

PILOT LEARNING STRATEGIES IN STEP WITH NEW TECHNOLOGIES: LIS AND ITALIAN IN A BILINGUAL MULTIMEDIA CONTEXT 'TELL ME A DICTIONARY'

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Abstract

A pilot project designed for the integrated or non-integrated classroom, speech therapy setting, and family at home, this multi-media DVD + book series offers deaf and hearing children "of all ages" a lively interactive tool for discovering and comparing two very different languages, Italian Sign Language and Italian.

"Raccontami un dizionario" (Tell Me A Dictionary) is rich in vocabulary presented through stories and sentences that project both languages as living languages, thanks also to a lively 8-minute animated cartoon, signed and spoken narration, Italian with subtitles, vocabulary building games and a glossary that takes you back to the vocabulary items in the DVD.

The illustrations and story in the accompanying book derive from the DVD: both animated and printed versions tell the story even without the support of language, permitting access even to young children just beginning to read.

The animated story facilitates the understanding of written Italian, especially verbs which, through animation, offer a dynamism that is limited by two dimensional book illustrations. The book reinforces the written Italian and children can experiment narrating the story to their friends and engage in dramatization with classmates.

Published by LisMedia & CO, it is easily adapted to other spoken and signed languages.

1. PROLOGUE

Making the learning of a new language enjoyable is not always easy to accomplish. It is even less so if you have been deprived the possibility of acquiring a mother tongue, that language that is assimilated naturally if the child is exposed to it at an early age.

All too often, deaf children travel down a scholastic and speech therapy path in which the only language encountered is vocal language, like spoken Italian or spoken Greek.

Vocal language is not natural for deaf children, since it travels on the acoustic-vocal channel that is inaccessible to them because of their deafness; for this reason the path is arduous, and the objective is reached only after hard work, enormous effort and frustrations for the deaf child.

Even written language, though visual, is no small challenge.

A highly effective way to favour integration that aims at equality through access, participation and respect is to permit deaf children to measure themselves with the hearing children, taking advantage of their natural language, sign language, as a strong point and not merely as a marker of diversity.

The desire to see sign language find an appropriate place within the teaching and speech therapy contexts with the need for true integration of deaf and hearing children, coupled with the need for a specific tool that favours learning LIS and Italian in a bilingual context, gave rise to a pilot interactive multimedia series, "Raccontami un Dizionario" (Tell Me a Dictionary) and its first volume "Un Picnic Tutto Pazzo" (A Crazy Crazy Picnic) and accompanying book.

This series offers deaf and hearing children an interactive and enjoyable instrument that permits them to discover and compare two very different languages, and offers them a stimulating venue to "grow" together.

At a first glance, this material appears to be designed for very young children, because of its clarity and its lively primary colours throughout.

As one uses the material, one realizes that each section is multi-layered, so there are semantic and grammatical features to suit everyone's age and reading abilities, or lack of.

It is currently being used by kindergarten children, elementary school and high school students, parents, and teachers of sign language courses for hearing and deaf non-signing adults.

It is being used in classrooms where there are no deaf children, but where hearing children are learning LIS as a second language.

It has been acquired by parents whose hearing children are learning sign language because, for one reason or another, they are unable to communicate through speech.

At first glance, this material might seem difficult for the younger children, who are just beginning to read, since the language presented in the DVD is at times complex.

But, thanks to the wonderful world of multi media technology, this series seems to turn upside down the classic learning readiness rules for certain aspects of language.

Children grow with the material, and like Alice in Wonderland, the level of understanding will increase with the age of the child.

It is an expensive product, and so it had to be designed to be used over and over, and for a long period.

This pilot DVD and accompanying book were realized by LIS.Me.Di.A. & Co., a consortium composed of the Istituto Statale di Istruzione Specializzata per Sordi, the Mason Perkins Deafness Fund, and Digisys, s.r.l., with a contribution from the Comune di Roma (Municipality of Rome).

