

MULTIMEDIA TEXTS : A VALIDATION SURVEY OF LEARNERS' PERSPECTIVES OF CAPTIONING

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本論文では、英語学習者に対するクローズドキャプションの効果を、学習者の自習作業という方法によって調査した。

序論では、キャプションの技術と歴史について説明し、本研究が、第二言語習得及び、マルチメディアに関する研究の中でどのように位置づけられるかを述べる。

本論では、「キャプション付きでビデオを視聴する方が、通常のキャプションなしの場合よりも、ほとんどの英語学習者にとって、内容を理解し、言語を習得していくために、有益であるとみなされるのではないか」という、本研究での中心となる仮説を検証する。さらに、「視聴するプロセスや見方は、学習者の個人差と熟達レベルによって影響されるのではないか」という2番目の仮説も検証していく。

実験参加者は、日本の大学生で、レベル別に4グループに分けた。(初級から中級レベルで、それぞれn=34、48、45、40となる。)それぞれの参加者は、好きな時間に自分で選んだ映画の最初の部分の画面をキャプション付きで見て、3つのパーツからなる課題を課せられた。すなわち、映画の最初の部分を説明する文を書き、キーワードやフレーズのリストとメモを作成し、内容についての質問と答えを10問つくることを求められた。

この結果、ほとんどすべての参加者が、キャプションの存在は必要であり、彼らの全体的な理解を助けてくれたと感じていることがわかった。視聴の手順については、個人差が見受けられた。

これらの結果は、もしキャプションの技術とそれを支援する教材が、学習カリキュラムの中に取り入れられるならば、学習者にとって有益であるだろうということを示唆している。またその他の教育環境、図書館、マルチメディア施設、AVセンター、家庭での使用にも応用できると思われる。

The potential of using the technology of closed captioning as a means of speeding learning in both content courses and second language acquisition (SLA) is being increasingly recognized. The increasing availability of multimedia materials and systems can speed this process. The most frequently used and most readily available materials are films (movies). It should be emphasized that if these do not merely represent entertainment. Films such as *Ben Hur*, *Chariots of Fire*, *Witness*, *The Awakening*, *The Crucible*, *Shine* etc., are based on historical events and are rich in cultural content. Most other films are based on novels or literature, which usually address issues current in society. The rich contextualization provided by such authentic materials can often help learners grasp sometimes alien concepts or knowledge, especially while still residing within their own countries. However, in promoting use of multimedia texts, there is an ongoing danger of history repeating itself. Many multimedia rooms or cen-

ters for computer assisted language learning, computer aided instruction, or audio-visual centers fail or have failed to maximize the potential of such facilities. Often both staff and administrations are frustrated at the poor outcome and regard the result as wasted time and wasted money. This outcome is often the result of adopting a prescriptive position, either negative or positive, without assessing the true role of such facilities within the curriculum. In Japan's case, usually this displays itself in a focus on the hardware with no consideration of, or finance for, courseware (software), support, or training. The availability of courseware, support, and training is important not only for learners but also for staff.

In this process of decision-making, one area that has been particularly neglected is what learners themselves feel about such multimedia systems and materials. Where captioning actually aids learning, and what kind of pedagogic intervention is necessary, are separate questions. Both questions need more research. However, too often the perceptions of learners have been ignored. If learners have a low opinion of the materials, the system or the methodology, the affective attitudes will be low, as will be motivation. The risk is that little learning will occur. This study seeks to assess what the students themselves feel about the technology of captioning and the nature of the materials: whether they feel that it helps their comprehension and is of value.

Introduction

Captioning Technology

Captioning technology enables the text of the spoken dialogue or commentary to appear in the same language as the spoken dialogue at the same time as it is being spoken. Therefore, captioning is by definition very different from subtitling which translates the spoken dialogue or commentary which is in a second language (L2) into the viewer's native tongue (first language) L1.

Usually the captioning is identical to the spoken text, but modification is found where the spoken dialogue exceeds 120 words per minute. This modification is usually of two types: first, the omission of segments or single words felt not to be important for understanding; and second, simplification of syntax. Thus, rarely does this modification remove key content vocabulary, irrespective of whether it is a historical documentary, a science training program, or a film.

