US-China Foreign Language, ISSN 1539-8080
April 2011, Vol. 9, No. 4, 241-246

Watching Cartoons With Subtitles Improves Children's Foreign Language Acquisition

Mohammad Reza Ghorbani
Bojnord University, Bojnord, Iran

Exposing the EFL (English as a Foreign Language) learners to highly contextualized language input which involves the use of ICT (Information and Communication Technologies) is becoming fashionable and prevalent. Some argue that input modification can help comprehension. This longitudinal case study was designed to provide evidence about whether target language subtitles are effective in providing modified input to the learners. The participant was an Iranian 12-year-old boy, Morteza, who watched more than 20 cartoons enhanced with English subtitles in two years. He was just indirectly observed but not controlled by the researcher. After mastering each cartoon, he took the direct listening, pronunciation, vocabulary and comprehension tests orally. The testing sessions were followed by an oral interview regarding the usefulness of subtitles. The results indicated that his performance incrementally improved. First, he preferred to watch the cartoons without subtitles. Then, he used English subtitles as a crutch during the second viewing of the cartoons. And finally, he used Persian subtitles during the third viewing to get the exact meaning of the new words and expressions. Now he speaks English fluently and understands the original cartoons without any subtitle quite well after watching them two or three times. His pronunciation is native-like at the age of 12.

Keywords: information and communication technologies, modified input, subtitles, young learners, language acquisition

Introduction and Background

There have been quite a few discussions among people about how to teach their children a foreign language. When there are no foreign language classes where they live, they think about home-schooling. They do not know at what age to start and which method to use. They have heard that children's brains are geared towards acquiring language until the age of 10 or 12 and afterwards they lose this ability little by little.

Based on the interactionist SLA (Second Language Acquisition) theory, since interaction promotes negotiation of meaning between human interlocutors, it is believed to be a crucial factor for language learning (Long, 1996; Pica, 1994). Nowadays, the notion of interaction in CALL (Computer-Assisted Language Learning) includes human-computer interaction, too. According to this theory, the input can become beneficial, only if it is perceived. This implies that the instructional materials should have characteristics which strengthen input through modifications (Chapelle, 2003). The effectiveness of two types of input modifications, subtitles and transcripts, was investigated by Grgurović and Hegelheimer (2007). The results of their study revealed that learners preferred subtitles and used them more than transcripts.

Mohammad Reza Ghorbani, Ph.D. in TESL (Teaching English as a Second Language), Foreign Language Department, Bojnord University.

According to Winke, Gass and Sydorenko (2010), watching videos with subtitles is becoming more and more common for foreign language learning, because they are easily producible and accessible. Videos with subtitles are pedagogically important tools, because they provide a learning environment in which learners can integrate written and aural input. They argue that, in the 1980s, subtitles were introduced to increase learners' attention and motivation. Subtitles reduced learners' anxiety by giving them instant confirmation of what they had heard. But, following that period, some studies indicated that subtitles lead to superior performance on subsequent comprehension tests. For example, an experiment conducted by Bird and Williams (2002) confirmed the claim that subtitles are a beneficial language learning tool which aids comprehension by increasing the depth of processing. Mitterer and McQueen (2009) maintained that foreign subtitles help but native-language subtitles harm foreign speech perception. They argued that subtitles in the language of the film can help to boost lexically-guided speech learning, because they indicate which words are being spoken.

The results of past research regarding the level of proficiency required by learners to benefit most from subtitles are mixed. According to Markham (1993), subtitles are more helpful to intermediate and advanced learners when the video materials are abstract and difficult for them to understand. Yet, Guillory (1998) found that subtitles are beneficial for the beginning-level learners, especially if only key-words are presented on screen.

Two recent studies which have dealt with the effect of subtitles on foreign language learning belong to Markham (2001) who found that both background knowledge and subtitles contribute considerably to the learners' comprehension of the videos, and Grgurović and Hegelheimer (2007) who discovered that subtitles are used more frequently and for longer periods of time than transcripts by learners.

Chapelle (2003) claimed that the real and current challenge in language teaching is to find the most effective ways to help learners take advantage of the available electronic resources. According to Baltova (1999; 1994), EFL teachers and researchers know that there is no one guaranteed teaching method to be suitable for a variety of situations. But subtitled audiovisual material can be used as a powerful instructional tool everywhere to provide simultaneous exposure to spoken and written language as well as visual information that conveies the same message. Due to its rich context, subtitled audiovisual material has a motivational impact on viewers. It improves content and vocabulary learning, and facilitates auditory processing.

