened to the audio materials actually used in intermediate Japanese classes and studied the speed of the materials for my project. I recorded my own voice for all the characters in Urashima Taro. I used Sony Sound Forge 7.0 to adjust spaces between sentences. For the characters beside Taro, I used an audio editing program called, "Audiocity" to change the voice pitch for each character. Audiocity allows you to save files only as MP3 format.

I utilized a software called, "Sound Track" by Apple, and combined different sound clips to create my own music. I chose various kinds of music to match each scene perfectly. For example, I used up-tempo music for the scene where Taro goes to the Dragon Palace with the turtle. Those music clips are saved as AIF and compressed into MP3 format in Flash.

Flash and Interactivity

I separated this program into several files as many as possible, to minimize the size to download. The story section is divided into 7 movie files and 7 language box files by each chapter.
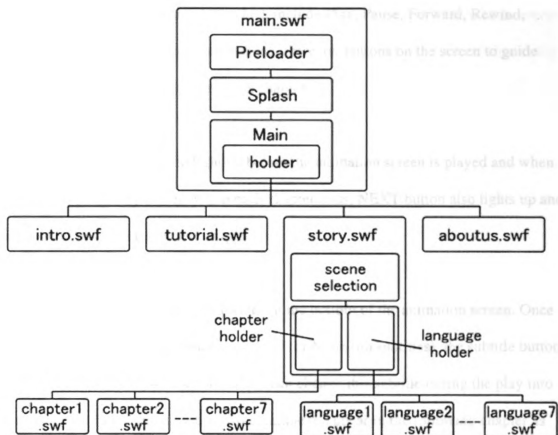

Figure 11 Flash movie tructure

The Story section contains useful interactive tools. These features will help users learn Japanese effectively.

Although the whole story of Urashima Taro only plays for 15 minutes, I deliberately divided the story into 7 short chapters. Each chapter includes learning elements such as

vocabulary, grammars and scripts. Users may choose any chapter since the story section is designed to begin with menu selection screen.

After selecting scenes, users will move onto the animation screen. I created buttons to play the animation screen smoothly, which include Play, Pause, Forward, Rewind, Repeat, Mute buttons. As mentioned above, there are buttons on the screen to guide users to the next chapter or to a previous chapter.

The Play button is designed to light up before the animation screen is played and when the screen is paused by a user. When each chapter ends, NEXT button also lights up and blinks, guiding users to the next chapter.

The buttons to choose subtitles are located at the bottom of the animation screen. Once you choose subtitles among Japanese, English or None (no subtitles), the subtitle button that users have selected will be red. Users can change this subtitle during the play into another. Once the subtitle is set, it will continue to appear in the following chapter as well unless the user desires to switch it to a different language or turn it off.

The Language Box, which is located next to the animation screen, consists of four tabs: Overview, Vocabulary, Hints, and Script. The animation screen will stop if a user presses any of the Language Box tabs. I deliberately set up the animation screen to pause when a user clicks on any of the four tabs in order for the user to focus on one thing at a time rather than two at the same time.

Delivery

The internet is the main platform which delivers this program. The results of the quantitative research indicate that 10 percent participants use CD-ROMs as their sources to study Japanese, while 38% of them use the internet. Based on this data, I chose only the Internet as this software's platform.

Chapter 5

Post-Production Research

Research Method

Objective

The post-production research consists of two parts: a qualitative survey and an user observation. The purpose of the qualitative survey is 1) to test the usability of the software; 2) to investigate how this production can help the target users learn Japanese; and 3) to evaluate the effectiveness of this project. The purpose of the observation is to know how users interact with the software and to understand their ways of studying Japanese using this web site.

Procedure

The subjects were students who had taken Japanese 200 or 300 level courses at Michigan State University. The subjects were contacted by email[5] from the instructor, Yoshimi Sakakibara. This survey collected data from 5 students who study Japanese as a second language. Three were male. Three were from the 300 level course and the other 2 were from the 200 level course. I observed them using the software and took notes of their reactions. After they finished exploring the software, the subjects were asked to fill out a questionnaire[6].

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[5] Refer to APPENDIX E RECRUITING ADVERTISEMENT

[6] Refer to APPENDIX F QUESTIONNAIRE FORM OF QUALITATIVE RESEARCH

User Observation

Four of the five participants consented to let me observe them while they were using the software.

"Jason" was a male student, who finished a 300 level course and will take a 400 level course next semester. He said he loves to use the Internet for the purpose of both learning and entertainment. He started playing the software with no problem. When he moved to the "Tutorial" section, he didn't pay much attention to the subsections. When he entered the "Story" section and selected Chapter 1, he clicked the Play button without exploring any other features. After he played the story, he turned on the Japanese subtitles. After he finished watching Chapter 1, he clicked on the "Script" tab in the Language Box. He read through it all quickly. It seemed he learned about some new words and expressions he didn't know before. He watched the rest of the chapters with the Japanese subtitles on. He occasionally, but not often, clicked on the "Vocabulary" tab in the Language Box while he was watching the story. He sometimes laughed at some of the scenes. After he finished using it, he commented that it was interesting to use this software and it was a good practice to improve his listening skill. He seemed to understand the Japanese language in this story pretty well. He mentioned that he was one of the top students in the last semester's 300 level courses. He could be categorized as advanced-intermediate Japanese learners. He also spoke good Japanese.

