Developing and Studying the Effectiveness of EFR Annotations for Chinese Language Learners

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DEVELOPING AND STUDYING THE EFFECTIVENESS
OF EFR ANNOTATIONS FOR
CHINESE LANGUAGE LEARNERS

by

Amber Marie Chen

A project submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of

Masters of Arts

Department of Linguistics & English Language
Brigham Young University
December 2009
This project has been read by each member of the following graduate committee and by majority vote has been found to be satisfactory.

Date                                   _________________________  _________________________  _________________________  _________________________
Date                                   Alan K. Melby, Chair    Charles Ray Graham   Alan D. Manning
As chair of the candidate’s graduate committee, I have read the project of Amber Marie Chen in its final form and have found that (1) its format, citations, and bibliographical style are consistent and acceptable and fulfill university and department style requirements; (2) its illustrative materials including figures, tables, and charts are in place; and (3) the final manuscript is satisfactory to the graduate committee and is ready for submission to the university library.

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ABSTRACT

DEVELOPING AND STUDYING THE EFFECTIVENESS
OF EFR ANNOTATIONS FOR
CHINESE LANGUAGE LEARNERS

Amber Marie Chen

Department of Linguistics & English Language

Master of Arts

This project is intended to take the film *To Live*, directed by Zhang Yimou, and apply the Electronic Film Review (EFR) approach to it in a Chinese as a Foreign Language (CFL) setting. The Electronic Film Review project, developed by Alan K. Melby, is aimed at providing a superior language learning experience for Americans learning Chinese. Using feature films as a teaching tool has been found to stimulate and motivate students to achieve higher language levels, but in order for optimal learning to occur the material must be challenging yet accessible to the student. Most feature films, by themselves, are too advanced for the average language learner. The EFR approach provides annotations designed specifically for the feature film with the language learner in mind. These annotations can include access to vocabulary helps, grammar and cultural notes in order to bridge the gap between the learner and the film. It does not alter the film itself. This
approach has been used with ESL students (English annotations), French language learners, and with Korean ESL learners (Korean annotations), but has not been developed for students learning Chinese.

The purpose of this project is not only to apply the technology of the Electronic Film Review program to a Chinese film for the purpose of aiding Chinese language learners, but also to critique whether or not the tool is effective in helping students to gain better listening comprehensions skills and therefore ultimately better language skills. Previous studies have not shown clear results on this issue. This thesis will briefly review what the EFR project is and how it has been used with other films and languages as well as the findings up to this point. Then it will look at the effects of annotations on several aspects of listening comprehension as well as student preferences and reactions. It will then evaluate the results collectively to determine whether students watching the film without the help of EFR annotations show differing levels of listening comprehension achievement when compared with those using the EFR tools. Suggestions will be made for further improvements.
ACKNOWLEDGMENTS

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Finally I would like to take a moment to acknowledge my family, without whom I would never have been able to complete this project. Each of my siblings has helped me through their support to be a mom & finish this degree. My parents have been a tremendous support and given me encouragement throughout my life. My daughter Lynn has been very patient while mommy dragged her back and forth to classes instead of to the park. Most of all, I want to acknowledge the help and support of my husband, Xihui, without whom I may never have begun this venture in the first place, and most certainly would not have finished. Thank you for your patience and your love and for always believing in me.
# Table of Contents

Title Page ........................................................................................................................................ i
Graduate Committee Approval ................................................................................................. iii
Department Approval ................................................................................................................... iv
Abstract ........................................................................................................................................ v
Acknowledgments......................................................................................................................... vii
Table of Contents........................................................................................................................ viii
List of Tables and Figures.............................................................................................................. x
Chapter 1: Introduction .................................................................................................................... 1
Chapter 2: Review of the Literature............................................................................................... 5
  Advantages of Video..................................................................................................................... 5
  Krashen’s I + 1 Theory & the EFR Project................................................................................. 6
  Past EFR Projects & Their Results.......................................................................................... 7
  Teaching Listening Comprehension......................................................................................... 10
Chapter 3: Making an EFR............................................................................................................ 15
Chapter 4: Methodology.............................................................................................................. 23
  Subjects ..................................................................................................................................... 23
  Film .......................................................................................................................................... 25
  Procedures ............................................................................................................................... 27
  Testing Procedures ................................................................................................................... 27
  Posttests .................................................................................................................................... 30
Rational Behind the Materials ....................................................... 31

Analysis .................................................................................. 34

  Quantitative ........................................................................... 34

  Qualitative ............................................................................. 36

Chapter 5: The Results ............................................................... 37

  Test 1: Vocabulary ............................................................... 37

  Test 2: Film Response – Listening Comprehension Questions .......... 40

  Test 3: Extra Evaluation 2 - Character Recognition ....................... 42

  Qualitative Analysis .............................................................. 44

Chapter 6: Conclusion ............................................................... 48

  Future Possibilities for this EFR .............................................. 48

    Future Testing .................................................................... 49

    Future Additions ................................................................ 52

References .................................................................................. 55

Explanation of Appendices ........................................................ 57

Appendix A: EFR Explanation Sheet for Class Presentations .............. 58

Appendix B: Research Consent Form .......................................... 59

Appendix C: Testing Materials .................................................... 60

Appendix D: Transcripts of Audio Files ....................................... 72

Appendix E: EFR Creation and Use ............................................ 74
List of Tables and Figures

Figure 1: Segmentation from *To Live* – Part 1 .................................................. 15
Figure 2: Segmentation from *To Live* – Part 2 .................................................. 16
Figure 3: Codes ................................................................................................. 16
Table 1: Tokens File .......................................................................................... 17
Table 2: Concepts File ...................................................................................... 17
Figure 4: Vocabulary Link, Sample ................................................................... 18
Figure 5: Synopsis Sample .......................................................... ............................. 19
Figure 6: Questions Page, Sample .............................................................. ............................ 20
Figure 7: Grammar Page, Sample .............................................................. ............................ 21
Table 3: Subject statistics ............................................................................. 24
Table 4: Vocabulary Test Results ............................................................... .......................... 37
Figure 8: Vocabulary Test Scores ............................................................... .......................... 38
Table 5: Vocabulary Test Significance Level ............................................. .......................... 39
Table 6: Vocabulary Mean Scores ............................................................... ................................ 40
Figure 9: Film Response – Comprehension Questions ........................................ 41
Table 7: Film Response Significance Level ................................................. .......................... 41
Table 8: Film Response Mean Scores ........................................................... .......................... 42
Table 9: Character Recognition Mean Scores ............................................. .......................... 43
Table 10: Character Recognition Significance Level .................................... .......................... 43
Figure 10: Student Feedback ................................................................. ............................. 47
Figure 11: Word Web .................................................................................... 52
CHAPTER 1: Introduction

In 2006 Time magazine ran an article with the headline “Get Ahead, Learn Mandarin”. Below this it reads “China's economic rise means the world has a new second language—and it isn't English” (Ramzy, 2006). The rise of interest in learning Chinese worldwide has been almost as phenomenal as the rise of the Chinese economy itself over the past few years. In the United States the increase of Chinese language learners has reached the level that it is now offered as an Advanced Placement course for high school students who are rewarded with up to two years of college credit. According to the College Board, “The first AP Chinese Language and Culture courses will be offered worldwide in the fall of 2006, followed by the exam in May of 2007” (http://www.collegeboard.com). In 2007, students from 433 schools took the exam numbering 3,261 in all with over 80 percent of them scoring a 5 and a mean score of 4.69 (www.wikipedia.com). These numbers are just from the first year the exam was offered, with increases expected well into the future. In addition to that, many elementary schools are beginning to offer Chinese immersion classes throughout the United States. For example, here in Utah the first dual immersion classes will begin this fall for the 2009-2010 school year with 475 students, a number which is expected to more than double by next year. The program will follow the students through high school. Wasatch Elementary School here in Provo originally planned to have two first grade classes for the up-coming school year but because of demand will now have three and a waiting list (Franson, 2009). These numbers indicate a substantially increased need for teachers of Mandarin and an increased capability to train students in a language which is linguistically very different than the L1 of the majority of
American students, or even than other European languages which are commonly taught and with which students may have had more experience.

Much has been said in the field of language acquisition about how and what to teach but it seems that those skills which may be the most important are often more difficult to teach and are therefore more likely to be forgotten. Lee (1994) states that a “wealth of study has shown the importance of focusing on listening in the early stages of language study… [yet] listening is the least well-taught skill” (p. 4). The empirical evidence supporting the need for improving listening comprehension abounds, yet the application of these results still falls far short of the needs of a rapidly changing modern world.

Though the world is becoming increasing more interconnected and the need for multilingualism in fields such as business and politics is growing rapidly, much of a student’s initial dealings with a foreign language may come in an external L2 environment, or in other words, in an atmosphere where the learner does not encounter the target language in any of his or her regular social environments. Siegel (2003) shows that in a classroom or external L2 environment the key determinate in SLA is motivation (p. 186). If the students struggle to find motivation to learn this language with which they have little contact, then ultimately acquisition will fail.

Another issue language instructors face is that language itself does not exist in a vacuum; there are cultural factors, social norms and expressions as well as all the varied nuances of meaning and structure. These can be a challenge to express to students in general but are a particular challenge to English speakers learning Chinese, where the cultural and social backgrounds are as different as the languages are themselves. Kitajima
& Lyman-Hager (1998) illustrate that “theoretical and applied linguistics lend strong support for video as a provider of cultural, social and linguistic data sources in which the importance of context is all pervasive” (p. 44). With the context of video, students are better able to wholly acquire language skills.

Video has been used as a language learning tool in classrooms for decades because it addresses so many of the issues a teacher faces. It provides students with a chance to listen to native speakers in a realistic setting. It motivates the students to learn because they enjoy and are familiar with the medium and they have a desire to understand the story line. It introduces them to cultural and social aspects of the language as well as helping them to be familiar with a variety of linguistic patterns. Yet there has always been one major drawback to using popular films in language classrooms, particularly with novice or intermediate learners, and that is that the language of the film is often too advanced for the listener to glean much information from. If gaining listening comprehension were as easy as watching a film in a foreign language we could all be fluent in Spanish and French at least, as most feature films sold in DVD format now come with soundtracks available in these languages. Unfortunately learning a foreign language is not so simple no matter how appealing the use of video may be. The EFR project was developed as a solution to this dilemma. According to Melby (2003):

The pedagogical basis of the EFR project is the assumption that interesting feature films can be effective in improving listening comprehension, but only with user control over the playback and with access to sufficient supplementary material to make the film comprehensible. (p.135)
My hypothesis is that use of the EFR aids will significantly improve listening comprehension of the students who use it. Some limited studies have been done up to this point all with positive feedback from the students, but I plan to do a more extensive test of the material.

In the following chapter I will give a brief review of literature and summarize past EFR projects and their results. In chapter three I will describe the process of making an EFR. Chapter four will contain the methodology used in this project. Chapter 5 is the description of the results of the testing followed by a conclusion in chapter 6.
CHAPTER 2: Review of Literature

Advantages of Video

There is a question with which likely every teacher who has ever cared for his students has wrestled, and that is how to ignite a passion for learning in those students so that they might be motivated and have an internal drive to carry them far beyond the basic requirements of their tasks. One partial solution to this question, at least in the realm of language acquisition, is that “student success is strongly influenced by student interest, and student interest is increased by the use of stories in the form of interesting films with an audio track in the language being studied” (Melby, 2003). Stories have been a means of education for as long as people have been able to tell them. They draw us in and hold our attention. We have a desire to make sense of them, and this can draw us to increase our language skills accordingly. They allow us to draw from the context and make connections with our own experiences.