Since, up to now, the advantages of subtitling in EFL learning have not been observed in EFL contexts like Iran, very little audiovisual material with synchronized subtitles has been designed to promote this kind of language learning. This study investigates and reports a 12-year-old learner's use of subtitles while watching cartoons in English. Morteza, the author's son, is the boy whom this research is all about. The author taught him English at home before they moved abroad so he would have a head start at language class. He was six at that time. The author just bought him a lot of simple English books. They went to Japan in September, 2003. The author was very motivated to teach him English. To the author's astonishment, he found EFL in the Japanese context is as poor as the Iranian one. The author did not know how easy it would be to keep his kid motivated to speak English when he was not using it. The author did not motivate him to learn the language. Instead, he learned a little Japanese from the context. While the author was teaching English at the Iranian school in Tokyo, Morteza started his first grade in Persian there. Then, they lived in Malaysia for two and a half years then he went to an expatriate school run by non-native English speakers for one year. Although the author is fluent in English, he speaks Persian with him at home.

By the age of 10, Morteza was good at reading but weak at the other three skills as well as pronunciation. When the author found that subtitling may bridge the gap between the learners' reading and listening abilities

(Borrás & Lafayette, 1994) and that learners' incidental language acquisition or subconscious and implicit learning occurs even through passive regular exposure to linguistic phenomena (Saffran, Newport, Aslin, Tunick, & Barrueco, 1997), the author exposed him to age-appropriate English language that does not always find its way into classes from June, 2008 to June, 2010 while he was growing up. Little by little he got addicted to the *Lion King*, *Mulan*, *Hulk*, *Garfield*, *Ice Age*, *Shrek, Bolt*, *Tarzan*, *Home on the Range*, and other children's videos which were not at all surprising. What is surprising is that now he speaks English fluently and understands more than 90% of the original cartoons without any subtitles. He is very good at spelling and writing, too. Although he is 12, his pronunciation is native-like. The details of the study will be discussed in the following sections.

According to Taylor (2005), research has shown that subtitles distract lower-level learners, but both lower-level and upper-level learners' attitudes toward them are positive. It is now commonly accepted that audiovisual materials with subtitles are powerful pedagogical tools that facilitate language learning by helping the language learner to connect auditory with visual input, especially if the input is a little beyond the learners' linguistic ability (Danan, 2004; Markham & Peter, 2003; Borrás & Lafayette, 1994; Garza, 1991). However, both theoretically and pedagogically, it is not exactly known what young learners actually do with subtitles while watching cartoons. And finally, "a pedagogical question that has been raised by several researchers but has not been investigated is when learners should be exposed to captioning" (Winke, Gass, & Sydorenko, 2010, p. 67). Addressing the challenge, this paper tries to answer the following questions to shed more light on the young learners' use of subtitles based on a longitudinal case study: (1) Where is the young learner's attention focused while watching cartoons enhanced with subtitles? (2) How does he balance the intake of audio, video and text? (3) Should subtitles be used on the first exposure? (4) Which subtitles are more useful? Foreign or native language subtitles? (5) What order of subtitling is more effective? and (6) What level of proficiency is required to make subtitles beneficial?

Method

This study took place at home. Rather than using samples and following a rigid protocol, this longitudinal case study was based on an in-depth investigation of a single learner to explore the advantages of subtitling in EFL learning. Because of the repeated observation of a phenomenon within its real-life context at the individual level, such a research strategy seems to be more reliable than cross-sectional observational studies.

The participant was an Iranian 12-year-old boy, Morteza. After learning the English alphabet, basic words and simple sentences at home, he went to an expatriate school in Malaysia run by non-native English speakers for one year at the age of nine. The medium of instruction was English. He was good at reading but weak at the other three skills as well as pronunciation by the age of 10 when he left that school and was exposed to more than 20 cartoons with subtitles from June, 2008 to June, 2010 as he was growing up and attending Iranian schools. The medium of instruction in Iranian schools is Persian. He preferred to watch the cartoons without subtitles first. He saw English subtitles during the second viewing of the cartoons and Persian subtitles during the third viewing. He always preferred this learning strategy during the study. As suggested by Grgurović and Hegelheimer (2007), the learner was allowed to toggle subtitles on and off as he wished. He was just indirectly observed and not controlled by the researcher regarding the time he spent on watching the cartoons. After mastering each cartoon, he took the direct listening, pronunciation, vocabulary and comprehension tests orally.