"Brian" was a male student, who finished a 300 level course, and will take a 400 level course next semester. He read through all the subsections located in the "Tutorial" section. Before playing the story, he spent a little time in the Language Box to read the "Overview," vocabulary in the "Vocabulary," and grammar in the "Hints." Right after he played the story, he turned on the Japanese subtitles, switched to the English subtitles after a while, and finally turned it off. In Chapter 2, he started with reading the "Overview", and then moved to the "Script." When he was watching the "Story", he did not turned on any subtitles. In Chapter 3, he turned on the Japanese subtitles till the end. After the story finished, he looked through the "Hints" section. In Chapter 4, he started with reading the "Overview" and moved to the "Story", keeping the Japanese subtitles on from the previous chapter. He also explored the "Vocabulary" section. After finishing the chapter, he checked the "Script." He started Chapter 5 by reading the "Script" before he played the "Story." He sometimes went to the "Vocabulary" section. He showed the same pattern in Chapter 6 too. In Chapter 7, he took a look at all the terms in the Language Box. He kept the "Vocabulary" tab on, as he started the animation. He paused once, read the Japanese subtitles, and looked up words in the "Vocabulary."

"Bob" was a male student, who finished a 200 level course, and will take a 300 level course next semester. He played all the subsections in the "Tutorial" thoroughly. He began the "Story" by reading the "Overview." He quickly figured out how to play the story. He tried to figure out how to turn on the subtitles, switching between different options. He selected the English subtitles in the middle of Chapter 1. He sometimes paused the animation and read the English subtitles. At the end of the animation, he

clicked all the tabs in the Language Box. In Chapter 2, he spent some time to examine all the "Overview," "Vocabulary," "Hints," and "Script" contents before playing the story. He turned on the Japanese subtitles in this chapter. He played the animation without pausing at all. He kept the same pattern of interaction in Chapter 3, 4 and 5. In Chapter 6 and 7, he also started each chapter by checking all features in the Language Box, but switched the subtitles to English.

"Sue" was a female student, who took a 300 class and will take 400 level course next semester. She read all the subsections in the "Tutorial," and moved to the "Story" section. She began Chapter 1 with the Japanese subtitles on. After the animation was over, she checked some words in the "Vocabulary." In Chapter 2 and 3, she sometimes looked up in the "Vocabulary," while she was watching the story. In Chapter 4 to 7, she first examined the "Overview," "Vocabulary," and "Hints" in the Language Box, and then played the animation. She laughed a lot at several scenes.

Findings from User Observation

I noticed that the 4 subjects were using the software in different ways. Bob and Sue showed certain patterns after they figured out the best way of using the software. As their certain patterns, Bob and Sue checked out parts or all the features in the Language Box before they played the story. Jason looked through the Language Box after the animation of each chapter was over. Brian changed the way he was using the software in each chapter.

Survey Results

Tutorial section

There are five subsections in the Tutorial section: Language Selection Tutorial, Language

Box Tutorial, Japanese Level Tutorial, Terminology Tutorial, and Character Tutorial,

which are designed to review before reading the main story of Urashima Taro. Four

students rated the tutorials «Very Helpful» or «Helpful» and one felt they were only

«Somewhat Helpful».

Story used in the Story section

None had read Urashima Taro before. All students rated the content of the story «Very

Enjoyable» or «Enjoyable». All the students rated the illustration and the visual

movement «Very Attractive». Four students thought the speed of the dialog was «Just

Right». One student (from the 200 level) thought it was «Somewhat Fast».

Japanese language used in the Story section

One student from the 300 level indicated they understood «All» of the spoken Japanese in

the story, and 2 from the 300 level understood «Most» of it. On the other hand, the 2

students from the 200 level only understood «Some» of the spoken Japanese in the story.

Experience with Japanese also influenced the perception of how advanced the content

was. Three students thought the level of Japanese used in the story would be classified as

«Intermediate». One from the 300 level thought it would be classified as

«Beginner/Intermediate». One from the 200 level thought it would be classified as

«Intermediate/Advanced».

Subtitle Selections for the animation

All the students rated Japanese subtitles for the story «Very Helpful» or «Helpful».

Three students rated English subtitles «Very Helpful» or «Helpful». Two students did not

use English subtitles.   All the students thought it was «Very Easy» to find the use of

subtitles in the Story section.

Control buttons for the anmation

Four students rated the Pause button on the animation screen «Very Helpful». One

student rated it «Somewhat Helpful». Two students rated the Rewind button «Very

Helpful» or «Helpful». One student rated it «Somewhat Helpful». Two students did not

use the Rewind button. One student rated the Forward button «Very Helpful». One

student rated it «Somewhat Helpful». Three students did not use the Forward button.

Four people did not use the Repeat button. One student rated it «Very Helpful». Four

people did not use the Mute button. One rated it «Not Helpful». All the students thought

it was «Very Easy» or «Easy» to find the use of control buttons.

Language Box in the Story section

All the students rated Overview in Language Box «Very Helpful» or «Helpful». All the

students rated Vocabulary in Language Box «Very Helpful» or «Helpful». Two students

rated Hints in the Language Box «Very Helpful» or «Helpful». Two students rated it

«Somewhat Helpful». One student rated it «Not Helpful». Four students rated Script of the story «Very Helpful». One student did not use the script. All the students thought it was «Very Easy» to find the use the Language Box.