Another advantage to using video is that, because it is contextualized, it facilitates memory. Video gives learners a better framework for remembering as compared with disembodied audio tapes (Mendelsohn, 1995, p.153). Also students are able to draw from the surroundings, facial expressions and body language, which raises their ability to understand a given passage and makes the speech seem more natural. In addition, Conrad (1989) showed that if listeners rely more on syntax than on contextual semantic cues, their language proficiency actually decreases. Consequently, it is very important that students have the opportunity to balance their learning with contextualized speech.
Mendelsohn (1995) summarizes the above mentioned benefits to using video as a tool for instruction:

Properly selected video provides sufficient context that the listener can get the most out of what they know/understand, it aids in motivation, being used in context aids memory, it provides exposure to varying accents and genders and it allows the student to learn through a medium which he/she is already very accustomed and comfortable.

It is clear than that video has many advantages to offer students learning a foreign language, but we must also be keenly aware of its disadvantages.

*Krashen’s ‘i + 1’ Theory & the EFR Project*

Ried (2003) touches on one possible disadvantage of using video by saying “there seems to be cognitive thresholds for processing of audio, which of course, likely vary by individual” (p.17). He suggests allowing users control over the rate of audio presentation as a means of helping them to stay under such thresholds while maximizing learning efficiency. The EFR project not only allows the user control over how much content is seen how fast, it also provides supplementary materials to help bridge the gap between the learner and the film. Keeler (2005) elaborates:

The EFR approach is based on the assumption that students are interested in film, but it takes into account the realistic nature of authentic feature film. In keeping Krashen’s ‘i + 1’ theory in mind, the EFR approach seeks make feature films fall within this range by providing wraparound material. Providing vocabulary help,
cultural notes and comprehension questions, it is hoped that the film is brought closer to the \( i + 1 \) realm. (p. 22-23)

To further explain Krashen’s theory of comprehensible input, in order for a learner to make progress in a language the input must be given at a level just slightly higher than the level with which the learner is comfortable. In this theory \( i \) represents the language level which the learner has already achieved, \( i + 1 \) is the ideal level of input for learning and \( i + 2 \) or higher is a frustration level. Feature films alone (with no subtitles) would be at a frustration level for most language learners without the aid of some tool such as the EFR, with annotated clips and user control of playback. Melby (2003) sums up the anticipated gains by saying the following: “with the benefit of optional subtitles as well as control over the playback of the film and access to clip-specific wraparound material, there is a much greater chance of improvement in listening comprehension.” This is the aim of the EFR project, to increase the listening comprehension of the learners. Some results of this can be seen in the following section.

*Past EFR Projects & their Results*

Most of the past work and research that has been done with the EFR Project has been in relation to ESL learners. The most documented example is that of Farrah Keeler (2005) who used the film *October Sky* for her graduate project and conducted a small pilot study with ESL learners in China. She also created a manual documenting the creation process of the EFR.

The most well developed EFR for American foreign language learners is the film *Chocolat*. It was developed for those learning French and has been presented at the 2002...
Primarily [Dr. Melby’s] work is on the BYU Electronic Film Review (EFR), using computer-based systems to improve listening comprehension in foreign language and ESL students. The EFR needs a specialized DVD player; it is interoperable with an international format called Video Asset Description. The review allows for discrete analysis of smaller clips, whether on the subscenes, or on the individual utterance levels. A sequence of commands gives a play list, individualized by the user. This can include a vocabulary list defined by circumlocution rather than by dictionary proper definition. One project currently in the making is “French for Chocolate Lovers”. (http://www.ofla-online.org/addl_files/Cardinal/Cardinal-2003-02.pdf)

The project “French for Chocolate Lovers” has been completed using the film Chocolat and was a forerunner to the current project due to the fact that it to was developed for Americans learning a second language.

Dr. Ray Graham, also of BYU, has led a study along with Melby and Eric Voss of the University of Hawaii, focusing on the effectiveness of the EFR and has co-authored a paper on this topic (see below). In addition Graham conducted a study at BYU’s English Language Center on the effectiveness of the EFR in aiding vocabulary acquisition using the film Civil Action. The student responses were all very positive. More information about these results is given below.
In the study, conducted by Graham, Melby and Voss, surveys were given to a group of Chinese judges, Chinese law students and Chinese prosecutors as well as learners from BYU’s English language program. According to their results all the learners indicated that they enjoyed the use of commercial full-length movies as a tool for learning English as a Second/Foreign language. In addition to this the authors report that, “almost universally learners expressed the wish that they could spend more time watching the movies and working on the EFR program. They also, for the most part, found the vocabulary helps and other EFR aids useful in comprehending the movie and learning the vocabulary” (Melby Graham and Voss, 2005).

With respect to the vocabulary acquired by the participants of the study mentioned above, the authors state that the results are “promising”. They go on to say that “it is particularly encouraging that students performed so well on the production test, given that such a test is quite demanding” ” (Melby Graham and Voss, 2005). These results are encouraging because if students are able to master more vocabulary they should be able to understand more of the spoken passages in the film as well, gaining the advantages of learning language with film that have bee discussed above.

Keeler (2005) calls for more research to be done.

“Although a limited pilot study examined how effective the EFR was in teaching vocabulary, a more extensive study needs to be conducted… Research should examine the effectiveness of the EFR approach in the areas of listening comprehension, vocabulary acquisition and cultural understanding” (Keeler, 2005, p.62).
This has been addressed to some extent in work produced by Rocque (2008), which addresses the effectiveness of the annotations for intermediate ESL learners; however, in his study Rocque was unable to show a significant difference between those who used the EFR annotations and those who did not. Possible reasons for this suggested by Roque are motivation of the students (at the junior and senior high school levels), lack of randomization in sorting participants into groups, and the fact that many of the students with access to the annotations did not use them a significant amount. These and other concerns are addressed in his work and suggested improvements have been used in the current study as will be shown. The goal of this project is to show the usefulness of the EFR tools, especially in the area of listening comprehension, as there seems to be a real need for such tools which aid in listening comprehension, such as the EFR annotations, if they truly are effective.

*Teaching Listening Comprehension*

Yang (2006) states, “it would be beneficial to CFL [Chinese as a Foreign Language] learners if listening strategies were taught; however, listening strategy research has not yet been conducted in the area of CFL” (p.4). This poses somewhat of a challenge for an EFR project done in Chinese. However, by using new work done by Yang and others, as well as traditional methods for general listening comprehension, it can hopefully be overcome.

“Additionally,” Yang says, “no studies have looked at CFL listeners’ cognitive strategies (bottom-up processing and top-down processing). Studies have not yet examined how low-proficiency level CFL listeners actively process language
information…” (p.5). In her study Yang is one of the first to begin filling this need and the results will have bearing on the progress of the current study.

Herring, (2003) states that, “listening processes [top-down and bottom up] and purposes [global and specific] are distinctly different concepts [from each other] and the distinction must be recognized by materials developers in order to ensure that materials provide adequate support to learners in all four of these areas: top-down processing, bottom-up processing, global listening and specific listening”. Herring goes on to say that processes and purposes are often used interchangeably in the current literature but that each of the areas mentioned above must be understood separately as students have different goals and strategies in their listening.

Material developers must be able to differentiate between top-up and bottom down strategies which deals with whether the learners are building from phonemes up to meaning or from the big picture down to individual words, and global vs. specific goals or purposes meaning whether they are listening for the gist or for specific information. This will allow materials developers to create material which helps students to focus on what is needed for their specific processing methods and goals.

It is therefore vital to include all four methods, top-down and bottom up processing, global and specific purposes to help language learners to become successful. Yang agrees that learners must be taught to “focus on words as well as globalize the background knowledge in order to answer questions correctly” (Yang 2006, p.70). The EFR project helps students to be able to do this by giving them simultaneous access to the vocabulary and the film so that they can grasp the individual items but not lose sight of the overall story of the film.
Specifically, the EFR software aides the user with top-down strategies by supplying tools such as the chapter synopsis. While top-down processing is easier to create helps for because of it’s legal accessibility, the EFR program also allows for bottom-up processing strategies to be used. It aids in bottom-up processing by helping the listener to identify key vocabulary items which might have been unknown, and from which they can construct meaning of individual utterances. Learners have global tasks, such as understanding the film as a whole, and specific purposes, such as answering listening comprehensions questions based on a single sub-scene. In this way the EFR interface is able to maximize its usefulness as a listening comprehension tool.

Herring (2003) outlines some additional principles for L2 listening comprehension. The first is focusing on form as well as meaning. If students are properly introduced to new forms in listening activities before being asked to produce such forms they will have an increased consciousness of new vocabulary, structures and other elements of the language as well as being able to better reconstruct their current grammars, avoid errors and look critically at structural aspects of the language and their uses.

Herring also mentions the importance of providing the listeners with a good schema, which is to say a mental framework of prior knowledge that allows them to make sense of what they are hearing, and sufficient context, saying where sufficient background knowledge is lacking “providing it will be an essential step” in the design of learning materials (p.39). She suggests that top-down listening strategies should be actively taught through pre-listening activities such as introducing theme, predicting and
previewing vocabulary and also during viewing by continuously referring to comprehension questions.

Attention should also be given to teaching bottom-up processing skills but listeners seem to use these strategies more naturally. For example, students may pick out key words from a sentence or dialogue with which they are familiar and try to construct the overall meaning from there.

Another important principle is that listeners need to have an authentic purpose for listening. Typically in real life situations we either listen for the gist of something or for some specific detail, or in other words, in real life we generally have either a global or a specific listening goal; because of this these listening activities should contain some relevance and/or applicability to the students’ own lives.

Efforts should also be made to reduce listener anxiety. As has been discussed above, the use of film is one viable way to reduce anxiety as it is a form of recreation and entertainment with which nearly all students are familiar and enjoy on a regular bases.

Provisions should be made to allow students to repeat a task as often as necessary to reinforce a particular task/skill but if recursive listening, or re-listening, is also used to help learners glean as much as possible from a passage, it might be more beneficial if each pass through the material could also be set to include a different listening task or target in mind. Alternate tasks may help the listener to make the most of every experience with the listening text (p. 38-46). As listening comprehension is understood better and taught better, tools such as the EFR will be even more significant in the assessment of the most productive recursive listening strategies.
While this review of literature does not claim to be comprehensive on the topics covered, there are other sources which contain more information, especially in relation to the EFR. For more information about the benefits of using video or other topics here or to learn more about the creation and use of an EFR, see Appendix E which contains references to relevant works, studies completed and contact information for those involved in this project, as well as website information.
CHAPTER 3: The Making of an EFR

In this chapter I will briefly go over how an EFR is created. This is also covered in Keeler (2005), but this study discusses how the process has been updated and become easier to complete since then. More complete instructions have been created and are available on on-line at www.efr.byu.edu. These will continue to be updated as necessary.

The first step in creating an EFR is to generate a segmentation file list which allows the film to be divided into chapters, scenes and sub-scenes. This segmentation file is created using the program EFRaid. At this point the creator can decide how narrowly he wants the film divided. The divisions can go all the way to the utterance level if so desired. For the film To Live divisions were made to the sub-scene level. An example of this can be seen below.