The direct testing sessions were followed by an oral interview regarding the usefulness of subtitles. In the

interview, he was asked about his experience of watching the cartoons. His responses elucidated the direct test results. To learn how Morteza dealt with subtitles in the cartoons, he was asked the following questions: (1) Where do you focus your attention while watching cartoons enhanced with subtitles? (2) How do you balance the intake of audio, video and text? (3) Do you prefer subtitles on the first exposure? (4) Which subtitles do you think are more useful? English or Persian subtitles? (5) Do you prefer watching the cartoons with English or Persian subtitles first? and (6) What level of proficiency do you think is required to make subtitles beneficial?

Results

The outcome of this two-year-long study is Morteza now speaks English fluently and understands the original cartoons without any subtitle quite well after watching them two or three times. He is very good at spelling and writing, too. His pronunciation is native-like at the age of 12. His answers to the following research questions are presented with some modifications.

(1) Where do you focus your attention while watching cartoons enhanced with subtitles?

Morteza seems aware of his own needs for listening when he says,

> Subtitles affect my attention to the input. You know they help me double-check what I have heard before. I focus on the words and expressions that I couldn't get the first time I watched the cartoons without subtitles at the bottom. They are helpful when are on, but they sometimes really divert my attention away from the cartoons.

(2) How do you balance the intake of audio, video and text?

> I pay attention to certain things each time. During the first viewing of the cartoons when the subtitles are off, I pay close attention to the video. Then, I use the English subtitles during the second viewing and focus on the words and expressions and their spelling. Next, I use the Persian subtitles to check the meaning. And after that I enjoy watching the cartoon with subtitles off again and again.

(3) Do you prefer subtitles on the first exposure?

> No, I think they are distracting on the first exposure. Well, I just listen first. I prefer watching cartoons with English subtitles on the second exposure because during the first exposure many questions form in my mind and during the second and third exposure I can double-check their answers by using English and Persian subtitles, respectively.

(4) Which subtitles do you think are more useful? English or Persian subtitles?

> Both English and Persian subtitles are always useful in different ways. English subtitles help me learn and get familiar with the new words and their spelling, while Persian subtitles help me verify and make sure what I am learning is correct.

(5) Do you prefer watching the cartoons with English or Persian subtitles first?

> As I told you before, I prefer English subtitles first because it is easier for me to find the Persian meaning of the English words than the English meaning of the Persian words.

(6) What level of proficiency do you think is required to make subtitles beneficial?

> When I first began to use subtitles two years ago, I was very weak at listening. I felt it was very helpful but distracting at that time, because many of the words and phrases were high over my head. Little by little, I got more interested and found that subtitles are fantastic. I love them even now, because I do not need to ask you or use a dictionary to check the spelling or meaning of new words. Subtitles are always beneficial regardless of your level of language proficiency.

Discussions

This study set out to investigate whether a young learner's use of subtitles while watching cartoons facilitated foreign language learning. The results supported the benefit of subtitles as a type of modified input. Subtitles functioned as a sort of crutch or scaffold to aid the young learner. It appeared that the input modes (text and sound) reinforced one another. This finding is in line with the previous research conducted by Bird and Williams (2002). They discovered that a bimodal presentation led to better recognition and comprehension by increasing the depth of processing.

As argued by Gass (1997), interaction (in this case subtitling) serves as a tool which sets the stage for learning. When subtitling occurred during the second listening in this study, it drew the learner's attention to what he did not know. It provided additional evidence for confirmation. Subtitles were beneficial regardless of the learner's level of language proficiency, but the more the learner became proficient, the less he found the subtitles distracting. This result is in keeping with previous literature (Winke, Gass, & Sydorenko, 2010) that suggested subtitles may function similarly for a range of proficiency levels.

Since Morteza hated being taught English formally and the researcher was determined to set him up to succeed, different teaching methods were used by the researcher to find a solution to the problem. But teaching language for the sake of language as an end did not work in this study. Therefore, the researcher tried to be creative and finally learned how to do it informally. He provided Morteza with the framework and scaffold to succeed by exposing him to interesting cartoons and reinforcing his success by different rewards. Gradually, Morteza began to like the positive reinforcement and came along. Now, he is so proficient and motivated that he usually surf the internet in English to get supplementary information for doing his school assignments. This result confirms Larsen-Freeman's (2000) idea that the main duty of a language teacher is management of learning, that is, the teacher is expected to provide a friendly learning atmosphere by subordinating teaching to learning. The implication is that language teachers can improve their students' performance and motivation by focusing on language as an instrument for implicit and subconscious learning.