Japanese Learning

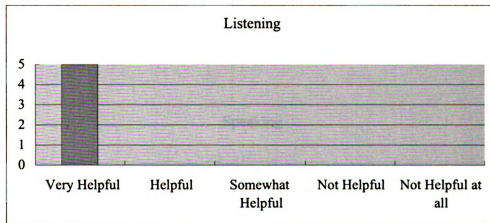All the students thought this web site was «Very Helpful» to reinforce their Listening skill.

Figure 12 Listening

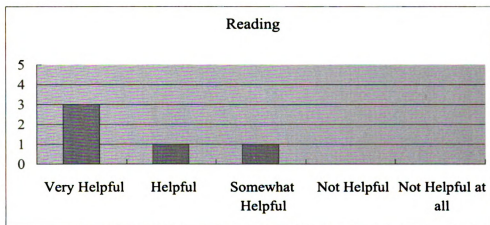Four students thought this web site was «Very Helpful» or «Helpful» to reinforce reading skill.

Figure 13 Reading

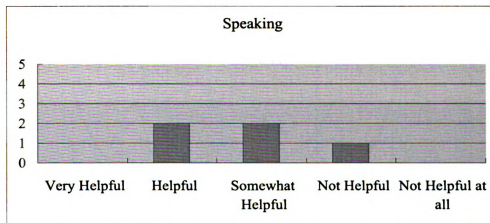Two students thought this tool was «Helpful» to improve speaking skill.

Figure 14 Speaking

Four students thought the web site was «Very Helpful» or «Helpful» to learn

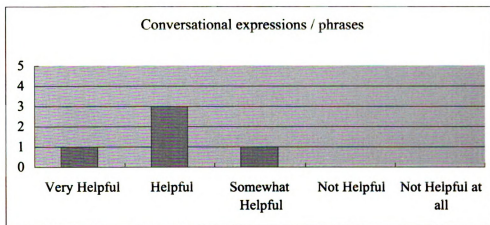Conversational expressions or phrases.

Figure 15 Conversational expressions / phrases

Four students thought this web site was «Very Helpful» or «Helpful» to learn Vocabulary.
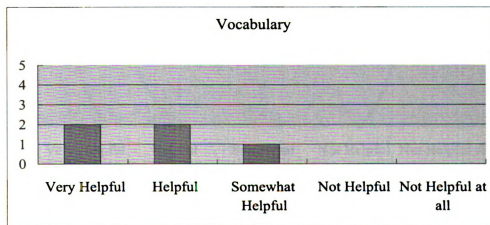

Figure 16 Vocabulary

All the students thought this web site was «Very Helpful» or «Helpful» to learn Grammar.
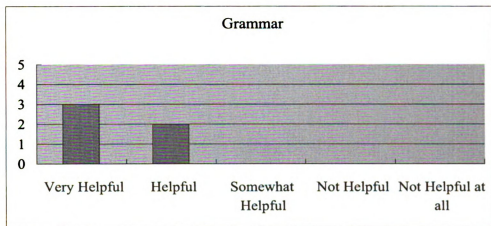
Figure 17 Grammar

Four students thought this web site was «Very Helpful» or «Helpful» to learn Kanji.
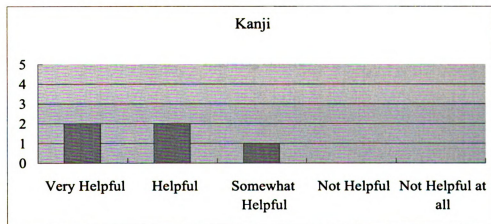

Figure 18 Kanji

Four students thought this web site was «Very Helpful» or «Helpful» to learn Keigo.
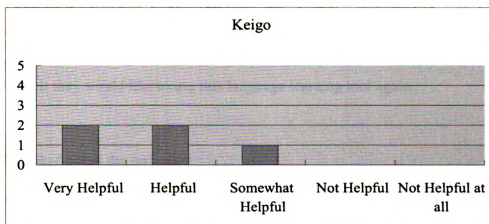
Figure 19 Keigo

Four students thought this web site was «Very Helpful» or «Helpful» to understand
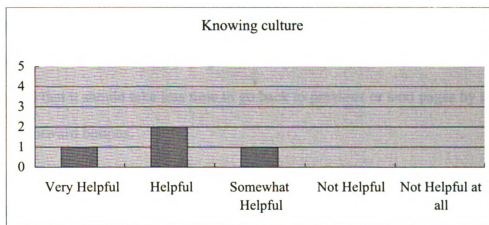
Japanese culture.

Figure 20 Knowing culture

The web site

All the students thought it was «Very Easy» and «Easy» to use the web site. They felt it was «Very Enjoyable» or «Enjoyable» to use this web site for their Japanese learning. They also felt they would like to use this language learning tool again.

What they liked about the web site

Two students described the site as a great listening tool. Four students liked visual aspects of the website including the animation and illustration. Two students liked the interactive features of this web site, including the pause and the rewind buttons, and Japanese subtitles that help them understand the content of the story.

What part of the website could be improved

Three students thought there should be more contents in the Hints section of the Language Box. One student suggested that the ending of each chapter should be easier to recognize. For example, adding the sign "continued" to inform users to move on. One student said that it should take less time to go back to previous or next pages by using the rewind or forward buttons.

Findings from Survey

They liked the visual aspects a lot including illustration and animation. The subsections in the Tutorial section helped users prepare to watch the story and use the features in the Story section. They thought the Language Box was helpful except for the Hints section.

Many students agreed that interface, navigation, and interactivity of the web site are well designed.

