What Is the Participant Learning Experience Like Using YouTube to Study a Foreign Language?

Yuan-Hsiang Lo
University of Arkansas, Fayetteville

Follow this and additional works at: http://scholarworks.uark.edu/etd

Part of the Adult and Continuing Education and Teaching Commons, Communication Technology and New Media Commons, Educational Assessment, Evaluation, and Research Commons, and the Other Education Commons

Recommended Citation
http://scholarworks.uark.edu/etd/636

This Dissertation is brought to you for free and open access by ScholarWorks@UARK. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of ScholarWorks@UARK. For more information, please contact scholar@uark.edu, ccmiddle@uark.edu.
WHAT IS THE PARTICIPANT LEARNING EXPERIENCE LIKE USING YOUTUBE TO STUDY A FOREIGN LANGUAGE?
WHAT IS THE PARTICIPANT LEARNING EXPERIENCE LIKE USING YOUTUBE TO STUDY A FOREIGN LANGUAGE?

A Dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Education in Workforce Development Education

By

Yuan-Hsiang Lo
Pittsburg state University
Bachelor of Science in Biology, 2005
Pittsburg state University
Master of Science in Technology Education, 2007

December 2012
University of Arkansas
ABSTRACT

This research is to explore and understand participants’ experience using YouTube to learn a foreign language. YouTube and learning has become more and more popular in the recent years. The finding of this research will be adding more understanding to the emerging body of knowledge of YouTube phenomenon. In this research, there are three interviews and two questionnaires. The interviews are conducted to find in-depth responses from participants; the questionnaires are used to inquire demographic and basic information about the participants.

There are twelve themes found in this research. These themes reflect on the perceived experience using YouTube to learn a foreign language from participants. Among the twelve themes, there are two themes that contributed to positive perception of the experience, three themes contributed to negative perception of the experience; and seven themes contributed to neutral perception of the experience. Finding suggests that multiple factors may impact participants’ experience. These factors may be personal or external, or both. The significance of the finding is to explore the experience and find the re-applicability for future studies.
This dissertation is approved for recommendation to the Graduate Council.

Dissertation Chair:

_______________________________________

(Dr. Jules Beck)

Dissertation Committee:

_______________________________________

(Dr. Kit Kacirek)

_______________________________________

(Dr. Brent Williams)
DISSELTATION DUPLICATION RELEASE

I hereby authorize the University of Arkansas Libraries to duplicate this thesis when needed for research and/or scholarship.

Agreed
____________________________________
Yuan-Hsiang Lo

Refused
____________________________________
Yuan-Hsiang Lo
ACKNOWLEDGEMENTS

I want to express my gratitude to my dissertation committee, Dr. Beck, Dr. Kacirek, and Dr. Williams for their support and guidance along my journey. I would like to thank my committee chair, Dr. Beck for his tirelessness to help me overcome my language barriers, and showing me the way to be a well-disciplined scholar. I would like to thank my family for their unconditional support and love. And foremost, I would like to thank my only God, Jesus Christ, savior of my life for guiding me through the dark valleys and giving me the strength I needed when I felt helpless. All praises and glory belong to God.
# TABLE OF CONTENTS

CHAPTER I. INTRODUCTION .................................................................................. 1

Background .............................................................................................................. 1

Research Background ............................................................................................ 3

*Problem Statement & Purpose of Study* ............................................................... 6

*Research Questions* ............................................................................................. 6

*Significance of the Study* ...................................................................................... 8

*Scope of Study* .................................................................................................... 8

Theoretical Framework ........................................................................................... 8

*Research Method* ................................................................................................ 10

*Coding, Encoding, and Themes* .......................................................................... 12

*Participants and Sampling* .................................................................................. 13

Researcher ................................................................................................................ 16

*Role of Researcher* ............................................................................................... 16

*Background of Researcher* .................................................................................. 17

Credibility, Validity, and Reliability ........................................................................ 18

Figures .................................................................................................................... 20

Key Terms ................................................................................................................. 21

CHAPTER II. PRELIMINARY LITERATURE REVIEW ........................................... 22

*YouTube and Its Evolution* ................................................................................ 22

*YouTube and Learning* ...................................................................................... 23

*Virtual Courseware Project Principles* ................................................................. 29

*Research Design* ................................................................................................ 30
<table>
<thead>
<tr>
<th>Role of Researcher</th>
<th>32</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case Study</td>
<td>34</td>
</tr>
<tr>
<td>The Issues of Credibility</td>
<td>35</td>
</tr>
<tr>
<td>Coding</td>
<td>37</td>
</tr>
</tbody>
</table>

**CHAPTER III. METHODOLOGY**

<table>
<thead>
<tr>
<th>Research Design Overview</th>
<th>39</th>
</tr>
</thead>
</table>

*Objectives of Interview Questions to Corresponding Research Questions…* 42

*Fieldwork Gadgets and Interview Set-up* 44

<table>
<thead>
<tr>
<th>Data Collection Procedure</th>
<th>45</th>
</tr>
</thead>
</table>

*Step I. Deciding the Appropriate Approach* 45

*Step II. Get to Know Participants* 46

*Step III. Preparing to Watch YouTube Videos* 49

*Step IV. Interviews* 49

*Step V. Focus Group Interview* 52

<table>
<thead>
<tr>
<th>Analyzing Data</th>
<th>53</th>
</tr>
</thead>
</table>

*Coding Strategies* 54

*Setting Parameters and Defining Codes* 55

**CHAPTER IV. FINDINGS**

<table>
<thead>
<tr>
<th>Introduction</th>
<th>58</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Factors Contributed to Positive Perception</th>
<th>61</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Factors Contributed to Negative Perception</th>
<th>64</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Learning Routine</th>
<th>68</th>
</tr>
</thead>
</table>

| Participants Analysis | 69 |
YouTube lacked communication. 

YouTube learning lacked a way to evaluate learning.

I was able to go back to videos I watched anytime I wanted to.

I was able to access YouTube lessons at the time and I place wanted.

Expertise was the key factor that influenced whether I liked the video.

The difficulties of YouTube video lessons were not sorted appropriately.

I did not use other sources provided by the teacher from YouTube.

Lessons with clear objectives were more appealing to me.

Organization of video lessons made a difference of good or bad.

Technicability was important to a video quality.

I was able to use the lesson in practical application.

YouTube has advantages that might become a useful and popular educational tool in the future.

CHAPTER V. EXTENDED LITERATURE REVIEW.

Introduction.

CHAPTER VI. DISCUSSION & RECOMMENDATION.

Research Recap.

Conclusion.

Discussion and Implication.
Recommendation……………………………………………………………………………… 102

Recommendation to Future Studies…………………………………………………… 102

Recommendation for Practices………………………………………………………... 102

Funding……………………………………………………………………………………… 103

REFERENCES……………………………………………………………………………… 104

APPENDICES……………………………………………………………………………… 109

Appendix I: List of YouTube Videos Participants Watched………………………… 109

Appendix II: Demographic Survey……………………………………………………… 112

Appendix III: Survey of Technology Knowledge Background……………………… 113

Appendix IV: Interview Question Guide……………………………………………… 114

Appendix V: IRB Protocol Approval…………………………………………………… 115
CHAPTER I. INTRODUCTION

Background

I am one among the millions of people who visit YouTube on a daily basis. Using YouTube is no longer a trend for me; it has become a part of my life. Just as I thought that I am a YouTube addict, Google, the parent company of YouTube, released data last year showing that there are millions of individuals who visit YouTube every single day. Whether it is for fun, for serious business, or for politics, individuals on YouTube find reasons to spend minutes and hours watching videos. For the majority of the time I spend on YouTube, I find myself watching videos that educate me: videos that explain a concept, a drill, a phenomenon, or a trend, or sometimes videos that demonstrate, inform, or persuade. Some videos do the job well; but some videos cannot seem to connect the dots.

In 2011, Google released statistics that showed that there were over 4 billion hours of videos being watched around the world each month, which number of hours translates to 456,621 yearlong videos being watched each month collectively. Facebook also released statistics showing that 500 years of embedded YouTube videos were watched each day. Along with 3 trillion views of videos in 2011, the mind boggling number of videos tells at least one thing: there are a lot of individuals that watch videos on YouTube. Google also released statistics that showed there were 72 hours of video uploaded per minute. These numbers indicated that YouTube has a gigantic data pool.

YouTube allows users to freely access any videos that are set to public: including videos that contain educational content. Whether a video is created by an accredited university, or by a random video blogger, users can decide what best suits their needs. Literature suggest that there are more and more people who use YouTube as a tool to learn, but there is not much empirical data to understand this phenomenon. (Bonk, 2008; O’Reilly, 2005; Teng, 2007)
I became interested in understanding it in 2009 when I found out that I could freely learn how to use Adobe Illustrator from YouTube videos. I spent hours and hours finding videos that taught the program. I began to see some differences in video content created by different users and have noticed that some videos had obviously more popularity. I started to associate my past online learning experience to YouTube learning experience. I was curious because these learning experiences were similar yet different. The question that came to my mind was “What is it like to learn on YouTube?” To answer my own question, I began to seek an appropriate method to gather enough data so that I can explain the experience.

The art of adult learning explains that learning is affected intimately by factors that are closely related to the learner self (Knowles, 1980). It was this statement that made me understand that I have to find the answers from the learners, not the tool. Understanding a learning experience without a subject is unheard of. I, therefore, implemented a common subject in the study for participants so that the findings of these experiences would be consistent to the inquiry. A qualitative case-study design seems a good fit because the design is to inquire a contemporary phenomenon within a bounded system, and it yields in-depth findings to the experience (Merriam, 2009).

YouTube adapts Web 2.0 technology and allows freer user engagement and communication. Hence, a subject that emphasizes these strengths becomes an obvious choice. Language is the chosen common subject because it requires teachers and learners to communicate fundamentally. I look to explore and understand the experience; and ultimately, use these findings to build replicable methodology in the future so that I will be able to understand the experience not only on language learning, but also any subject that I am interested in.
Research Background

The advent of new web technology with high-speed broadband and mobile application has made video streaming via Internet more accessible to the general population. A social website like YouTube provides users the opportunity for endless creativity and innovative learning due to its freedom of creation and storytelling functionality, as well as access to a vast database of videos and other resources (Ohler, 2005/2006; Trier, 2007). The fast-paced evolution of technology continually creates tools and applications for researchers in online education. While traditional web-based learning lacks the intense face-to-face attribute of learning, YouTube, the product of Web 2.0 technology, provides both learner and instructor a bridge to engage through video and text (Bloom and Johnston, 2010). Online learning has already become a popular trend; and as the literature suggests, there is still a need to research the phenomenon of rapid evolution of video sharing-based teaching and learning (Snelson, 2008). Stanford and universities all around the world have been developing websites based on new technology to provide education to anybody who has Internet access. Additionally, Web 2.0, a technology that allows massive online user engagements, opens a gate to fill the gap between technology and learning experiences. Khan Academy, Udacity, University of Phoenix, and Ashford are examples of websites that provide online education to users. Some of them are free; some of them are tuition based. Some research statistics show that online learning is becoming more and more popular because of its strengths. (Deggs, et, al., 2009; Snelson, 2008; Snelson & Elison-Bowers, 2009)

The integration of social media and learning has evolved greatly in the past decade. YouTube, a social media website that was created for homemade videos, has become the single largest video database in a short amount of time. As the official YouTube blog claims, the view
count on the website each day was a little over 3 billion in November 2011; an increase from 1 billion views per day in 2009 (YouTube Global Blogspot, 2011). The hours of videos uploaded everyday was 24 hours per second in January of 2012; an increase from 35 hours per minute in 2010. These fast growing statistics show not only that there are more people who use YouTube on a more consistent basis but also that more people are utilizing YouTube as a tool (YouTube Global Blogspot, 2010). The large user number base allows users to have a great variety of choices of videos. Furthermore, the virtual classrooms allow the flexibility of classes in terms of time, place, and even the teachers (Ko, & Rossen, 2005). Despite the appearing advantages of using an Internet platform like YouTube, there are still limitations that baffle scholars in understanding this rapid growing phenomenon; studies that investigate YouTube learning generate more questions.

Burke (2009) conducted a study to investigate how health education faculties use YouTube as a teaching tool by using both open-ended interviews and survey questionnaires. The implication of the study suggests that there is a need to explore further in understanding the effect of YouTube learning in different ethnographical groups (p. 6). Furthermore, such studies will bring deeper understanding to this new and powerful tool and its impact on both teachers and learners (p. 7). Understandably, YouTube learning is a topic that is yet to be explored. In order to become more familiar with this phenomenon, I recognize the importance of understanding the experience from learners’ perspectives because the learners are the ones who decide the success of YouTube learning. As the learners describe their experiences, the truth of YouTube becomes unveiled and understood. It is the learners’ point of view that tells why YouTube learning has become a phenomenon.
The design of this research focuses on understanding learners’ experience using YouTube. Patton (2002) suggested, “Open-ended interview responses yield people’s experiences perceptions, opinions, feelings, and knowledge” (p. 4). A qualitative research design was constructed to fulfill the need to understand participants’ experience. Also, a supplementary quantitative instrument was added to the original qualitative design to provide subsequent analysis to participants’ background and related experiences. I narrow the topic of learning to a single subject: Chinese language. The unified subject allows the investigation of experience to be more consistent among participants and allows me to replicate the study with a different subject in the future for further investigation. Language learning itself requires a great amount of communication and practices between teacher and learner. The strength of Web 2.0 technologies is to allow a freer user engagement experience, thus, provides more encouragement to communication between the learners and teachers.

The research was designed to explore user experience. Students who were enrolled in a Chinese language class were informed of this study and invited to participate with all necessary information of this research presented to them prior to their decision to volunteer. All participants were given the freedom to use YouTube resources as either primary or secondary learning sources. Participants were also given the freedom to choose the time and place to watch the videos on YouTube as if they were any regular YouTube user. Finally, participants were encouraged to watch at least ten videos, as the minimum number of videos of the one subject appears to yield repetitive themes. To report their experience, the research was designed to interview the participants three different times with two quantitative measures. These interviews were constructed with informal interview settings and recorded with participants’ consents. Figure 1.1a displayed the design and flow of data collection.
The findings were generated through raw interview scripts and survey questionnaires. The interview scripts came from the field recording with the participants; all scripts were analyzed and cultural themes were created by grouping similar responses together, counting frequency of responses, relating responses into categories, and working with words. These steps helped condense the voluminous raw data. Detail coding information was displayed in later sections. Quantitative findings served as a descriptive purpose of the participants that inquired participants’ demographic background and related experience with technology.

**Problem Statement & Purpose of the Study**

It is becoming a popular trend to learn through social media; thereby, it is important to understand how tools like YouTube work and how learners use them. There is a need of qualitative investigation of the learning experience from learners who use YouTube videos as a source of learning (Burke, et al, 2009; Jiang, 2007; Nikopoulou-smyrni and Nikopoulous, 2010). However, there is still a lack of a qualitative study that investigates the learning experience by using YouTube, particularly in language learning. The value of understanding such personal experience from participants is unparallelled because the learners are the ones who define the success of learning in YouTube, especially when many empirical literatures suggest that YouTube-learning is a phenomenon yet to be explored (Bonk, 2008; O’Reilly, 2005; Teng, 2007). The purpose of this study is to understand the experience of the participants who use YouTube as a language-learning medium. The findings will reveal both the cultural portraits and cultural themes of the participants.

**Research Questions**

I seek to understand the language-learning experience from users who use YouTube as a learning tool. The goal of the research questions is to answer the core question of the study:
What was the experience of language learning like from YouTube videos? The findings of this research will add more empirical data to the emerging body of knowledge about the learning experience. The research questions are constructed to respond to the core question of study in four different aspects. The first aspect is the experience itself. I seek the descriptive finding of what participants go through in the process of learning through YouTube. The second aspect is the practical application of learning experience. I am looking to understand how the knowledge learned in those videos reflects on their practices. The third aspect is the modern online learning philosophy. Online learning models reflect on how learners learn. I seek to investigate the relevance of these models to the participants’ experience. Lastly, the forth aspect is how participants relate everything else to their YouTube learning experiences. I look to find out any element that brings impact to their learning experience: These questions are the research questions:

- What does the learner experience from YouTube lessons?
- How do YouTube lessons facilitate transfer of learning through standardized interaction between human users, machines and subject matter?
- How do components of a virtual learning model support learner experience?
- What else can the learner relate about the experience of YouTube learning?

The goal is to find themes in the responses of learners that will further describe and explain their learning on YouTube. Also, I look forward to comparing the findings to current literatures. The interviews may yield commonalities, similar themes, or similar sub-themes. Or, the interviews may yield no commonalities in any area.
Significance of Study

This research intends to establish a foundation for future studies of YouTube and learning. The research findings aim to use generated themes to create constructs of models that can be developed and replicated in future studies. Additionally, the findings focus on understanding the experience through the eyes of participants who learn through YouTube videos. These experiences are meaningful in three aspects: it is a reflection of current literatures related to YouTube and learning; it is creating more comprehensive knowledge to the emerging body of knowledge related to YouTube and learning; and lastly, it is creating a communication bridge between learners’ experience and technology. This research has three primary audiences and four secondary audiences for the findings. The primary audiences are scholars who research in the area of YouTube and learning; individuals who are interested in making teaching videos via YouTube; and scholars who work with online learning programs. The secondary audiences are YouTube interface engineers and programmers; the online program administrators, the adult education professionals, and the general audience.

Scope of Study

This study focuses on finding meaning from the learning experience of YouTube learning. Language, as a common subject of learning, is assigned to learners in order to have a consistent theme of learning. However, the finding of this research is not to generalize but to discover the experience.