Figure 1: Segmentation from To Live – Part 1

```
107195-120705 (00:59:37:04 - 01:07:08:15)
Chapter 11 Smelting Steel [color="green" relevance="none" why="unspecified"]

107195-111879 (00:59:37:04 - 01:02:13:09)
Scene 18 Best for the Family [color="green" relevance="none" why="unspecified"]

111879-120705 (01:02:13:09 - 01:07:08:15)
Scene 19 Performance at Smelting Oven [color="green" relevance="none" why="unspecified"]

111879-114093 (01:02:13:09 - 01:03:27:02)
Subscene 1 Singing [color="green" relevance="none" why="unspecified"]

Subscene 2 Spicy Tea [color="green" relevance="none" why="unspecified"]

116455-120705 (01:04:46:25 - 01:07:08:15)
Subscene 3 Youqing’s Revenge [color="green" relevance="none" why="unspecified"]
```

The next step is to add text or other annotations to the segmentation file. Here the words from the film must be placed in order and separated by spaces as seen below. The dialogue is placed into the smallest category in which it occurs. For example if a chapter of the film has been broken down into two scenes but only one of these scenes has sub-
This segmentation of the text allows for the initial generation of the spreadsheets from which vocabulary pages specific to each segment of the film will be generated.

In addition to adding text, it is possible to add other annotations to the file at this point as well. This is done following the code labels in figure three. As you can see from the example above, text is added following a “//T:” while notes are added following a “//N:” etc. Figure 3 shows a list of the different types of annotations which currently exist and the codes used to mark them (taken from Keeler, 2005).
Once the segmentation file is finished then it can be used to generate spreadsheet tables. Two types of tables are generated, one is called a **TOKENS** file and the other is called a **CONCEPTS** file. The EFR maker will use the segmentation file created earlier as input to generate a **TOKENS** file like the sample seen below. It also creates a skeleton of the **CONCEPTS** file which is filled in by the person creating the film specific EFR.

Table 1: Tokens File

<table>
<thead>
<tr>
<th>ChapterNum</th>
<th>Token Num</th>
<th>Token</th>
<th>Clip ID</th>
<th>Concept ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>福貴</td>
<td>C1-S1a</td>
<td>Fu2 gui4</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>少爺</td>
<td>C1-S1a</td>
<td>shao3 ye2</td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td>您</td>
<td>C1-S1a</td>
<td>Nin2</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
<td>又</td>
<td>C1-S1a</td>
<td>you4</td>
</tr>
<tr>
<td>1</td>
<td>5</td>
<td>輸</td>
<td>C1-S1a</td>
<td>shu1</td>
</tr>
</tbody>
</table>

The **TOKENS** file contains the information necessary for the EFR player to identify vocabulary relevant to each scene. The **CONCEPTS** file contains information about the level of each vocabulary item, its definition and grammatical category as well as examples, notes and related images. The two files are linked together by their concept ID.

Table 2: Concepts File

<table>
<thead>
<tr>
<th>Concept ID</th>
<th>Head Word</th>
<th>Grammar</th>
<th>Definition</th>
<th>Examples</th>
<th>Optional Notes</th>
<th>Translation</th>
<th>Level</th>
<th>Images</th>
</tr>
</thead>
<tbody>
<tr>
<td>fu2 gui4</td>
<td>福貴 fu2 gui4</td>
<td>proper noun</td>
<td>personal name meaning 'luck-noble'</td>
<td></td>
<td></td>
<td>fú gui</td>
<td>200</td>
<td>fugui.jpg</td>
</tr>
<tr>
<td>shao3 ye2</td>
<td>少爺 shao3 ye2</td>
<td>noun</td>
<td>young master of the house (old term)</td>
<td></td>
<td></td>
<td>shào yé</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>nin2</td>
<td>您 nin2</td>
<td>pronoun</td>
<td>you (formal)</td>
<td></td>
<td></td>
<td>nín</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>you4</td>
<td>又 you4</td>
<td>adverb</td>
<td>(once) again</td>
<td></td>
<td></td>
<td>yòu</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>shu1</td>
<td>輸 shu1</td>
<td>verb</td>
<td>to lose a game</td>
<td>昨天晚晚上他写完没输 Last night he didn't lose a single game</td>
<td></td>
<td>shū</td>
<td>200</td>
<td>lose.jpg</td>
</tr>
</tbody>
</table>
The next step in the process is to create the vocabulary pages from the spreadsheets. This involves another component of the EFR called the EFRVocTool. This tool takes the spreadsheets and the initial EFR file as input and generates a full EFR file and vocabulary pages as output. The vocabulary pages are linked into the EFR so that students will be able to view them while watching. An example page is below. As can be seen there are two parts to the vocabulary list for each scene, mastered vocabulary and target vocabulary. The target vocabulary list can be scrolled up and down by the user to access the definition, pictures, examples or other material attached to the word.

Figure 4: Vocabulary Link, Sample

### Vocabulary List for Chapter 1, Scene 2, Subscene 3

<table>
<thead>
<tr>
<th>Vocabulary List</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>伤胎气 shāng tāi qì</td>
<td>图tú (verb) to pursue</td>
</tr>
<tr>
<td>凤霞 fèng xiá</td>
<td></td>
</tr>
<tr>
<td>出人命 chū rén mìng</td>
<td></td>
</tr>
<tr>
<td>咱 zán</td>
<td></td>
</tr>
<tr>
<td>嘎嚓 kā cā</td>
<td></td>
</tr>
<tr>
<td>嗯 ēn</td>
<td></td>
</tr>
<tr>
<td>图tú</td>
<td></td>
</tr>
<tr>
<td>大清早 dà qīngzǎo</td>
<td></td>
</tr>
<tr>
<td>大烟 dà yān</td>
<td></td>
</tr>
<tr>
<td>娘儿三 niáng ér sān</td>
<td></td>
</tr>
<tr>
<td>怀 huái</td>
<td></td>
</tr>
<tr>
<td>戒 jiè</td>
<td></td>
</tr>
<tr>
<td>折腾 zhé téng</td>
<td></td>
</tr>
<tr>
<td>断 duàn</td>
<td></td>
</tr>
<tr>
<td>日子 rìzi</td>
<td></td>
</tr>
<tr>
<td>爹 diē</td>
<td></td>
</tr>
<tr>
<td>答应 dāyīng</td>
<td></td>
</tr>
<tr>
<td>赌 hùtu</td>
<td></td>
</tr>
<tr>
<td>赔 di</td>
<td></td>
</tr>
<tr>
<td>过个安生 guò gè ānshēng</td>
<td></td>
</tr>
<tr>
<td>齐根儿 qí gēn ér</td>
<td></td>
</tr>
<tr>
<td>Mastered:</td>
<td></td>
</tr>
<tr>
<td>一 yī</td>
<td></td>
</tr>
<tr>
<td>一下 yīxià</td>
<td></td>
</tr>
<tr>
<td>不能 bùnǐng</td>
<td></td>
</tr>
<tr>
<td>为 wèi</td>
<td></td>
</tr>
</tbody>
</table>

Image: [Zebra in the wild]

Translation: Chinese (China)
The level of vocabulary for the vocabulary tables can be selected in the VocTool program when the vocabulary pages are being compiled. This makes it possible for a single preparation of EFR material to be used by several different levels of students.

In addition to vocabulary it is important to build contextual information by adding synopses to each chapter for students to refer to. Below is an example of a synopsis for the first chapter of the film *To Live*.

Figure 5: Synopsis Sample

<table>
<thead>
<tr>
<th>Chapter 1 Synopsis</th>
</tr>
</thead>
<tbody>
<tr>
<td>The chapter opens in a gambling den in China in the 1940’s. Fugui, a landlord’s son is losing money to Long’er, the leader of a puppet troupe. Fugui jokes around with those around him and we learn that, unbeknownst to him, he is on the verge of losing everything. He returns home where he argues with his aging father. His pregnant wife, Jiazhen, begs him to stop gambling. She gives him an ultimatum: <em>Gambling or Family?</em></td>
</tr>
</tbody>
</table>

The synopses are an important aspect of the EFR because they help the student narrow the scope of possibilities while listening and makes the context of the film more accessible. In addition, as shown above, it can introduce characters to help the student sort out who is who. While the vocabulary information changes for each scene, sub-scene or utterance (whichever is the smallest defined unit) the synopsis information changes every chapter. This is also true of the questions link.

To test listening comprehension a variety of questions may be developed. In the past these have fallen into two types: general questions and clip specific questions. All
questions that refer to an entire chapter or span several clips are general questions. A clip specific question is a question that refers to specific details of the film, as opposed to the general idea. In the past these have sometimes been labeled “Utterance Questions”, although they may include more information than that found in a single utterance. It is important to note that no matter which type of question is used they should all be written in such a way that students cannot answer them merely from watching the actions in the film or reading the synopsis.

Figure 6: Questions Page, Sample

In this project, a somewhat different method was used because Professor Der-lin Chao, of Hunter College, NY, had already spent a great deal of time coming up with questions specific to each scene in this film, and so the questions she developed were
used instead (more information about her work is given in the following chapter). These questions not only include ones which might be labeled general or utterance questions, but also exercises which will help the students better understand and use the grammar and vocabulary in the scene. Students who used the project requested some modifications to this page to make it easier for them to use. These suggestions will be addressed in more detail in later in the paper but include making all pages containing characters available in either simplified or traditional format.

Although there are many other aspects of developing an EFR, I would like to mention only one more in this section. This last item is an additional link which was added to the EFR in this project. It was called the Grammar link and contained example

Figure 7: Grammar Page, Sample

<table>
<thead>
<tr>
<th>Sentence Patterns</th>
</tr>
</thead>
<tbody>
<tr>
<td>【第一幕】</td>
</tr>
<tr>
<td>(1) 都…了</td>
</tr>
<tr>
<td>(They) have already sung all night.</td>
</tr>
<tr>
<td>1. 天都黑了，他還沒回家。</td>
</tr>
<tr>
<td>It's already dark outside, and he has not yet come home.</td>
</tr>
<tr>
<td>2. 你都二十歲了，怎麼還不會開車？</td>
</tr>
<tr>
<td>You're already 20 years old. How come you still don't know how to drive?</td>
</tr>
<tr>
<td>(2) 要不</td>
</tr>
<tr>
<td>Or, Young Master FuGui, please sing for us.</td>
</tr>
<tr>
<td>1. 我們去紐約玩兒要不，去華盛頓也行。</td>
</tr>
<tr>
<td>Let's go to New York to have fun, or Washington, D. C. is fine, too.</td>
</tr>
<tr>
<td>2. 你明天來，要不後天來吧。</td>
</tr>
<tr>
<td>Come tomorrow or the day after tomorrow.</td>
</tr>
<tr>
<td>(3) 可</td>
</tr>
<tr>
<td>By all means don’t make mistakes when you calculate.</td>
</tr>
<tr>
<td>1. 開車的時候你可得注意安全。</td>
</tr>
<tr>
<td>You must pay attention to safety when you drive.</td>
</tr>
<tr>
<td>2. 那件事很重要，你可別忘了。</td>
</tr>
<tr>
<td>That's very important. DON'T forget.</td>
</tr>
</tbody>
</table>
sentences from the film as well as additional examples of how to use select grammar patterns. This section also came from work developed by Dr. Chao.