The degree to how much the students understand the content of the story was co-related to the students' Japanese level. Students in the 300 level understood much more than students in the 200 level. However, students in the both 200 and 300 levels understood the content of the story, Urashima Taro. The students thought that this web site works best to improve their listening skill.

Based on the findings from the user observation and the survey, a few improvements could be made in the future. "Hints" in the Language section should contain more content. The interface that indicates the end of each chapter could be more obvious. The Rewind and Fast Forward buttons could be added for users' convenience.

CHAPTER 6

Conclusion

The production of the thesis is a Japanese language learning web site using the storytelling animation of a Japanese folklore story. This project was designed for college students, who study Japanese as a second language and are at intermediate level. The objective of this project is to design a new effective learning tool with various multimedia and interactive features.

My own experience as a second language learner inspired the idea to combine the features of DVDs, a language learning tool such as dictionary, and a storytelling animation. I deliberately designed the interface that users can explore easily and encourage their language learning.

One of the biggest challenges was to understand the target audience. The pre-production survey was conducted in intermediate level classes of Japanese program at Michigan State University. It has taught me a lot about how Japanese language students learn. The user testing for the post-production research showed me their actual ways of learning Japanese language on the Internet. Through those surveys, I could gather insights for designing the storytelling learning web site.

As the result of the quantitative research shows, students at intermediate level are interested in the use of online resources for Japanese language learning. However, they

still have a hard time in finding good web sites appropriate to their level of skills. Students at intermediate level are positive in exploring new styles of studying Japanese.

Learning Japanese language is as challenging as learning other languages. There are many areas to study, such as Listening, Reading, Grammar, Vocabulary, Speaking, and so on. It is so hard to master all the areas of a language.

Ideally, there should be appropriate materials to assist students of all levels of learning language and all purposes. My product was designed mainly to reinforce learner's listening skills. Based the post-production research, I feel the web site was effective at accomplishing it's goal for intermediate Japanese language learners.

APPENDIX A CONSENT FORM OF QUANTITATIVE RESEARCH

Using Digital Storytelling for Japanese Language Learning
Consent Form

Instructions
You are being asked to participate in a survey for the production of a thesis called, Using Digital Storytelling for Japanese Language Learning. Please read this consent form thoroughly. If you agree to participate, please sign your name at the bottom of this page and you will start the questionnaire.

Project Description
The purpose of this production thesis is to create a new Japanese language learning tool for American college students who study Japanese as a second language. The product will be a web site containing an animated story related to Japanese culture or trends. It will also include explanation of grammar and vocabulary used in the story to help learners.

Survey Procedure
The survey will take around 10 minutes to complete. You are being asked to answer 18 questions in the survey. The purpose of this survey is to discover what learning materials you use to supplement and enhance your learning of Japanese and to generate ideas on how to create more effective learning materials for you.

Participation in the survey is voluntary. This survey will be conducted only with your consent. You may stop participating in the survey at any time for any reasons. You don't have to answer any questions you do not want to. Participation in this project will in no way effect your evaluation in the class.

Confidentiality
The results of the survey will be used for comparative research and design purposes only. Your privacy will be protected to the maximum extent allowable by law. All responses to the survey will be anonymous. Your name will not be associated with the findings. The result of this survey will be used only by the investigators. The data will be stored in a locked cabinet and on a drive on a password-protected computer, available only to the investigators.

Contact Information
If you have any questions about this project, please contact the principal or secondary investigators:

Principal Investigator	Secondary Investigator
Brian Winn	Asuka Nakagawa
253 Comm Arts Building	253 Comm Arts Building

East Lansing, MI 48824	East Lansing, MI 48824
517-353-5497	517-353-5497
winnb@msu.edu	nakagawa@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 – anonymously, if you wish – Peter Vasilenko, Ph.D., Chair of the University Committee on Research Involving Human Subjects (UCRIHS) by phone: (517) 355-2180, fax: (517) 432-4503, e-mail: ucrihs@msu.edu, or regular mail: 202 Olds Hall, East Lansing, MI 48824.

Statement of Consent
If you agree to participate in this survey, please sign and date below.

"I voluntarily agree to participate in this survey."

_____

Printed name

_____   _____

Signature   Date

APPENDIX B QUESTIONNAIRE FORM OF QUANTITATIVE RESEARCH

Questionnaire for "Using Digital Storytelling for Japanese Language Learning"

01) What is your gender?   ___ Male   ___ Female

02) How old are you?   ___ years old

03) Are you native English speaker?   ___ Yes   ___ No

04) How long have you been studying Japanese?   About ___ years

05) Have you ever been to Japan?   ___ Yes   ___ No

06) What reason motivated you to want to learn Japanese?

07) What is the biggest challenge you have in trying to learn Japanese?

08) Are you finding that Japanese is easy or hard to learn?
___Easy   ___In between   ___Hard

09) Do you use the Internet or CD-ROM to learn Japanese by yourself?
___Neither   ___Both   ___Internet only   ___CD-ROM only

10) If you use the Internet or CD-ROM to learn Japanese by yourself, **how satisfied are you in using** them for the following purposes, using a scale from 1 = strongly satisfied to 5 = strongly dissatisfied. If you do not use the Internet or CD for a particular purpose, please leave it blank.