Theoretical Framework

The theoretical framework is a set of principles that guides the research process. These principles create a bridge between the researcher and existing body of knowledge; and it determines how the phenomenon is perceived and comprehended.
The choice of research design was made based on the core research purpose—to find out the experience of YouTube learners—and it has a direct impact on the findings. Creswell (2007) quoted Yin’s (2003) comments on research design: “The design is the logical sequence that connects the empirical data to a study’s initial research questions and, ultimately, to its conclusions” (p. 20). Patton (2002) suggested that interviews consisted with open-ended interview questions inquired about people’s in-depth responses of one’s experiences, opinions, feelings, knowledge, and perceptions. Six guiding questions were considered prior making the decisions on methods:

- What are the purposes of the inquiry?
- Who are the primary audiences for the findings?
- What questions will guide the inquiry?
- What data will answer or illuminate the inquiry questions?
- What resources are available to support the inquiry?
- What criteria will be used to judge quality of the findings?

These six questions set the frame of research by understanding the primary goals (p. 13). Creswell (2007) summarized a set of principles to guide a good research design: research employs a design to collect multiple forms of data; research is framed within the assumption and characteristics of qualitative approach; clarify focus of research; develop layers of data collection process and data reports; writes in clear, engaging, and persuasive form; reflects both macro and micro cultures; and is ethical (p. 45).

To further understand the experience, a theoretical concept of virtual learning was introduced to this study. Desharnais and Limson (2007) developed design principles from the Virtual Courseware project. These principles were based on several successful Internet learning
projects from the last two decades. The original concept was introduced by Steve Jobs, CEO of Apple (p. 2). There are ten principles in the courseware project, and these principles served a role of fundamental inquiry of online learning experience related to a systematic concept, which guided the research in understanding the experience from participants (Desharnais & Limson, 2007):

- Align to learning standards or objectives.
- Make the software web-based and easily accessible.
- Design with the three “I’s” in mind: interactive, intuitive, and inquiry-based.
- Reinforce scientific methodology and critical thinking skills.
- Create open-ended simulations with linear demonstration tours.
- Use randomization algorithms that simulate experimental error.
- Provide mechanisms that allow students to record and save experimental results.
- Incorporate assessment tools.
- Allow customization by instructors.
- Provide online help for students and supporting documentation for instructors.

The theoretical framework serves as a basic foundation of knowledge to the researcher and allows the researcher to make a preliminary selection of research instrument and participants. These 10 principles create a bridge between the existing virtual learning models to the understanding of the YouTube learning experience.

**Research Method**

The research design adapted a qualitative research design with supplementary quantitative survey instruments to identify the characteristics of participants and their demographical information. The research design has a primary method that guides the project,
and a secondary database that provides a supporting role in the procedures. The primary data is qualitative data, and the quantitative data is the secondary data. Data reside side by side as two different pictures that provide an overall composite assessment of the inquiry (Creswell, 2009). The purpose of the quantitative part was to gather descriptive information from subjects and triangulate the findings that identified participants. Patton (2002) suggested, “Quantitative measures are succinct, parsimonious, and easily aggregated for analysis; quantitative data are systematic, standardized, and easily presented in a short space” (p. 20). I was able to assess the identity of my participants after incorporating quantitative data collection to the method. Quantitative data inquiry was implemented with demographic interviews. Along with the demographic interviews, the descriptive quantified data identified the research participants and further defined who they were and where they were coming about.

Qualitative findings were in-depth and was neither systematic nor standardized if compared to quantified data. However, it permitted one to understand the world as seen by the respondents (Patton, 2002). First interview session collected a qualitative data set that described the identity of participants; the second interview inquired about the experiences of participants as well as how they perceived their experience in relation to the virtual courseware model. The third and final stage of data collection was the focus group interview; it reconffirmed the interview findings with the participants and served to member check their responses. During the focus group interview, I repeated participants’ own responses back to them and sought for further elaboration. Additionally, I also looked for new codes and themes generated from the exchange of communication among all participants when they were all present at the same interview.
Coding, Encoding, and Themes

A code is a word or a short phrase that symbolically represents the essences of a segment of qualitative data. This research adapted a three-step coding approach suggested by Saldana (2009): raw data to preliminary codes, then preliminary codes to final codes, and finally final codes to themes. These steps help the raw interview transcripts that contained unclassified language-based data to be organized and presentable to the audience. Additionally, the words encoded in this research reflected how I perceive the importance of the issues in the experience of participants. In order to code the findings, I followed a seven-principle guideline suggested by Saldana (2009):

- Organized. All data were organized by participants’ names and date interviewed and had three digital copies on three difference devices.
- Perseverance. A consistent and reliable transcribing process schedule helped coding in a timely fashion.
- Dealing with ambiguity. During the act of codifying, I had encountered multiple ambiguous statements. I re-read and re-analyze these statements with the focus of study and theoretical framework to ensure I understood the experience as well as closely following the purpose of the study.
- Flexibility in coding. I allowed myself to recode transcripts when I felt the necessity even with a code had already been established.
- Creative. I selected codes from a wide range of language choices. I advocated the possible options and analyzed the metaphors from the language to construct a code that was best suited for the original context.
• Ethical. As Saldana (2009) described, “not ignore or delete those seemingly problematic passages of text; and rigorously ethical with your analysis by maintaining a sense of scholarly integrity…” (p. 29); there is no other way to put it: treat both participants and data with the highest respect and integrity.

• Extensive vocabulary. Vocabulary tools and an advanced English thesaurus were used to maximize the understanding in the codifying process.

As many qualitative research writers indicated, coding is a time consuming and challenging process (Crewell, 2007; Denzin, Lincoln, 2005; Patton, 2002; Saldana, 2009). The guidelines were used to assure that the transcribing process stayed with the research focus and purposes while revealing as much experience as possible from the participants without abridgement of meaning to its original contexts.

Participants and Sampling

The sampling in qualitative research typically focuses on smaller sample sizes, selected purposefully. Cases with rich information are studied to understand the central issue. As Patton (2002) suggests, “Studying information-rich cases yields insights, and in-depth understanding rather than empirical generalizations” (p. 230). A sampling strategy was used: Homogeneous Samples. Unlike a typical sampling strategy to maximize the variability, this strategy selects a small group of samples purposefully to explore the in-depth information of a particular subgroup. Additionally, Patton further suggests that the homogeneous group is best for focus group interviews because it brings in participants with similar backgrounds together to discuss a major issue that affects them (p. 236). There were a total of 10 participants. All participants were volunteers from a Chinese language class. The quantitative survey will display the frequencies of items describing the characteristics of participants; the qualitative will display a summary of
interviews and all themes generated in those conversations. Relevant information about the participants was included in a demographic survey. The participants were selected purposefully to ensure they meet the homogenous sampling purpose of this research. In order to be qualified for participating in this study, all participants fulfilled the following conditions:

- Learning a foreign language or had experience learning a foreign language.
- Were able and willing to communicate in English.
- Willing to invest time out of the class to look at YouTube videos.

These conditions were definitive to all participants because these conditions were a necessity for the researcher to carry on the research questions to the participants.

The participants were students who were taking a Chinese class at a state university. The distribution of the age group indicated that the 8 participants were under the age of 25. The Chinese language class registered as an undergraduate class; therefore, the students who enrolled in the Chinese class were mainly undergraduate students.

<table>
<thead>
<tr>
<th>Age Group Distributions</th>
<th>Under 25</th>
<th>26-35</th>
<th>36-45</th>
<th>46-55</th>
<th>Over 55</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 25</td>
<td>8</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Again, the education level describes the composition of participant sample. The great majority of participants were in four-year-college programs. One of the participants indicated that she enrolled in the class as a community college student but was taking the class out of interest. Another participant had completed his undergraduate program but was interested in the Chinese language, therefore, enrolled for personal enrichment. The next table would display the education background of the participants.
Table 1.1b

<table>
<thead>
<tr>
<th>Education Background</th>
<th>High School</th>
<th>High School – Some College</th>
<th>College or University</th>
<th>Graduate</th>
<th>More than Graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>8</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Gender distribution showed that there were more female participants than male. The Chinese class itself also had more female students than male students enrolled at the semesters of research.

Table 1.1c

<table>
<thead>
<tr>
<th>Gender</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7</td>
<td>3</td>
</tr>
</tbody>
</table>

The following tables show the demographic findings for technology experiences from the participants. The information showed in the tables was in Yes and No format. These items did not intend to measure participants’ competency or knowledge of technology. It strictly was a descriptive survey that described the characteristics of the participants. These descriptive data, however, are important because they identified several potential analytic directions; combining with other descriptive data and their responses, I was able to see how these technology experiences related to interview responses. Furthermore, these descriptive data also served as a future research road map as I looked to replicate this study with a different demographical group. Here were the items answered by the participants.
Table 1.1d
Description of Experiences Using Technology

<table>
<thead>
<tr>
<th>Technology</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have downloaded music</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>I have downloaded videos</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>I have shared photo on web</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Have used instant messaging</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>I have a webpage</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

**Researcher**

The qualitative approach in research involves the concept that the researcher is an instrument. The researcher is the primary tool for data collection. As Creswell (2007) suggested, “How we write is a reflection of our own interpretation based on the cultural, social, gender, class, and personal politics that we bring to research” (p. 179). Therefore, it is essential that the researcher have the credentials and enough previous experience to understand the whole picture of the phenomenon of interest.

**Role of Researcher**

The researcher is the key instrument of this study. Qualitative research is interpretative. As the inquirer, the researcher is involved substantially in both collecting the data and understanding the data. Denzin and Lincoln (2000) explain the importance of research: “theory, method, analysis, ontology, epistemology, and methodology. Behind these terms stands the personal biography of the researcher, who speaks, from a particular class, gender, racial, cultural, and ethnic community perspective” (p. 18). Therefore, during the research process, a general
strategic guideline was used to make sure the researcher minimizes all possible biases. Creswell (2009) provided a list of strategic concepts for researcher’s role:

- Including statements about past experience that provide background data to the audiences would have better understanding of the topic.
- Comments on connections between the researcher and the participants and on the research sites in order to ensure the closure of data collected.
- Indicate steps taken to obtain permission from the Institutional Review Board to protect the rights of the participants.
- Comments on the possible ethical issues that may arise during the research.
- Discuss the possible approach for the researcher to avoid such issues.
- Discuss the setting of research and secure the permission to study the participant.
- A brief proposal is usually obtained from the participants and sponsoring institute.

The key informants of this phenomenon were to share their experience in various aspects and it was the researcher’s responsibility to seek balance between sufficient depth of findings and repeating themes.

Background of Researcher

I am a doctoral candidate in the degree of education at University of Arkansas, Fayetteville. The emphasis of this research is Human Resource Development. During my study, I also worked in the adult education field as a part-time community college instructor and a volunteer language instructor in community adult education center in Taiwan and the United States. I worked closely with other adult education faculties in Taiwan and had two publications as the second and third author. Also, I served as the vice chair in adult learning research in Fokuang Community College in 2009. I joined YouTube in 2007 and became an active member
in 2009. I have two active YouTube accounts and had shared many self-created videos with peers in language learning and music. As an active member, I spent more than ten hours a week in exchanging opinions and discussion with peers online. During a volunteer language learning session in 2009, I was inspired by other YouTube instructors and made a decision in helping adult learners learn through YouTube lessons. I had lived in Taiwan, Belize, the Philippines, and am currently living in the United States. Multiculturalism was the main theme for the majority of my life. I worked and interacted with students, scholars and professors from different cultures and backgrounds. This experience helped me to embrace individual differences and cultural differences in communication. As a researcher, I was able to communicate effectively between and among participants and created a free-expressive atmosphere during the interviews.

Credibility, Validity, and Reliability

The credibility of qualitative research was determined by the description of persons, places, and events. The definition of validity and reliability has a different take from the traditional quantitative aspect. Instead of measuring what it is supposed to measure, Denzin and Lincoln (2005) offered another definition, “Validity in qualitative research has to do with description and explanation and whether or not the explanation fits the description” (p. 393). Donmoyer’s argument (1990) in regard to generalizability was summarized by Denzin and Lincoln (2000) that traditional ways of thinking about generalizability are inadequate, and fall short in the interpretation of individual cases. Denzin and Lincoln also argued, “the value of qualitative research is in its uniqueness of each case; the traditional sense of reliability, which means replicability, is pointless” (p. 394). However, the replicability of findings may not be valuable, but the replicability of methods holds importance in the sense of research design and approach.
I conducted interviews to inquire about the experiences of the participants. Focus group interviews were incorporated to implement both member checks and review the findings from participants. During the focus group process, participants received the individual interview scripts with individual responses inscribed with the conclusion and implication. It was to make sure what he or she meant during the previous interviews. Furthermore, I also suggested that every participant in the focus group interview share his or her experience again by answering the research questions. These two sets of interview responses allowed me to ensure that I did not misrepresent the information the participants had shared with me. A triangulation method was used to strengthen the validity of this research. A survey questionnaire was used to confirm that the responses from the participants matched some part of the qualitative interview responses. Finally, another triangulation approach was used by conducting an extended literature review after data had been collected. I spent prolonged time in the field both with and without the participants. I was aware of the potential bias; therefore, I had constantly reflected the literature and findings to conceptualize the entire phenomenon in the eyes of participants. Negative and contradictory evidence are presented in the literature to provide the broadest possible perspective.
The timeline indicates the chronological steps in data collection procedure. As the figure displays, gathering participants’ demographic information was the initial step. Participants were given four to six weeks to complete the YouTube learning exercise. Interviews were conducted to gather participants’ experience and their opinions of YouTube learning. The first set of codes was generated after the second interview; these codes were again introduced to the participants in the focus group interview. During the focus group interview, participants were asked to review the codes and reevaluate their previous responses to assure that I understood their words or did not misrepresent their opinions. The final coding process began after focus group interview. Figure 1.2a displays each aspect to its corresponding research question.
I explored these four perspectives to shape research questions. The figure shows that there was no direct relation among the perspectives themselves, but they contributed to my developing the research questions. Investigating YouTube learning from these four points of view gave me a broader understanding of the phenomenon.

**Key Terms**

Web 2.0 Technology, Social Media, YouTube
CHAPTER II. PRELIMINARY LITERATURE REVIEW

This chapter is a review of the literature that guided the direction and methodology of this research. This chapter reviews the past literature from three different perspectives: the origin of YouTube and its evolution; the inquiry design; and online learning model. I purposefully leave out the literature that discusses the strengths and shortcomings of YouTube in this chapter to avoid preexisting biases.

YouTube and Its Evolution

YouTube was founded by three former employees of PayPal in 2005: Chad Hurley, Steve Chen, and Jawed Karim. The website YouTube.com was launched in early 2005, and the co-founder, Jawed Karim, uploaded the very first YouTube video “ME@THEZOO” (http://www.youtube.com/watch?v=aEcOJAhPShk). YouTube was created to be a website that allowed users to freely upload videos on the Internet and share those videos with any audience who had access to an Internet connection. The high influx of Internet traffic quickly made YouTube a well-known video source worldwide. In little over a year, YouTube had over 100 million views and 65,000 videos uploaded per day. In that time, YouTube became the fastest growing company worldwide and received national recognition. YouTube entered partnership with NBC in 2006.

The growth of the website did not stop after being acquired by Google. In 2007, Google launched YouTube in nine different countries, developed a mobile version of the YouTube website, and created YouTube partner programs for users. In 2008 and 2009, YouTube launched analytical tools to help users analyze viewers’ data to better understand viewers’ demographics; celebrities, politicians, and international figures like the Pope launched official channels to create a direct contact with viewers. The growth of YouTube remained exponential. YouTube
announced the statistics that showed an unparalleled rate of videos being uploaded and being watched. YouTube increased its 1 billion views per day in 2009 to 2 billion views per day in 2010.

**YouTube and Learning**

The advent of Web 2.0 technology has brought a change to higher education and has made social media websites like YouTube available. Web 2.0 enables users to communicate more efficiently (Shang, et. al, 2011). Web 2.0 technology is essentially a platform that allows users to exchange information and reconfigure existing knowledge (p. 178). On Web 2.0 platforms, social interaction takes place between individuals as well as groups. Such function allows users to co-create and co-manage an existing database, creating more spontaneous and effective communication over Internet. Murugesan (2007) suggested that Web 2.0 is not just a new version of the old Web. It is also different because of its functions (p. 35):

- Facilitates flexible Web design, creative reuse, and updates.
- Provides a rich, responsive user interface.
- Collaborative content creation and modification.
- Social networking.

The Web 2.0 service model has four components (Shang, et. al, p. 179). Each of the components contributes different but distinctive functions: socialization, externalization, combination, and internalization. In the socialization function, Web 2.0 allows users to observe the web data and participate in a web community; externalization allows users to send out data, like writing emails, sharing information, teleconferencing, and uploading video or audio; combination allows users to use social bookmarks, share resources, and filter web content; and lastly, internalization allows users to reflect Web 2.0 content on strategy implement through simulation and sharing of
best practices. Learning through the application of Web technology has transformed the present learning industry (Fralinger and Ownes, 2009). Davis (2009) defined Web 2.0 as a tool that fosters collaboration, user participation, interactivity, and content sharing (p. 181). Furthermore, Davis summarized the contemporary principles of Web 2.0 as the following:

- Facilitation of the individuals’ creation and manipulation of digital information.
- Strong support and low barriers to share the work and contents.
- Open source; large pool of intelligence to help each other to solve problems.
- Maximization of participation from the audience.
- Use and reuse; the openness of digital resource allows audiences with high accessibility and reapplication of the existing resource.