The system was originally designed in North America to help deaf or hard-of-hearing L1 viewers. However, its use has also become widespread amongst two groups of non-native speakers (NNS), for whom English is a second language (L2): first, learners of English as a Second Language (ESL), defined as those resident in English speaking countries; and second, learners of English as a Foreign Language, defined as those resident in their own country or a country in which English is not the first, or preferred, language of communication (EFL). For ESL learners in North America, most research has been conducted in mainstream primary education with immigrant children. For EFL learners, early research was confined to Europe. However, increasingly the countries on the Asian Pacific rim are conducting research on cap-

tioning.

Role in the Curriculum

The possibility of being able to present on screen a text of the spoken dialogue, in the same language as the spoken dialogue, has had an immediate appeal to many teachers. In Japan, the opportunity to use authentic materials such as movies, documentaries, children's educational programs etc. has become a reality. Until this time, the use of such materials was difficult to justify on both ethical and professional grounds. In Japan and many other EFL contexts, the listening proficiency level of learners means it is very difficult for them to catch enough of the dialogue of authentic materials to make this the most beneficial use of valuable class time. Similarly, in self-access study centers, the learner has no way of comprehending the parts that are difficult or impossible to understand.

However, while in Japan and other EFL contexts the learners' listening ability is generally poor, this is not so much the case with their reading ability and their general knowledge of vocabulary and grammar. The opportunity to combine listening and reading through authentic materials, such as movies, is not only justifiable on pedagogic and ethical grounds, but it also appeals to, and motivates, learners.

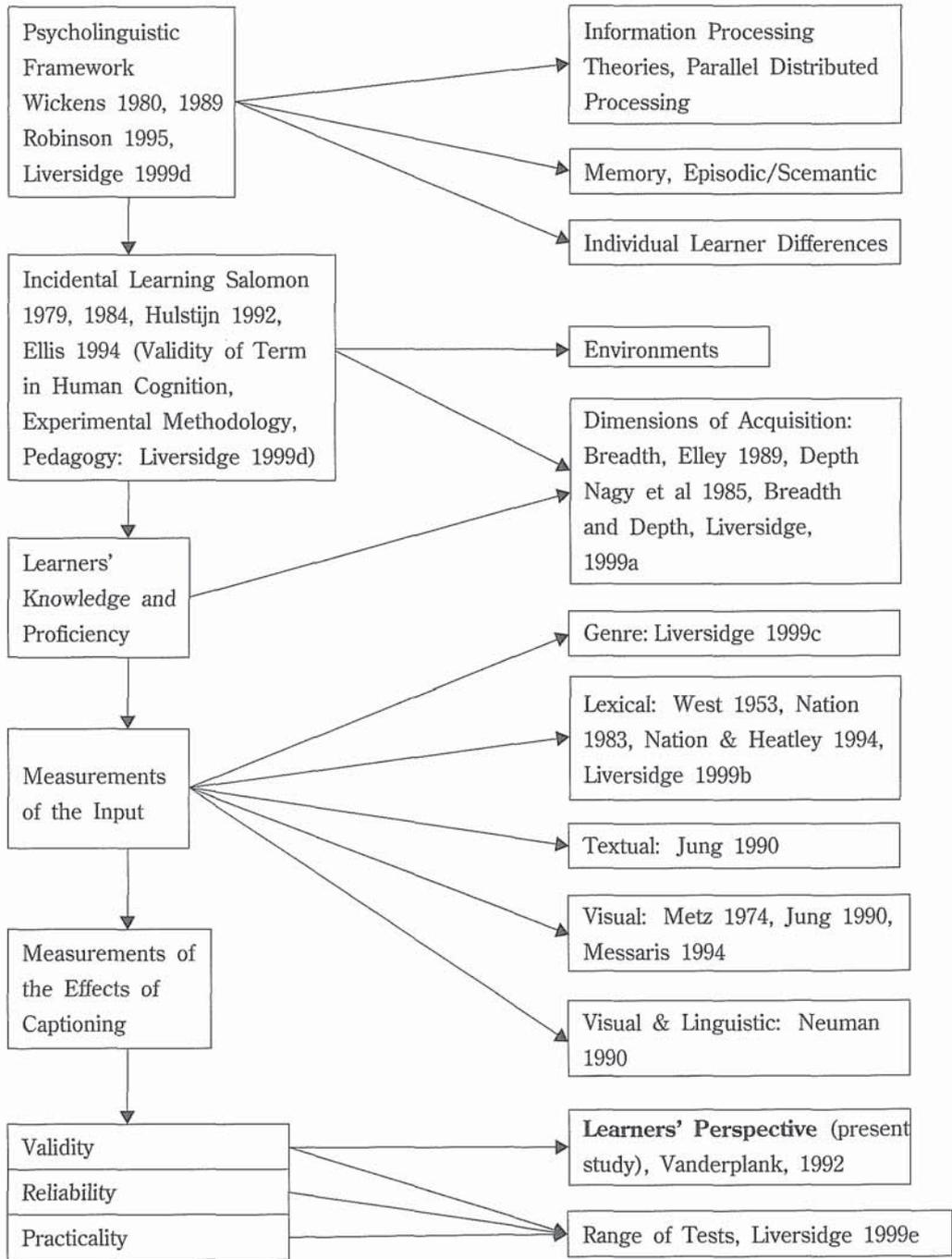
In Japan, several companies produce scripts of the films with accompanying translations, and/or notes on difficult expressions. There are more than one hundred script books available, along with those published in the USA, the UK, and in other English speaking countries. These scripts ease the burden of building in and designing in-class or self-study activities connected with films. Access to them in AV-centers, and their availability for borrowing from the library, will also help learners' progress.