The EFR program is very versatile in that links can be added with a variety of information and focus depending on the needs of the users. In addition to the example above other links could be added such as cultural notes or examples of idiomatic phrases related to the scene or vocabulary. The potential as a learning tool is nearly unlimited. For further information on the making of an EFR see Appendix E.

Now that we have gone over the specific tools that go into making an EFR, we will look at the procedures and methodology that went into the testing of it.
CHAPTER 4: Methodology

The purpose of this study was to address the question of whether or not EFR annotations are effective in helping Chinese language learners improve their listening comprehension and in what ways. In the series of tests developed for this project, participants were asked to identify isolated words, translate sentences and answer comprehension questions about a target clip, as well as the additional language tasks of word usage and character recognition. This chapter will discuss how the tests were conducted and why.

Subjects

The subjects for this test were all students at Brigham Young University. The participants came from the following classes: Chinese 201, 202 and 301 in Winter Semester, 2009 and Chinese 201 in Spring Term, 2009, as well as some additional volunteers. The participants came from various backgrounds including those who have served LDS missions to Chinese speaking countries, those who have served LDS Chinese speaking missions to non-Chinese counties such the United States or Australia, those with military language experience and those whose main experience with Chinese language has been in the classroom setting.

The LDS mission experience gave the learners 18-24 months of immersion in the language. Therefore those who served in Chinese speaking countries, such as Taiwan, are labeled with “Extensive” language experience in the table below. Military language training was also included in this category. Those who completed Chinese speaking missions in countries such as Canada, the U.S. or Australia had less immersion due to the prevalence of English, therefore it was decided to label their language experience as
“Moderate”. Those who reported no language experience outside the classroom were recorded as having “Minimal” language experience. All students were asked if they had spent any amount of time living abroad in a Chinese speaking country.

The participants were randomly selected to belong to one of two groups, those who had access to the EFR annotations while watching the selected film clip and a control group who did not have the annotations but did watch the film clip. Each group contained twelve participants. Information was gathered from the participants using a questionnaire which they were asked to fill out at the beginning of the test procedure. This questionnaire can be found in Appendix C. Table 3 below is a summary of some background information about these participants.

Table 3: Subject statistics

3a.) Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Film Only Group</th>
<th>EFR Annotation Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Female</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
<td>12</td>
</tr>
</tbody>
</table>

3b.) Experience

<table>
<thead>
<tr>
<th>Language Experience</th>
<th>Film Only Group</th>
<th>EFR Annotation Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimal</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Moderate</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Extensive</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
<td>12</td>
</tr>
</tbody>
</table>

3c.) Course Level

<table>
<thead>
<tr>
<th>Chinese Course Level</th>
<th>Film Only Group</th>
<th>EFR Annotation Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>201 (Low intermediate A)</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>202 (Low intermediate B)</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>301+ (Intermediate)</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
<td>12</td>
</tr>
</tbody>
</table>
For simplicity’s sake not all the factors which were taken into account in this study are shown here. As can been seen the two groups were divided fairly evenly, if there was any linguistic advantage it appears to be on the part of the Film Only group as they have slightly more language experience and the average number of courses they had taken was higher than the annotations group; however if there was any advantage it was not found to be statistically significant.

Each Chinese class, held during Winter Semester 2009 and Spring Term 2009, at the selected course levels received a 5-10 minute demonstration of the EFR program and an explanation of the project along with an invitation to participate in the test. For the informational page explaining the project which each student received, see Appendix A.

All participants received an Institutional Review Board (IRB) approved “Consent to be a Research Subject” form which they were asked to sign in order to participate. This form can be seen in Appendix B.

Film

The selected film for this project is Zhang Yimou’s “To Live” (活着). The following is a brief explanation of the film:

To Live (1994) "is a big, strong, energetic film, made by a filmmaker [Zhang Yimou] whose vision takes in four decades of his nation's history, and who stands apart from all the political currents, and sees that ordinary people everywhere basically want what his heroine cries out for, a quiet life. It is exciting to see these new films as they emerge from China. They are history being written, celebrated, and mourned" (Ebert). "To Live is a simple title, but it conceals a universe. The film follows the life of one family in China, from the heady
days of gambling dens in the 1940s to the austere hardship of the Cultural Revolution in the 1960s. And through all of their fierce struggles with fate, all of the political twists and turns they endure, their hope is basically one summed up by the heroine, a wife who loses wealth and position and children, and who says, 'All I ask is a quiet life together" (Ebert).

It was decided that To Live was an appropriate film for this project because it was compelling, carried a good message and also illustrated a good deal of cultural background. Watching the film one starts to get a sense of the intensity and turbulence of the last several decades leading up to the development of modern China. It is also a well known film that has been used in both history and Chinese classes at universities around the country.

Professor Der-lin Chao of Hunter College of The City University of New York has used the film to teach her students for many years and has developed a text entitled “Learning Chinese through Films: A study manual for the movie To Live” (in-house publication). The manual includes the text of the film, divided up into scenes, in both simplified and traditional Chinese characters, as well as a list of relevant new vocabulary and grammar concepts, organized by the scene in which they first appear. As an added bonus she has also designed additional exercises for each scene to help students to gain more from the film. Professor Chao has agreed to let her manual be used in developing an EFR for the film and has offered to help with additional cultural notes and other additions in order to make the support materials as accurate and up to date as possible.
**Procedures**

Each of the participants was given written instructions, as well as verbal instructions, directly from the researcher. BYU computer labs were used in the JFSB building on campus. Each of the computers had the EFR software loaded on it previously and multiple copies of the DVD were purchased so that students could participate simultaneously. Each work station had its own set of headphones. Students scheduled a time beginning at the end of March 2009 till the end of May 2009 to come in and take the test. Sometimes students were there individually and other times as a group depending on their schedules. Also, each computer had two audio files, labeled “Test A” and “Test B”, downloaded to the desktop for students to use for the corresponding tests. Both of these sound files were previously recorded by a native Chinese speaker from Hubei, China. All activity on the computers was monitored by the researcher.

**Testing Procedure**

The following will be a description of the test process itself, followed by rationale for each section of the test.

Students’ participation in this test was a single event lasting between forty five minutes and an hour and a half. After signing the consent form students were given a summary of the tasks which they would be asked to perform. These tasks are listed below:

- Background survey
English pretest. (Sample from the ACT)

Chinese vocabulary pretest (from sound file)

Advance organizer. (small reading & prediction questions)

Film introduction clip w/ English subtitles (6 mins)

Target clip - no subtitles (1½ mins)

Film review with or without annotation.(remaining time out of 20 mins total)

Film posttests: Film Response (4 listening comprehension questions)

Chinese vocabulary posttest (from sound file)

Listening comprehension (8 novel sentences)

Optional posttests: Use vocabulary items in sentences

Character recognition (from vocabulary items)

Final Response Survey

As can be seen from the list above the complete task was quite time intensive and it was difficult for most students to complete it in less than one hour. The details of each item in the list above are given below.

First, students were given a background survey to collect information about their Chinese linguistic abilities and experiences. Some of the results of this survey are listed above.

Next the participants were given nine minutes to take a sample English test from the ACT test. The test was taken on-line at http://www.actstudent.org/sampletst/. Each student was asked to complete test #4 under the English section. Participants were asked to write their answers down instead of clicking on the screen both to preserve a record of
the answers as well as to prevent them from discovering the correct answers to the questions by clicking on the screen. All activity was monitored by the researcher.

Following this language test students were asked to listen to the sound file labeled “Test A”. This file contains 20 words spoken in isolation which come from the target clip of the film. The words were selected from the vocabulary list created for the film by Professor Chao. Participants were asked to record the English equivalents to each word on their paper labeled “Vocabulary Pre-test”. If a word had more than one potential equivalent they were asked to list as many as they could think of.

Following the vocabulary pretest, the students were asked to complete an advance organizer task. They were given a page and a half summary of political event leading up to the 1940’s in China (composed from articles found on Wikipedia.com). They were asked to skim the pages and then answer some prediction questions about what they think might happen in the film before beginning it.

After completing the event prediction task described above, students were allowed to begin the film. They were instructed in writing and verbally that for the first few minutes of the film they would be allowed to watch with English subtitles, following which they would be instructed to turn the subtitles off before continuing on to the target clip.

The introduction clip lasts about six minutes and the target clip is a minute and a half conversation between the main character and his wife. The participants were instructed that they would be asked questions on the content of the conversation and be given a number of post-tests after the film. All of the students were given twenty minutes to in which to watch the film clip and re-watch the target clip specifically as many times
as they wanted or until the time ran out. During this time the group with the EFR annotation materials was also able to access this material as much as they wanted. The group without the EFR annotations had the same video display and pop-up instructions to turn off the subtitles but no annotations.

Posttests
Following the viewing of the film clip each participant was given a film response page with four questions about the conversation they had just watched. These questions were designed so that visual cues from the film would not be enough to answer them, students would have to understand the dialogue.

After completing the film response page, the participants were given a vocabulary post-test using the same sound file as they used for the pre-test. They had the same instructions with the additional knowledge that these words had come from the clip they had just watched.

Then they were asked to listen to the sound file labeled “Test B” which consisted of eight sentences, spoken in Chinese. These sentences were meant to be comprised of basic vocabulary, with the key to understanding each of them being a grammar or vocabulary item from the target clip. Participants were asked to transcribe the sentences into English.

Following this, there were two optional evaluations. The first asked the students to use the twenty vocabulary items from sound file A in a sentence (using pinyin or characters and providing an English transcription). The second evaluation listed the
twenty vocabulary items as Chinese characters and asked the participants to list the English equivalent.

To conclude the test the participants were given a reaction questionnaire which asked them to record the number of times they viewed the target clip and write comments and suggestions. Those who had access to the EFR tools were asked to evaluate them through a series of questions.

The target length of time for completing these tasks was one hour. On average students took slightly longer than an hour with the shortest time being about 45 minutes and the longest time being nearly an hour and a half. This variation in time was due to the fact that students could elect to stop watching the film before their 20 minute time period was up if they felt they had gained all they could from it. Also students who spent more time filling out the answer sheets or who elected to do the optional evaluation material took more time completing the whole task. All of the materials described above can be found in Appendix C. The transcriptions of the sound files are in Appendix D.

*Rationale Behind the Materials*

Each part of the test materials was carefully designed and selected.

The information students were asked to give on the background information sheet was intended to identify possible contributions to their posttest performance from outside variables such as language ability, prior viewing of the film, gender, etc. For this same reason students were asked to take a sample section of the English portion of the ACT. The data from this was used to verify that students overall intelligence or linguistic ability
was within normal ranges and not a significantly skewed contributor to their posttest performance.

Each student was asked to complete a task called an advance organizer. An advance organizer is a cognitive instructional strategy used to promote the learning and retention of new information (Ausubel, 1960). This was given to all of the participants to help increase their focus on the film. Rationale for this comes from Herring (2003), who mentions giving students background information and predicting exercises to help them with top-down processing of information.

The pre-test was given for vocabulary items to identify how much of the target vocabulary students already knew and adjust for that in analyzing their posttest scores. Each of the main tests for this project was selected with listening comprehension evaluation in mind.

For the vocabulary test, students heard each of the twenty vocabulary items followed by a repetition of them and were asked to identify as many meanings for each word as possible so as to be able to evaluate whether or not they were familiar with the words prior to listening to the film. The posttest was then assumed to be a fairly reliable measure of what they learned while watching the clip.

