
THE USE OF VISUAL AIDS IN A SOCIO-INTERACTIVE ENVIRONMENT*

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ABSTRACT

The need for audiovisual materials in the EFL classroom arises from the fact that the association of visual aids with the new language makes meaning more direct and quick to understand than through verbal explanation, attracts the students' attention and aids concentration. Learning a language through visual aids in collaboration with other peers makes the experience more productive and profitable. Therefore, this work discusses how the use of visual aids in a socio-interactive environment can improve students' ability to learn a language.

KEY WORDS: EFL, visual aids, socio-interactive, environment.

INTRODUCTION

This study is an investigation on how the use of visual aids in a socio-interactive environment can improve the students' ability to self-learn the English language. As visual aids I consider realia, pictures, charts, the board, flash cards, or whatever can visually help students convey the meaning of unknown vocabulary. The aim of the activities was to teach the pronunciation of regular past tense verbs in English and introduce new verbs. Since reading should be emphasized in public schools, according to the new curriculum, the classes were centered on a text, "The Wilson's party". Believing in the principle that teachers should provide the means for learning, but not spoon-feed the students, the activities were designed so that students worked collaboratively in shared tasks and the teacher just monitored the activities. Therefore, in this paper, I describe the experience I had with students of the 7th grade at

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CEPAE (Centro de Ensino e Pesquisa Aplicada à Educação). First of all, some theoretical background will be discussed in order to support the choice of strategies proposed. Next, the activities in class will be presented and then discussed.

THE HISTORY OF IMAGES FOR COMMUNICATION

The use of visual aids as a means of communicating has been used since the origins of mankind. The first attempts of communication known were through drawings found in caves dated from the Upper Palaeolithic Age. After that, the drawing disappeared and there was a shadowy period during which not much is known. In the Stone Age, signs of paintings reappeared. Later on, the invention of writing was momentous. A limestone tablet is one of the earliest documents there is of the stages by which it happened. It was found in southern Mesopotamia and has been dated to about 3500 BC. The little pictures are of hands, feet and some kind of sledge (perhaps used for threshing grain); they mark a big stride towards using signs to stand for things, a process already foreshadowed in symbols on pottery. Later, the Egyptians clung to such 'pictographic' forms of writing, elaborating them into the 'hieroglyphics' that recorded their life and business for thousands of years. By then, the Mesopotamian tradition had taken another direction, away from picture-writing towards patterns of signs made of identical marks in different arrangements which could be easily formed by a reed-stalk stamp on a soft clay tablet. This process took about fifteen hundred years after these tablets were made (ROBERTS, 1993, p. 13-33).

Making a leap forward in history, we arrive at the era of the World War II during which great changes took place in the world and eventually influenced language teaching and learning. The interaction between the warring countries created a need for communication in languages other than that of each country. Masses of soldiers sent to war had to develop rapidly their language skills in order to survive abroad. Therefore, a methodology using visual aids was developed in the United States in order to equip these learners with practical means of oral communication as quickly as possible, with virtually no relation to literature or the written language. Despite Heaton's claim that "the printed text remains unchallenged as the central focus for language learning

even now, after the audiolingual revolution has come and gone” (HEATON, 1989, p. 39), we must consider that even written language is a visual means to convey information.

COGNITIVE MEANING THROUGH VISUAL AIDS

Many linguists have asserted that language cannot be described wholly apart from meaning, since meaning – and its relation to mind – is inherent in the very nature of language. Therefore, the need for audiovisual materials in the ESL classroom arises from the fact that language is ultimately inseparable from the real world, which must then be supplied by the teacher in order to make the new language more meaningful. The association of visual aids with the new language makes meaning more direct and quick to understand than through verbal explanation, attracts the students’ attention and aids concentration, thus making the associated language memorable (GOWER, 1995; SCOTT, 1990).

According to Chomsky’s tenets, language learning is not a matter of habit and conditioning, as dictated by the behaviorists, but a creative process – a rationalistic, cognitive activity rather than a response to outside stimuli. It is the job of the teachers to activate this process in the students, so that they become independent learners. Heaton (1989, p. 40) points out that, “for students who are well equipped with learning strategies, even the teacher might be dispensed with”. Moreover, Nuttall (1982) and Carrell (1988) claim that the ability to interpret graphs, diagrams, pictures etc. is independent from the language; therefore, abilities to interpret can be transferred from the source language context to the target language. To encourage such transfer is to stimulate the student to contribute to the task of creating meaning to the new language. That is why it is so important to supply students with strategies that will enable them to find their own way through the learning process.