YouTube allows users to share their videos and comments and is becoming a place where people find various learning opportunities. Benevenuto (2008) described YouTube and its interaction:

YouTube video response feature allows users to converse through video, by creating a video sequence that begins with an opening video and an array of responses from fans and detractors who respond with videos of their own, ... the social networking issues that influence the behavior of users interacting primarily with stream objects, instead of textual content traditionally available on the Web (p. 761).

The technology was not yet at its full potential, but the many users were beginning to seek opportunities to utilize the open and infinite resources from all over the world. Beginning in 2007, the field of education started to hop on the bandwagon. Wesch (2009) conducted research of YouTube on how it impacted learning, imitating, and other social behaviors. The research gave such a social networking website a new definition in the field of learning. According to Bonk (2008), “it is clear that the use of YouTube Videos in instruction is linked to educational and psychological research” (p. 5). Bonk proposed five-theoretical-linkages related to the use of
YouTube videos in instruction at the American Educational Research Association conference: the videos provide a context for learning; the videos increase learner retention of information via visual and auditory information rather than the traditional textual and auditory; the videos share a common learning experience for learners in the aspect of reflection on the subjects; the nature of shared online videos that are organized in ways that videos can be later used in lectures, discussions, and study activities; the videos promote participation from the learners because the videos can be created, watched, shared, and commented on.

In Fralinger and Owen’s study (2009), the effectiveness of YouTube as a learning tool was broken down into four categories: application of the YouTube project, major strengths of the YouTube project in the learning process, instructor effectiveness in the learning process, and suggestions for improvement to enhance learning. The data from Fralinger and Owen’s study indicated that learners were intrigued by the advanced technology as well as the accessibility to open resources. The data also indicated the instructors felt resistant to use YouTube as a tool for learning because the lack of quality and meaningful video organization. Wankel (2009) offered further direction of the application of social media websites in education: the students would be able to ubiquitously interact with each other through the technology; use the artificial intelligence interface provided by technology to shorten the time and effort to acquire information; and would engage in massive groups with collaborations from disparate locations (p. 260). Nikopoulou-smyrni and Nikopoulous (2010) conducted a study to understand the relationship between video-based learning and traditional lecture learning. The findings of the research suggested that short video based lectures could be at least as effective as the standard teaching methods. Additionally, the use of videos improved students’ attention to the topic and had positive impact on students’ motivation and concentration (p. 307). O’Connor (2010)
conducted a pilot study with a group of K-12 teachers and students using YouTube videos for microteaching. The findings suggested that self-videotaped performances could improve communication between the teacher and the students; furthermore, the students quickly learned the technology and were able to establish a more personal but professional relationship with the teachers. The findings also suggested that to publish videos to a public forum such as YouTube was more technically efficient and required an actual performance. (p. 153)

Wesch (2008) in his presentation at Library of Conference suggested that the booming of YouTube has become a fact and has great implications to people around the globe (http://www.youtube.com/watch?v=TPAO-lZ4_hU).

Users on YouTube seek entertainment, information, memory, and sometimes education. The data suggested that digital natives, the age group of 24-35, are the highest number of users, while the percentage of teen users is roughly the same to the age group 35 and older. Wesch further suggested that YouTube was a medium that changed human relationships. In another of Michael Wesch’s video, he talked about how the Internet reformed education. There was more and more interaction between students to teachers, students to students, and even teachers to teachers. New Web technology allowed individuals to share their knowledge with a simple click. The exchange of expertise and knowledge sped up learning. However, Kellner and Kim (2008) suggested that critical pedagogy had to intervene to encourage individuals to make active use of YouTube because the majority of YouTube educational videos did not meet the strict criteria of pedagogy (p. 30).

Mitra et al. (2010) concluded that video is very helpful for enhancing deep learning and simulating interests. However, the lecture needs to engage the audience. The relevance of the video also has to be highlighted to the audience to ensure proper expectations. The video
lecturer’s attitude dictates the flow of the video lesson (p. 412-413). Pastor (2007) conducted online linguistic learning research that indicated web-based learning activities were preferred to the text-based ones. In the particular study, Pastor aimed to explain and contrast the differences between improvement of language learning from web-based and text-based learning design. Furthermore, the researcher aimed to analyze and evaluate the outcome of learning technique implementation. The findings of Pastor’s research implied that text-based activities stimulated fewer interests from the learners, whereas web-based activities improved the understanding and the communication of students (p. 606).

In the research conducted by Jiang (2007), three methods were proposed to measure the integrated second language knowledge of the participants with the minimization of explicit knowledge of the subject and the structure being tested: the oral report of the form of pictures or video clips; task approach that measured the accuracy and rates; and task with timed pressure (p, 7). Despite the application of these approaches, a limitation was still shared among the three: potential involvement of explicit knowledge. The study examined the automaticity of the learners as well as the improvement in reading in their second language acquisition. The finding of this research suggested that the integration of second language acquisition was learning transfer played a significant role in the experiment because of the similarity between Chinese and English languages. However, the lack of plural morpheme in Chinese language indicated that the second language learners were less likely to take notification of the plural morpheme errors in the tests when they were displayed in the testing materials. (p. 20)

Teng, et al. (2009) conducted a study that discussed the use of YouTube videos for educational purposes by creating survey tools based on Multimedia Learning Theory proposed by Mayer and Dual Coding Theory by Paivio. Both theories supported concurrent learning
through visual and audio senses, and the previous research outcomes for both theories indicated that learners learn better with the combination of audio, textual, and graphical sources (Teng, 2009). The finding of this research suggested that both Dual Coding Theory and Multimedia Learning Theory were able to predict behaviors and reactions to shared online videos.

Learning was not evaluated through tests or exams in YouTube videos like the traditional E-learning. However, YouTube provided alternative ways of evaluating the content of a video, such as the word-of-mouth-online and thumbs-up rating systems. Additionally, YouTube videos allow both comment tools and the like-dislike system to reflect on the point of view from learners if the video host gives such permission (Snelson & Elison-Bowers, 2009). The booming of social media websites had made a significant impact to the daily life routine, as “…college students reported visiting social network profiles an average of 2.4-4.19 times a day for an average of 1-2 and half hours” (Morgan, Snelson, and Elison-Bowers, 2010, p. 1405). YouTube provides two-way communication interactivity for users to collaborate and cooperate more freely. Such interactivity facilitates more engagement from the users and enables the users who are separated geographically to develop more personal relationships in both ends (Minocha, 2009). The conversation among users was informal and asynchronous; and according to Wesch, who conducted the pivotal study on YouTube’s impact to the media community, the infrastructure gave the users the freedom to express their thoughts and ideas without the fear and social anxiety. (Wesch, 2009) Such elements would allow the users to conquer some of the social obstacles in traditional classrooms. In Bloom and Johnston’s study (2010), YouTube was considered as a less controlled platform as an educational tool (p. 115). Ng, and Hussain (2009) suggested that YouTube allows the shift in focus learner control from mere engagement of
students to develop learner empowerment. The use of social media also allows student to be the key factor of learning which can be empowering and significant. (p. 284)

**Virtual Courseware Project Principles**

Virtual Courseware Project was a project guided by ten principles: the same principles also served a theoretical framework for this research. Virtual Courseware Project began when Steve Jobs, the former CEO of Apple, introduced their early generation computers, NeXT (Desharnais, & Limson, 2007). It was a project that focused on integrating computer technology into the learning experience. During its early development, Apple worked closely with California State University at Los Angeles to develop computer workstations for science classes. In the mid 1990s, an application called FlyLab was created based on the NeXT model and was introduced to science classes. The application successfully delivered the learning experience with the emergence of the World Wide Web, and created a large database of genetics. The scientists and computer engineers continued to work and developed many other virtual courses based on its original model. This successful experience evolved into the Virtual Courseware Project (p. 2).

The Virtual Courseware Project was designed to engage students with computer-based technology (p. 2). New web technology provided even more tools for educators to be creative in teaching. The Virtual Courseware Project was designed around ten principles. These principles came from the successful experience of the NeXT model and the feedbacks from students, teachers, and software engineers who developed the application (Desharnais, & Limson, 2007):

- Align to learning standards or objectives: A class that is designed with a clarifying objective to ensure class content meets the desired goal.
- Make the software web-based and easily accessible: Class is made easily accessible for students.
• Design with the three “I’s” in mind (interactive, intuitive, and inquiry-based): Keeping class interactive by engaging students; creating a culture for students to think and be creative; and class is designed to respond to students’ questions.
• Reinforce scientific methodology and critical thinking skills: Class is designed to encourage students develop critical thinking skills by using empirical evidences to support their reasoning.
• Create open-ended simulations with linear demonstration tours: Class is designed with the mind of open-communication and interaction.
• Use randomization algorithms that simulate experimental error: Class is designed to correct errors with experimental and algorithmic methods.
• Provide mechanisms that allow students to record and save experimental results: Helping students keep tracks on their learning history.
• Incorporate assessment tools: Adapt a tool to help students to evaluate their learning.
• Allow customization by instructors: Class is designed by teachers who modified the class materials by understanding the needs of students.
• Provide online help for students and supporting documentation for instructors: Teachers are giving students additional help with alternative forms other than the class content, such as PDF, and websites that have supplemental materials to the subject.

Research Design

“There is no one way to do interpretive, qualitative inquiry” (Denzin & Lincoln, 2000, p. 15). The nature of qualitative study is open-ended and inquisitive (Corbin & Strauss, 2008; Creswell, 2007; Denzin & Lincoln, 2000; Merriam, 2009; Patton, 2002). The inquiry design was
driven by the intended purpose and targeted audience. Patton (2002) suggested six guiding
questions that should be asked before researchers make decisions on inquiry designs (p. 15):

- What are the purposes of the inquiry?
- Who are the primary audiences for the findings?
- What questions will guide the inquiry?
- What data will answer or illuminate the inquiry questions?
- What resources are available to support the inquiry?
- What criteria will be used to judge the quality of the findings?

There were four purposes: research, evaluation, dissertation, and personal inquiry. The finding
was set to contribute to the emerging body of knowledge. The inquiry was designed to research;
however, a dissertation was a form of research to demonstrate scholarship of the researcher.
Many quality inquiry designs also had evaluation and personal influence purposes. These
purposes reflected well on overall design of the research. Setting the purpose of the inquiry helps
the research design to be focused and narrow in the desired direction. Patton suggested that there
were four primary audiences: scholars, program administrators, doctoral committee, and oneself.
The audiences affect the tones of the study and the depths of the issue. Depending on the
awareness of the issue of the audience, the inquiry design sets a language that is more accepted
to the audience group. In qualitative research, the questions that guided the inquiry design often
were dictated by theories, disciplines, or personal interests, which also led the direction in
designing how data would be collected.

Rossman and Rallis (2003) also suggested four guiding questions that shaped the inquiry
design. These questions also functions to set the tones of research design.

- What are the characteristics of qualitative research?
• What perspectives do qualitative researchers share?
• What stances do qualitative researchers typically take?
• How do they go about their work?

Denzin and Lincoln (2000) suggested that researchers should include the following considerations before making a decision on research designs: (p. 385)

• The questions that guide the study.
• Selection of a site and participants.
• Access and entry to the site and agreements with participants.
• Timeline for the study.
• Selection of appropriate research strategies.
• The place of theory in the study.
• Identification of the researcher’s own beliefs and ideology
• Identification of appropriate informed consent procedures the willingness to deal with ethical issues.

Role of Researcher

The researcher is an instrument in a qualitative study. (Corbin & Strauss, 2008; Creswell, 2007, 2009; Denzin & Lincoln, 2000; Patton, 2002; Rossman & Rallis, 2003) Researchers in qualitative design are involved in collecting data, interpreting data, and analyzing data. Therefore, defining the role of researcher becomes a critical element in qualitative inquiry. Rossman & Rallis (2003) addressed the role of researcher by answering the trustworthiness of researcher. Merriam (2009) pointed out by identifying his or her trustworthiness and credibility,
the researcher also validates the findings of the research (p. 213). Creswell (2009) provided a list of strategic concepts for the researcher’s role (p. 177):

- Including statements about past experience that provide background data so the audiences would have better understanding of the topic.
- Comments on connections between the researcher and the participants and on the research sites in order to ensure the closure of data collected.
- Indicate steps taken to obtain permission from the Institutional Review Board to protect the rights of the participants.
- Comments on the possible ethical issues that may arise during the research.
- Discuss the possible approach for the researcher to avoid such issues.
- Discuss the setting of research and secure the permission to study the participant.
- A brief proposal is usually obtained from the participants and sponsoring institute.

Denzin and Lincoln (2000) identified the responsibilities of the researcher in qualitative studies. Researchers must develop working models: a model that explains the actions in the study. The researcher needs to present the data in a narrative form supported by evidence from field notes to make empirical assertions. The researcher needs to provide interpretive commentary framing the key findings in the study to make theoretical discussion traceable in the data. The researcher should describe his or her own role. This allows the researcher to confront assertions and biases with credibility. Additionally, researcher needs to explain his or her social, philosophical, and physical location in the study to describe the precise role of the researcher in the study (p. 389). Patton (2002) offered another perspective on credibility of the researcher. Patton believed that a definite list of questions must be established to report any personal and professional information that may have affected data collection, analysis, and interpretation (p.
Furthermore, there were four factors that created concerns the researcher as an investigator could be affected. These factors were reactions of those in the setting, such as participants and staff; changes in the fieldworkers during data collection; predispositions or biases of inquirer; and researcher incompetence. As an investigator, the researcher needs to overestimate the effects of these factors and describe the concerns in the study (p. 568).

Case Study

“A case study is an in-depth description and analysis of a bounded system” (Merriam, 2009, p. 40). A case could be a collective of individuals or a single person depending on the bound or parameter of the system, typicality, and uniqueness. A case study is particularistic. It focuses on a particular situation of an event, program, or phenomenon. A case study could illuminate the readers’ understanding of the phenomenon as well as bring discovery of new meaning. Creswell (2007) suggested five rules of thumbs for a case study (p. 74):

• Researchers should determine if case study approach is appropriate to the research problem: the inquirer could clearly identify the boundaries and seek to provide in-depth understanding.

• Researchers need to identify their cases. The cases may involve an individual, a group of individuals, a program, an event, or an activity. A purposeful sampling is appropriate for cases that meet the requirement of the research condition.

• Data collection is extensive and drawn from multiple sources.

• Data analysis should not generalize beyond its case but enough to understand the complexity of the phenomenon. When multiple cases were chosen, the analysis allows the cross-case analysis.
• Researcher provides the meaning of the case from its holistic point of view: whether it is a usual or unusual situation.

Case studies face challenges. Multiple literatures suggested that the biggest challenge of the case study is the researcher. The researcher has to make the decision in choosing cases and setting boundaries. In many situations, the ambiguity of the boundaries sets the researcher back and loses the credibility of the qualitative study (Creswell, 2007; Merriam, 2009; Patton, 2002).

The Issue of Credibility

Qualitative researchers often respond to the psychometric paradigm trinity: validity, reliability, and generalizability, as if there were no other linguistic representation for questions. “Validity in qualitative research has to do with the description and explanation and whether the explanation fits the description” (Denzin & Lincoln, 2000, p. 393). To address the same issue, Patton (2002) further suggested an explanation of credibility in qualitative research. The credibility of qualitative inquiry depends on three elements:

• Rigorous methods that yield high quality data and can be systematically analyzed.

• Credibility of research determined by training, experience, track record, status, and presentation of self.

• Philosophical belief in the value of qualitative inquiry that adapts naturalistic inquiry, qualitative method, inductive analysis, purposeful sampling, and holistic thinking.

Addressing rival conclusions and negative cases helps credibility of the research, as well. Patton (2002) discussed the method of triangulation that is involved in creating credibility of the study. There were four kinds of triangulation that can validate qualitative analysis (p. 556):
• Method triangulation: Checking out the consistency of findings generated by different data collection methods.

• Triangulation of sources: Checking out the consistency of different sources within the same method.

• Analyst triangulation: Using multiple analysts to review findings.

• Theory/perspective triangulation: Using multiple perspectives or theories to interpret the data.

Merriam (2009) suggested eight strategies researchers could adapt to promote validity and reliability of qualitative research (p. 229):

• Triangulation: using multiple sources to confirmation emerging findings.

• Member checks: taking findings back to the people from whom they were derived and asking if they were plausible.

• Adequate in data collection: adequate time spent collecting data until the data become saturated.

• Researcher’s position or reflexivity: critical self-reflection by the researcher regarding assumptions, worldview, biases, theoretical orientation, and relationships that may affect the investigation.

• Peer review: discussion with colleagues regarding the process of study.

• Audit trail: a detailed account of the methods, procedures, and decision-making.

• Rich in descriptions: provide enough description for readers to connect the dots of the research.

• Maximum variation: purposefully seeking diversity in sample selection to allow greater range of application.
The purposes of the strategies suggested were mainly to help researcher to gain ground in credibility. To a large extent, validity and reliability depend heavily on how the researcher established him/herself with credible characteristics and competencies (Merriam, 2009; Patton, 2002).

**Coding**

In a qualitative study, coding is a process to arrange findings in a systematic order. Standardizing findings helps the researcher understand the findings more efficiently; and it also helps to uncover hidden messages from the field notes. Merriam (2009) offered a codifying process to create categories (p. 178):

- Category construction: taking entire field notes to construct raw categories; taking as much useful information as possible.
- Sorting category and data: rearrange the categories by merging, deleting, and adding to the existing list of categories.
- Naming the categories: making sure the themes answer to the research questions.
- Dealing with ambiguity: the level of abstraction is dependent on the number of categories. Use principles to seek optimized number of categories that reduce redundant categories without high levels of abstractions.
- Becoming theoretical: theorizing the findings with graphs and figures. Explain the findings and support the findings with theories for research questions.