The first film response task was a series of four questions which were aimed at eliciting specific details from the students about the conversation. These questions are listed below:

1. Why is Jiazhen (Fugui’s wife) crying when he enters the room? What promise did Fugui make to her?

2. What reason does Fugui give her to stop crying?
3. What does Fugui compare quitting gambling to?

4. What does Jiazhen say to Fugui at the end of their discussion?

It was intended that the questions be such that the information could only be ascertained from listening to the film, not from the actions of the characters. Unfortunately one of the questions, number #1 above, did not hold up to this criteria in the end, as will be explained later, but the other three were a good indication of what the students understood from the film. Each of the four questions targeted a key aspect of the minute and a half conversation.

Following the four-question task, another listening comprehension test was given to the participants. This test was composed of eight sentences not found in the film, and was designed to show if the students who had used the EFR tools would be better able to understand sentences in which key words or grammar points from the film were pivotal.

The pretest and posttests together composed the main body of listening comprehension feedback from which it was hoped the effectiveness of the tool could be ascertained.

The two extra evaluations which the students received were intended to illustrate additional benefits of the EFR. Extra Evaluation 1 asked the students to put the twenty vocabulary items found from sound file “Test A” into sentences to show how deeply they comprehended each item. Extra Evaluation 2 asked them to identify the Chinese characters which corresponded to the twenty vocabulary items. This skill is an additional benefit to Chinese language learners as will be discussed later in this paper. These last two evaluations were made optional because the participation time was projected to be
one hour and these tests were not part of the core goal: to show listening comprehension. Students who took the time to complete these extra tasks, even in part, typically stayed longer than one hour.

Finally students were asked to complete a final response page and those who used the program were asked for feedback so that the completion of the project material could be done in a way that was most beneficial to the people it is intended for.

ANALYSIS
Due to the various ways in which data was collected in this experiment, the analysis consists of a quantitative and a qualitative section.

Two of the items from the test materials described above will not be treated in the analysis. The first of these is the prediction page which was done as part of the advance organizer activity. This was given to both groups to help them engage with the film more but did not shed any light on the question of listening comprehension. The second item which will not be addressed is the eight sentences for the listening comprehension test.

Unfortunately, the grammar principles chosen for these sentences were too basic and almost all of the participants had mastered the items before viewing the clip, so the results were not informative. Fortunately, all of the other basic tests were successful and informative. They will be reported on in the following chapter.

*Quantitative Analysis*

The vocabulary pre- and post-tests, the film response (listening comprehension), and the character recognition tests were all completed by a sufficient number of students that they
could be analyzed as to whether or not using the EFR material created a statistically significant difference in the outcome scores.

Before an analysis could be done, the variables that might influence the outcomes had to be accounted for. There were six variables whose effects were examined. The variables were:

- gender

- number of months spent in a Chinese speaking environment (mission, study abroad, etc.),

- whether or not the participant had seen the film,

- level of Chinese course in which the participant was currently enrolled (for simplicity’s sake this category consisted of two groups: 200 level and 300 level)

- English scores (from the sample ACT), and

- how many times the participant viewed the target clip during the testing session.

On the whole none of these variables were found to have a statistically significant effect on the outcome but the exceptions to this will be discussed on the following chapter. The statistical analysis for this project was done in conjunction with the Brigham Young University Center for Statistical Consultation and Collaborative Research. SAS (Statistical Analysis Software) was used to do the analysis. The details of the results are documented in the next chapter.
Qualitative Analysis

The main source of information in this section comes from the response sheets filled out by the participants. Although most of the feedback comes from the EFR group because the Film Only group did not get to use the program, there is feedback from both groups.

This section will also contain an explanation of the Extra Evaluation 1. This is because not enough students had the time to do this evaluation so it was not possible to do a statistical evaluation of it, however observations about this test and other general observations about the results of the project will be reported in this section.

See the following chapter for a detailed description of both the quantitative and qualitative analysis.
CHAPTER 5: The Results

The purpose of this study was to determine the usefulness of the EFR program to Chinese language learners and specifically to conclude whether or not it was helpful in increasing listening comprehension. We will first look at the quantitative results for three of the tests given and then we will look at the qualitative results including user feedback.

Test 1: Vocabulary

This test, as was mentioned above, involved a pre-test and a post-test using an identical sound file which contained twenty intermediate level vocabulary words. Each participant took both the pretest and posttest and their respective scores are show in the table below. A correct score was given if the participant gave a response that matched the target words from the film. Since Chinese words can often have more than one meaning students were invited to list all that they felt were applicable but it was only marked “correct” if the definition given matched the film definition. If the definition given did not match the anticipated answer but was closely related the participant was given a half a point.

Table 4: Vocabulary Test Results

<table>
<thead>
<tr>
<th>Person#</th>
<th>Film Only</th>
<th>EFR</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-Test</td>
<td>Post-test</td>
<td>Pre-Test</td>
<td>Post-test</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>0.5</td>
<td>0.5</td>
<td>0</td>
<td>7.5</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>6</td>
<td>0.5</td>
<td>14</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>7</td>
<td>1.5</td>
<td>12</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>2</td>
<td>3.5</td>
<td>12.5</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>2.5</td>
<td>3.5</td>
<td>17.5</td>
</tr>
<tr>
<td>8</td>
<td>1.5</td>
<td>2.5</td>
<td>6</td>
<td>17</td>
</tr>
<tr>
<td>9</td>
<td>7.5</td>
<td>8</td>
<td>8.5</td>
<td>17.5</td>
</tr>
<tr>
<td>10</td>
<td>0.5</td>
<td>2</td>
<td>4.5</td>
<td>17</td>
</tr>
<tr>
<td>11</td>
<td>4</td>
<td>7</td>
<td>2</td>
<td>13.5</td>
</tr>
<tr>
<td>12</td>
<td>4.5</td>
<td>7.5</td>
<td>5</td>
<td>15</td>
</tr>
</tbody>
</table>
As can be seen, the pretest scores for both groups appear similar, which is to be expected since each group contains a similar mix of backgrounds. However, there is a striking difference that can be seen between the posttest scores, with the EFR group performing significantly better. This data was evaluated as described above and found to be significant at the .05 significance level. The scores from above have been tabulated and are also shown in the figure below. For easier comparison the figure below shows the difference between each individual’s pre-test score and post-test score.

Figure 8: Vocabulary Test Scores

Since the pre-test scores varied among the participants, the data was analyzed in two ways; one as the difference between the two scores and the other having the pre-test be a co-variant of the post-test scores. This second method was done to avoid a potential ceiling effect. The results of both methods were similar and statistically significant. Only the second method’s results will be reported here. Below are the results. There were two categories which were found to be statistically significant in this test. The first was how
each participant scored on the pretest. The second was which group the participants were placed in. All of the tests in this section were evaluated using type III SS (Sum of Squares), which means the effect of each variable in question is measured after all other variables have been taken into account. Each table generated by SAS also shows the degrees of freedom (DF), the mean square, the F-value and the probability of getting a score greater than that F-value. The mean square is calculated by dividing the sum of squares but the degrees of freedom.

**Table 5: Vocabulary Test Significance Level**

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Type III SS</th>
<th>Mean Square</th>
<th>F Value</th>
<th>Pr &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre_test_20</td>
<td>1</td>
<td>179.50</td>
<td>179.50</td>
<td>57.93</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Group</td>
<td>1</td>
<td>454.33</td>
<td>454.33</td>
<td>146.64</td>
<td>&lt;.0001</td>
</tr>
</tbody>
</table>

As can be seen above the pre-test scores are a factor in predicting the post test scores but an even greater factor was the group to which the participant belonged. One might at this point say that this is no great accomplishment since the EFR group had access to the words being tested while using the EFR annotations, but this is precisely what we had hoped to show. Students with access to the EFR annotations used them and as a result comprehended more. This will be shown more clearly in the results of the listening comprehension test which follow but first let me add one more thought. Learning vocabulary can be done one of two ways, explicitly and implicitly. In this test, both groups did increase in their knowledge of the relevant vocabulary, as can be seen from the mean gain scores below:
Table 6: Vocabulary Mean Scores

<table>
<thead>
<tr>
<th>Group</th>
<th>LSMEAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>EFR</td>
<td>13.07</td>
</tr>
<tr>
<td>Film Only</td>
<td>4.31</td>
</tr>
</tbody>
</table>

However, there is a very noticeable difference between the groups. Having access to the vocabulary allows the students to learn more material faster and as a result comprehend better, as will be shown in the next section.

Test 2: Film Response-Listening Comprehension Questions

The next test which students were asked to complete immediately following their viewing of the film was a series of four questions. Each question asked for specific detail from the conversation between Fugui and his wife which the participants had just seen. The following questions are the ones which were given to the participants:

1. Why is Jiazhen (Fugui’s wife) crying when he enters the room? What promise did Fugui make to her?
2. What reason does Fugui give her to stop crying?
3. What does Fugui compare quitting gambling to?
4. What does Jiazhen say to Fugui at the end of their discussion?

The intention was that the participants would not be able to answer these questions from visual cues. Figure 9 shows the group means for each question on this test. The total score for each question is one. Question one was not specific enough to solicit the whole answer desired as a response and the portion of the correct answer which most students
gave (which received a score of .75) was possible to guess from the actions in the film and the wording of the question. Questions two through four were written better, in that the desired response included ideas which could only be had through understanding the conversation.

Figure 9: Film Response – Comprehension Questions

The significant levels for this observation can be seen below.

Table 7: Film Response Significance Level

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Type III SS</th>
<th>Mean Square</th>
<th>F Value</th>
<th>Pr &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>1</td>
<td>3.45</td>
<td>3.45</td>
<td>4.19</td>
<td>0.0535</td>
</tr>
<tr>
<td>Group</td>
<td>1</td>
<td>9.69</td>
<td>9.69</td>
<td>11.78</td>
<td>0.0025</td>
</tr>
</tbody>
</table>

One interesting result of this test was that gender played a significant role (at the 0.1 significance level). In the other tests preformed, gender was not a significant factor but it is mentioned here merely as a point of interest, the far greater factor was of course whether or not the participants had access to the EFR annotations. The data above clearly shows that students who had the EFR materials understood the content of the film better.
Below is the mean scores of the two groups, with the EFR group being nearly double the film only group. A perfect score on this test would be a four.

<table>
<thead>
<tr>
<th>Group</th>
<th>LSMEAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>EFR</td>
<td>2.70</td>
</tr>
<tr>
<td>Film Only</td>
<td>1.43</td>
</tr>
</tbody>
</table>

As can be seen, while the EFR group did significantly better than the Film Only group, they did not understand everything about the film clip. I would like to contribute some of this to the skill level of the participants. As was stated earlier it was determined that this film might be at a level too advanced for 201 students, however due to the need for more volunteers to make the project a valid test, 201 students were included with the understanding that they might not score as high. In table 3 (above) it can be seen that more than half of the participants in the EFR group were from the 201 classes. Despite this, they were still able to outperform the Film Only group by a very wide margin.

**Test 3: Extra Evaluation 2 — Character Recognition**

The final test which will be added to the quantitative section of this paper is that of character recognition. In this task participants were given a list of the twenty Chinese characters and asked to give the English equivalent. These items were the target vocabulary items which the participants had heard previously during the vocabulary pre and posttests. The characters were written in traditional Chinese. Participants were asked to write the English equivalents for as many as they could identify or had time for. Since
this test did not focus on listening comprehension it was listed as an optional evaluation which students with time constraints in their schedules could elect not to take. Nine participants for the EFR group and eight participants from the Film Only group elicited to take the test. They were each given a score which was a percentage correct out of the total number they attempted. The number attempted differed with each individual but there was not significant difference in the number of items attempted between the two groups. The average percentage scores for each group are listed in table nine below.