However, to use these instead of the captioning software would fail to make the best use of available materials. The on-screen contextualization of text where visual-verbal (reading) and auditory-verbal (listening) can be accessed at the same time as the screen picture aids the process of language acquisition. The captioning and scripts need to given an appropriate place in the curriculum rather than their present usage, which usually regards them as an appendage.

Literature Review

The aim of this study is not to address the whole field but to concentrate on qualitative research concerning the learners' perspective. However, to aid understanding of the general field of multimedia and captioning, this literature review provided two summaries. First, there is a brief summary outlining the main research issues relating to multimedia, cognition, and learning (Figure 1), the present study on the learners' perspective is indicated by bold text. This framework designed for the analysis of captioning can also be applied to other types of multimedia. Second, there is a summary of fields and types of captioning research.

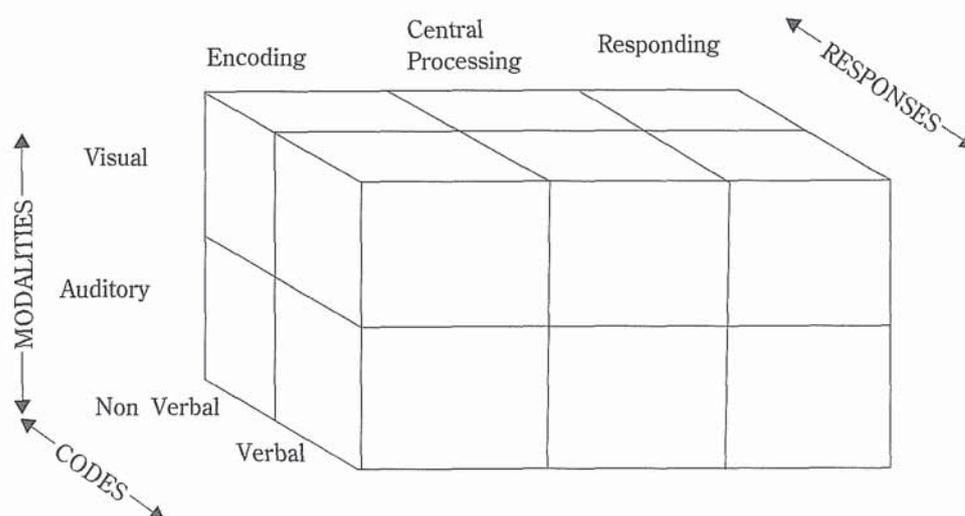
Figure 1: Multimedia, Cognition, and Learning : A Simplified Framework of Analysis



Main Research Issues

In Figure 2, the first section, the *psycholinguistic framework* proposes a multiple-resource-captioning model (Liversidge, 1999d) developed from the work of Wickens (1980, 1989). Although Robinson (1995) uses this model to focus on possible effects of modality and code upon output, such analysis aid in understanding the effect of multimedia texts, of which captioning is a part. The model is based on a capacity theory of information processing. The theory argues those areas of attention, inhibition and selection, memory, and individual learner differences are all enhanced by the presence of captioned input. To analyze the effect of captioning, more research is needed in two main areas: first, its effect due to enhanced input; and second, its effect with relation to task.