Conclusions

This longitudinal case study has shed more light on the use of subtitles. It confirms previous research that subtitles are beneficial, especially if cartoons without subtitles are followed by target and source language subtitles, respectively. In this study, the learner always preferred this learning strategy. When a young learner watches a cartoon in a foreign language with subtitles, two visual channels (one verbal and one non-verbal) seem to modify and facilitate the comprehension and learning of the auditory channel input.

The subtitled audiovisual material used in this study had not specifically been designed for the purpose of EFL learning. If learners are trained to use subtitles effectively (Taylor, 2005), we can expect better results.

In sum, the present study supports some of the findings described in the relevant literature. Minor discrepancies may be due to the different number of subjects and the type of material and testing procedure adopted. However, since there was only one participant in this longitudinal study whose performance was tested directly but informally, the obtained results cannot be generalized in any way. The use of subtitles will undoubtedly increase in the future. That is the reason why further research is in order to introduce an appropriate pedagogical tool in this regard.

References

Baltova, I. (1994). The impact of video on the comprehension skills of core French students. *The Canadian Modern Language Review, 50,* 507-532.

Baltova, I. (1999). Multisensory language teaching in a multidimensional curriculum: The use of authentic bimodal video in core French. *The Canadian Modern Language Review, 56,* 32-48.

Bird, S. A., & Williams, J. N. (2002). The effect of bimodal input on implicit and explicit memory: An investigation into the benefits of within-language subtitling. *Applied Psycholinguistics, 23*(4), 509-533.

Borrás, I., & Lafayette, R. C. (1994). Effects of multimedia courseware subtitling on the speaking performance of college students of French. *Modern Language Journal, 78,* 61-75.

Chapelle, C. A. (2003). *English language learning and technology: Lectures on applied linguistics in the age of information and communication technology*. Amsterdam: John Benjamins.

Danan, M. (2004). Captioning and subtitling: Undervalued language learning strategies. *Meta, 49*(1), 67-77.

Garza, T. J. (1991). Evaluating the use of captioned video materials in advanced foreign language learning. *Foreign Language Annals, 24*(3), 239-258.

Gass, S. M. (1997). *Input, interaction and the second language learner*. Mahwah, NJ: Lawrence Erlbaum Associates.

Grgurović, M., & Hegelheimer, V. (2007). Help options and multimedia listening: Students' use of subtitles and the transcript. *Language Learning & Technology, 11*(1), 45-66.

Guillory, H. G. (1998). The effects of key word captions to authentic French video in foreign language instruction. *CALICO Journal, 15*(1-3), 89-108.

Larsen-Freeman, D. (2000). *Techniques and principles in language teaching* (2nd ed.). Oxford: Oxford University Press.

Long, M. H. (1996). The role of linguistic environment in second language acquisition. In W. C. Ritchie, & T. K. Bhatia (Eds.), *Handbook of second language acquisition* (pp. 413-468). San Diego: Academic Press.

Markham, P. L. (1993). Captioned television videotapes: Effects of visual support on second language comprehension. *Journal of Educational Technology Systems, 21*(3), 183-191.

Markham, P. L. (2001). The influence of culture-specific background knowledge and captions on second language comprehension. *Journal of Educational Technology Systems, 29*(4), 331-343.

Markham, P. L., & Peter, L. (2003). The influence of English language and Spanish language captions on foreign language listening/reading comprehension. *Journal of Educational Technology Systems, 31*(3), 331-341.

Mitterer, H., & McQueen, J. M. (2009). Foreign subtitles help but native-language subtitles harm foreign speech perception. *PLoS ONE 4: e7785* (doi:10.1371/journal.pone. 0007785).

Pica, T. (1994). Research on negotiation: What does it reveal about second-language learning conditions, processes, and outcomes? *Language Learning, 44*(3), 493-527.

Saffran, J. R., Newport, E. L., Aslin, R. N., Tunick, R. A., & Barrueco, S. (1997). Incidental language learning: Listening (and learning) out of the corner of your ear. *Psychological Science, 8*(2), 101-105.

Taylor, G. (2005). Perceived processing strategies of students watching captioned video. *Foreign Language Annals, 38*(3), 422-427.

Winke, P., Gass, S., & Sydorenko, T. (2010). The effects of captioning videos used for foreign language listening activities. *Language Learning & Technology, 14*(1), 65-86.