_____ To improve listening skill
_____ To improve speaking skill
_____ To improve reading skill
_____ To improve writing skill
_____ To learn grammar
_____ To learn vocabulary
_____ To improve conversational expressions/phrases
_____ To learn Hiragana and Katakana (syllabic Japanese alphabets)

____ To learn Kanji (third Japanese alphabet from China)
____ To use dictionary or translation tool
____ To know more about Japanese culture or trends

11) How interested would you be in using Japanese language learning materials on the Internet or CD-ROM for the following purposes? Please write your answer, using a scale from 1 = very interested to 5 = not interested at all.
____ To improve listening skill
____ To improve speaking skill
____ To improve reading skill
____ To improve writing skill
____ To learn grammar
____ To learn vocabulary
____ To improve conversational expressions/phrases
____ To learn Hiragana and Katakana (syllabic Japanese alphabets)
____ To learn Kanji (third Japanese alphabet from China)
____ To use dictionary or translation tool
____ To know more about Japanese culture or trends

12) How easy is it for you to find Japanese language learning materials on the Internet or CD-ROM which are appropriate to your ability level for the following purposes, using a scale from 1 = very easy to 5 = very hard?
____ To improve listening skill
____ To improve speaking skill
____ To improve reading skill
____ To improve writing skill
____ To learn grammar
____ To learn vocabulary
____ To improve conversational expressions/phrases
____ To learn Hiragana and Katakana (syllabic Japanese alphabets)
____ To learn Kanji (third Japanese alphabet from China)
____ To use dictionary or translation tool
____ To know more about Japanese culture or trends

13) How often do you use the following to improve or reinforce your Japanese skills? Please check your answer.

___ Never	___ Sometimes	___ Often	The Internet
___ Never	___ Sometimes	___ Often	Computer CD-ROM
___ Never	___ Sometimes	___ Often	Audio cassette or audio CD
___ Never	___ Sometimes	___ Often	Radio
___ Never	___ Sometimes	___ Often	Broadcast or Cable Television
___ Never	___ Sometimes	___ Often	DVD Discs
___ Never	___ Sometimes	___ Often	VCR Tapes
___ Never	___ Sometimes	___ Often	Movies shown in a Theater
___ Never	___ Sometimes	___ Often	Comic Book
___ Never	___ Sometimes	___ Often	Picture Book

___ Never ___ Sometimes ___ Often Fiction (novels, stories)
___ Never ___ Sometimes ___ Often Nonfiction writing
                                      (newspaper, magazine)
___ Never ___ Sometimes ___ Often Textbook
___ Never ___ Sometimes ___ Often Other _____

14) If you use DVDs for Japanese learning purposes, which of the following features do you use (if available)? Please check the applicable items below.
___ Japanese subtitles
___ English subtitles
___ English audio track
___ Japanese audio track

15) How much do you like the following types of stories (for learning or entertainment purposes), using a scale from 1=LIKE VERY MUCH to 5=DO NOT LIKE AT ALL?
___ Love story
___ College campus life
___ Comedy
___ Science Fiction
___ History
___ Folklore/Mythologies/Traditional Stories (ex. Crane Lady, Bamboo Lady, Golden Boy, Six Little Statues....)
___ Mystery
___ Horror
___ Non-Fiction (ex. Law, Economics, Finance, Crime.....)
___ Other _____

16) What specific dramas, movies, comics, or animes, if any, have you used to study Japanese? Please list the titles and genre.
Title_____ genre _____
Title_____ genre _____
Title_____ genre _____
Title_____ genre _____

17) If there was a web site with animated Japanese stories, what features would be desirable to help you improve your Japanese, using a scale where 1=very desirable to 5=not at all desirable.
___ Animation supplemented with English subtitles
___ Animation supplemented with Japanese subtitles
___ Animation supplemented with English audio dialog
___ Animation supplemented with Japanese audio dialog
___ Grammar explanation of dialog
___ Vocabulary explanation of words used in dialog
___ Furigana with Kanji (phonetic comment and reading aid)
___ Script of entire story in English text
___ Script of entire story in Japanese text

18) What other features would be desirable to help you improve your Japanese in a web site with animated Japanese stories?

Thanks very much for your time!

APPENDIX C STORY SCRIPT IN ENGLISH

Chapter 1
Once upon a time near the sea, there lived a very kind young man called Taro Urashima.
He made his living by fishing and picking up shells in the sea everyday.
One day, when he was on the way back from fishing in the sea, some children were making a lot of noise.
Taro: "Oh what's happening?"
As he went closer, he saw that they were tormenting a turtle.
He ran up to the children and scolded them.
Taro: "What are you doing? Stop it! What a pity!"
Children: "It's ok to beat a turtle."
Children: "It is. It is."
Taro: "Then, I will give you guys these fish.
You can take them back to your home and eat them.
In exchange, can you release the turtle?"
Children: "In that case, we have a deal."
He gave the children all the fish he was supposed to sell, to save the turtle.
The children went back home with the fish.
Taro: "Now it's safe.
Go back to the sea."
Turtle: "Thank you very much for saving me from harm.
I won't forget your kindness"
The turtle disappeared into the sea.

Chapter 2
After several days had passed, Taro was fishing as usual and the turtle swam over.
Turtle: "Mr. Taro Urashima, I am the turtle you saved some time ago."
I came back because I want to return your favor.
I live in the legendary Dragon Palace in the sea.
I came to pick you up and take you there."
Taro: "You can take me to the Dragon Palace?"
Turtle: "Yeah."
Taro: "I thought it was just a myth!"
Turtle: "No, it is real."
Taro was surprised, but he decided to follow the turtle because he was interested in what the Dragon Place looks like.
He rode on the turtle and went into the sea.