Figure 2 Multiple-Resource Captioning Model



The second section, *incidental learning*, largely addresses enhanced input. Three learning environments are possible: self-directed, instructional, and interactional. An examination of the term *incidental learning* reveals that it is invalid to make a distinction between incidental and intentional learning. It is better to think of the two as being a continuum. Incidental learning could occur in any of the three environments. An important distinction needs to be made between experimental designs: Type 1, where learners are not aware of any post-test; and Type 2, where the kind of post-test is explicitly explained to the learners, prior to the experimental task or activity. This distinction partially parallels that of the psycholinguistic framework, between enhanced input and task (output). Almost all captioning studies have been Type 1 experiments. Thus, there is a need for Type 2 studies. However, as the most common viewing condition is that of a self-directed environment, more Type 1 studies are also needed. In any case, whether Type 1 or Type 2, an examination of research on reading, writing, listening and viewing reveals the dearth of studies in this field. It is also important, irrespective of the envi-

ronment, to distinguish between broadening and deepening of knowledge, and to recognize that this two-dimensional analysis is important for any studies of the effect of captioning.

The third section is *learners' knowledge and proficiency*. When assessing the effect of captioning, one particular weakness has been the failure to consider the learners' proficiency. When examining learners' knowledge, the traditional distinction between receptive and productive knowledge, and between syntax and lexis, can both be criticized for two reasons. First, that while recognizing that these distinctions aid analysis and pedagogy, their interrelation, and the actual state of the learners' knowledge, is more complex. Second, that such a distinction does not always reflect the learners' communicative skills. The Type 1 studies of the effect of captioning generally assume that most gains are in receptive knowledge and lexis. However, there is a need to clarify the effect of captioning upon production, and upon more integrated linguistic knowledge: a combination of syntax and lexis.

The fourth section examines *measurements of input* (linguistic and visual). Irrespective of whether the focus of research is on the enhanced input, or on the task, or whether it is a Type 1 or Type 2 experiment, there needs to be a more sophisticated approach to the analysis of the input than there has been in most studies. This is particularly important when considering the learners' proficiency. While this section provides a large variety of analyses, as demonstrated by the subsections, no clear conclusions can be drawn. There is a necessity for both linguistic and visual measures, but either alone is not sufficient. Research is needed to design mixed measures, which incorporate and interrelate visual and linguistic input. These need to include two factors: first, whether and to what degree linguistic input is realized in visual form, and the reverse, whether visual input is present in linguistic form; and second, as to whether it is concurrent or delayed. Such analysis could also proceed from the factors of proximity, ambiguity, and ambivalence.

The fifth section examines *measurements of the effects of captioning*, including validity, reliability, and practicality, upon language comprehension and acquisition. Most of the studies until now have not given sufficient consideration to issues of validity and reliability. Maybe because of practical constraints, most studies have been limited to one area, rather than being comprehensive. Measurements of the nature of the input, and of the reliability of the tests need to be provided. Furthermore, given the existence of arguments for incremental, or trace element, learning, there have been almost no longitudinal studies which track gains over time. There have also been almost no studies that assess students' opinions about captioned materials.

Many of the above mentioned points are separate research areas. However, at this time, there is a particular need for more comprehensive studies that examine the role and effect of captioning across a number of different materials. These should be consistent and replicable measures of the input, task, and outcome. Measurements of the outcome, in the form of post-tests, need to include a battery of reliable and valid tests.