Table 9: Character Recognition Mean Scores

<table>
<thead>
<tr>
<th>Group</th>
<th>LSMEAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>EFR</td>
<td>89.83</td>
</tr>
<tr>
<td>Film Only</td>
<td>48.98</td>
</tr>
</tbody>
</table>

Once again which group the participants where in was the major factor in determining outcome, with the EFR group being nearly twice as accurate in their answers. In this test the group in which a participant was placed was the only variable found to affect the outcome at any significant level, as shown in the table below.

Table 10: Character Recognition Significance Level

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Type III SS</th>
<th>Mean Square</th>
<th>F Value</th>
<th>Pr &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>1</td>
<td>7066.15</td>
<td>7066.15</td>
<td>28.94</td>
<td>&lt;.0001</td>
</tr>
</tbody>
</table>

Like the vocabulary tests, the F values in this test are quite large, indicating that the effect of a participant’s group is very significant. An interesting point to make here is that this test shows a benefit that is unique to Chinese language learning students; this program gives them the opportunity to learn to recognize the written word, which often gives
further insight into meaning as well. This is a new benefit that has not been looked at before, as the advantage is not the same for ESL or French language learners.

The results of these tests show that the EFR is without a doubt a very valuable tool for students using film as a media from which to learn Chinese. Even more is said by the students’ responses which will be included in the qualitative analysis.

*Qualitative Analysis*

Each of the participants who used the EFR program was asked to report on what they liked the most and what they liked the least, their overall thoughts of the program, which tools they used the most and any other comments or suggestions they had. Those who did not use the program where also invited to leave comments or suggestions. The vocabulary list was unanimously the most popular EFR tool, with the grammar patterns or synopsis pages being listed as second most useful by many students. The question pages did not apply to the focus of the test specifically and they were also written in simplified Chinese characters without pinyin or an English transcription, so many participants felt it was not very accessible to them in that format (especially since most students at BYU only learn the traditional form of the characters until they reach the 300 level in Chinese). Below, I will go through the positive and then the negative feedback before sharing some comments from the students about the program as a whole.

Some of the features the users like best about the program were the accessibility of the vocabulary and that it could be used simultaneously while watching the film. If they heard a word they did not recognize they could look it up immediately while it was still in a context and fresh in their memory. According to several participants this helped
them to understand what was being said much better. Also several people said they thought it was beneficial to be able to repeat a small clip. For example one student wrote “I like having a small clip and being able to re-watch and analyze it. This ensures a good comprehension and puts grammar/vocab in a context”. Another student called the chance to repeat the clip and find the words in the film “exciting”. This type of feedback reinforces the idea that the EFR is helpful in motivation.

Also, when using the EFR program a vocabulary item is learned by a student and can be immediately heard in use in a native-like context. This can be beneficial on a number of levels, such as inputting it into memory, as their feedback shows. Another feature which was pointed out by a student currently in a Chinese film class is that the EFR allows you to easily turn subtitles on and off while you are watching the film (instead of reverting to the DVD language menu). While students overall felt that the program was very helpful they did have some suggestions for improvement.

The items which people disliked seemed to be mostly matters of personal preference. For example, one student felt the pictures were unnecessary and distracting but most commented that they were helpful. Another student felt the grammar page was not useful, but was the only one to make this comment. In this section, I will focus primarily on observations for improvement made by more than one person. First, in regards to the pictures, it seems they might be improved if they came in a standard size so as not to make the screen jump back and forth as the user scrolled through. Currently, pictures are a variety of sizes and make the formatting change as the screen changes.

Another complaint was that the vocabulary was not relevant to the participant (words like “to demand someone’s life” and “to hurt the fetus”); however, I think if the
student had access to the whole film, as opposed to the small segment focused on in the test, this would be less of a problem since there would be plenty of other words to focus on. This is also an issue that would come up whenever authentic material is used; some words won't interest certain users.

Other suggestions that should be looked into include the organization of the vocabulary list, using the vocabulary words in examples (there are currently some difficulties in doing this on the vocabulary pages using Chinese characters and pinyin), and the slight pause in-between clips that can be distracting. Also, all of the linked-in pages should have the option of viewing with traditional or Simplified characters and linked-in material should include pinyin and English transcriptions where needed, for example, on the questions pages. This makes them easier to understand and more accessible to a wider range of students.

It is recommended that in regular use a student watch the entire film straight through before using the annotation tools. The last comment I would like to address is that a few students felt they would not watch a film this way solely for entertainment, but that if your intention was to learn something from the film, it was beneficial. Assuming that the goal is to learn something, let's look at what students had to say about the program overall.

As was mentioned previously, the participants all felt strongly that the vocabulary tool was the most useful feature of the program. One student said that although she didn't hear every word in the film dialogue, “it gave [her] clues” from which she was able to figure out what was going on. Below are some other comments made by the participants about the film overall.
From these comments you can see that the program inspires positive feedback from students. Those who didn’t use the EFR program all expressed interest in using it.

Students and teachers alike have repeatedly asked when it will be available for use. This excitement also helps to show the value and success of the program.

In the quantitative section of this chapter we saw how the program helps students to perform better and in this section it can be seen that students feel more successful and that the feeling of success causes them to be more excited and achieve more. This is the main goal of the EFR program; successful, happy, motivated students.
CHAPTER 6: Conclusion

The purpose of this study was to determine whether or not the EFR program described above would prove to be effective at increasing listening comprehension in a CFL environment. Some might say that this study constructed a “strawman” so to speak because the results of the vocabulary test are to be expected, since, they might argue, one group had access to the meanings of the 20 target words while the other did not. To this complete we have two responses. The first is that the availability of the material or not does not guarantee any significant difference between the groups as was shown in Rocque’s experiment. The second is that the point of this study was to show that because the EFR gives the learner access to a higher amount of vocabulary (and other tools) they are able to reach higher levels of listening comprehension, as was shown by test number two.

From the data and other results mentioned above, it is clear that not only does the EFR program aid users in the area of listening comprehension but it also has additional important features for Chinese language learners such as allowing them to simultaneously learn the related characters as well. Additionally, cultural notes might also prove to be very useful tools for CFL learners. This will be addressed more below. Since the EFR software is still in its infancy, there is a lot that can be done to make it an even better addition to the language classroom.

FUTURE POSSIBILITIES FOR THIS EFR

As a conclusion to this paper, I would like to detail more clearly what I envision the future of this project might to be. First, I plan to get the material on-line and in an
accessible, downloadable format as soon as possible. This is so students from this university and others across the nation, including high school students or independent Chinese language learners, can access the material.

**Future Testing**

In the future it would be good to have a test of the program which is run over the course of a semester so that the effects of the project when used for a more substantial period of time can be seen. If the EFR material can be incorporated into the curriculum so that all class members participate in the project this will also result in a larger and better sample size than was available for the current study. The availability of a larger sample size will help to factor out influences that cannot be controlled for. This would also make it easier for the researcher to test retention, something which was not done in this study. It is recommended that retention be tested both in the short term, such as after a week, and long term, such as at the end of a semester of study.

In addition, it would be interesting to compare the differences in the experiences of students who have guided exposure to the EFR through classroom instruction and use with those who have a limited introduction and are left to work with the system more independently. Perhaps this could be done in a class such as the Chinese film class offered here at BYU.

Other testing ideas may involve some or all of the following:

I. Definition formats using single, context specific entries vs. the multiple entry definitions common in dictionaries and other reference manuals.
The purpose of this would be to determine how to best help learners grasp the meanings of each new lexical item. There is disagreement about whether or not the learners would be able to select the correct meaning for a scene from a list of definitions and therefore whether or not full definitions would be as effective as context specific ones.

II. A comparison of definition formats using words, word webs, pictures, examples of the lexical item used in other sentences etc.

Since lexical items frequently do not have a 1-1 correspondence cross linguistically the goal of this test would be to identify which display methods would be most beneficial to the learned in accessing and retaining meaning for new lexical items they encounter while using the program. Also which ever method is used should help the learners to fully understand the similarities and differences of each lexical item to items they already know or lexical items with which they might be equated.

III. a). Pre-teaching vocabulary/grammar vs. no pre-teaching

This may involve advance organizers, or other pre-teaching tools. The idea is to see if students would benefit more from pre-teaching used in conjunction with the EFR project.

b). Pre-explanation of story line/background or cultural information vs. no explanation

This might be done as an in class discussion or it could also be assigned for the students to read before the film is used in class, or before they use the materials on their own.

c). Pre-viewing the entire film vs. not having viewed it prior to using the EFR.
While we recommend that students view the film in its entirety before using the EFR materials in different segments it may be worth investigating whether or not this is actually necessary.

IV. Grouping of scenes into grammatical sequences vs. watching film in sequence

The object of this experiment would be to specifically test whether or not watching target clips containing specific grammatical items increases a students understanding of the usage of these items. This idea is explained in more detail below. It is assumed that the students would be familiar with the film before watching the isolated clips.

V. Comparison of annotations vs. other formats.

This might include such comparisons as the use of paper materials vs. materials available on the computer screen, EFR annotations vs. English subtitles, and EFR annotations vs. students who are just given access to Chinese-English dictionaries. Each of these examples has the potential to provide interesting insights into the usefulness of the EFR approach.

VI. Lastly of course, there is the huge need for this to be developed with other films not only for Chinese films but also for other languages.

To further detail some of the ideas above, it may be beneficial to select several concepts which may be more difficult for students learning Chinese to grasp (such as the uses of “le”, “ba” vs. “ma”, imperfective markers, or topic controlled deletion) and create an EFR playlist which specifically focus on bringing these concepts out in a way which will make them more attainable to the students. The hypothesis would be that learning these
concepts in the context of film may help the students to make connections to semantic meaning beyond what they might otherwise understand.

Future Additions

Another change which may be helpful might be to develop multiple levels of mastery and new vocabulary accessible to students for each film, perhaps to coincide with a popular, widely used test such as “Integrated Chinese” series by Yuehua Liu & Tao-chung Yao. Along with this, allowing the students some way to check their progress and move up in levels would be useful as well. The easiest way for students to gain feedback with these is to have the questions be multiple choice and in a format so that students could receive instant feedback. Perhaps a website link coinciding with the film could be developed with interactive links to quizzes for students to test their progress with.

In addition, I believe it would be beneficial to create alternative options to the methods listed above that a student could utilize to learn the meaning of a new word or phrase. For example, it may be possible to have the option of seeing the translation of a word grouped in a web like format with other words related to it. A very basic example of this is outlined below.

Figure 11: Word Web
This may even be placed in the photo section of the vocabulary help, especially for words where there is no specific image that helps define them. Concept webs could also be done to illustrate the relation of Chinese words to each other (instead of or along with English equivalents) and to the term being analyzed.

Another idea, suggested by Dr. Alan Manning, would be to create a small beep which would sound just previous to each occurrence of a selected lexical item in the film segment (Personal Communication, 2007). This might help the learner to become more aware of the word and be better in recognizing it in subsequent scenes.