Saldana (2009) suggested that coding is the process to search pattern, trend, and categories from the field notes. Saldana offered a list of things that should be considered when categorizing or coding (p. 14):

- Cultural practices that include daily routines and occupational tasks
• Episodes that have special contexts, such as and championship games.
• Encounters between participants and another individual.
• Roles of participant. Social roles and personal roles.
• Group and subcultures that participants belong to.
• Settlement and habitats participant reside.

Some literature suggested that the number of codes and categories should reflect on the depth of interpretation (Denzin & Lincoln, 2000; Merriam, 2009). There are not a set number of themes that should present in a qualitative study. Generally, the belief is that the reoccurring codes and themes are signs of data saturation (Creswell, 2007; Merriam, 2009; Patton, 2002; Saldana, 2009). Using graphs, tables, and figures helps with the readers to visualize codes, and it enhances the readability of qualitative data. (Bazely, 2009; Patton, 2002;
CHAPTER III. METHODOLOGY

Research Design Overview

There were four research questions, and these questions centered on the core question:

What was the experience of language learning like from YouTube videos?

• What does the learner experience from YouTube lessons?
• How do YouTube lessons facilitate transfer of learning through standardized interaction between human users, machines and subject matter?
• How do components of a virtual learning model support learner experience?
• What else can the learner relate about the experience of YouTube learning?

In order to answer these questions, this research was designed with a qualitative method with a supplementary quantitative measure. This design allowed me to gather both demographic information of the participants and their learning experience from YouTube. Patton (2002) suggested, “Open-ended interview responses yield people’s experience perceptions, opinions, feelings, and knowledge” (p. 4). Furthermore, the added quantitative measure was implemented so that I could acquire participants’ demographical information. Along with the interview responses, I was able to understand the experience from a broader and more objective point of view. As Creswell (2007) stated, a good research design employs multiple forms of data collection (p. 45).

The quantitative data in this research represented the demographical findings that described who participants were and their previous experiences of learning with technology. The purpose of quantitative data in this research was not to seek frequency distribution or significance to any sample population, but to identify the participants. The following table showed the items of inquiry in the demographic and technology experience survey. The findings
did not aim to find significance or relations between the variables. It simply summarized the characteristics of the participants.

Table 3.1a
*Demographics and Technology Experience Survey Elements*

<table>
<thead>
<tr>
<th>Participants</th>
<th>Frequency and Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Age Group</td>
</tr>
<tr>
<td>Education</td>
<td>Education Level</td>
</tr>
<tr>
<td>Use of Technology</td>
<td>Types and Frequencies</td>
</tr>
<tr>
<td>Attribute</td>
<td>Working with others</td>
</tr>
<tr>
<td>Motives</td>
<td>Incentives and Language Orientation</td>
</tr>
</tbody>
</table>

The qualitative data collection was designed by using a three-staged-interview to each participant. The purpose of the qualitative method was to find out the experiences from participants. These experiences were unique and reflected the phenomenon differently. The qualitative data was collected through three continuous stages: Interview I, an interview that inquired about the past experiences of learning through technology, preference of materials in the past, and personal opinions regarding to online learning; Interview II, a post-YouTube-learning interview that inquired about the participants’ experiences from learning with technology; finally, a focus group interview that inquired collective responses from all participants. During the focus group interview, I shared research findings from previous interviews with participants to probe more into the response and to perform member checks of the findings. At the end of focus group, participants were given a final short survey to add anything to the existing responses of YouTube learning. The interviews were guided with the ten principles by Deshanaris and Limson (2007).
• Align to learning standards or objectives.

• Make the software web-based and easily accessible.

• Design with the three “I’s” in mind: interactive, intuitive, and inquiry-based.

• Reinforce scientific methodology and critical thinking skills.

• Create open-ended simulations with linear demonstration tours.

• Use randomization algorithms that simulate experimental error.

• Provide mechanisms that allow students to record and save experimental results.

• Incorporate assessment tools.

• Allow customization by instructors.

• Provide online help for students and supporting documentation for instructors.

During the interviews, the participants were not given the information about the theoretical principles on which the research is based. They were to inform or respond solely based on their own perceptions. However, I asked the questions based on theoretical concepts as guidance in the interview sessions. The focus group was conducted with multiple participants, joining together in one interview session. The goal of the focus group interview was to seek the exchange of thoughts and opinions among participants. I, as the researcher, was to pose questions from the findings to the participants and encourage participants to share their experiences. Table 3.1b displays the summative information of research stages. These stages were in chronological order.
**Table 3.1b**

*Research Stages*

<table>
<thead>
<tr>
<th>Chronological Steps</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demographic Survey:</strong> The researcher gathers the demographical data from participants.</td>
<td>Gather the demographical information from participants.</td>
</tr>
<tr>
<td><strong>Interview I:</strong> Informal. Collecting experience themes prior to YouTube experience.</td>
<td>Collected detailed qualitative data is to understand the meaning participants attribute to past experience prior watching videos.</td>
</tr>
<tr>
<td><strong>YouTube Watching:</strong> Each participant is given 4-6 weeks to watch the videos.</td>
<td>4-6 weeks allows enough time for participants to complete watching videos at their own pace.</td>
</tr>
<tr>
<td><strong>Interview II:</strong> Inquiring about YouTube learning.</td>
<td>Second interview asks particular questions that relate to the opinion and reflections of the videos from the participants. Also, the questions inquire about the design of the video in order to relate to the principles of virtual coursework.</td>
</tr>
<tr>
<td><strong>Focus Group:</strong> Inquiring about the common themes among participants.</td>
<td>Invite more than two participants to share reflections about the videos and choice of videos to reveal more possible themes from the exchange of voices and to discover the similarities and differences in themes.</td>
</tr>
<tr>
<td><strong>Analysis:</strong> Analyzing the findings</td>
<td>Identify presence of corresponding principles of online learning in the videos. Codifying themes.</td>
</tr>
</tbody>
</table>

**Objectives of Interview Questions to Corresponding Research Questions**

Each research-measuring step was designed to purposefully answer the corresponding research questions. All interview questions were open-ended and asked in a semi-formal setting. Participants began their process of using YouTube as a language-learning tool after completing
demographic inquiries. In the second interview, I aimed to find the experiences from the participants as well as their thoughts on these experiences. Upon finishing the interview, the participants were asked to email the list of videos they watched and share the link of them. After all participants completed the second interview, they were contacted for focus group interview participation. Several dates were suggested and one of the dates was chosen to be the focus group interview date. Participants shared their opinions and experiences on this particular phenomenon, and participants were asked if they had more input after reading the findings back to them.

The final step, video content identification and coding, was to identify the experience of participants from a non-intrusive perspective. There were two major purposes for video content identification: to ensure the correspondence between interview findings and videos; and to help me to identify key codes suggested by the participants. The next table displays the interview objectives and the examples of interview questions.

### Table 3.1c
**The Interviews**

<table>
<thead>
<tr>
<th>Interview</th>
<th>Goals and objectives</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interview I</strong>: Introductory Questions. Goal is to gather additional information from participants such as prior experience before watching video.</td>
<td>Please describe your experience with social media websites.</td>
<td></td>
</tr>
<tr>
<td><strong>Interview II</strong>: Inquiry questions to explore learning experiences; inquire about and match the elements of videos against Desharvais and Limson 10 principles of the effective online learning.</td>
<td>What is it like to be a learner on YouTube? What have you been able to apply so far on YouTube’s lessons?</td>
<td></td>
</tr>
<tr>
<td><strong>Focus Group</strong>: Questions will be asked to explore and discover the themes among participants.</td>
<td>Please describe your experience with YouTube learning. What do you find interesting to you from the interview findings?</td>
<td></td>
</tr>
</tbody>
</table>
Fieldwork Gadgets and Interview Set-up

The preparation of fieldwork was important and intensive because every bit of information provided by the participants could become a key finding in this research. To prepare for the interview, a list was created every time before I headed to the field. The list included gadgets needed and all necessary paper work, such as the form of consent. H4n, a recording device by Zoom, was the main recording device. This device allowed me to record up to 40 or more hours of .wav files with a 16 GB SD memory card. H4n also had a feature where I could eliminate background noises by setting the noise threshold. A secondary sound recording was used to ensure no data would be lost due to technical issues or device failure. The secondary device was a Transcend 4 GB jump drive that also had voice recording ability. I was able to securely keep the data in two separate devices. During the interviews, the devices were placed on a table between the participants and the researcher. The sound receiver-end of main recording device H4N was placed pointing towards the interviewee whereas the sound recording jump-drive was placed pointing towards the interviewer.

Figure 3.1a
Field Device Set-up
As the figure shows, I was able to collect the same interview .wav file twice with two different devices from different angles.

**Data Collection Procedure**

The data collection process was set with three stages: demographic interview, experience interview, and focus group interview; additionally, there was a demographic survey prior to the first interview, and a reflective survey at the end of focus group. In the demographic interview, the researcher was to find out about the participants’ background in language learning and technology usage; in the experience interview, the researcher inquired about the participants’ experience in learning language on YouTube; lastly, the focus group interview was to discover the differences and similarities from participants by exchanging opinions and ideas.

**Step I. Deciding the Appropriate Approach**

Data collection began with purposeful selection of subject, participants, method, and settings. All selection criteria were guided by the theoretical concepts provided in the literature.

**Selection of Method:** In order to understand participants’ experiences, I sought the meaning through various forms of data, both qualitatively and quantitatively. The research method was composed of interviews, surveys, informal observations, documents, and audio-visual materials.

**Selection of Subject:** Chinese language was chosen to be the subject of learning. It is a subject that requires significant amount of communication between the learner and teacher due to the nature of language learning; there were also plenty Chinese language videos on YouTube websites.

**Selection of Participants:** Learners from Chinese language classes were invited to participate in this study. The learners invited were studying the same subject of selection of the research to ensure that the participants had enough experiences and knowledge in the subject. Participants
were informed prior to joining that this research was a voluntary study: dropping out from this study anytime during the study would not influence their grades or performance evaluations of the classes they take. Participants were also shown the Institute Review Board document to understand their rights as participants in this study. All participants must fulfill the following requirement:

- Learning a foreign language or had experience learning a foreign language.
- Were able and willing to communicate in English.
- Willing to invest time off the class to look at YouTube videos.

These conditions ensured that the participants were able to communicate freely in this research because I, as the researcher, would be creating a lot of dialogue in the interviews.

**Motivation and Initiatives:** All participants would receive out-of-class tutoring from a native Chinese language speaker to help with their in-class work and materials. This was to compensate their time spent for this research. At the end of the research, all participants also receive a letter of participation, which showed my appreciation of their time and effort in volunteering in this study. This letter of participation did not hold any professional standing; it was provided to encourage participants to complete the research study.

**Precautions and Bias:** The interview questions were designed in neutral setting: the questions did not ask for preferences; this was to ensure that the questions were not misleading participants’ perceptions.

**Step II. Get to Know Participants**

In this step, I began to interact with participants by asking them questions. My goal was to know who they were and their past experiences related to technology and language learning. As Merriam (2009) suggested, “Generally it is a good idea to ask for relatively neutral,
descriptive information at the beginning interview” (p. 103). The demographic survey was given to the participants prior to the first interview. The interview began upon the completion of this survey. All interviews were recorded with the Zoom H4n Portable sound recording device with the consent of each participant.

**Selection of Setting:** Each individual had preference of the places that they wanted to be interviewed. Prior to the interview, the researcher contacted the participant for arranging the place and time to meet. The selection of setting was based on the participants’ preferences to ensure that they were most comfortable when they were being interviewed.

**Selection of Recording Device:** Zoom H4n was used for its clear sound quality and its ability to adjust and adapt to ambient noises in a public setting. The device recorded all interviews in .wav format and was able to be converted into .wav/MP3 format when needed.

**Demographic Survey:** Each participant was given 10-15 minutes to complete the demographic survey along with IRB documents and the abstract of the study. All participants were informed of their rights and benefits as a participant in this research.

**Interview:** All participants were to answer the designed interview questions from researchers. Questions were not in a particular order and the settings were informal. During the interviews, I was to ask the participants to expand their answers if it was unclear to me.

Interviewing was the main method of data collection. An interview protocol was used during the process to keep the interview semi-structured. This protocol had five parts:

- Heading. A heading that includes name of interviewer and interviewee, date, place, and the title of the research.
• Pre-Questions. Ice breaking questions such as “why did you feel like learning a new language?” These questions serve the purpose of easing the participants and creating a more communicative atmosphere.

• Interview Questions. Inquiring the experience from participants in details.

• Elaboration. Probing questions back to the participants to confirm the experiences.

• A final thank you. A thank you statement was made at the end of interview process, allowing the participants ask any questions related to the study.

The first interview was meant to understand participants’ experiences and perspectives on social media and learning. Both the first quantitative survey and the questions set in the first interview were introductory questions that led to knowledge of the participants by asking who, what, where, when, and how. The introductory interview questions are listed below.

• Why are/were you learning Chinese language?

• What was the most difficult in learning language?

• Please describe your experience of using web technology such as YouTube, Facebook, Twitter, or others.

• Have you learned anything before from social media website such as YouTube? What was the subject that you learned?

Files and Transcripts: All recorded data were saved to 10 individual participant folders labeled Demographical Interview on the researcher’s computer and tablet with security passcodes encrypted. The transcripts were saved to a separate folder in the same computer and tablet for later decoding.
Step III. Preparing to Watch YouTube Videos

All participants were to watch ten or more YouTube videos of Chinese language learning. Some of the participants had prior experiences in using YouTube as a source of learning whereas a few of them had no experiences at all. I was there to explain how to search YouTube videos on the website to each participant before they began searching and watching videos.

Selection of Videos: All participants were to choose their own videos of learning like any YouTube user. After understanding the search method, each participant was to search videos from YouTube and use those videos as a learning source. Participants were informed that they could watch all these videos at their own pace and their own time as long as it was completed within four to six weeks.

Understanding the Contents: Participants were encouraged to take notes while watching the videos. All participants were required to provide the link of each video they watched at the end of their interviews. These links would help me review the content they referred to during interviews.

Step IV. Interviews

After watching videos, each participant was contacted by me for a second interview. At this time, I aimed to explore and understand their experiences.

Selection of Setting: Each individual had preference of the place that he or she wanted to be interviewed. Prior to the interview, the researcher contacted the participant for arranging the place and time to meet. The selection of setting was based on the participants’ preference.

Interview: Again, all participants were to answer the designed interview questions from researchers. Questions were not in a particular order and the settings were informal. During the interviews, the researcher was to ask the participants to expand their answers if they were unclear
to the researcher. The same protocol was used with minor modification to the ice breaking questions.

The second interview consisted of two sets of questions. The first set of questions contained the central questions, seeking the experience from the participants; the second set of questions was to use the Virtual Courseware project as the theoretical framework that guided the process. The following was the list of the first set of interview questions:

- What was it like to be a learner on YouTube?
- After watching these video lessons, had you found anything in common among them?
- What would make you want to go back and watch more of these videos and what would not?
- What feedback did you leave to the instructor or channel if you had left any?
- What was the advantage you had during these experiences and what was the disadvantage?
- How were you able to apply the materials on YouTube in practical use?
- Why would you prefer to watch some videos over others?
- What made a good video and what made a poor video for learning?
- Describe the difference or similarity you experience between learning from YouTube and other types of learning, such as classroom or Blackboard.
- What made you choose a particular video when it popped out from the search list over the others?
- How did the responses from other users of those videos affect your thoughts on the video content?
The first set of questions was more general and was mainly looking to explore what participants felt about their experience. The second set of questions was to inquire about how participants felt about the YouTube videos in specific terms. It was asking participants to describe their experiences. The second set of interview questions were the following:

- How was the objectives presented to you?
- How did these objectives support the lessons?
- Was the video there if you wanted to go back and watch again?
- How accessible were those videos to you?
- How did the instructor invite any feedback from users?
- How was the video designed to motivate you to learn?
- Was there any specific teaching model that you recognize or you could relate to in the videos?
- Did the video asked you to think critically or was the content challenging?
- Did the instructor in the video use any examples or demonstrations that related to the content?
- How did the instructor handle mistakes and errors if there were any?
- Did the instructor encourage you to experiment in practices?
- How were you able to review your learning?
- What resource was the instructor able to give you to evaluate your own learning?
- How was the experience of learning customizable to your needs?
- Was there any additional help from the instructor?
- Were there other websites, programs, or documents used by the instructor to aid your learning?
• Were you able to use those additional resources for your learning?

**Files and Transcripts:** Upon the completion of interviews, all recorded data were saved to another 10 participant folders labeled Experience Interview in the researcher’s computer and tablet with security passcodes encrypted. The transcripts were saved to a separate folder in the same computer and tablet for later decoding.

**Step V. Focus Group Interviewing**

After all participants completed the second interview, each was contacted again by the researcher for the final part of this research: the focus group interview. The participants were informed that they would only receive the full initiatives stated in the beginning of this research when they complete the study.

**Selection of Setting:** All participants were given the choices of places near campus and different dates and times for participating in the focus group. This was to maximize engagement and participation from the participants.