Captioning Research

Fields

The amount of research on the effect of captioning is larger than applied linguistics and SLA journals indicate. This is because this technology is of value in a number of different disciplines. There are three main areas. The first area where research has been conducted has been with the deaf and the hard-of-hearing: children and adults (Baker, 1985). The captioning system was developed in North America to help those who were born with or who had developed hearing difficulties. At about the same time in the early 1980's, the teletext system became available in the UK. The two systems are similar, except that teletext appears at the bottom of the screen as a kind of running tickertape, whereas captioning appears on the screen. The second area of research is also within mainstream US education. Faced with a large number of language minority students, teachers and institutions were quick to realize that benefits could accrue from using captioning (Neuman, 1990). These students are, strictly speaking, ESL students. However, because they were not adult, SLA research in North America has largely ignored this area. The third area is to be found, not within ESL, but in EFL contexts in Europe and more recently in Asia (Jung, 1990; Vanderplank, 1988, 1990).

Types

The majority of the research has been quantitative rather than qualitative. A few papers have examined the nature of the system and input (Baker, 1985; Jung, 1990; Sato, 1995). Research with the deaf and the hard-of-hearing focuses on readability and reading levels. In mainstream education, studies concentrate on comprehension and vocabulary acquisition, particularly with educational and science documentaries (Neuman, 1990). EFL studies have looked at a wider range of materials, including films. However, these studies have tended to concentrate on comprehension gains (Shang-Ikeda, 1994). Almost no studies have looked at the effect of the captioning related to task or upon speaking (Borras & Lafayette, 1994). Very few studies have provided a way that material could be assessed for suitability for in-class or self-study activities. At one conference, one presenter of captioning data of two hundred movies was unable to make any recommendations to a junior high school teacher as to how this technology could, or should, be applied. The researcher had not considered viewers' proficiency level, which could be excused. What could not be excused was that no scale of level of difficulty of materials was provided. Using the VocabProfile software (Nation & Heatley, 1994), a study by Liversidge (1999b) examined sixty-two films and determined various levels of ease and difficulty with accompanying pedagogic recommendations.

The only study that examines qualitative issues is that of Vanderplank (1992). If learners themselves do not consider a methodology or certain materials to be interesting or useful, the value of maintaining such a pedagogic approach or continuing to use such materials has to be in question. However, often staff and administrations alike do not consider or obtain such opinions. It should be ascertained where and there is satisfaction and discontent. If there is serious discontent, and it is felt that nothing should be changed, then the very least that should be done is to explain to learners why this is the case. Vanderplank found that, even

among advanced learners, almost all felt that the presence of captioning was helpful.

Similar kind of research does not appear to have been conducted with elementary-or intermediate-proficiency learners. With lower proficiency levels, there is a critical level below which the use of authentic materials cannot be justified ethically or pedagogically. Authentic materials are defined as those produced for L1 (first language) speakers of English, whether they be children, teenagers, or adults. Examples of such materials would be newspapers, novels, news programs, educational texts and documentaries, films, CD-ROMs etc. Often the alternative non-authentic materials are poorly produced and are not very interesting. Most authentic materials are too difficult for lower proficiency learners to understand, unless in some way they are brought within the range of such learners. The usual way is that this is achieved by providing support such as notes, scripts of the commentary or dialogue, pre-and post-viewing activities/teaching, and repeated viewings. Another way that this can be achieved is by making use of the captioning technology. This should be regarded as a complementary method rather than a separate one: that both support and captioning are present.

Theoretically, it can be argued that the addition of the fourth quadrant allows learners more flexibility with respect to: first, their own proficiency; second, the varying levels of difficulty present in video material, whether news, dramas, or films; and third, individual differences such as those who have or prefer spatial presentation as opposed to verbal presentation. Self-assessment is a technique which is not without its dangers. However, to ignore learners' opinions invites greater risk of unenlightened eclecticism (White, 1988).

The Study

This survey examined, through a self-study assignment, how students reacted to captioned films. The survey sought to answer six questions.

1. Are Japanese learners more likely to select films they have already seen?
2. What proportion of time do learners spend viewing the film in order to complete the assignment, and for their own interest?
3. What viewing procedures do learners employ?
4. How difficult do learners regard such an assignment, and the film itself, and is there a correlation between disliking the assignment and difficulty?
5. What percentage of the film do learners think they understand through each of or a combination of the four input quadrants? As described in the literature review, these are verbal-auditory (listening), verbal-visual (the closed captioning), non-verbal-visual (movement, scenery, people's appearance), and non-verbal-auditory (natural and man-made environmental sounds).
6. Do they find the captioning helpful, necessary, or a hindrance?