Chapter 3
Turtle: "Taro, here is the Dragon Palace."
When he opened his eyes, he saw a magnificent castle in the sea.
The turtle dropped off Taro at the front gate and swam off.
After a while, the princess came to the gate.
She was very beautiful.

Taro: Nice to meet you. I'm Taro Urashima.
Princess: "Mr. Taro Urashima, welcome to the Dragon Palace.
Thank you very much for saving the turtle.
Please enjoy yourself here."
He was guided into the castle.
There was a lot of food and pretty fish were dancing in the room.
Taro had very much fun and stayed in the Dragon Palace for a long time.
After a while, Taro and Princess fell in love.
Soon they got married.
They were very happy together in the palace.

Chapter 4
Three years had passed since he came to the Dragon Palace.
He gradually began to miss his old home.
Finally he decided to leave the palace.
Taro: "Princess, it has been three years since I came here."
I want to leave for my home."
Princess: "Why do you think like that?"
Taro: "I miss my home above the sea."
Taro: "Please don't leave.
You are my husband!
Your home is here with me now."
The Princess pleaded for Taro to stay, but Taro's mind didn't change.
Finally she gave up.
Princess: "I want you to stay here with me, but there is no way to keep you here.
But be warned, your former home may not be the same as you remember."
After saying that, the princess gave a box to Taro.
Princess: "Please take this Tamate-Bako with you.
It will allow you to return to your village as if you never left.
However, you must not open it whatever happens."
He received the Tamate-bako from her.
Then, he left the Dragon Palace riding on the turtle.

Chapter 5
Soon after he arrived at village, he wanted to go to his house.
However, something was strange.
He found his village had changed a lot.
He could not find his house where he lived.
He asked a man in the village.
Taro: "Excuse me. I am Taro Urashima. Do you know where my house is?"
Man: "Well, I have never heard of it."
Taro: "No, certainly I lived near here."
After a while, the man remembered something.
Man: "Oh yeah, I have heard a story of a young man with your name that didn't come back after he went to the sea three hundred years ago."

Chapter 6

Taro was very surprised.

Taro: "What on earth happened!?

I was at the Dragon Palace for only three years, but three hundred years passed here!"

He was at a loss.

Then, he noticed Tamate-Bako, which he was holding.

Princess: "You must not open it whatever happens."

He remembered what the princess said, but he decided to open the Tamate-bako anyway

When he opened it, white smoke came out.

Chapter 7

He had become an old man.

He realized that time had passed much slower in the Dragon Palace.

However by opening the Tamatebako, he returned to his current age.

He burst into tears, sitting on a beach.

Taro: "What should I do from now?"

The turtle, sensing the tears of Taro, returned to the beach.

The turtle transformed into the beautiful princess.

Princess: "Don't cry Taro. You saved my life once and now I will now save yours."

In a cloud of smoke, both Taro and the princess became turtles.

Both swam off into the sea to live happily for several thousand years together.

APPENDIX D Consent From of Qualitative Research

Using Digital Storytelling for Japanese Language Learning
Consent Form

Instructions
You are being asked to participate in a survey for the production of a thesis called, Using Digital Storytelling for Japanese Language Learning. Please read this consent form thoroughly. If you agree to participate, please sign your name at the bottom of this page and you will start the questionnaire.

Project Description
The purpose of this production thesis is to create a new Japanese language learning tool for American college students who study Japanese as a second language. The product will be a web site containing an animated story related to Japanese culture or trends. It will also include explanation of grammar and vocabulary used in the story to help learners.

Survey Procedure
The survey will take around 40 to 60 minutes to complete. You are being asked to explore the web site including the animation, and, after that, answer questions in the survey. The purpose of this survey is to conduct usability testing of the web site, to investigate how this production can help the users learn Japanese, and to evaluate the effectiveness of this projects.

Participation in the survey is voluntary. This survey will be conducted only with your consent. You may stop participating in the survey at any time for any reasons. You don't have to finish watching whole the animation if you don't want to, or answer any questions you don not want to. Participation in this project will in no way effect your evaluation in your future class.

Confidentiality
The results of the survey will be used for comparative research and design purposes only. Your privacy will be protected to the maximum extent allowable by law. All responses to the survey will be anonymous. Your name will not be associated with the findings. The result of this survey will be used only by the investigators. The data will be stored in a locked cabinet and on a drive on a password-protected computer, available only to the investigators.

Contact Information
If you have any questions about this project, please contact the principal or secondary investigators:

Principal Investigator	Secondary Investigator
Brian Winn	Asuka Nakagawa
253 Comm Arts Building	253 Comm Arts Building
East Lansing, MI 48824	East Lansing, MI 48824
517-353-5497	517-353-5497
winnb@msu.edu	nakagawa@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 – anonymously, if you wish – Peter Vasilenko, Ph.D., Chair of the University Committee on Research Involving Human Subjects (UCRIHS) by phone: (517) 355-2180, fax: (517) 432-4503, e-mail: ucrihs@msu.edu, or regular mail: 202 Olds Hall, East Lansing, MI 48824.

Statement of Consent
If you agree to participate in this survey, please sign and date below.

"I voluntarily agree to participate in this survey."

_____

Printed name

_____   _____

Signature   Date

APPENDIX E RECRUITING ADVERTISEMENT

Evaluation Opportunity for a Japanese Language Learning Web Site using Storytelling Animation

Volunteers are needed to assist in the evaluation of a Japanese language learning web site. Volunteers will have the opportunity to contribute their evaluation and insight regarding this project.