**Interviews:** Snacks were provided to the group of participants during the focus group interview. During the interview, I started with sharing the findings from the first two interviews. The findings were organized into several categories and listed on a piece of paper. I began with first theme on the list and followed the list with questions for participants in no particular order. A central question was asked to participants as they responded to the findings: “Can you give me a word or statement to add to what you see from the theme/statement?” All interviews were recorded with the Zoom H4n Portable sound recording device.

**Reflective Survey:** At the end of focus group, the participants were given the reflective survey. These surveys were to provide numerical information regarding to the experience of learning via YouTube videos from the participants.
Analyzing Data

“Data analysis is making sense out of texts which involves consolidating, reducing, and interpreting what people have said and what the researcher has seen and read” (Merriam, 2009, p. 170). As Creswell (2007) explained, data analysis involves preparing the data for analysis, conducting different analyses, moving deeper into understanding the data, representing the data, and making an interpretation of the larger meaning of the data. In order to understand the findings, a coding process to put massive unorganized textual data pool was necessary; I had to adapt a grand strategy to codify the findings. Saldana (2009) recommended a checklist for considering the appropriate coding method.

- Is the coding method harmonizing with your study’s theoretical framework?
- Is the coding method able to address your research questions?
- Are you confident applying the coding method?
- Are data appropriate to the field notes?
- Is the coding method leading to an analytic path?
- Are you making new discovery as you code your data?

There were three steps before the coding process began. These steps prepared raw interview conversations into an organized textual form, and I was able to read through the conversation over several times to make sense of the conversation before putting the texts into categories and codes. The three steps were to collect raw data from the conversation, organize the data, and read through the data.

**Collected raw data:** Identifying the raw data from audio and texts from all sources. The sources include: interview transcripts, field notes, and videos from YouTube.
Organization of Data: Transcribing the raw audio and video data into texts; re-type and re-write field notes; arrangement of data in categories depending on the sources.

Reading through Data: Making sense of data in a general point of view.

Coding Strategies

Coding was the most complex part of the qualitative study because it involved a comprehensive understanding of the research. In this study, I adapted a five-step coding approach suggested by Creswell (2007).

- Reading all transcriptions thoroughly. Any ideas that stood out would be written down on transcription note.
- Making a list of topics after the completion of reading. Arranging the ideas into categories and columns.
- Taking the list back to the data; labeling the segments of data with appropriate categories.
- Grouping topics from the segments. Find descriptive wording for all topics and drawn lines between categories to show interrelationships.
- Assemble the data to each perform preliminary analysis. Recode data if necessary.

The interview data was coded manually both during and after data collection. “Manipulating qualitative data on paper and writing codes in pencil that give you more control over and ownership of the work” (Saldana, 2009, p. 22). To put these five steps into more detailed explanation, I split the coding process into two parts: first cycle coding and second cycle coding. In first cycle coding, I included attribute coding, descriptive coding, and versus coding that focused on discovery of terms and vocabularies identified the experiences. In second cycle coding, I was looking for patterns. Therefore, I grouped emergent and similar codes into several
meta-codes. From these codes, I was able to generate themes that described participants’ experiences in YouTube learning.

Table 3.1d

<table>
<thead>
<tr>
<th>Coding Strategy</th>
<th>First Cycle Coding</th>
<th>Second Cycle Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview Transcripts</td>
<td>Attribute coding</td>
<td>Pattern coding</td>
</tr>
<tr>
<td>First Cycle Coding</td>
<td>Descriptive coding</td>
<td>Versus coding</td>
</tr>
<tr>
<td>Second Cycle Coding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The interviews were recorded and typed in texts as interview transcripts. These transcripts contained direct quotes and actual conversations between researcher and participants.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All the codes generated from the transcripts were classified into categories. Merriam (2009) suggested a rule-of-thumb for the categories. These rules helped me to form categories to sort codes into appropriate areas that eventually led to creating themes.

- Responsive to the purpose of research.
- Exhaustive and relevant to the study.
- Mutually exclusive.
- Sensitive to the data.
- Conceptually congruent.

**Setting Parameters and Defining Codes**

For a qualitative study, the researcher is the gatekeeper, interpreter, and analyzer. The researcher filters information with the guide of theoretical concepts and literature that relates to the knowledge (Creswell, 2007; Merriam, 2009; Patton, 2002; Denzin, 2005). There were four types of coded data: first cycle code, second cycle code, category, and theme. These four coded data types were the building blocks of how I perceived participants’ experience in YouTube.
learning. To begin with analyzing the data, I first read through interview transcripts and jotted down words and phrases that fulfilled four conditions that were essential to understanding the experience (Saldana, 2009). These conditions were considered in first cycle coding:

- **Practices**: Things participants do relate to the experience.
- **Social**: Both individual and social roles and relationships of participants.
- **Lifestyles and subcultures**: Anything participants relate in life.
- **Encounter**: Unique scenarios that relate to the experience.

Any statements in interview transcripts that fulfilled any of these conditions were classified into the three types of first cycle coding if they reappeared in the context equal or more than four times: attribute coding, descriptive coding, and versus coding. Once first cycle coding completed, I began to analyze and search for patterns among the codes. In order to make a better inference to the patterns of data, several transitional words were considered when I read through the data a second and third time. Transitional words included “if,” “then,” and “because.”

The coding condition for second cycle coding did not only reflect on the reappearance of a code but also codes that identified similarities or trends. A trend was determined when a code reappeared in the contexts equal or more than three times. The reason that codes in first cycle had to reappear four times and codes in second cycle had to appear three times was that second cycle coding was more condensed and filtered. The transitional words helped me to identified hidden messages and connect the dots among other codes that eventually led to a similar pattern. These second cycle codes were generated to create meta-code or themes that further explained participants’ perceptions to YouTube learning. All codes generated from second cycle were put into categories. These categories were the building blocks that essentially built the themes of this research. A figurative process of coding is displayed in Figure 3.1b.
There were multiple themes; the coding process was to organize building blocks into bigger pieces that reflect on participants’ experiences. There was no minimum frequency required for a particular textual content to be considered as a code as long as it fulfilled the four conditions in first cycle coding. The second cycle was basically a reconnecting process among codes that had similarities or were related. Finally, I categorized these meta-codes to groups collectively so the transcripts were organized enough to be representing the participants’ experiences.
CHAPTER IV. FINDINGS

Introduction

This chapter is to reveal all the themes and qualitative findings discovered in this study. A theme is a collective insight constructed from the codes of data: in this case, interviews. I split this chapter into two parts: findings of experience and findings of participants. Findings are presented as themes and subthemes. All these themes contribute to the understanding of the learning experience from participants in this study. Also, themes represent the perceived experience, not the actual experience. All themes were manually analyzed and coded because I wanted to have complete control over data and interpretation of data. Each theme was generated through the process of coding and recoding described in Chapter III.

Each theme analyzed in this chapter includes two components: interview quotes and codes. The code section displays both the first and second cycle codes generated through interview scripts; interview quotes display the actual quote, examples, and conversation from all participants. These quotes and examples were not the only ones addressing a particular question in the interview; there were more quotes and examples that can be identified in the responses. To protect participants’ privacy, all names that appear before and in the quotes are different from their actual names.

There were also subthemes. A subtheme is a theme that corresponds to one of the major themes; subthemes are generated the way a major theme is generated. Subthemes also represented less trending or less frequency of a similar code, and were perceived differently from the rest of the themes. The first part of this chapter displays the findings to identify participants and their background in learning the Chinese language and using technology to learn. The second part displays their perception of using YouTube for learning.
There were a total of 7 thematic summaries that identified the participants and 12 themes that related to participants’ YouTube experience. Participants’ thematic summaries described who they were, and YouTube experience themes described how participants’ feel about their learning and how they learned. Participants were major subjects of experience in this research. It was critical to know who they were and how they saw technology and learning before commencing the study. All these summaries also served a role in triangulating with the demographical survey from an earlier stage of the study:

<table>
<thead>
<tr>
<th>Participants</th>
<th>Thematic Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Learn Chinese because….</td>
<td>• Helping with career.</td>
</tr>
<tr>
<td>• Believe that Chinese language is….</td>
<td>• Learning language as a hobby.</td>
</tr>
<tr>
<td>• Have had… social media experience….</td>
<td>• Writing Chinese is difficult.</td>
</tr>
<tr>
<td></td>
<td>• Tone of Chinese language is difficult.</td>
</tr>
<tr>
<td></td>
<td>• Artistic</td>
</tr>
<tr>
<td></td>
<td>• Daily uses so social media for multiple purposes including social, and entertainment.</td>
</tr>
<tr>
<td></td>
<td>• Some informal learning with social media technology.</td>
</tr>
</tbody>
</table>

The majority of participants share similarities in responses because they were from one dominant subculture: a four-year college language class. Therefore, the contexts of interview findings showed no surprises and the same trend reflected on the demographic survey as well. Furthermore, these summaries indicated that participants had some experience in using YouTube. The familiarity of YouTube exhibited little impact in their learning experience, even though one participant had very little previous experience with YouTube.
There were 12 themes identified from participants’ YouTube experiences. These themes showed how I interpret participants’ perception of the entire YouTube learning experience. Originally, there were more themes, but later on the themes identified were recoded after the completion of the focus group interview. The themes identified in the second interview were introduced to participants later in the focus group interview because of two purposes: to member check findings and to discover more themes that might emerge beyond the previous ones. Focus group interview field data were transcribed to cross analyze the existing themes to finalize the themes that reflected the experience. There were two themes that contributed to positive perception (+), three themes contributed to negative perception (-), and seven themes contributed to neutral perception (O). These positive and negative themes implied that participants had some pleasant experiences with certain aspects and unpleasant experiences with other aspects.

Table 4.1b  
*Participants’ Experience and Themes*

<table>
<thead>
<tr>
<th>YouTube Learning Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>About using YouTube</strong></td>
</tr>
<tr>
<td>Themes</td>
</tr>
<tr>
<td>• YouTube lacked communication. (-)</td>
</tr>
<tr>
<td>• YouTube learning lacked a way to evaluate learning. (-)</td>
</tr>
<tr>
<td>• I was able to go back to videos I watched anytime I wanted to. (O)</td>
</tr>
<tr>
<td>• I was able to access YouTube lessons at the time and place I wanted. (O)</td>
</tr>
<tr>
<td><strong>About the video lessons</strong></td>
</tr>
<tr>
<td>Themes</td>
</tr>
<tr>
<td>• Expertise was the key factor that influenced whether I liked the video. (O)</td>
</tr>
<tr>
<td>• The difficulties of YouTube video lessons were not sorted appropriately. (-)</td>
</tr>
<tr>
<td>• I did not use other sources provided by the teacher in YouTube. (O)</td>
</tr>
<tr>
<td>• Lessons with clear objectives were more appealing to me. (+)</td>
</tr>
<tr>
<td>• Organization of video lesson made a difference of good or bad. (O)</td>
</tr>
<tr>
<td>• Technicality was important to a video quality. (O)</td>
</tr>
</tbody>
</table>
About the applicability

Themes
  • I was able to use the lesson in practical application. (O)

About everything else

Themes
  • YouTube has advantages that might become a useful and popular educational tool in the future. (+)

The factors that influenced participants’ experience were more evident when looked into the original first and second cycle coding. After the interpretation of the codes, the message became clearer, and I was able to identify more specific examples what the experience was made of.

Factors Contributed to Positive Perception

The participants displayed a wide array of opinions on various aspects of learning on YouTube. There were two themes that had positive perception led by four satisfying factors in YouTube learning experience. Participants concluded that four major factors that enhanced their learning and yielded satisfying experience were:

  • Accessibility. Easily accessible lessons.
  • Organization. Well-planned and organized video content.
  • Expertise. Knowledge and credibility of teacher.
  • Choices. Large database.

The following chart is a graphical description of the factors that YouTube video lessons contributed to a satisfying experience for the participants. Each box represents the category of factors. There were multiple codes that supported these categories. The codes were originally identified in interview transcripts.
Choice was a mechanism that allowed participants to freely select the videos they wanted to watch; and, was the most recognized advantage by the participants. Accessibility of these lessons gave participants a great flexibility and convenience. At any time and any place, the participants were able to learn the topic they were interested. One of the participant responded to this factor:

Loisa: “I have internet at home. So, I watched the videos at home. It is kind of nice to be able to access what I need to learn from home instead of a classroom. I don’t mind classrooms, but I think learn it at my pace, and pause anytime I want. It is really convenient.”

Another participant also had similar response.
Halen: “I like to go to coffee shops for my study. I hang out with my friends there a lot. Most of the places I go to have free WiFi. I was able to watch some videos there, and sometimes with my friends too.”

Organization of the video was important for the participants because it kept the participants focused. Very much like any classroom experience, the organization of the lesson agenda or lesson plan helped the learners to follow and pace effectively and efficiently. Participants suggested that such organization contributed greatly to the learning experience. One participant talked about how setting objectives helped keep materials organized.

John: “I like one particular lesson by a Chinese lady in the video. She clearly stated the lesson objectives in each of her videos. It made me easier to follow. She would also suggest the audience to follow her lesson plan given in her external plan. I thought it was really helpful.”

Also,

George: “When I found a video that I like, it is usually pretty clear to what I am expecting because I specifically typed in the keywords… the teacher said again in the beginning that we will be learning grammar regarding to negative expressions. I thought it important that he she stated it because it helped to focus.”

In some videos, participants implied that poorly planned and organized video caused more distraction than help to learning experience.

Anne: “I think the teacher was trying to be funny. I am not sure if I like that. It was difficult to follow because he walks on the street and interviewing random people. It was hard to follow. Maybe it would have been a better video if I was not expecting a lesson.”

Expertise of the teacher was also the determining factor for the participants. Teachers who had great communication skills and knowledge on the subject yielded positive learning experiences. Also, the image the teacher presented also yielded the credibility. Participants tended to prefer to follow the same teacher once the sense of credibility was established. Lastly, participants also indicated teachers with expertise also were entertaining. One participant responded:
Kaylie: “*It was entertaining to watch the lady teaching the lesson. She was friendly and communicative. Lots visuals and gestures were used during the lesson. They were effective. I think she really did a good job keeping me watching the lesson.*”

The last factor of the four was connectedness. The participants were able to choose lessons freely based on personal preferences alone. Participants felt more connected to a particular videos or teacher. YouTube provided all the freedom for participants to choose what they believed was best for them. According to the participants, some YouTube lessons were just as good as a classroom lesson, if not better. Additionally, the large video database gave participants a lot of choices in topics. These choices made the learning experience unique and unparalleled. One participant responded to the uniqueness of YouTube experience.

Richard: “*I think the strength of YouTube videos from other audio based learning was that I can see the content. In one video, the teacher drew on the board behind her. It sort of made me feel like a classroom experience; I also had another video that used cartoon type of video to teach vocabularies. I thought it was too easy for my level but I could see it to be useful to kids who want to learn.*”

These factors were to participants’ advantage in their language learning experience. However, as the theme suggested, there were multiple neutral themes comprised by codes that supported positive perception. I believe it was because these factors are an example of a double-edge sword that could either help or hurt the experience. Therefore, I included these factors in the focus interview to inquire about participants’ thoughts on them.

**Factors Contributed to Negative Perception**

On the other end, participants identified five major factors that had negative impacts on their learning experiences. These factors are ambiguity, communication, technical difficulty, evaluation, and searching.

- Ambiguity: Unclear video message or objectives.
- Communication: Delayed communication, privacy, and one-way communication.
• Technical difficulty: Quality of video and audio presentation, voice syncing.
• Evaluation: The lack of true evaluation.
• Searching: Hardship to find desired video, same title video with different level of difficulties.

Figure 4.1b
Factor Contributed to Unsatisfactory Experience

Ambiguity of video objectives often led the participants to unsatisfactory learning experience. Unclear messages sent out by the teachers could confuse the audience in different ways, especially when most participants were influenced heavily on the first impression of the video. Participants were likely to watch a different video if the message was unclear at the start.

Lily: “I think the video was trying to be funny but I failed to see the materials. If they focused on delivering the lesson rather than acting it out, it could have been more helpful in my opinion.”
Communication was another major factor that impacted negatively the participants’ experience. Participants felt that the communication remained one-way. The conversation between learner and teacher was insufficient. Additionally, the participants felt that delayed responses created frustrations because they were not able to get the answers at the time of need from the teacher. Privacy was also another issue that participants felt that YouTube learning could improve.

Jane: “I don’t know if the teacher will respond to me; I don’t feel like it was a right tool to ask questions; I didn’t know there was a private message channel…. I don’t want others to see what questions I ask; I am not comfortable leaving comments like that, anyone can see me.”

Some findings suggested that if the comments made by the participants were only visible to the teacher and the participants, the participants would be more comfortable asking questions and leaving comments.

One participant says on asking questions in YouTube:

Tony: “I could not ask questions if I had any because I did not know if the teacher were committed to give me feedbacks. I think it would have been great if there were a way for me to know that I can reach the teacher. I think it would help me on my learning a lot.”

In the technical difficulty aspect, some dissatisfying experience was generated by poor video and audio quality. Noises in the background or blurry images were not recommended by the participants as those were basics and gave bad first impressions to the audience; some videos had poor presentation of the information due to poor delivery method or communication skills of the teacher. It was difficult for the participants to grasp the information if the obstacle was getting the message across. One participant responded:

George: “It is very distracting if a video has noises or poor video quality. It is already 2011; I believe we have enough technology to have a decent quality of both video and audio. I don’t want to watch a video lesson if they fail to even deliver this type of quality.”
On video quality, one participant stated:

Tony: “I think the video was created long time ago. I can barely see the teacher’s face if I use full-screen mode. The entire video turned into blocks. It made it hard to stay and enjoy the video. If the person who created the video used a better camera or a higher definition format, it would have made the video more enjoyable.”