Method

Subjects

All the subjects came from one university offering a full four-year course and a two-year short course, known in Japan as a *tandai* (junior college). All the students were female,

majoring in English. The subjects were from four different classes: one third-year class ($n=34$) from the four-year course, two first-year classes A and B ($n=48, 45$) from the two-year course, and one class of second-year students ($n=40$) from the two-year course.

Materials

At the time of the survey, two self-access centers each had about one hundred and fifty captioned films. The only films not to be found were those containing a large number of explicit sexual or violent scenes.

Procedures

The four classes were asked how much they knew about the captioned videos that were in the university. Although most knew that there were videos in the AV centers, very few were aware that these could be borrowed and viewed at home. Thus, the assignment had a secondary goal of encouraging students to make use of the facilities.

All four classes were told the assignment focused on the beginning of the film. It was explained that they themselves had to determine what actually was the appropriate length of an introductory sequence because it depended on the particular film. Rough parameters were set of between fifteen and thirty minutes. However, for clarification, the task was explained again as an imaginary scenario. "You and a friend have reserved tickets for a film but that because of a delay on your friend's train line, he/she is going to miss the start of the film. When your friend arrives briefly explain the story." Students were told to write at the top of their assignment, the introductory sequence length in minutes. They were also told to keep clear notes as to how long they spent viewing the introductory sequence.

It was clearly stated that they were free to view the films in any way that they wanted. They were also told that the assignment had three parts: the main part, which was to write between ten to twenty lines explaining the beginning (Introductory Sequence) of the film; a second part, to write down between ten to twenty key words or phrases, and alongside each one explain it in either easy English or a Japanese translation; and a third part, to write ten questions about the introductory sequence, and provide answers. It was explained that the order in which they completed the three parts was not important.

Due to restrictions on the number of videos being borrowed at any one time, the third-year class and the first-year Class A were given the assignment one month before the summer recess. They were told that they had two weeks to complete the assignment. First-year Class B and the second-year class were given their assignment on the last day before the summer recess. Therefore, these classes handed in their assignment at the end of the summer recess: a period of approximately eight weeks.

Survey

On the day that the assignments were due, all four classes were asked to answer the questions listed below. Questions requiring only a numerical answer were grouped with questions in which students had to write in detail about the viewing process and their opinions.

The purpose of this grouping was to provide a check against inconsistency in their self-assessment of the films, the procedures they followed, and their opinions.

The combinations were: Questions 2, 6, & 7; Questions 3, 4, & 5; and Questions 8 & 9. The questions were:

1. What was the title of the film you watched?
2. Have you seen this film before? If so how many times?
3. What was the length of the start of the film that you felt suitable to constitute an introduction sequence?
4. Altogether, how long did you spend watching this introductory section? In addition, after that, did you view the film in its entirety?
5. In what way did you view the introductory section? Be specific and write in detail: how many times you watched it, and how you watched it. Did you run through without stopping? Did you rewind / fast-forward, or pause? What else did you do? At what point did you take notes? How did you complete the assignment?
6. On a scale of 1-5, (1=very easy, 5=very difficult) rate how difficult you found the film to be (not the assignment). Write why it was easy or difficult. Explain in detail.
7. On a scale of 1-5, (1=liked a lot, 2=liked, 3=so so, 4=disliked, 5=disliked a lot) rate this assignment. Please write comments about the assignment. Why did you like it or dislike it? Was it useful / of value? If so, how was it useful? If not, why not?
8. How much did you understand of the film through listening, reading the captions, visual information, and overall? Write a percentage (%).
9. How and how much did the captions help or hinder you? Write in detail.

Analyses

The data were analyzed in accordance with the questions listed at the beginning of this chapter: preference for new or previously seen films, time spent viewing, viewing procedures, difficulty and enjoyment levels of the films and the assignment, role of the different inputs upon understanding, and the perceived importance of captioning.

Analysis of the introductory sequence data was largely restricted to descriptive information without statistical analysis because of the variation of classes (1st, 2nd, and 3rd Years), and of the time allowed to complete the assignment (two vs. eight weeks). Some students' answers showed clear inconsistencies. For example, in the case of Question 5, if a student answered that she watched the introductory sequence twice without rewinding or pausing during either viewing, while for Question 4, length of time spent watching the introductory sequence, she answered fifty minutes, then the answer to Question 3, the length of your introductory sequence, should be about twenty-five minutes. Thus, if a student answered fifteen minutes, she clearly had miscalculated or misreported. Students had been told to make notes of the time they spent viewing the introductory sequence, and while recognizing that there is a certain lack of precision in self-assessments, responses such as the above were removed from the survey.