SHARING AND LEARNING

From a psychological point of view, the process of learning a foreign language places any individual, whatever his age, in a position of a child, since he/she cannot master the signs and sounds of the other language. Consequently, an open exposure in class usually creates embarrassment

and hinders the student from developing further. Moreover, working with peers creates a more collaborative and amicable environment among the students, making their work more productive and profitable.

Vygotsky (apud VEER, 1991, p. 329) observed that there are two levels of development: one is what the child can already do and, the other, what the child's potential is. These two levels should be established in order to find out the zone of proximal development (ZPD), that is, the zone where the child's learning ability increases.

The zone of proximal development of the child is the distance between his actual development, determined with the help of independently solved tasks, and the level of the potential development of the child, determined with the help of tasks solved by the child under the guidance of adults and in cooperation with his more intelligent partners. (VYGOTSKY, apud VEER, 1991, p. 337)

In Vygotsky's point of view, teachers do not directly instill the child's abilities to learn. For him, "teaching is only effective when it points to the road for development. The school child [...] has to learn to transform an ability 'in itself' into an ability 'for himself'" (VYGOTSKY, apud VEER, 1991, p. 331). This way, it is the teacher's job to furnish students with guided tasks, but it is the student's role to develop his/her own learning strategies thereafter. Therefore, in order to promote cognitive development, teachers should work on the child's potential creating the conditions for certain cognitive processes to develop, without directly implanting them in the child.

To implant [something] in the child [...] is impossible [...] it is only possible to train him for some external activity like, for example, writing on a typewriter. To create the zone of proximal development, that is, to engender a series of processes of internal development we need the correctly constructed processes of school teaching. (VYGOTSKY, apud VEER, 1991, p. 331)

Furthermore, performance in joint action with peers allows for the development of the weak ones. The social other plays a leading role in children's cognitive process, providing them with the "ideal form" of development. The already matured functions, 'the results of yesterday'

are activated, then, the performance of children cooperating with more knowledgeable others promotes the future development, that is, it reveals 'the results of tomorrow'. For Vygotsky (apud VEER, 1991, p. 337), the activities that are imitated today will be independently performed in the near future. He proposes to give the child hints and prompts to see how far this could lead the child.

MEMORY ACTIVATION

According to Rumelhart (1980, p. 3), Cognitive Science has emphasized the "notion of a schema and the related notions of frames, scripts, plans etc." since the 70s, though the concept of a schema goes further back in the past. In the late 18th century, Kant, in 1787, used the term *schema* to relate to rules of "productive imagination" associated to "categories" that were transformed in knowledge or experience. In addition, Rumelhart explains that schemata (the plural of schema) are the building blocks of cognition.

They are the fundamental elements upon which all information processing depends. Schemata are employed in the process of interpreting sensory data (both linguistic and nonlinguistic), in retrieving information from memory, in organizing actions, in determining goals and subgoals, in allocating resources and generally in guiding the flow of processing in the system. (RUMELHART, 1980, p. 4)

Schema is, therefore, a theory about how knowledge is represented and about how that representation facilitates the 'use' of the knowledge in particular ways. Based on this theory, we tried to develop a class in which the students would use their cognitive knowledge associated to visual aids to guess the meaning of new vocabulary and from there be able to understand and reproduce the text of "The Wilson's party" (Appendix 1).

Considering that "the internal structure of a schema corresponds, in many ways, to the script of a play" (RUMELHART, 1980, p. 5), we thought of having the students relate the concept of a party to the pictures used in the activity proposed. As much as different actors can play the same character at different times in a play without changing the essential

nature of the play, so “a schema has *variables* which can be associated with different aspects of the environment on different instantiations of the schema” (RUMELHART, 1980, p. 5). The students had, therefore, to put themselves into the characters of a *party play* and try to understand what was going on before, during and after the party was over.