The web site is created for Japanese language learners to reinforce their Japanese language skills by watching an animated story related to Japanese culture. This is a thesis project of Asuka Nakagawa, MA student in the Telecommunication Department of the College of Communication Arts and Science at Michigan State University.

The purpose of this survey is to test the usability of the web site, to investigate how this production can help the users learn Japanese, and to evaluate the effectiveness of this project.

The volunteers should be students who were enrolled in 200- or 300-level Japanese courses in Spring semester 2004.

This evaluation will take 40 to 60 minutes and will be conducted between Monday July 12 to Friday July 30 2004. The location will be conference or study rooms in the Communication Arts and Science building, Business Library or the Main Library at Michigan State University.

If you are interested in this opportunity, please contact the person below to arrange a time and location to take the survey.
Asuka Nakagawa
nakagawa@msu.edu
(517)355-3137

APPENDIX F QUESTIONNAIRE FORM OF QUALITATIVE RESEARCH

Questionnaire for "Using Digital Storytelling for Japanese Language Learning"

01) What is your gender?   ___ Male   ___ Female

02) How old are you?   ___ years old

03) Are you native English speaker?   ___ Yes   ___ No

04) Which course-level of the Japanese Program did you take in this spring semester?
___ 200 level   ___ 300 level

05) How often do you use the Internet or CD-ROM for the purpose of learning Japanese?
___ Never   ___ Hardly Never   ___ Sometimes   ___ Often   ___ All the time

Questions about the TUTORIAL section:

There are five subsections in the TUTORIAL section including Language Selection, Language Tips Box, Japanese Level, Terminology, and Characters. Following are the questions related to them.

06) If you read the subsections in the TUTORIAL section, how helpful was each for you in preparing you to watch animation in the STORY section. Please circle one response below.

Language Selection Tutorial
Very Helpful 1   2   3   4   5 Not helpful at all or did not use

Language Tips Box Tutorial
Very Helpful 1   2   3   4   5 Not helpful at all or did not use

Japanese Level Tutorial
Very Helpful 1   2   3   4   5 Not helpful at all or did not use

Terminology Tutorial
Very Helpful 1   2   3   4   5 Not helpful at all or did not use

Characters Tutorial
Very Helpful 1   2   3   4   5 Not helpful at all or did not use

07) What other information would be desirable to include as a tutorial to help you use the STORY section effectively? Please write any suggestions you have.

Questions about the STORY section:

08) Have you read or heard this story before using this software?   ___ Yes ___ No

09) How enjoyable was the content of the story?
___Very enjoyable ___ Enjoyable ___ Somewhat enjoyable ___ Slightly enjoyable
___Not enjoyable at all

10) Did you find the illustration visually attractive?
___ Very attractive ___ Attractive ___ Somewhat attractive __ Slightly attractive
___ Not attractive at all

11) Did you find the visual movement attractive?
___ Very attractive ___ Attractive ___ Somewhat attractive ___ Slightly attractive
___ Not attractive at all

12) In the story, how much of the spoken Japanese did you understand?
__ All ___ Most ___ Half ___ Some ___ Not al all

13) How would you classify the level of Japanese used in the story?
___ Beginner ___ Beginner/Intermediate ___ Intermediate
___ Intermediate/Advanced ___ Advanced

14) How was the speed of dialog?
___ Very slow ___ Somewhat slow ___ Just right ___ Somewhat fast ___ Very fast

15) How much did you enjoy learning Japanese by using this web site?
___Very enjoyable ___Enjoyable ___Somewhat enjoyable ___Slightly enjoyable
___Not enjoyable at all

16) There are several interactive functions in the software, including: Japanese and
English subtitles, control buttons for the animation (stop, pause, rewind, forward, repeat
and mute sound), and a language tips box (overview, vocabulary, hints, and dialog
script). If you used any of these functions, please circle one response to rate how helpful
each function was.

The story animation screen:
    Japanese subtitle
        Very Helpful 1   2   3   4   5   Not helpful at all or did not use

    English subtitle
        Very Helpful 1   2   3   4   5   Not helpful at all or did not use

Control the animation:
    Stop button
        Very Helpful 1   2   3   4   5 Not helpful at all or did not use

    Pause button
        Very Helpful 1   2   3   4   5 Not helpful at all or did not use

    Rewind button
        Very Helpful 1   2   3   4   5 Not helpful at all or did not use

    Forward button
        Very Helpful 1   2   3   4   5 Not helpful at all or did not use

    Repeat button
        Very Helpful 1   2   3   4   5 Not helpful at all or did not use

    Mute button to stop the sound
        Very Helpful 1   2   3   4   5 Not helpful at all or did not use

The language tips box on the right-hand side of the animation screen:
    Overview
        Very Helpful 1   2   3   4   5 Not helpful at all or did not use

    Vocabulary
        Very Helpful 1   2   3   4   5 Not helpful at all or did not use

    Hints (explanations of grammar and proper words, and tips)
        Very Helpful 1   2   3   4   5 Not helpful at all or did not use

    Script of entire story
        Very Helpful 1   2   3   4   5 Not helpful at all or did not use


21) How many vocabulary and grammar questions did you have which were not explained in the language tips box?
    None 1   2   3   4   5 Several

22) If you remember, please write down the vocabulary and grammar which you need to be explained in the language tips box? (Writing in English is also fine.)