Table 1. Film Introductory Sequence Assignment: Time Allowed, Number of Films Selected, Times Previously Seen

Class	3 rd	1 st Yr A	1 st Yr B	2 nd Yr
Number of students	34	48	45	40
No of weeks for assignment	2	2	8	8
No of different films selected	21	20	26	24
No of times film watched				
First time	20	9	8	10
Second time	9	28	25	24
More than twice	3	11	12	6
No response	2	0	0	0

Table 2. Film Introductory Sequence Assignment: Self-Determined Lengths and Total Viewing Times

Class	3 rd	1 st Yr A	1 st Yr B	2 nd Yr
Number of students	34	48	45	40
Length in minutes				
15 or less	12	10	4	7
20	3	13	6	10
25	2	7	3	4
30 or more	17	18	27	25
Total time spent viewing introductory sequence compared with their actual length				
Same or less than 1.5 time the length	14	3	0	4
Double	10	33	9	14
3 or more times	7	12	36	28
Viewed the entire film	5	8	16	28

Results

The numbers of students who completed the assignment of writing an introduction to the beginning of the film is provided in Table 1, together with the number of films selected and whether or not they had previously seen them. Students selected a wide variety of films but more than half of the students chose films that they had previously seen. Only the third-year students were more adventurous, possibly because of their higher proficiency.

Provided in Table 2 are the lengths of the selected films' introductory sequences felt necessary by students to provide a satisfactory explanation of each film's story. They fall into two main types: students who felt that only a short viewing time of fifteen to twenty minutes was needed to understand the story, and students who felt that more than thirty minutes was needed. More than half of students who had eight weeks to complete the assignment opted for the longer type. However, even with the two-week groups, the third-year class and the first-year Class A, the percentages of students that felt that thirty minutes or more was necessary was 50% (17) and 37.5% (18) respectively.

The first-year Class B and the second-year class, that both had eight weeks to complete the assignment, spent considerably more time viewing the introductory sequence than did the third year group or first-year Class A. One-third of first-year Class B and three-quarters of

Table 3. Film Introductory Sequence Assignment : Viewing Procedures

	3 rd	1 st Yr A	1 st Yr B	2 nd Yr
Number of students	34	48	45	40
Did not stop	4	2	2	1
Once through with pauses	11	25	13	9
1st time thru, 2nd pause and notes	12	21	25	21
1st time thru, 2nd pause and notes, 3rd check	7	0	5	9

Table 4. Film Introductory Sequence Assignment : Enjoyment and Likert Scale 1-5 Rating of Difficulty

	3 rd	1 st Yr A	1 st Yr B	2 nd Yr
Number of students	34	48	45	40
No who liked / disliked assignment	18/7	25/14	23/6	18/10
Aver of scale of difficulty of movie	2.8	2.9	4.0	3.8
Standard deviation	.83	.68	.89	.66
Aver scale of difficulty of assignment	3.2	3.8	3.9	4.1

the second-year class watched the films to the end compared with very few of the students from the third-year class or first-year Class A.

The viewing procedures shown in Table 3 were clearly affected by the pressure of time, and a higher percentage of the two-week groups' students went through the introductory sequence once, only pausing the video when they really felt that it was necessary.

Table 4 shows students' ratings on a Likert Scale of 1 to 5 for enjoyment and difficulty. In all the groups, students were quite clear and even outspoken in their comments about whether they liked the assignment or not, and about how difficult they judged the film that they had selected and the assignment. There were four main findings. First, there was no correlation between students rating films as being more difficult and a dislike of the same film. Second, approximately half of the students in all four classes said that they enjoyed the assignment, whereas only 10% to 25% expressed a clear dislike. Third, as was to be expected, the higher proficiency third-year class scaled the difficulty of the assignment at 3.2, lower than first-year Classes A and B means of 3.8, 3.9, and the second-year class mean of 4.1. Fourth, the first-year Classes A and B, and the second-year class selected similar types of film. However, first-year Class B, and the second-year class that had eight weeks for the assignment also rated the mean difficulty of the films at 4.0 and 3.8, significantly higher than the mean rating of first-year Class A, 2.9, that had only two weeks.