Some videos had poor transitioning: jumping from one topic to another often left the participants confused if there was a poor transition. It was one technical difficulty that the videos could improve.

The lack of evaluation was the final factor that suggested negative impact to participants’ experience. Participants had to seek alternative ways to examine their learning experience. Therefore, the lack of evaluation created some frustration towards this experience because participants valued their learning and wanted to evaluate their progress. One participant stated:

Tony: “There was no quiz or tests to evaluate my learning. I am not sure about the websites some of those videos offered. Some of those websites I linked to from YouTube I had to become a subscriber to see what they had to offer. There was really no way for me to review my learning unless I apply what I learned to my Chinese native friends.”

Finally, searching was difficult for multiple participants. There were many possible causes of this factor: the lack of search skills, poor video tagging, or combination of several reasons. Participants indicated that the search of videos was more of a hassle because they felt that many videos were sorted inappropriately to the videos’ difficulties.

Halen: “I was able to find one video lesson that I really like but I could not find similar ones from the lists. I wish there was a way the search engine could sort levels of difficulty on these lessons or at least give them a label. It will make finding the right video much easier.”

Also,

Anne: “I found the videos were too easy for me. I am in Business Chinese level and the videos I found on YouTube was simply too basic. I could not find any good videos that matched the level of my study.”
I was able to bring in these factors in the focus group interview and ask participants to suggest possible improvements to their experience. Also, the focus group interview confirmed multiple first and second coding results.

**Learning Routine**

Participants followed a similar learning pattern when asked to describe their learning routines. Although these steps were not definite to everyone, it displayed trends among them all. Once the participants discovered the need to learn, they were given all the freedom and flexibility that YouTube lessons provided. Therefore, self-motivation became an important factor for participants to carry on learning on their own at their own paces. When participants decided to take the lessons, the experience began.

Participants began with having a desired learning subject, and participant set up the searching parameters and entered keywords that related to their subject. After the searching process, the participants were presented with a variety of information related to the subject of learning. There were several factors that could influence participants’ learning experience, such as quality of the lessons or credibility of the teachers. Participant would decide to back out from the learning experience because the information presented was insufficient or unrelated which lead to an unsatisfactory learning experience. In this case, there would be no further YouTube learning occurring. On the other hand, one would decide to search and watch more videos because the information presented was insufficient and unrelated. The learning cycle then began from the beginning. The unsolved subject became the new subject of learning and the participants sought videos to answer their need to learn. Furthermore, once the participant was satisfied with the subject, participants would also begin the cycle again when they found a new
subject of learning. All these steps were not definite; however, the participants displayed a trend that followed these steps as they were going through video searching and learning.

Figure 4.1c
*YouTube Learning Experience Flow Chart*

---

**Participants Analysis**

To begin understanding the experience, I started the study with questions to understand the individuals who would be going through the event. The participants were volunteers from a Chinese language class in a four-year university. Most of the participants took the class as an elective; one participant was a returning student studying Chinese as hobby. I inquired about their original intent to study a foreign language like Chinese. Several participants indicated that they were interested in learning because of career advantage. Here were two examples in the conversation.

---

69
Amber: “I think multi-lingual is definitely helpful when I seek employment. I have some Chinese friends, and I think Chinese language will help me in the future in getting more opportunities in job hunting.”

Loisa: “China has a strong growing market and I am thinking to find some career opportunity there. I traveled to Hong Kong last year. I really liked it there. I think working there will be fun. In the future, that’s what I mean.”

Also, there were participants who said they were learning Chinese as an intellectual hobby.

John: “I love learning foreign languages. I think Chinese is interesting because it is so different from English.”

Jane: “I have taken French in high school. I thought it was kind of easy. I knew Chinese was pretty difficult especially with its writing. When I was deciding what classes to take, I thought Chinese could be a challenging but fun language to learn.”

It was apparent that participants considered that knowing how to speak another language would give them advantages to their careers in the future. Two participants’ added that they also had interest in learning new languages before taking Chinese language classes.

I inquired about participants’ thoughts on Chinese language itself because I wanted to know what they felt about the language before going in to understand how they feel about learning it on YouTube. Most of the participants agreed that writing in Chinese and the tones of Chinese language were the most difficult. It was important to know because such conclusions led me to ask participants later about how YouTube lessons touched on these aspects of language.

Here were some comments made on the writing and tones of Chinese language.

John: “I find Chinese writing fascinating. I hope I knew how to write them all but I don’t. I spend extra time on practicing the writing myself during my spare time but it seemed never enough. I still find it hard to memorize the strokes of each character. If I don’t get to read the book for a couple days I tend to miss out a stroke or two in the writing.”

And,

Jane: “I don’t know many Chinese speaking friends. It is hard for me to practice when I don’t have a conversation partner. Teacher does a great job helping me out in the classroom but I find it difficult to pronounce some words or some sentences, especially those words that have similar tones. We have audio files that we can use in Blackboard.”
It helps. Although I still prefer a conversation partner because I can ask questions or practice with my partner.”

However, one participant who came from a different linguistic background in which the spoken language was more related to Chinese language; that participant indicated that the tones and writings were actually something he found to be easier.

George: “Chinese language is very similar to my language because we have Kanji in writing. I can easily relate the writing to my language and transfer it to what I learn in class. It helped a lot because I already know how to write.”

I also inquired about how participants felt about social media websites like YouTube. My intention was to find out whether participants responded differently if they had more previous experiences with social media or YouTube. The responses, however, did not show difference. The participant who had limited exposure to YouTube was able to learn how to utilize YouTube videos like the rest of participants. Some participants had experience of using YouTube as a place for entertainment, and some other participants had used YouTube as an informal learning tool in the past. One participant suggested that even though some participants had no experience of using YouTube to learn, they quickly adapted and were able to see the possibility of using it as a tool for learning.

John: “Oh I think this is wonderful. I didn’t know about YouTube can teach me some good lessons. I really enjoyed the few lessons I watched. I wish there was YouTube when I was in college. It would have been so much more helpful for my French class.”

YouTube lacked communication

YouTube has multiple channels for users to exchange information: personal messages, video comment sections, channel comment sections, and in some cases emails. However, participants felt that there was still a lack of communication between the teacher and the learner. Privacy, credibility of the teacher, and the lack of communication channel were pointed out by
the participants as the factors that influenced their communication. Many participants had very specific encounters:

Lily: “They were inconsistent. I couldn’t find the lessons after a particular lesson. I tried to search around and I finally found it. However, it was named differently. I think maybe the teacher made a mistake or something. I also tried to message one of the teachers. I had not heard back from her. I am not sure about the consistency if I can’t talk to the teacher and ask questions.”

And,

Halen: “I would say that I didn’t think I have improved much on my pronunciation from these lessons. I mean, those are good lessons but I still don’t know if I am pronouncing it right without a teacher checking it. I think face-to-face learning will help a lot.”

Some participants also made comments on how privacy was an obstacle between learner and teacher. Here was one example of how a participant responded on privacy.

Jane: “I don’t want others to see what questions I ask; I am not comfortable leaving comments like that, anyone can see me.”

I informed the participants that one could send private messages; and the responses to private message communication remained negative. Here was what one of the participant responded:

Jane: “I don’t know if the teacher will respond to me; I don’t feel like it was a right tool to ask questions; and I didn’t know there was a private message channel.”

I further asked if she would try to contact the teacher directly if she knew there was a private channel. The participant showed resentment to private messaging and brought up another issue in communication: delayed response.

Here was the extended questioning and what she responded in communication:

Jane: “I had one question in grammar when I watched this particular video. But I ended up found the answer in another video.”

The response was that she felt there was a delay in communication even if there was communication. She was not the only participant who felt that delayed communication was an obstacle while learning. The rest of the group implied strongly on this particular issue that the
wide choices made communication less needed because they were able to find answers from other Internet resources.

Overall, participants felt that there was lack of communication even though YouTube provided many features that encouraged communication. A lot of spontaneous questioning and answering was not there to help the learners get passed their confusions while the video lesson was being watched. The suggestion made about privacy was related to the credibility of the teacher. Participants believed that if the teacher was a professor they personally know, they would feel more comfortable sending a message to the professor and be more willing to communicate because of the established credibility.

**YouTube learning lacked a way to evaluate learning**

Evaluation was a big thing for participants. Even though participants volunteered to learn Chinese language from YouTube videos, knowing how well they had learned in the process was critical to all participants. However, it was also the biggest issue participants had with learning on YouTube. There was not much evaluation at all from the lessons. Participants had to search alternative sources to check on how they had learned. It became a hassle and built negative perception towards the whole experience. Several participants had similar response to the following comment made:

**Anne:** “There was no quiz or tests to evaluate my learning. I am not sure about the websites some of those videos offered. Some of those websites I linked to from YouTube I had to become a subscriber to see what they had to offer. There was really no way for me to review my learning unless I apply what I learned to my Chinese native friends.”

Also,

**Halen:** “I basically took note from the video and created a vocabulary lists. I re-wrote the vocabularies after I finished watching the video. It was helpful. I got every vocabularies right... I believe I was very self-motivated learner.”
Some participants suggested that there were evaluation resources given by the teacher; most of them were links to external websites that required either subscription or entering email information. It became an issue because the concerns were similar to communication: privacy and credibility. Participants worried about getting spam emails and computer viruses from unknown links. Therefore, they were hesitant to use the resource. During the focus group interview, several participants suggested that YouTube could develop a quizzing or question feature along with the videos. It would not only help the learners to evaluate their learning, but also be more reliable since it was already implemented with the video.

Some participants made suggestions in regard to improving evaluation: if there was a way to implement creating a quiz over an educational video, it would have been great for the learners.

Tony: “I believe websites like SurveyMonkey was pretty popular. If YouTube could implement some features like a short quiz in each educational video, I would definitely take those quizzes to test my learning.”

I was able to go back to videos I watched anytime I wanted to

This was noted as the major strength of YouTube lessons. Participants stated that such a feature allowed them to revisit the lesson or re-watch the lesson when they wanted to. It also gave them the time flexibility because they could pause the lesson in the middle and finish watching it a few hours or few days later.

George: “Yes, I was able to find the video I previously watched. I bookmarked the web address. It was easy enough.”

During the re-searching process of those videos, the participants had little or no problems finding the previous videos. As long as the videos on YouTube did not violate the copyright policy, they would be free from banning and being removed by YouTube administrators. Such policies
protect the original owners of the videos, as well as giving the users a standardized usability of those videos.

**I was able to access YouTube lessons at the time and place I wanted**

Participants were content about the accessibility of YouTube videos. One of the participants stated:

Anne: “I could access those videos on campus or at home anytime I want. I have cable Internet service, the speed was very fast.”

Most of public places participants visited had Internet access. However, it was more difficult for one of the participants who had no Internet access at home; this participant had to use public Internet services whenever he needed to access the videos. It was a hassle for him. This advantage was taken away as the learners were not given the privilege of Internet access.

**Expertise was the key factor that influenced whether I liked the video**

It was a theme that every participant agreed on. Expertise was important. If the teacher was able to demonstrate expertise to the viewer, regardless of the technicality or quality of the video, participants were able to learn. It was obvious that those secondary factors helped with the experience. Expertise was the single most critical factor to the participants.

George: “I think the video was created long time ago. I can barely see the teacher’s face if I use full-screen mode. The entire video turned into blocks. It made it hard to stay and enjoy the video. If the person who created the video used a better camera or a higher definition format, it would have made the video more enjoyable.”

Expertise also was a factor to help participants stay and continue to watch the video.

Tony: “I learned quite a lot just by watching this one video. The video was about 15 minutes long but I stayed the whole video. She knows what she was talking about.”

**The difficulties of YouTube video lessons were not sorted appropriately**

Even though there was a wide range of choice of videos, the choice was still difficult for many participants. The reason was that many videos had similar titles but were different in
content and style. Participants loved the choices. It was good for them because there were many styles that fit differently to participants. However, some participants stated that selecting the videos was not the best experience. One participant specifically pointed to the issues in searching videos.

Jane: “I was able to find one video lesson that I really like but I could not find similar ones from the lists. I wish there was a way the search engine could sort levels of difficulty on these lessons or at least give them a label. It will make finding the right video much easier.”

Even though YouTube provided an advanced searching feature that allowed learners to go through lists with detailed searching criteria, the video content was still unrated in terms of difficulties in presentation. Participants came up with a suggestion in the focus group interview that could potentially solve this issue.

Halen: “I think the rating system is good but can definitely be improved even further. If I can make a suggestion, I would say YouTube should have rating system specifically for educational contents. Maybe rate it from Novice level to Expert level with difficulties of the content and teacher’s expertise. That should make learners understand the content before even finishing the video.”

Also,

Tony: “If there’s a checkbox to check on difficulties for educational videos, it would make the sorting more appropriately in my opinion. It will allow users to decide how these lessons are difficult and how they are easy.”

The suggestion made was based on Web 2.0 technology’s strength: user engagement. Learners would be allowed to rate not only the popularity of the video, but also its level of difficulty if it was an educational video. Therefore, participants would not need to spend time searching for videos that suit their needs. Instead, they could just use the filter or check box to search the videos that had appropriate difficulties.
I did not use other sources provided by the teacher from YouTube

It was common that participants were not willing to follow the links provided by the teachers that directed them to external or non-YouTube websites. Despite the intent of these links to help participants in learning, participants felt that they would rather learn everything at once on YouTube and YouTube only. The ideas of using external websites generated fears such as spam emails, computer virus, and losing personal information on the websites. It was understandable because this threat of Internet is common and unwarranted. Hence, participants stated that they would not go on the external websites.

Lily: “There was websites in the information section of the video. The teacher also mentioned that we could go to the link and find more resources. I did not direct myself to the link though. I don’t want to get my laptop infected with virus.”

Also,

Tony: “Yeah there was some links to external websites. I think it is a good idea. But if the teacher can’t establish that credibility like I said, I am not going to go to his website and give him my email address. That’s just my opinion.”

Participants also made suggestions relating to the issue of linking to external websites.

Lily: “If the link provided was a YouTube domain link, I will definite have more confidence to direct myself to the website. Like other participants mentioned. We still fear virus and dislike spam mails. Any official web link helps us to establish the trust to the teacher. That’s definitely a huge factor.”

If the link source was a warranted website, participants seemed to have more confidence and were more willing to give it a try. It was similar to the issue of communication: participants felt that there was not enough credibility and accountability from the teachers. However, this fear of trust could be improved once the communication and relation between teacher and learner was established. One participant stated specifically on this issue:

Tony: “If I had more time to look into YouTube and learning, I think I would be more comfortable to use the external sources. I think some teachers looked really credible on
their videos; however, I am still afraid that I will get spammed by unwanted Emails if I gave away my email to their websites.”

Lessons with clear objectives were more appealing to me

Participants stated over and over in the interviews that they felt that a video with clear objectives was more appealing and provided a better learning experience. One important code that many participants suggested was attention. A well-organized video with objectives kept participants focused, which was a difficult task to do in many cases. One participant stated:

Tony: “…. of course. I don’t like the videos that are poorly organized. Especially when I am trying to learn something… objectives keep my learning more focused, and I think it also helps the teacher to be focused too.”

Additionally, several participants also indicated that putting class objective in the title would help with audiences because the audience would know what to expect.

Tony: “I have not uploaded videos myself so I wouldn’t know how difficult is to make objectives clear to everyone. If the title of the video is something like a regular lesson-10 type of title, I would suggest the teacher to at least state the objectives in the beginning of the video. It will only help.”

Also:

Jane: “In one of my videos, I had the teacher going over the objectives before the lesson began. It helped me to focus a lot more than the other videos. I would suggest any online teachers to do that if I could. It kept the lesson organized and focused, which helped me as a learner in this particular subject.”

As long as participants were able to stay focused during the video session, participants implied that the experience usually turned out to be pleasant; and setting a clear objective or objectives was an easy way to keep the video session focused.

Organization of video lessons made a difference of good or bad

This theme was evolved from the previous theme when I inquired about what made a good video. There were several levels in the response to this theme. Firstly, participants stated that there should be objectives because it would help keep the audience focused. Secondly,
participants suggested that if a teacher had a series of videos and the videos were sorted with titles, categories, or even difficulties, the teacher would have gained more credibility to the audiences. Thirdly, there was a video content organization participants suggested. Some videos had abrupt flow in transition; it made the lesson hard to follow. Finally, the consistency of lesson quality was a way to keep audiences excited. Participants indicated that if they found a video that was good, they wanted to see more from the same teacher that provided the video lesson. The audience had great experience if the video lessons were consistently good.

Halen: “I was looking for a video that could help my Chinese language class. I found this video and the teacher specifically pointed out what she was going to do in her videos. During her lessons, I was able to understand that some of the questions I had in mind for my class could be explained differently... it made easy for me to understand the lesson overall. I was glad that she was very organized.”

**Technicality was important to a video quality**

Similar to the previous theme, there were certain factors that had impacts to participants’ experience in using YouTube to learn Chinese language.

Tony: “I had the hardest time learning anything because the video was not synced to the audio. There was a 2 second delay on everything. It was a horrible video. And I don’t know why the owner of the video was not trying to fix it.”

Even though the video was corrected after the second time I visited the link, it was troublesome for one of the participants when he watched it. The impression of the video lesson was critical; and the technicality was the face of the whole experience. Even after correcting it, it left a bad first impression. Since there were many other videos of similar content, the teacher could easily lose audience that way.