Let’s consider the schema for the concept *party*. One can imagine a playwright writing a most ordinary play about a person enjoying a party. There would be many ways of playing this little play. The kind of party could vary from a birthday to a wedding party, the guests could vary in status, occupation, sex, nationality, age etc., and the kind of food and drinks could vary immensely. Despite all this variation, as long as the fundamental plot remained the same, we could say that the *party play* was being performed.

Such knowledge about “the typical values of the variables and their interrelationships is called the *variable constraints*” (RUMELHART, 1980, p. 6). Variable constraints can help identify various aspects of the situation with the variable of the schema and serve as initial “guesses” by inferring unobserved values implicit in the context. For Rumelhart (1980, p. 7) “schemata represent *knowledge* rather than definition”. Therefore, the idea was to have the students activate the knowledge they already had about different concepts and help them formulate their own strategies to become more independent learners.

HANDS ON THE DOUGH

In our experience with a 7th grade group at CEPAE, classes focusing on past tense verbs were planned in order to present the pronunciation of the past tense of regular verbs and introduce new verbs. My aim was mainly to have the students notice that there was really a difference in pronunciation rather than mastering it. I had two 45-minute classes to teach the subject.

In the first class, as the emphasis was on pronunciation, there was a lot of repetition. I tried to contextualize the activity by using verbs the students already knew along with those they would need for the hand out activity. After a brainstorm, the verbs were presented in cards and the correct pronunciation emphasized by placing them in three columns: /d/, /t/, and /Id/. A written exercise was handed out in order to

have a more controlled practice of the activity. [Appendix 2] As the main focus of the curricula nowadays is on reading, I tried to make them associate the pronunciation and to guess the meaning of unknown vocabulary with visual aids, which were, in this case, the written cards, the text and the pictures associated to them. The students were able to notice the difference in the pronunciation and reproduce them well.

The following class, I started with the group activity I had planned. The class was divided into five groups, each receiving an envelope with a set of scrambled chunks of words from a paragraph of the text “The Wilson’s party”, in slips of paper, along with a set of pictures related to it. There were about six to seven sentences in each set, all mixed, and colored differently to help students identify which word belonged to which sentence. The students were supposed, first of all, to form the sentences correctly and, then, to form a reasonable text with them. The text had to be coherent with the picture that accompanied that specific set of the party. The pictures that accompanied the slips of paper should convey the unknown vocabulary. The purpose of this activity was to find out the ability of the students to, collaboratively, form a text coherent with the picture and to guess the meaning of unknown vocabulary by looking at the pictures instead of depending on the teacher’s explanations.

The students were able to perform the activity with success, even though, at first, they had some difficulty for they did not know how to work with scrambled sentences. However, after playing a game on the board, where many words were set at random, for example, A LOT/ STUDIED/ I/ ENGLISH/ YESTERDAY (I studied English a lot yesterday), they understood the activity and performed their task well.

Up to this point the students had not had any contact with the full text, that is, “The Wilson’s party”. Each group had only a part of it. The second part of the activity consisted on having each group of students report orally their part of the story to the class. They were supposed to retell the story and explain the unknown words without translating them. That would make the students be more creative, since they could only use the pictures they had in hand, gestures or any other means they found necessary. The purpose of this activity was to see how the students would manage to explain their ideas and how close their stories would be to the one in the text “The Wilson’s party”. Unfortunately, this second part of the activity was not performed for lack of time.

Therefore, the full text was distributed to the students right after the groups had finished their part of the task, that is, make up a story for the picture with the scrambled sentences. They, then, compared their version with the one in the text and checked how well they had done it and read it aloud for the class. After that, I read the whole text for the class emphasizing the pronunciation of the past tense of regular verbs. The purpose of this activity was to enable the students to figure out what made the pronunciation change. They were supposed to find a similarity in the verbs that had the same ending sound. Besides this oral activity, they had already worked with a hand out (Appendix 2) in which the verbs were separated by the ending sound.

DISCUSSION

In order to have a more accurate assessment of the learning process, a survey was carried out to know the students' opinions about the development of the classes. A multiple-choice questionnaire was handed out to the students at the end of my second class (Appendix 3). The questions were in Portuguese so that the students would not have any trouble understanding them. Eleven out of the 20 students handed back the questionnaire, therefore, my evaluation will be on the account of the 55% of the students who answered the questionnaire (Appendix 4).