Students' self-assessment of auditory, captioning, and visual factors are provided in Table 5. Students in all the groups stated that the percentage that they were able to understand through auditory input alone was less than half. In each class the presence of the captioning raised the level of comprehension by approximately 20%. The value of the captioning was confirmed by the students' ratings of the presence of captioning using Likert Scale analysis. Eighty-five percent of the students regarded captioning as being either helpful or necessary. Fourteen of the first-year Class A students, who had two weeks to complete the assignment, considered captioning to be very helpful. However, this class also had eight students who expressed negative comments about captioning. Similarly, the third-year class, which also had two

Table 5. Film Introductory Sequence Assignment: Average Percentage and Standard Deviation (in brackets) of Introductory Sequence Understood Auditorily, Reading Closed Captioning (CC), Visually, and Overall; Value of CC

	3 rd	1 st Yr A	1 st Yr B	2 nd Yr
Number of students	34	48	45	40
Average % understood of / by				
Auditory	44(20)	37(16)	33(14)	31(13)
Reading of closed caption	62(19)	56(18)	52(16)	54(19)
Visual (non-verbal)	69(17)	61(27)	63(24)	66(23)
Overall	80(11)	71(21)	74(23)	72(22)
Value of Captioning				
Very helpful / very necessary	5	14	4	11
Helpful / necessary	24	24	38	23
Neutral / no comment	0	2	2	5
Divided attention	3	4	0	0
Hindered listening	2	4	1	1

weeks, also had five students who expressed negative comments.

In addition to the above ratings, students had been encouraged to comment at length. Several students commented on how the visual and auditory element of non-verbal factors helped them to understand or anticipate the story. Some students stated that, while at the beginning they were apprehensive or did not like the assignment, doing it had resulted in them coming to like video and would do it again. Some simply said that they felt more confident. Fifteen students expressed some reservations, thirteen of whom were from the two classes that had had two weeks for the assignment. The most common criticism was that the captions were too quick so they had either to pause or rerun scenes. Related to this was that they either had to pay attention to the captions or the scenes but were unable to do both. A few students said that the captions helped when the dialogue was fast. A few stated captioning hindered when the dialogue was easy. In fact, this may reflect a viewing preference rather than a hindrance: that they wanted the captioning removed because it was not needed at that point, something they could do themselves with a remote control if they were using the original closed-captioned software. Some complained that the captioning was difficult to read because the words were all upper case. However, all of these fourteen students stated that reading of captioning resulted in a percentage of understanding of the film equal to or higher than that of only auditory input.

Discussion and Conclusion

The main purpose of this survey was to ascertain whether learners valued the presence of captioning. The results confirmed that irrespective of the proficiency level of the learner, the film selected, or individual differences in the preferred viewing procedures, the majority of the students felt that captioning was both necessary and helpful. Of the few that expressed criticism of the captioning, it is not clear as to why almost of all them were from the classes that only had two weeks for the assignment. It may be that time constraints con-

flicted with their preferred learning styles: that they preferred to try and catch what was being said rather than rely on the captioning but that time constraints forced them to do the former.

The survey was not intended to be comprehensive but rather to provide direction for future quantitative analysis. As such it did not use factor analysis to assess the validity of the areas of the survey nor assess the reliability of the questions or the students' answers. However as stated earlier, data where students' written answers were in apposition to their numerical ones were excluded from the results. There was also the danger that as the viewing was a new experience, the positive responses could be partially due to a novelty effect. Furthermore, there were variations in proficiency levels and assignment conditions.

However, the survey confirmed that closed captioning does have a role. Most important, it confirmed that the use of authentic material for lower proficiency learners is difficult to justify on ethical and pedagogic grounds, unless there is captioning or considerable pedagogic and/or materials support. This student self-assessment does not accurately identify where the benefits of captioning are, or help academic institutions or staff in determining what and when materials should be used and what support learners need. Detailed quantitative analyses are necessary in all of the areas outlined in the literature review.

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