Although more could be said and done in relation to improving this EFR for CFL learners, I would like to conclude this section by talking about context annotations. The more the learner understands the context of a film the easier it is for them to understand. In a discussion with my husband, he related this to the idea of machine translation, which can do really well in unambiguous context specific realms of speech. Language learners also do better and are better able to bridge gaps in areas that are well defined so that they know what to expect. Some work has already been done in the area of synopsis and cultural notes as mentioned above but I think more could be done, especially with the expertise of those, such as Professor Derlin Chao, who have worked in the field of teaching CFL for many years and are familiar with the film and the needs of the students. Creating cultural/historical context to go along with the film will enable students to have a better idea of the background supporting each dialogue and eventually gain a better command of the nuances of the language itself. One possible avenue to explore in this area is the possibility of linking references to external websites. Since the EFR is run
from a computer DVD player it should not be too complicated to make these links provided the computer has Internet access. This is possible to do with the annotations now but has not really been explored. With an increasing number of schools installing wireless connections I anticipate that this will become more and more useful.

These examples have illustrated a few of the ways the development of this EFR project is and can continue to be a viable teaching resource. As I have said I think that this project will prove to be a valuable educational tool and I am excited to have had the chance to develop it in the Chinese language. Despite the small sample size, this project has proven the EFR software to be an effective tool in helping to improve listening comprehension, as well as other language skills, for Chinese language learners.

It is anticipated that the EFR software will be used, improved and expanded upon and that the developments used for improving for Chinese language learners will also benefit other language learners. This tool is one that can reach a wide audience and can be collaborated on in schools throughout the nation and even internationally as our global community works to improve the language skills and cultural awareness of its citizens everywhere.
REFERENCES


Yang, Chao-Chi (Teresa) (2006). The Dominant Listening Strategy of Low-Proficiency Level Learners of Mandarin Chinese: Bottom-Up Processing or Top-Down Processing A thesis submitted to the faculty of the Center for Language Studies, Brigham Young University, April 2006
EXPLANATION OF APPENDICES

Appendix A: This page is an explanation of the EFR project in general and gives specifics about the current study inviting students to participate. It was given out in the various classrooms where the project was presented.

Appendix B: This is the consent to research form and was the first document each of the test participants received.

Appendix C: This appendix contains the remaining test documents as follows: First students were given an overview sheet describing the test procedures. They were also asked to fill out a questionnaire about their background in Chinese. Following this they were asked to complete the pretest for the vocabulary items, they listened to the sound file and filled in the blanks on the pre-test sheet. Then they were asked to complete an advance organizer task which consisted of a reading on Chinese history leading up to the start of the film and some prediction questions. The rest of the sheets in this appendix are the post film exercises which students where given after they finished watching the film. These include listening comprehension questions about the film (Film Response sheet), a post vocabulary test (same test as the pre-test), a listening comprehension test with novel sentences, two optional evaluations, one involving creating sentences and the other recognizing Chinese characters, and finally a reaction questionnaire.

Appendix D: This contains the transcriptions and expected translations to the tests involving sound files.

Appendix E: This contains contact information for people working in EFR as well as websites containing instructions and materials and other EFR references.
Appendix A: EFR Explanation Sheet for Class Presentations

EFR (Electronic Film Review)

The EFR program was developed by Dr. Alan K Melby, Linguistics dept., BYU
In the past it has been used mainly to help ESL students and French language learners.

The EFR program allows you to view a feature film in a foreign language but also have access to additional helps such as the following:

**Chapter Synopsis**—to give the listener a general idea of what the dialogue is about.

**Vocabulary links**—which has two parts:

- **Mastered Vocabulary** which you are likely to already know and can listen for during the scene or sub-scene.
- **New Vocabulary**, which is hyperlinked to additional information including definitions, part of speech, notes, examples and images

**Chapter Questions**—questions relating to the movie which may test overall comprehension or individual vocabulary knowledge. **These can be assigned by the teacher or done for extra practice**

Other links may include things such as:

**Grammar or sentence patterns**—showing grammar structures found in the film with additional example sentences and/or explanations

**Cultural Links**—containing information about cultural background relative to the film

**Notes**—to give useful background or other information

Additional features include the ability to break the movie into smaller clips which can be repeated if needed to understand better. It is also possible for teachers to design a play list which focuses on just a few select clips throughout the film. This enables them to focus on a particular way in which a vocabulary or grammar item might be used without having to watch whole chapters or mess with cueing up multiple segments.

This project is designed to test the effectiveness of the EFR when used with a Chinese film. Students from Chinese 201, 202 and 301 are being invited to participate.

**Benefits:** It is hoped that this tool will eventually be used to help teach and learn Chinese (as well as other languages) in schools throughout the US and even abroad. If it is successful there will be a need for further testing and development of EFR material for other films in Chinese. This may be something you may work on as project for your own degrees or something you use in the future either as a teacher or a student. Since it is still in the developmental stages you have the chance to be part of influencing it and making it better.

The test will take place in the basement of the JFSB and will last about 1 hour. There will be refreshments after. Thanks you for your time. 😊

If you have questions please feel free to contact me: Amber Chen (陈明),
cell: (801) 787-1795
amber_marie_c@hotmail.com
Appendix B: Research Consent Form

Consent to be a Research Subject

Introduction:
This research study is being conducted by Amber Marie Chen in partial fulfillment of the requirements for a MA degree in Linguistics at Brigham Young University. Its purpose is to measure the learning of vocabulary by students who view commercially prepared full length movies on DVD accompanied by reference tools on the Electronic Film Review (EFR) program. This is the first time this tool has been used with a Chinese film. You have been selected to participate because you are a Chinese learner in level 202 or 301.

Procedures:
Before watching the movie you will be asked to fill out a 15 question English test, a Chinese vocabulary pre-test, and do a short warm up task. You will then watch the initial part of the film with English subtitles. When you reach the target clip you will be asked to turn the subtitles off before continuing. You will have 20 minutes to gain as much information as possible from the target clip. Half of you will have access to the EFR resources and half of you will only have access to the film itself. You will be randomly assigned to a group. Following the allotted time for viewing the film you will have several post test and a final comment page. You are also invited to have some refreshments if you would like. The complete duration of the test should be under 1 hour.

Risks/Discomforts
There are minimal risks for participating in this study. It will take time to watch the movie and complete the tests and exercises, but it should be a pleasant learning experience.

Benefits
Your Chinese language development should benefit directly from your participation. You may help in the development of material you yourself can use with students someday. In addition you get cookies and juice.

Confidentiality
All information provided will remain confidential and will only be reported as group data with no identifying information. All data, including questionnaires and test results, will only be available to those directly involved with the research and will be kept confidential. After the research is complete the questionnaires and tests will be destroyed.

Participation
Participation in this research is voluntary. You have the right to withdraw at any time or refuse to participate entirely without affecting your class status, grade or standing with the university.

Questions about Research
If you have any questions regarding this study you may contact Amber Chen at (801) 787-1795 or Dr. Melby (developer of EFR) at 422-2144.

For questions about your rights as a research participant please contact Christopher Dromey, IRB Chair, at 133TLRB, 422-6461 or dromey@byu.edu.

I have read & understood the above consent and I desire to participate in this study.

Signature: __________________________________________ Date: _____________________
Appendix C: Testing Materials

**Procedure Overview:**

First please fill out the information form and take a brief language test taken from the ACT. This is to help evaluate the tests on a level playing field.

Next follow the instructions for the vocabulary pre-test.

After you have completed the pretest you are ready to begin working with the film. There will be two groups, one with EFR tools and one without. You will be randomly assigned to a group. Both groups will have an Advance Organizer to help them to engage with the film. It will consist of a brief reading giving historical content as well as a few prediction questions to help get your mind thinking about the film.

Once you have completed the warm up you can begin watching the film. When you begin the film you will be instructed to turn the English subtitles on. The first 6 minutes will give you an introduction to the characters and the setting. After that the film will pause and you will be instructed to turn the subtitles off.

It is very important that you DO NOT USE THE SUBTITLES for the target clip. The target clip is only a 1½ minutes. You may repeat the target clip as many times as you like. *Please keep track of the number of times you watch the target clip* and fill it in on your response paper. Those who have access to the EFR tools will be able to use them to help them understand the clip.

Following the clip there will be several tests focusing on overall comprehension of the target clip, as well as vocabulary and grammar items from the target clip only.

Once these post tests are completed we would like you to fill out a comment page and enjoy some refreshments.

*Thank you for participating in this study.*
Initial Background Survey

Age:   Gender:

**Chinese Background**
1. Which Chinese course are you currently enrolled in?
2. How many Chinese courses have you taken?
3. Have you served a Mandarin speaking mission?  
   If so, was it in a country where Mandarin was the primary language?
4. Have you ever lived in an area where Mandarin Chinese was the primary spoken language (other than on a mission)? If so please explain.

**General Background**
1. Have you seen the film “To Live” before?  
   If so how many times?  How long ago?
2. How often do you watch TV, movies, etc. in Mandarin? (every day, every week, etc)
3. Were you present in class when the EFR program was demonstrated?
4. Have you heard of EFR before participating in this experiment? (If so explain)
Instructions for Pre-Test
After reading the instructions below please listen to the file labeled “Test A” and record your answers on the answer sheet provided. The file is located on the bottom right hand corner of the desktop screen.

You will hear 20 words spoken in Mandarin Chinese. After each word there will be a pause for you to write down the English meaning of the word you hear. If you feel the word is ambiguous you may write down as many meanings you know. If you do not know the meaning of a word draw a line through the question.

Once you have heard all 20 words you will hear them a second time and be able fill in any you missed. Do not play the sound file more than once. If you run into a problem let the administrator know.

Answer Sheet

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>“shāng tái qì”</td>
</tr>
<tr>
<td>2.</td>
<td>“chū rén míng”</td>
</tr>
<tr>
<td>3.</td>
<td>“zán”</td>
</tr>
<tr>
<td>4.</td>
<td>“kā cā”</td>
</tr>
<tr>
<td>5.</td>
<td>“ēn”</td>
</tr>
<tr>
<td>6.</td>
<td>“tú”</td>
</tr>
<tr>
<td>7.</td>
<td>“dà qīngzǎo”</td>
</tr>
<tr>
<td>8.</td>
<td>“dà yān”</td>
</tr>
<tr>
<td>9.</td>
<td>“niáng sān ěr”</td>
</tr>
<tr>
<td>10.</td>
<td>“huái”</td>
</tr>
<tr>
<td>11.</td>
<td>“jiè”</td>
</tr>
<tr>
<td>12.</td>
<td>“zhéteng”</td>
</tr>
<tr>
<td>13.</td>
<td>“duàn”</td>
</tr>
<tr>
<td>14.</td>
<td>“rìzi”</td>
</tr>
<tr>
<td>15.</td>
<td>“diē”</td>
</tr>
<tr>
<td>16.</td>
<td>“dāying”</td>
</tr>
<tr>
<td>17.</td>
<td>“hútu”</td>
</tr>
<tr>
<td>18.</td>
<td>“dǔ”</td>
</tr>
<tr>
<td>19.</td>
<td>“guò gè ānshēng”</td>
</tr>
<tr>
<td>20.</td>
<td>“qīgēn”</td>
</tr>
</tbody>
</table>

Note: The answer sheet which was given to the participants was blank. The audio file is transcribed here for the reader’s convenience.
Below is a little History about the Events occurring as this movie opens. Please skim through it and answer some general questions about what might take place in the film.