**I was able to use the lesson in practical application**

Since participants indicated that there was no real evaluation tool on YouTube, participants had to find alternative ways to assess their learning. One method that multiple
participants used was practicing the learned materials with their Chinese-speaking friends. The lack of evaluation method became a reason participants practiced on the YouTube materials.

Jane: “I worked in a Japanese restaurant. I have several co-workers who speak Chinese. I had Chinese class and I learned some conversation. I was able to find something more interesting on YouTube and used in the conversation with them. It turned out to be pretty fun. There were things I learned that were not taught in the textbook.”

Also, another method that they used was to apply the content to their classes as class supplementary materials.

Tony: “I searched the videos related to my Chinese language class because I wanted to review. I was able to find some videos that helped me on my grammar.”

Also:

Lily: “I learned some conversation phrases on YouTube and shared it with my Chinese speaking friends. They laughed because my pronunciation was a bit off, but overall it was a pretty good experience.”

Both methods were practical and participants were able to apply what they have learned to practical uses as they needed.

**YouTube has advantages that might become a useful and popular educational tool in the future**

Every participant agreed that despite its many flaws, YouTube had many strengths that helped participants learn in this experience. Even for the participant who had limited experience before this experiment with YouTube, it was an eye-opening experience.

John: “You have opened up my eyes. This is really wonderful idea. I never thought YouTube have this many videos that I can learn from. I really like some of the videos I watched. I can imagine that those folks spent a good amount of time making them. But it’s free. Thank you.”

The idea of YouTube learning was still something new to participants because some of them believed that YouTube was a place for entertainment. As participants used YouTube as a
resource of educational information, they learned ways to find videos that suited their needs. One participant stated:

Jane: “I think it’s a really new idea. I mean, I don’t think it can be textbook type of teaching yet but definitely has the potential. I have never viewed YouTube as an actual learning resource before. But I can see how it can be effective if the search results could be more systematic. I like this idea. It’s free too.”

Participants were not sure how far YouTube would go to make it more appealing to people who want to use YouTube as an educational tool, but they were glad to see feature updates on the website. Participants indicated that they would like to use YouTube more often in the future for learning purposes.

John: “I am definitely interested. Now I know about another tool that I can use. I think YouTube is a very interesting idea because you get to see so many different type of teaching. I have been a student all my life. I would love to continue to learn about YouTube and use it as a learning tool.”

Also:

Lily: “Yes I had some success learning on YouTube. I also checked on YouTube if I was going to look for some visual demonstrations. It is so far the best resource on the Internet for this kind of stuff. I think I will use YouTube more in the future if I am interested to learn some other stuff.”

And:

Tony: “I subscribed to one teacher for my future reference. Thank you for letting me try out this experiment. I think I have found a great tool.”

Participants suggested that they were not able establish a trusting relationship with the video teacher because of the limited amount of time committed to using YouTube as a learning tool. Hence, there were more rooms for improvement in credibility, communication, and learning experience. Many participants indicated that they would continue this learning experience in future subjects. Participants believed that as they started to feel more comfortable using
YouTube as a learning tool, the experience would improve and also participants may have more questions in regard to this phenomenon.
CHAPTER V. EXTENDED LITERATURE REVIEW

Introduction

This chapter discusses the current literature and empirical findings on topics related to YouTube and learning. Because the world of technology moves rather quickly, some coverage of empirical findings were still ongoing in research. Additionally, the YouTube website itself receives feature updates regularly. Some research was conducted prior to the most current feature updates and therefore may have more ambiguity in the feature description. The purpose of this chapter is to quickly review the findings of other literature and draw relevance to the findings in this research.

YouTube and Research

The origin of YouTube learning can be traced back to computer-based learning in the 1990s. Many terms were adapted along the years, and for a period of time learning with technology was identified as Distance Learning (Salas et al, 2002). Salas et al. suggested that technology brought learners more flexibility (p. 139), but such technology lacks a standardized model due to the rapid evolution of web technology (p. 141). Furthermore, Salas et al. believed that the most influential factor to distance learning was the instructor, not the interface design of the website. However, Lawless and Brown (1997) argued that multimedia interface that had higher interactivity enhanced the independent responsibility from learners and promoted intrinsic interest in learning (p. 121). The given learner controllable interface encouraged learners to develop cognitive skills in addition to the traditional learning environment (p. 127). Lim et al. (2007) conducted a study to evaluate the learning differences between online learning and blended learning. Lim et al. concluded that the instructional delivery format might not affect learners’ learning or application of learning to a significant degree (p. 34). However, Lim also
suggested that online learners experienced more challenges and obstacles in achieving similar learning levels than the learners in the blended delivery group. Salcedo (2010) conducted a study to compare learning outcomes between face-to-face foreign language classes and an online language lab. The findings of the study suggested that online instructional design may have an ultimate advantage but is not necessarily applicable to learning foreign languages. The instructors agreed that learners needed more personal interaction to overcome anxiety of speaking a foreign language (p. 52). On the other hand, Tallent-Runnels et al. (2006) suggested that the difference in learning outcomes between face-to-face and online courses could be contributed to many variables that current literatures have no way of measuring. The lack of instrument to measure these variables prohibits researchers to further understand the experience (p. 119). Ashraf (2009) believed that most students would still need face-to-face instruction so they can ask questions and interact with peers in their learning environment. However, the digital native generation would cause the institution to rethink and redesign their educational and business strategies (p. 350).

Web 2.0 can be used in several learning theories because it provides an infrastructure to incorporate communication more efficiently among universities, learners, and teachers; it also creates personal narratives that promote individual styles of learning (Greenfield, 2008; Ramirez, Hine, Ji, Ulbrich, Riordan, 2009). Web 2.0 technologies allow users to take collective actions that previous technologies could not. “The advent of Web 2.0 enabled learners to use Internet in a completely new participatory way” (p. 165). Ramirez et al. conducted a study with students taking a business class through the use of Web 2.0 technology. The finding of the study suggested that Web 2.0 tools allow students to use the Web in a participatory way that enhanced
students’ learning experience; however, Ramirez et al. also suggested that it was challenging to help students master the use of Web 2.0 tools (p. 172).

Anderson et al. (2010) conducted a study with undergraduate students and professors to understand the YouTube phenomenon. Anderson pointed that the experience of students learning from YouTube videos were parallel to that of teachers trying to integrate the literacy and everyday knowledge from textbooks and classrooms, but YouTube was not “burdensome” (p. 41). The process of using YouTube to inspire students was productive. Chenail (2011) offered a compiled review of YouTube as a qualitative research asset. Chenail believed that there is a great potential in YouTube to produce and share reusable learning resources. “The ease at which users can upload and download their original videos to YouTube makes it more possible today for this sharing and reusing of quality resources to become a reality” (p. 233).

Nicholson (2010) discussed a study of a graduate course of librarian management taught primarily over YouTube and the impact of a freely available course to the learner community. Nicholson indicated that the course not only helped school library staff but also encouraged hobby games to be more involved in community library volunteering. The model adapted in the study was Open Educational Resources, which suggests when the barrier of content is lowered; more people can engage with the material and will be motivated to explore the content beyond the course (p. 234). However, Nicholson concluded that this course was a failure in tuition-based economy perspective. Programs or schools, which consider such courses, must take evaluation before launching the course (p. 239). There were other researchers who have been trying different approaches to understand YouTube’s impact on people’s learning in different fields. Mitchell and Watstein (2007) stated that YouTube as a means of communication and understanding is a big part of teaching librarians (p. 524)
Juhasz (2009) made five statements to defer the YouTube learning phenomenon. Juhasz believed that YouTube videos were easily censored by users because the videos content were not evaluated by quality, but by popularity. YouTube’s corporate ownership limits the form and content of its videos, which further inhibits the democratic promises touted for Web 2.0. The uneven quality of videos reifies distinctions between professional culture and amateurs. The foreclosed community of YouTube remains unorganized and messy. Cuddy (2010) also had a similar suggestion for this perspective. “Not all content on YouTube is arranged in channels… It can be difficult to separate the good from the bad” (p. 88). Lastly, it is hard to learn on YouTube because it lacks depth of dialogue. It can be difficult to find educational videos because of the production quality as well as the information quality (p. 88).

The relationship of student and instructor in online learning was addressed in Nathan’s (2008) article. “As technology in certain circumstances replaces the instructor for delivering or facilitating learning, it is important to examine the relationship between instructor and student…the relationship can be reflected in the importance of generation differences” (p. 19). Also, Nathan discussed the possibility of all-in-one global learning systems and concluded that even though the same model may not apply in all cultures, the concept of developing a learning system could be similar (p. 22). YouTube, however, is not the only platform that offers educational videos (Young, 2008, p. 4).

Burke, Snyder, and Rager (2009) conducted a study with a group of health education faculties and made several conclusions on YouTube learning with a different learning topic. These conclusions were drawn from the open-ended comment section of the study. There was both positive and negative feedback to YouTube learning experience (p. 6). The positive views:
• A wealth of video materials is available.
• It provides another means for serving information to the students via a new technology that they might find fresh and interesting, and to which many of them can relate.
• It offers real-life examples and visual demonstrations of the topics and concepts covered in class.
• The quick, short videos it can provide are excellent for use as lecture launchers to promote discussion and critical thinking.
• YouTube was current, timely, free, and diverse.

The negative views:
• A moderate amount of time can be involved in making or finding appropriate videos.
• The credibility and validity of some of the YouTube videos may be difficult to ascertain.
• Instructors and students may face problems in connecting to the YouTube website.
• It can be a messy abyss of inappropriate and appropriate materials.

The study implied that that future research ought to explore the utility of YouTube as a learner tool from several other perspectives: undergraduate vs. graduate; online vs. in-class settings; and the impact of existing YouTube experiences to learning (p. 6-7). Also, the informative application of YouTube has been adapted in many other universities: University of Minnesota and Kansas State University had video casts that drew 1 million views and 400,000 views respectively (p. 2). YouTube provides a stage that expands beyond standard university settings. The benefit of using YouTube is still yet to be understood.

O’Connor (2011) conducted a pilot study with an online teacher-education course. The findings suggested:
• The interaction between teachers and teachers and teachers and learners increased.

• Preparation to integrate YouTube in teaching methods is necessary for successful experience.

• The connection among individuals extended beyond the traditional model.

• A more comprehensive assessment is necessary to evaluate student’s performance.

The increase in communication was unexpected. However, the YouTube platform provided multiple channels for both teachers and learners to exchange conversation. O’Connor suggested that it is critical to have the mindset prepared for the transition from the traditional classroom model to the integration of YouTube. The pilot was successful in preparing teachers in transition and hence created a successful experience (p. 151).

**YouTube and Trend**

During Aspen Idea Conference 2012, NBC hosted a panel discussion with two individuals, Joanne Wise and Andrew Yin, who have high credentials in the field of higher education and online learning. These two individuals summarized the trend of online learning and the future research directions during the discussions. Here is the full link of the panel discussion video: [Aspen Ideas Conference 2012](http://fora.tv/2012/06/28/will_higher_education_be_transformed_by_technology#fullprogram). (NBC). (2012). *Will Higher Education be Transformed by Technology?* [Streaming Video] Available from http://fora.tv/2012/06/28/will_higher_education_be_transformed_by_technology#fullprogram.


The benefits of using online video courses were discussed during the conference.

• Teachers have access to a much greater population.

• Students are able to access a wider array of choices of teachers.

• It is more cost-effective than paying high tuitions.
• More student engagement than a traditional large class.
• Reusability and anonymity.

An online video course allows teachers to face potentially a greater number of audiences from anywhere in the world. As mentioned in the discussion, for a standard classroom lecture with 40 students, a professor has to teach 250 years to reach an audience of 10,000 people. Additionally, there is more than one teacher who teaches one subject among the online course videos. Students can choose the teacher who fits their learning styles and habits. Unlike the traditional university model, students are no longer limited to taking classes with few selections of teachers for one subject. Another advantage of online video courses is that it is free. The living cost and commuting cost are rising as the economy is falling. Many students are seeking alternative resources to receive quality education. Online video courses allow students to access education from anywhere at anytime, which reduces commuting costs; furthermore, many quality courses offered by accredited universities like Stanford, Harvard, Princeton, and Berkley are free. Even though students do not receive a diploma from these universities, these universities provide video courses that have equal quality of their standard classroom lectures.

Students can now engage more in the classroom. One key strength mentioned in the discussion is that many professors who provide online courses ask students to watch the video prior to coming to a class. The video provides instructional or demonstrative knowledge, whereas, the lectures that are taught by the professors are facilitated more as a discussion and inquiry-based session. It greatly improves the interaction and engagement between the students and teachers. Additionally, in a large classroom setting, when the professor asks a question to the entire class, one or two students answer the question whereas the rest of the class is left out from engaging in the class. In online video courses, everyone who sits in front of the computer is
prompted with the same question and is encouraged to answer that question. Thus, everyone is engaged. Reusability of video courses is another strength. As it was mentioned in the panel discussion, despite any teacher who has great patience, it is highly possible for the teacher to be judgmental if a student asks the same question over and over again. Furthermore, students can learn about the materials multiple times without facing peer pressure in the classroom or being a victim of racial stereotypes. The anonymity provides enough privacy for students to overcome some of the difficulties students face in school.

Some challenges were presented during the panel discussion. These challenges implied that online video course designs were still being developed and not optimized. Additionally, the integration between traditional and online models was said to be in a historic phase for both the teachers and students. The challenges are the following:

- Not everyone has access to Internet.
- Online Technology is not fully developed to learn.
- Evaluation.
- Self-directed learning.

Not every student has Internet access at home; and not every student is taught how to use the Internet to search for course content. It remains to be the top priority for educators in the field to provide enough resources to all students. Such challenges are more often seen in K-12 level education. The shift of learning with technology implies a potential change of learning habits from the traditional model to a modified model. As mentioned in the discussion, teachers and parents of the students might emphasize self-directed learning to the students because learning with an online video course requires no mandatory supervision. In other words, students can learn anything at any place at anytime without being told to. This presents a challenge for
education administrators because classroom settings are based on the pedagogical model. With the integration, the focus of the learning experience changes to student engagement and interaction. Lastly, integrity and honesty remains top challenges to online video course evaluations. Stanford and other universities have been trying to come up with a design that includes peer reviews to evaluate online learning. However, such an evaluation system is still under development.

The future direction of education is optimistic. The integration of an online video learning model is going to provide students and teachers alternative ways of learning. Furthermore, at the higher education level, professors and students will be able to communicate with less limitation from time and distance differences. Online video courses only add more function to the existing role of professors in the university. During a large class, the professor no longer is only to pass on information and knowledge to the students but also to understand and interact with students more closely. Despite the utility of online video courses, they are not to replace the existing university model but add value to universities.

**YouTube Updates and Features**

YouTube constantly updates the website features. As of October 2012, YouTube has an official category for education. The link takes visitors to videos with educational contents in different fields including university official channels, teachers’ channels, specific subjects, and K-12 channels. These channels were recommended to visitors by both the computer-generated data and users.
The YouTube education page has only been launched since late 2011. YouTube has been trying to develop tools for teachers to use for educational purposes. The idea behind YouTube education is that in an open education system, everybody gets to learn. YouTube team also created an official video for YouTube education.

http://www.youtube.com/watch?feature=player_embedded&v=NegRGfGYOwQ#

YouTube is gearing up the website to be more learning friendly: a beta version of the website reveals that there is a quiz type interface under development.
At the end of 2011, Google, the parent company of YouTube, announced the list of historic universities with 100% Web support. These universities are bound to share their abundant education resources, free of charge (Tom Mills, 2011, retrieved from http://googleblog.blogspot.com/search?q=education). Furthermore, YouTube itself has launched several educational channels in 2010 and 2011. YouTube.com/Teachers is a channel designed specifically for teachers who want to integrate technology into their classrooms. However, the main focus of this channel is on K-12 students. YouTube.com/education is another channel that focuses on bringing streaming videos to the classroom. It was created collectively by many teachers who made videos to teach students online for their needs. The range of subjects is wide. The channel provides students who have a special interest in the particular subject an alternative source of learning (YouTube Blog, 2011, retrieved at http://youtube-global.blogspot.com/).
Khan Academy, a non-profit organization created by a unique YouTube user called Salman Khan, started a mission to bring quality free online lessons to the audiences on YouTube in 2009. The beginning of this organization was simply an attempt for Khan to teach math to his relatives through online videos on YouTube. It turned out to be viewed with great popularity. Khan then started to teach other subjects. Those classes received high praises and recommendations from the users; and Khan himself was invited to NBC for an interview on his philosophy of free online education. The interview series can be found at http://www.youtube.com/watch?v=T4dk6woz4Do

Google+ is an application that allows users to share spontaneous data to each other at any place and anytime in the world, as long as one has Internet access. It also allows users to create a virtual conference with other users with a webcam. It is reported that several YouTube users and channels have uploaded videos of individuals using Google+ Hangouts as a learning conference tool. One example can be found at http://www.youtube.com/watch?v=TzbtZw5HKC0

Conclusion

Technology is heading towards education. There are more and more cases reported that show more users are trying to create ways to reach out to audiences by providing free and quality education. This extended literature review only shows a tiny fraction of what is going on around the Internet in education. With the newer 4G mobile technology and tablets, learning has a potential to become even more mobile and spontaneous. These researchers are there to provide empirical evidence of this online education movement. In the next five to ten years, it is possible to see even further advancement of online education; and a greater shift from a traditional education model to an integrated education model.
CHAPTER VI. DISCUSSION AND RECOMMENDATION

Research Recap

YouTube learning is a new phenomenon. Despite the restless efforts from software engineers and teachers on YouTube, YouTube as a learning tool is yet to reach its full potential. Scholars have been trying to explore the possibilities in making such a platform a genuine tool for everybody to study and learn. However, there is still much to be understood. This study focused on understanding the experience of a learner who used YouTube as a learning tool. The research questions centered on the individual:

- What does the learner experience from YouTube lessons?
- How do YouTube lessons facilitate transfer of learning through standardized interaction between human users, machines, and subject matter?
- How do components of a virtual learning model support learner experience?
- What else can the learner relate about the experience of YouTube learning?