According to the students' evaluation, the majority of them had a good comprehension of the text, at least the part their group was working with. 46% of them thought their comprehension was regular, 36% good, and 18% excellent.

With regard to the difficulty of the text according to their level, 64% of them judged the text reasonably easy, and 36% thought it was difficult.

Considering what helped the students' comprehension, the games were acclaimed by 8% of the students, the pictures by 61%, the classmates by 8%, the explanation of the teacher by 15%, and 8% of the students did not answer this question.

In their opinion, what made the comprehension more difficult were the games for 28%, the pictures for 18%, the classmates for 27%, the lack of explanation for 18% and 9% did not answer.

In order to have the students develop their ability to form sentences, the sentences of the text were printed in different colors and split in chunks. It also was meant to bring the students attention to the text. A picture illustrating the text was included in their package as well. For 82% of the students, the activity of scrambled sentences associated to the pictures helped their comprehension of the text, while only 18% did not think it helpful.

As the text was very long, in order to facilitate comprehension and make the students more active, it was divided in parts and distributed to groups of students. According to their assessment, the division of the text in sets helped the comprehension for 91% of the students and did not help 9%.

Having in mind that visual aids, that is, the text associated to the pictures, should convey the meaning, no explanation of unknown vocabulary was given when students worked with the text. In the previous class, some of the vocabulary had been worked with while they practiced the pronunciation. Unknown words, therefore, impeded the comprehension of 64% of the students and did not for 36%.

Taking into account that there had been no explanations and that the students were able to understand at least part of the text, the fact that 45,5% of students were able to guess the meaning of unknown vocabulary, while 45,5% were not, was very positive, considering yet that 9% of the students did not answer the question.

Among the tools that the students named as helpful for guessing the meaning of unknown vocabulary are the teacher (17%), cognates (8%), the context (17%), the dictionary (17%), and 41% did not answer.

All 11 students agreed that the written text was a helpful tool for the correct pronunciation of the verbs.

Judging from the answers the students gave and from the experience itself, the use of visual aids in a socio-interactive environment proved to be a helpful tool in the comprehension of the text and the pronunciation of the past tense of regular verbs in English.

CONCLUSION

Even though the time allotted for the development of the classes was tight, the students were able to notice the difference in the pronunciation

of past tense of regular verbs, what could be seen from their pronunciation and the way some of them misspelled some verbs by writing the phonetic sound instead of 'ed' at the end of the verb. The classes were very dynamic and the students did not need to be spoon-fed to be able to perform the tasks. On the contrary, they work very well with peers.

If we take into consideration the fact that the time children are in contact with a foreign language in public schools is not much, in order to achieve better results and make the classes more profitable, teachers should work in a socio-interactive system organized around the comprehension and production of texts that create new forms of cognitive activity in the children, which while keeping the students busy, allows the teacher to be free to monitor the activities.

Regarding the results of this investigation, the use of visual aids to activate blocks of cognition in a socio-interactive environment contributed greatly for the effectiveness of the class. The fact that one student could fill in the gap of the other made the task more profitable. In sharing their knowledge the students were able to perform high cognitive tasks in a quite short period of time and learn more. As Vygotsky (apud VEER, 1991, p. 331) put it, "teaching is only effective when it points to the road for development".

Therefore, we can conclude that the use of visual aids in a socio-interactive system is very helpful for teachers to convey meaning and for students to develop in English.

RESUMO

A necessidade do uso de recursos visuais em uma aula de língua estrangeira deriva do fato de que a associação de imagens à nova língua torna o significado mais direto e fácil de compreender do que por explicações verbais, atrai a atenção dos alunos e ajuda na concentração. Aprender uma língua através de recursos visuais em colaboração com outros colegas torna a experiência mais produtiva e proveitosa. Assim, este trabalho discute como o uso de recursos visuais em um contexto sociointerativo pode melhorar a capacidade dos alunos para aprender uma língua.

PALAVRAS-CHAVE: Língua estrangeira, recursos visuais, contexto sociointerativo.