The Qing Dynasty, the last of the ruling Chinese dynasties, collapsed in 1911. China was left under the control of several major and lesser warlords in the Warlord era. To defeat these warlords, who had seized control of much of Northern China, the anti-monarchist and national unificationist Kuomintang party and the president of the Republic of China, Sun Yat-sen, sought the help of foreign powers. Sun Yat-sen's efforts to obtain aid from the Western democracies were ignored, however, and in 1921 he turned to the Soviet Union. For political expediency, the Soviet leadership initiated a dual policy of support for both Sun and the newly established Communist Party of China, which would eventually found the People's Republic of China. The Soviets hoped for Communist consolidation, but were prepared for either side to emerge victorious. Thus the struggle for power in China began between the KMT and the CPC.

In 1923, Sun Yat-sen sent Chiang Kai-shek, one of Sun's lieutenants from his Tongmeng Hui days, for several months' military and political study in Moscow. By 1924, Chiang … rose to prominence as Sun's successor as head of the KMT.

During the Japanese invasion and occupation of Manchuria, Chiang Kai-shek, who saw the CPC as a greater threat, refused to ally with the CPC to fight against the Japanese. On December 12, 1936, KMT Generals Zhang Xueliang and Yang Hucheng kidnapped Chiang Kai-shek and forced him to a truce with the CPC. The incident became known as the Xi'an Incident. Both parties suspended fighting to form a Second United Front to focus their energies and fighting against the Japanese. In 1937, Japanese airplanes bombed Chinese cities and well-equipped troops overran north and coastal China.

The alliance of CPC and KMT Second united front was in name only. The CPC hardly ever engaged the Japanese in major battles but proved efficient in guerrilla warfare. The level of actual cooperation and coordination between the CPC and KMT during World War II was minimal. In the midst of the Second United Front, the CPC and the KMT were still vying for territorial advantage in "Free China" (i.e. areas not occupied by the Japanese or ruled by Japanese puppet governments). The situation came to a head in late 1940 and early 1941 when there were major clashes between the Communist and KMT forces. In December 1940, Chiang Kai-shek demanded that the CPC’s New Fourth Army evacuate Anhui and Jiangsu Provinces. Under intense pressure, the New Fourth Army commanders complied. In 1941 the New Fourth Army Incident led to several thousand deaths in the CPC. It also ended the Second united front formed earlier to fight the Japanese. In general, developments in the Second Sino-Japanese War were to the advantage of the CPC. The KMT's resistance to the Japanese proved costly to Chiang Kai-shek. In 1944 the last major offensive, Operation Ichigo was launched by the Japanese against the KMT.

Atomic bombs were dropped on Hiroshima and Nagasaki in 1945. Under the terms of the Japanese unconditional surrender dictated by the United States, Japanese troops were ordered to surrender to KMT troops and not to the CPC present in some of the occupied areas. In Manchuria the Japanese surrendered to the Soviet Union. However the KMT had no forces in Manchuria. Chiang Kai-Shek ordered the Japanese troops to remain at their post to receive the Kuomintang and not surrender their arms to the communists.
The first post-war peace negotiation was attended by both Chiang Kai-shek and Mao Zedong in Chongqing from August 28, 1945 to Oct 10, 1945. Both sides stressed the importance of a peaceful reconstruction, but the conference did not produce any concrete result. Battles between the two sides continued even as the peace negotiation was in progress, until the agreement was reached in January 1946. However, large campaigns and full scale confrontations between the CPC and Chiang's own troops were temporarily avoided.

In the last month of World War II in East Asia, Soviet forces launched the mammoth Manchurian Strategic Offensive Operation to attack the Japanese in Manchuria and along the Chinese-Mongolian border. This operation destroyed the fighting capability of the Kwantung Army and left the USSR in occupation of all of Manchuria by the end of the war. Consequently, the 700,000 Japanese troops stationed in the region surrendered. Later in the year, Chiang Kai-shek realized that he lacked the resources to prevent a CPC takeover of Manchuria following the scheduled Soviet departure. He therefore made a deal with the Russians to delay their withdrawal until he had moved enough of his best-trained men and modern material into the region. KMT troops were then airlifted by the United States to occupy key cities in North China, while the countryside was already dominated by the CPC. The Soviets spent the extra time systematically dismantling the extensive Manchurian industrial base (worth up to 2 billion dollars) and shipping it back to their war-ravaged country.

The truce fell apart in June 1946, when full scale war between CPC and KMT broke out on June 26. China then entered a state of civil war that lasted more than three years.
<table>
<thead>
<tr>
<th><strong>Title of Story:</strong></th>
<th>TO LIVE 活著</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Based on the title, &amp; pictures from the DVD case what do you think a problem in the story might be?</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Based on the title, what types of characters do you expect to be in the story?</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Based on the reading and what you know about the time period what might happen?</strong></td>
<td></td>
</tr>
</tbody>
</table>
Film Response

Please answer the following questions about the clip you just viewed. Be as specific as possible.

1. Why is Jiazhen (Fugui’s wife) crying when he enters the room? What promise did Fugui make to her?

2. What reason does Fugui give her to stop crying?

3. What does Fugui compare quitting gambling to?

4. What does Jiazhen say to Fugui at the end of their discussion?
**Instructions for “Post-test”**

After reading the instructions below please listen to the file labeled “Test” again and record your answers on the answer sheet provided.

You will hear 20 words spoken in Mandarin Chinese. After each word there will be a pause for you to write down the English meaning of the word you hear. **If you feel the word is ambiguous try to select the meaning which best coincides with the film clip you just watched.** All the words are from the target clip. If you do not know the meaning of a word you may leave it blank.

Once you have heard all 20 words there will be a slight pause and you will hear them a second time and be able fill in any you missed. Do not play the sound file more than once. If you run into a problem let the administrator know.

---

### Answer Sheet

<table>
<thead>
<tr>
<th>1. “shāng tài qì”</th>
<th>11. “jiè”</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. “chū rén míng”</td>
<td>12. “zhèteng”</td>
</tr>
<tr>
<td>5. “ēn”</td>
<td>15. “diē”</td>
</tr>
<tr>
<td>7. “dà qǐngzōng”</td>
<td>17. “hútú”</td>
</tr>
<tr>
<td>8. “dà yān”</td>
<td>18. “dǔ”</td>
</tr>
</tbody>
</table>

---

**Note:** The answer sheet which was given to the participants was blank. The audio file is transcribed here of the reader’s convenience.
Listening Comprehension Test

Please listen to the file labeled “Test B”. The file contains 8 sentences. Each sentence contains vocabulary and/or grammar items from the video clip you just watched. Please give an English translation for each sentence. Each sentence will be said twice followed by a 30 second pause.

1. “lǎoshī de gōngzuò shì wèi xuésheng fúwù .”

2. “tā yī zuò fēijī jiù bù shūfu .”

3. “nǐ bié zài mǎi nàme guì de dōngxī le .”

4. “xiǎohái zǐ yǐtiān Tiāncháng gāo le.”

5. “wǒ shénme cài dōu bùhuì zuò , jiùshì huì bāo jiǎozǐ”

6. “wǒ shénme dōu xǐhuān , jiùshì bù xǐhuan yùndòng”

7. “chūntiān lái le, dà qīngzōo hěnduō rén qílái pǐobù”

8. “wǒ dāyìng wǒ māmā wǒ huì bāng tā zuò wǒnfan”
Extra Evaluation 1

Listen to the file called “Test A” again. This time write a sentence for as many of the words as you know; if unknown leave blank. You may pause the audio between words to allow you time to write if you wish. Use Chinese characters or pinyin (you can mix them if needed) to write the sentence and provide an English translation for each one.

1.
2.
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12.
13.
14.
15.
16.
17.
18.
19.
20.
Extra Evaluation 2
Write the English meaning for the following words.

1. 傷胎氣
2. 出人命
3. 咱
4. 喀嚓
5. 嗯
6. 圖
7. 大清早
8. 大煙
9. 娘三兒
10. 懷
11. 戒
12. 折騰
13. 斷
14. 日子
15. 爹
16. 答應
17. 糊塗
18. 賭
19. 過個安生
20. 齊根
Reaction Questionnaire

How many times did you watch the target clip?

What other tools did you spend your time using, approximately how much time and how helpful do you think it was?

Overall what did you think of the program

Specifically what part of the program did you like the best and why?

Specifically what part of the program did you like the least and why?

Any other comments or suggestions:
Appendix D: Transcripts of Audio Files

Pre-test/Post-test

Audio file “Test A” Transcription & Answer Sheet

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 傷胎氣</td>
<td>11. 戒</td>
</tr>
<tr>
<td>To hurt the fetus during pregnancy</td>
<td>To give up something, to quit</td>
</tr>
<tr>
<td>2. 出人命</td>
<td>12. 折騰</td>
</tr>
<tr>
<td>To demand someone’s life</td>
<td>To turn form side to side; to do things over and over</td>
</tr>
<tr>
<td>3. 咱</td>
<td>13. 斷</td>
</tr>
<tr>
<td>I, my (collq)</td>
<td>Cut off, break off</td>
</tr>
<tr>
<td>4. 喀嚓</td>
<td>14. 日子</td>
</tr>
<tr>
<td>(noise) snap, crack</td>
<td>Days, life</td>
</tr>
<tr>
<td>5. 嗯</td>
<td>15. 爹</td>
</tr>
<tr>
<td>“Mm…”</td>
<td>Father (collq)</td>
</tr>
<tr>
<td>6. 圖</td>
<td>16. 答應</td>
</tr>
<tr>
<td>To pursue</td>
<td></td>
</tr>
<tr>
<td>7. 大清早</td>
<td>17. 糊塗</td>
</tr>
<tr>
<td>Early morning</td>
<td>Confused, bewildered</td>
</tr>
<tr>
<td>8. 大煙</td>
<td>18. 賭</td>
</tr>
<tr>
<td>Opium</td>
<td>Gamble</td>
</tr>
<tr>
<td>9. 娘三兒</td>
<td>19. 過個安生</td>
</tr>
<tr>
<td>Mother and two children</td>
<td>To live a peaceful life</td>
</tr>
<tr>
<td>10. 懷</td>
<td>20. 齊根</td>
</tr>
<tr>
<td>To carry (to be pregnant)</td>
<td>Right down to the root</td>
</tr>
</tbody>
</table>
Listening Comprehension Test
Audio file “Test B” Answer Sheet

1. The duty of teachers is to serve students
   老师的工作是为学生服务。

2. As soon as he gets on an airplane he feels uncomfortable.
   他一坐飞机就不舒服。

3. Don’t buy things which are so expensive
   你别再买那么贵的东西了。

4. Each day the kid grows a little taller
   小孩子一天天长高了。

5. I don’t know how to cook anything but dumplings
   我什么菜都不会做，就是会包饺子。

6. I enjoy everything but exercise
   我什么都喜欢，就是不喜欢运动。

7. Its spring, many people go running in the early morning
   春天来了，大清早很多人起来跑步。

8. I promised my mom I would help her make dinner
   我答应我妈妈我会帮她做晚饭。
Appendix E: Further Information about the EFR Project

For further information about the EFR project and available downloads please see the following websites:

http://efr.byu.edu/index.htm

http://www.ttt.org/efr/

For documentation on creating and EFR please see:
http://humaux.byu.edu/efrdoc/

For more information, please contact the project director, Alan K. Melby, by sending an e-mail to akmcvp@byu.edu with "EFR" in the subject line.