These questions helped me to further understand what these participating learners go through before, during, and after using YouTube as a learning tool. The research began with a descriptive survey that inquired the demographical information of ten participants who were studying Chinese language in a mid-western state university. The survey was followed by a descriptive interview. The descriptive interview was meant to explore deeper participants’ experience using YouTube and other technology.

All participants were given an extended period of time to watch YouTube video lessons of their choice. Just like any other YouTube users, the participants could watch any subject related videos in any given time at any given place. The participants, however, were encouraged to take notes on their learning experience.
After watching the video, participants were interviewed again with questions based on their experience and the Virtual Courseware learning model. After the interview questions on experience, the participants were given another series of questions based on Virtual Courseware principles. These principles served as a guideline for the researcher to identify and understand the key factors of participants’ experience. It not only provided a frame to the research, but also helped the participants look at their own experience in a systematic perspective. The final stage of the research took place with a focus group interview. All participants were given the research findings and invited to provide feedback and recaps of their thoughts and experiences. The main purpose of the focus group interview was to cross thoughts and opinions among all participants to generate more communication and to exchange of themes and to reaffirm the findings of previous parts to the participants.

The findings of this study discovered 12 themes that identified participants’ learning experience with YouTube. Two of the 12 themes perceived the experience positively, and 3 of the 12 themes perceived the experience negatively. Seven of the 12 themes were neutral and purely descriptive:

- YouTube lacked communication.
- YouTube learning lacked a way to evaluate learning.
- I was able to go back to videos I watched anytime I wanted to.
- I was able to access YouTube lessons at the time and place I wanted.
- Expertise was the key factor that influenced whether I liked the video.
- The difficulties of YouTube video lessons were not sorted appropriately.
- I did not use other sources provided by the teacher in YouTube.
- Lessons with clear objectives were more appealing to me.
• Organization of video lesson made a difference of good or bad.
• Technicality was important to a video quality.
• I was able to use the lesson in practical application.
• YouTube has advantages that might become a useful and popular educational tool in the future.

The findings, however, were a snapshot of the actual experience within the designed timeframe of this research. I expected that there would be significant differences in findings if more time was allowed in the study because the participants may develop stronger attachment to a particular instructor or feel less overwhelmed with credibility issue. The variables would change overtime that eventually contribute to possible different outcomes.

Conclusion

The purpose of this study is to explore the experience of using YouTube as a learning tool. With the guided interview questions, there are several conclusions drawn from the findings.

1. There was a trend. As participants starting to share their thoughts on the experience, there were many perspectives in common. Those similar thoughts displayed a potential for a working model that could further explore the learning experience.

2. Users could use more communication channels. Despite the strength of Web 2.0: user engagement, there was still a room for improvement in communication between teachers and learners. Comments seemed to be the most popular way of communicating; however, the participants in this research believed that there could be more features in YouTube to help users to engage even further with the teacher.
3. No true evaluation. YouTube lessons provided great information but had no evaluation tools to help learners be aware of their standings in their learning experience. Participants had to seek alternative sources to reevaluate their learning.

4. Users’ experience in learning reflects on the current technology. Many universities and technology companies are coming up with features and ideas to improve user engagement. Users drive many features of social media. The more researches are there, the more technology is integrated into learning.

5. More research has to be done. There is much limitation in this study that prevented even further understanding of the YouTube learning phenomena. However, these limitation show that there are so many unexplored areas that can be studied in the future: a working model, relation among subjects and learners, relations between learners and teachers, accessibility, evaluation, and so much more are still to be understood.

6. There were clear good videos for learning and poor videos for learning. The participants showed in the findings collectively that some videos in YouTube could be well established and informative, whereas some other videos were not. The differences were there.

7. There is a promising future to YouTube learning. Even participants who were not interested in technology were able to enjoy the experience. The strengths of using YouTube gave the participants more than enough to look forward to in the short future.

**Discussion and Implication**

I believed that there were multiple ways to extend the study and explore further into the experience. I was able to see some cultural differences impacted on how learners experienced YouTube learning. The background of participants was limited in the study to create a bounded
system so that I could eliminate some external variables that could potentially influence how learners experienced. Furthermore, the subject was simplified to Chinese language because I intended to create a case study that explored full experiences of a single subject. It helped me to create a fundamental methodological model that I could replicate the research process in the future.

I believe that the technology is already here for both the learners and teachers. However, I do not see the technology being fully utilized. Multiple websites offer free educational videos: Coursera, Udacity, YouTube, TeacherTube, and so on. YouTube has been the biggest video source on the Internet and allowing users to not only to watch but also to create videos. The freedom helps users to be creative in creating educational content and be multi-dimensional. The findings indicated that even though Web 2.0 allows a high user engagement experience, participants still were not satisfied because of the fear of Internet and teachers’ credibility. During the Focus Group Interview, participants made some suggestions that they desired to see from YouTube or any free video source for education. These suggestions were mainly to improve the functionality of the websites.

- Improved privatized communication channel
- Adding quiz features
- Online alert system to notify users if teachers become available
- A better classification system to sort difficulty levels
- A rating system to rate the difficulties of educational contents

I have used Google Hangout application in the past and I believe with some integration, YouTube and Google Hangout could fulfill several needs of the participants. I believe these points will help users to maximize the benefits of using free video based education.
• Tablet integration as a instant upload notebook
• Moderator administration in controlling classroom (Letting waiting person speak, muting others, block function, class time and Google schedule integration.)
• Endorsements from private/public sectors
• Integrating YouTube to class session
• Integrating quizability

As Internet technology grew more and more popular, websites like YouTube provided users a great platform of learning. The purpose of this study was to discover the YouTube learning experience and to explore the potentials of using it as learning resource. The findings of this research provided insights from three different perspectives: the process, the experience, and the working model. Everyone learned differently. It was the same for users on YouTube. However, during the course of this research, the participants exhibited a similar pattern of learning. The elements in the process flow chart showed a generic trend. These findings led to two implications, which were only limited to the individuals who participated in this research.

1. Despite the individual difference in learning processes, everyone who used YouTube as a learning tool went through the same stages in the chart.

2. The individual who used YouTube to learn had motivation to learn.

The process was meaningful because it displayed how the learning occurred for participants as they started to use YouTube as a learning tool. After understanding the process, the findings of further interview questions were made clearer.

The experience itself was a reflection of the learning process. It displayed the feedbacks from each stage. The two major types of experiences were satisfactory and unsatisfactory. Four themes were generated from the satisfying experience: accessibility, organization, expertise, and
choice. Five themes were generated from the unsatisfying experience: searching, ambiguity, communication, technical difficulty, and evaluation. Satisfactory themes showed the strength of videos, which was successfully delivering the materials, according to the participants. It had two implications.

1. Videos with the satisfying themes were good sources of learning.
2. Users felt content with the quality of the lesson if the videos had these themes.

On the other hand, an unsatisfying experience was generated when the videos had the unsatisfying themes. This led to two other implications.

1. Videos with the unsatisfying themes made poor source of learning.
2. The user felt unsatisfied with the quality of lessons if the videos had these themes.

There were many videos that had a mixture of both satisfying and unsatisfying themes, according to the participants. Therefore, the experience came down to personal opinions when the videos displayed both qualities that could not overcome one another. The final perspective was the working model perspective. The interview questions were guided by Virtual Courseware Project principles. The findings indicated that the elements from the model reflected on both satisfying and unsatisfying experiences. Additionally, Web 2.0 technology claimed to have more user engagement (O’Reilly, 2005). Therefore, it led to more participation between the learners and teachers. Here were the two implications from the findings:

1. The elements of the model were able to provide satisfying experiences.
2. Web 2.0 technologies enabled more participation than the previous model.
**Recommendation**

The potential of using YouTube as a learning tool will continue to be studied and understood. One may find a completely different conclusion with a slightly modified methodology to this study with a different group of participants, a different subject of learning, or a different setting. These are some factors for researchers to look into in future studies. There are universities and companies trying to understand this phenomenon and take advantage while at it. There are successful stories. In the future studies, two particular directions should be further explored and understood.

**Recommendation to Future Studies**

Future study is recommended to investigate:

1. The difference in experiences from participants who participate in different subjects for learning.
2. A replication of this study in a group with completely different demographical background.
3. A study of teachers of these YouTube lessons.
4. A replication of this study with a larger participant group.
5. A study that applies a different learning model as theoretical framework.

**Recommendation for Practices**

1. Explore the integration of social media tools such as Google+ Hangout and Facebook to YouTube learning.
2. Understand the users in social media learning platforms, such as Khan Academy.
3. Understand the differences between designing YouTube curriculum and classroom curriculum for different audiences.
4. Understand the impact of a free-education model to the learning community.

YouTube is free, and many academic institutes, companies, and governments have been using it to create informative contents on the web. There are waves and waves of researches and studies being conducted everyday to understand this phenomenon as well as bring benefits to the learning community. This study aims to bring more empirical data to the existing body of knowledge in order to have a more complete perspective. There were limitations in this study. However, these limitations did not limit the study but strengthen the focus of the study.

**Funding**

The author received no financial support for the research and/or authorship of this article.
REFERENCES


Chanail, R. (2011). YouTube as a qualitative research asset: Reviewing user generated videos as learning resources. The Qualitative Report. 16(1), 229-235


Greenfield, D. (2008) YouTube to MuseTube – Now we have Web 2.0 tools, how do we use them?" Presented in conjunction with the Department of Canadian Heritage through the Canadian Heritage Information Network and Canadian Culture Online.


105


Ng, H. Z., Hussain, R. M. (2009) Empowering learners as the owners of feedback while YouTube-ing. Interactive Technology and Smart Education. 6(4), p. 274-285


APPENDICIES

Appendix I: List of YouTube videos Participants Watched

Some videos were not listed because of duplication. The videos were listed in no particular order. They were solely based on the link order participants provided me.

http://www.youtube.com/watch?v=dZfbkC9bTTc
http://www.youtube.com/watch?v=hrynAv4_Cac&feature=related
http://www.youtube.com/watch?v=yQW_wdSNINc&feature=related
http://www.youtube.com/watch?v=JpoFA-nLE3E&feature=related
http://www.youtube.com/watch?v=2fYObYJG1k
http://www.youtube.com/watch?v=2fYObYJG1k
http://www.youtube.com/watch?v=VZBduBkV1CA&feature=fvwrel
http://www.youtube.com/watch?v=OCeyVh9v9bc&feature=related
http://www.youtube.com/watch?v=WTe4_cC4Zxc&feature=relmfu
http://www.youtube.com/watch?v=0i3LvewELpI&feature=related
http://www.youtube.com/watch?v=Sk1m_a8KUg8&feature=related
http://www.youtube.com/watch?v=VAPRL5t1IMQ&feature=related
http://www.youtube.com/watch?v=hLGa5mitTq4&feature=relmfu
http://www.youtube.com/watch?v=LCfnolgTApl
http://www.youtube.com/watch?v=28kSW40D1Pw&feature=relmfu
http://www.youtube.com/watch?v=uy8PktMIBuI&feature=related
http://www.youtube.com/watch?v=5LNCJZ15Fmo
http://www.youtube.com/watch?v=bkIfm0Wvg_Y
http://www.youtube.com/watch?v=d5HJVpy0rH4
http://www.youtube.com/watch?v=b-iYomeLAjQ&list=UUv7bRrg9N0OIfmcmgxs1wKw&index=3&feature=plcp

http://www.youtube.com/watch?v=jL8hV-zjJ_4&feature=related

http://www.youtube.com/watch?v=V_vjCDiwfTQ

http://www.youtube.com/watch?v=sdA36EwErCk

http://www.youtube.com/watch?v=Na_iinJHzHY

http://www.youtube.com/watch?v=SCGv7O2ql1s

http://www.youtube.com/watch?v=7VhOCX5WLpw

http://www.youtube.com/watch?v=xCYcL_BQn-4&feature=related

http://www.youtube.com/watch?v=ch6tl7rDFA0

http://www.youtube.com/watch?v=1wrBMhz8kxg

http://www.youtube.com/watch?v=K2EjEpI0JY0

http://www.youtube.com/watch?v=zvdd1FhcXS0

http://www.youtube.com/watch?v=eO1H0sJGcI0&feature=related

http://www.youtube.com/watch?v=sC9Bp-BM7is&feature=related

http://www.youtube.com/watch?v=CK7TkeK-hOk&feature=related

http://www.youtube.com/watch?v=sV3cyTEDp4

http://www.youtube.com/watch?v=S60TVBUj3RM

http://www.youtube.com/watch?v=P2SA4yU1Q0k

http://www.youtube.com/watch?v=G4DYfbLa2A4

http://www.youtube.com/watch?v=wgghK0Av1sc

http://www.youtube.com/watch?v=3f9CVsDM_iQ&feature=relmfu

http://www.youtube.com/watch?v=Zw3f8P21BTQ&feature=related
Appendix II: Demographic Survey

Please circle the age group best describes you.

Under 25  26-35  36-45  46-55  Over 55

Please describe the current education group best describes you.

High School  Some college  University  Graduate  More than Graduate School

What is your gender?

Male  Female

Please share your experience of using the following technologies.

Technology

I have downloaded music before  Yes  No
I have downloaded videos  Yes  No
I have shared photo on web  Yes  No
I have used instant messaging  Yes  No
I have a webpage  Yes  No
Appendix III: Survey of Technology Knowledge Background

Was the YouTube lesson interesting?
YES       NO       Do not know       Refuse to Answer
Did you understand what you were supposed to learn?
YES       NO       Do not know       Refuse to Answer
Was the materials related to the objectives of lessons?
YES       NO       Do not know       Refuse to Answer
Was the exercises provided by YouTube teacher relevant?
YES       NO       Do not know       Refuse to Answer
Did you expand knowledge of subject by using YouTube?
YES       NO       Do not know       Refuse to Answer
Would you use YouTube as a learning tool in the future?
YES       NO       Do not know       Refuse to Answer
Did you receive enough feedback on the lessons?
YES       NO       Do not know       Refuse to Answer
Is English your native language?
YES       NO       Do not know       Refuse to Answer

Survey instrument was inspired by Fralinger and Owens (2008). The original survey instrument developed by Fralinger and Owens was to investigate a tutorial design on YouTube. The purpose of the investigation was to gain in-depth understanding of participants’ perception of YouTube tutorial design. (p. 18) In this study, however, the survey instrument was to obtain additional information about the experience with a different approach from qualitative data collection. The survey instrument was to seek simplified response from participants’ experience. The survey instrument data was used to reflect on the qualitative data collected from interviews.
Appendix IV: Interview Guide

**Demographics:** age, gender, ethnicity, marital status, state residence, employment status, education.

**Interview I:** to gather information about experience with social media learning.

Please describe your experience with social media websites.
Have you seen any YouTube videos that teach content?
If yes, please describe your experience of learning through those videos.

**Interview II:** to gather information about the language learning experience on YouTube.

What is it like to be a learner on YouTube?
What makes you want to go back to watch those video lessons?
What makes you NOT want to go back to watch those video lessons?
What have you been able to apply to so far on YouTube’s lessons?
What is most important to you in learning from those video lessons?
What is the least important?

What were the objectives of the video lesson?
How did the lessons support the learning objectives?
How did YouTube work for you in learning a language?
How does the instructor invite feedback?
Describe the review process in your lesson.
What resources did the instructor provide to help you with the instruction?

**Focus Group Questions:** probing questions to clarify or expand on concepts identified in individual interviews.

Please describe your experience with YouTube learning.
What do you find interesting about the themes that I have shared?

These research questions are non-directive. Hence, the interviewer does not intend to lead the participants in any particular direction. The interviews may yield commonalities, similar themes, or similar sub-themes. Or, the interviews may yield no commonalities at all.
MEMORANDUM

TO: Yuan-Hsiang Lo
    Jules Beck

FROM: Ro Windwalker
      IRB Coordinator

RE: New Protocol Approval

IRB Protocol #: 11-09-137

Protocol Title: *What is the Participant Learning Experience like Using YouTube to Study a Foreign Language?*

Review Type: ☒ EXEMPT  ☐ EXPEDITED  ☐ FULL IRB

Approved Project Period: Start Date: 10/06/2011  Expiration Date: 10/05/2012

Your protocol has been approved by the IRB. Protocols are approved for a maximum period of one year. If you wish to continue the project past the approved project period (see above), you must submit a request, using the form *Continuing Review for IRB Approved Projects*, prior to the expiration date. This form is available from the IRB Coordinator or on the Research Compliance website (http://vpred.uark.edu/210.php). As a courtesy, you will be sent a reminder two months in advance of that date. However, failure to receive a reminder does not negate your obligation to make the request in sufficient time for review and approval. Federal regulations prohibit retroactive approval of continuation. Failure to receive approval to continue the project prior to the expiration date will result in Termination of the protocol approval. The IRB Coordinator can give you guidance on submission times.

**This protocol has been approved for 20 participants.** If you wish to make any modifications in the approved protocol, including enrolling more than this number, you must seek approval prior to implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

If you have questions or need any assistance from the IRB, please contact me at 210 Administration Building, 5-2208, or irb@uark.edu.