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APPENDIX 1



THE WILSONS' PARTY

Mr. and Mrs. Wilson invited all their friends and neighbors to a party last night. They stayed home all day yesterday and prepared for the party.

In the morning the Wilsons worked outside. Their daughter, Margaret, cleaned the yard. Their son, Bob, painted the fence. Mrs. Wilson planted flowers in the garden, and Mr. Wilson fixed their broken front steps.

In the afternoon the Wilsons worked inside the house. Margaret washed the floors and vacuumed the living room carpet. Bob dusted the furniture and cleaned the basement. Mr. and Mrs. Wilson stayed in the kitchen all afternoon. He cooked spaghetti for dinner, and she baked apple pies for dessert.

The Wilsons finished all their work at six o'clock. Their house looked beautiful inside and out!

The Wilsons' guests arrived at about 7:30. After they arrived, they all sat in the living room. They ate cheese and crackers, drank wine, and talked. Some people talked about their children. Other people talked about the weather. And EVERYBODY talked about how beautiful the Wilsons' house looked inside and out!


The Wilsons served dinner in the dining room at 9:00. Everybody enjoyed the meal very much. They liked Mr. Wilson's spaghetti and they "loved" Mrs. Wilson's apple pie. In fact, everybody asked for seconds.

After dinner everybody sat in the living room again. First, Bob Wilson played the piano and his sister, Margaret, sang. Then, Mr. and Mrs. Wilson showed slides of their trip to Hawaii. After that, they turned on the stereo and everybody danced.

As you can see, the Wilsons' guests enjoyed the party very much. In fact, nobody wanted to go home!


APPENDIX 2


What Did You Do Yesterday?


I work every day.		I worked yesterday.
I play the piano every day.		I played the piano yesterday.
I rest every day.		I rested yesterday.


work	-	worked	[t]
play	-	played	[d]
rest	-	rested	[ɪd]


What did you do yesterday?



 1. *I worked*



 2. *cook*


[t]

 3. *talk on the telephone*



 4. *fix*



 5. *brush*



 6. *dance*



 7. *wash*



 8. *watch*



 9. *play*



 10. *study*


[d]

 11. *shave*



 12. *smile*



 13. *clean*



 14. *cry*



 15. *listen to*


 16. *yawn*


 17. *shout*


 18. *paint*

[ɪd]

 19. *wait for*


 20. *plant*

APPENDIX 4

RESULTS OF THE QUESTIONNAIRE

	A	B	C	D	No answer
Text comprehension	2 (18%)	4 (36%)	5 (46%)	0 -	0 -
Level of difficulty	0	4 (36%)	7 (64%)	0 --	0 --
What helped	1 (8%)	8 (61%)	1 (8%)	2 (15%)	1 (8%)
What diffculted	3 (28%)	2 (18%)	3 (27%)	2 (18%)	1 (9%)

	YES	NO	NO ANSWER
Sentences + pictures	9 (82%)	2 (18%)	0 --
Text division	10 (91%)	1 (9%)	0 --
Unknown verbs	7 (64%)	4 (36%)	0 --
Inference	5 (45,5%)	5 (45,5%)	1 (9%)
Written + verbal	11 (100%)	0 --	0 --

- Number of students interviewed: 11

STUDENTS' OPINION ABOUT THE CLASSES

- “Bom. Vocês têm sido bem rápidas porque a aula é curta, mas poderiam aprofundar mais em muitos assuntos, assim os alunos compreenderiam mais o Inglês.”
- “Boa. Porque a aula teve muitas explicações, e essas explicações facilitam muito em desempenhar a tarefa.”
- “As aulas foram bem realizadas, e eu participei delas.”
- “A aula foi interessante e o aproveitamento foi de 80%.”
- “A minha opinião é que as gravuras sempre ajudam a entender melhor o texto e os jogos também.”
- “O desenvolvimento da aula foi boa. Todos cooperaram. O meu aproveitamento foi bom e aprendi muitas palavras e verbos novos.”
- “A aula foi boa, teve um bom desenvolvimento e aproveitamos ao máximo o conteúdo.”
- “Eu gostei. As professoras ensinaram muito bem e ajudou muito.”
- “As aulas foram muito boas, foi bem esclarecido. Eu pude aprender bastante.”
- “Bacaninha.”