2. CHARACTERISTICS

“*Un picnic tutto pazzo*” has several characteristics that, together, render it somewhat unique:

- The animated cartoon facilitates the comprehension of the accompanying written subtitles, in particular, the verbs that, by way of animation, conserve their dynamic state. It is extremely difficult to understand new verbs when reading books, especially because verbs are difficult to draw, because there are never enough illustrations to match the text, and because the illustrations are static and two-dimensional. Even more difficult to understand in children’s books in the absence of movement are relationships of cause and effect;
- The illustrations and the images in the DVD are extremely clear and colourful, and they enable the child to comprehend the story even before and without reading the text and without knowing how to read;
- The two languages, LIS and Italian, are presented through **single words**, that are placed in different types of **sentences** (negative, interrogative, affirmative, imperative, etc.) that contain the words, the story and the detailed account filled with interesting and humorous detail - all aimed at enriching the lexical, syntactic and narrative aspects of both languages;
- The signs and words are placed in a context (e.g. picnic) and subdivided into categories (e.g. food, beverages) to favour rapid vocabulary learning and a memorization that will last over time;
- The story is quite humorous and action-packed, aimed at richer language and enticing the children to return to the DVD over and over; the sentences in the dictionary section too, where possible, offer not only a context but are humorous and educational;
- Taking advantage of the fact that the letters of the computer keyboard appear in upper case, but when the child pressed on a capital letter, a small case equivalent appears on the screen (if the cap lock is not on, of course). We have chosen to use upper case in the more elementary dictionary section and the lower case in the subtitles that narrate the story in written Italian. The book, too, uses lower case written Italian.
- The DVD is technically designed to be seen interactively either on the computer screen, or on a large television screen with the whole class or the family at home, using the remote control.
- With the games section of the DVD, children can test what they have learned and recover what they have missed;
- The small book that accompanies the DVD is designed to root the written Italian once the story has been completely understood. The book version of the story offers children the possibility of reflecting, on what they are reading. And since it is a small book, they can take it anywhere, even on the bus, and they can also experiment the pleasure of narrating the story to their friends and relatives.

3. DVD CONTENT AND METHOD

3.1. Racconto Animato (The animated story)

This animated cartoon is about a ‘crazy, crazy’ experience that Lino and Milli, brother and sister, have in their futile attempt to have a picnic. The story is told first through animation (with the option of a voiceover and subtitles). In order for the story to be understood by all children, even very young children who have not yet learned how to read, the characters communicate with very clear actions and expressions and no words or subtitles are necessary for total comprehension.

Since comprehension of the story facilitates learning the signed and written narration, the cartoon section should be viewed one or more times before visiting the others.

The very first time the children view the animated cartoon; it is most effective to deactivate the volume to allow children to fully concentrate on understanding the cartoon.

The volume can be activated during subsequent viewings to let those children who have access to the spoken language practice the written Italian reinforced by the voiceover.

3.2. Racconto LIS (Story in LIS)

The Racconto LIS should be the second section to be viewed.

Added to what was experienced in the first section, here the “simpatico” deaf actor Emilio narrates the story of the cartoon in Italian Sign Language (LIS), right alongside the cartoon, which is now viewed in a television screen in what is supposed to be Lino and Milli’s bedroom.

Emilio narrates the entire story line, whereas in the following section, he will reappear, offering a detailed description of what the children are seeing in addition to the story line.

3.3. Racconto LIS Descrittivo (Detailed Description in LIS)

In this descriptive section, Racconto LIS Descrittivo, the entire cartoon has been divided in small segments, and indexed so the child or facilitator can pick the segment she wants to concentrate on.

Each segment is shown just as pure animation, with no voiceover and no Italian subtitles.

Then the segment that the child has just viewed stops and Emilio appears on the screen to recount the segment in great detail, adding rich vocabulary and grammar, a myriad of classifiers, all easy to understand after having viewed the animation.

Children can click on the segment again and again or pass on to another segment that they wish to view. Emilio’s detailed description in LIS can also be viewed with Italian subtitles and heard through voiceover by activating the appropriate button.

3.4. Disegni Segni Parole (Drawings Signs Words)

We have designed a descriptive dictionary section named Disegni Segni Parole that is rich in drawings,

signs and words, where you can learn signs, words, and then you can see the signs and words in sentences.

The interactive “dictionary” section is comprised of six categories, each containing 48 everyday key vocabulary words, all concrete objects that the children will have already encountered in the animated story.

The child first selects an object. Each object is represented by a written word in Italian, but also by the drawing of the object so that children who do not yet know how to read can still choose the object without understanding the meaning of the word.