23) How easy is it for you to find how to use control buttons in the animation screen?
    ___ Very easy   ___ Easy   ___ OK   ___ Hard   ___ Very hard
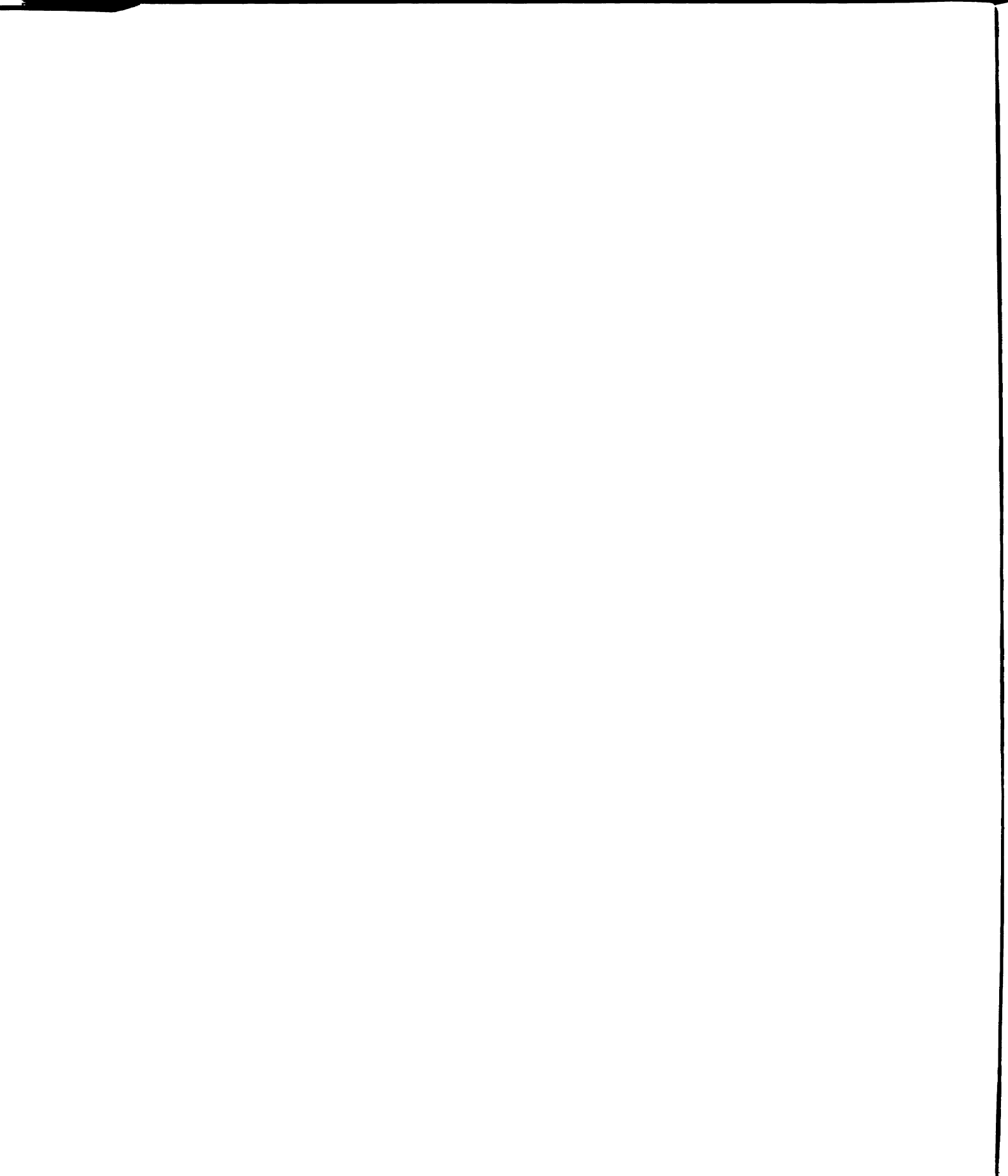
24) How easy is it for you to find how to use subtitles under the animation screen?
___ Very easy ___ Easy ___ OK ___ Hard ___ Very hard

25) How easy is it for you to find how to use language tips box on the right-hand side the animation screen?
___ Very easy ___ Easy ___ OK ___ Hard ___ Very hard

26) How easy was it to use the STORY section?
___ Very easy ___ Easy ___ OK ___ Hard ___ Very hard

23) What skills do you think this web site helped you reinforce or learn? Please rate the following skills using a scale from 1 = very helpful to 5= not helpful at all.

Listening
Very Helpful 1 2 3 4 5 Not helpful at all

Reading
Very Helpful 1 2 3 4 5 Not helpful at all

Speaking
Very Helpful 1 2 3 4 5 Not helpful at all

Conversational expressions / phrases
Very Helpful 1 2 3 4 5 Not helpful at all

Vocabulary
Very Helpful 1 2 3 4 5 Not helpful at all

Grammar
Very Helpful 1 2 3 4 5 Not helpful at all

Kanji (third Japanese alphabet from China)
Very Helpful 1 2 3 4 5 Not helpful at all

Keigo (humble and honorific form of verbs)
Very Helpful 1 2 3 4 5 Not helpful at all

Knowing culture
Very Helpful 1 2 3 4 5 Not helpful at all

Questions about the web site:

22) How easy was it to use the web site?
___ Very easy ___ Easy ___ OK ___ Hard ___ Very hard

24) Would you like to use this web site again for your learning?
___ Yes   ___ No

If no, why?

25) Please write down what you like about the web site.

26) Please write down what you wish could be improved in the web site.

Thanks very much for your time!

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