When a child clicks on the drawing of an object, the object pops out and then Emilio appears on the screen to show how to sign it in LIS. The same word is then shown and heard in written and spoken Italian respectively.

One can also access the translation in English of the Italian word equivalent.

Clicking on Emilio, he will repeat the sign, and the child can keep clicking until he has learned the sign.

Clicking on the link “*frase*” (“sentence”), the same sign appears, this time in a complete sentence that is in turn translated into both written and spoken Italian.

Just before the sentence appears, there is animation on the screen that helps the child who does not read to understand the meaning of the sentence to come.

The sentence, like the single sign, can be seen over and over.

This is an enjoyable while remarkably instructive way to provide children with sentences and vocabulary within a context.

Care has been taken to provide sentences that are at times humorous, at times educational, and that provide a wide variety of grammatical usage.

It goes without saying that those important classifiers abound, since the narration for the most part derives from the animated cartoon.

It is already evident to us that this section of the DVD must be amplified to include hundreds of key vocabulary words and sentences in the subsequent volumes.

3.5. Giochiamo (Let’s Play)

This game section, Giochiamo, was designed to enable the users of the material to test their comprehension of single signs.

Emilio signs an object and children have to choose the correct object or Italian word from a list of words and objects displayed at Emilio’s side.

Milli informs you if your answer is correct, and if not, Lino, being ‘psychologically correct’, encourages you to try again.

To prevent clever kids from guessing correctly because they have memorized the place the words occupy on the list, we keep mixing the order.

A colourful board of apples keeps the score and whenever you answer correctly, another apple is bitten. (Which, by the way, this is the section that is visited most frequently by adults!)

3.6. Glossario (Glossary)

In this section, Glossario, the letters of the ABC alphabet are presented with the equivalent handshapes from the LIS manual alphabet. You can click on any

letter to access a large number of words that are used throughout the narration and in the sentences from the dictionary section.

The vocabulary items listed are strictly tied to a specific context and cannot necessarily be generalized.

This reflects one of the peculiar features of sign languages, obviously because they are visual-gestural languages. When you click on a word, the word is shown within a sentence, thus clarifying its meaning and illustrating the context in which it can be used.

Further context is offered in parentheses alongside many of the vocabulary items that require disambiguation.

For example, when reference was made in a sentence to a mother and her baby ducks that swim, it was necessary, next to the word for ‘swim’ in the glossary a parenthesis indicating that it was for duck swimming, and in a particular way in which it appeared in the sentence context. (This is clearly delicate, for we are dealing with glosses, which no researcher likes. We realize that we can never be careful enough. In the future we must elaborate a way to include the very useful glossary in which there is no possible way that the user might apply the vocabulary learned to contexts in which that particular sign is not acceptable.)

Each sentence is shown twice to promote comprehension.

The vocabulary items that appear in the Glossario are presented in three colours:

yellow for the words/signs that are the 48 key words, green for those appearing in the key word sentences but are not the 48 key words, and **blue** for those appearing within the cartoon.

All of the vocabulary words appear in bold and are appropriately emphasized in the subtitled sentences, respecting the proper colour for each of the three types.

3.7. The Book that accompanies the DVD

The use of the book is strongly recommended only after children have watched the DVD one or more times.

Once the children have totally understood the story in the DVD, they are ready to learn the written Italian version in the book, and discuss it or narrate it to others with greater ease.

Both the DVD and the book are tailored to “children of all ages”. Since it is humorous and so rich in grammar, it is now very popular even with adult sign language classes.

4. TESTING THE MATERIAL

The material was tested by several teachers in kindergarten and elementary school and by bilingual speech therapists.

Reports were very positive, which was expected since even the smallest pool of water found in the desert is lifesaving!

In the testing phase, teachers were delighted to see how the children were riveted to the screen.

Most importantly, they were impressed by how especially pleased and participatory the deaf children in

the viewing group were to see their language on the TV or computer screen, in a primary role.

Teachers also commented that the children delighted in the interactivity and in being able to learn on their own, without adult assistance, promoting independence of choice.

They recounted that the story of Lino and Milli and the group of vindictive ants whose vacation has been ruined by the two children in search of a good place to have their picnic attracts the children to the point where they are able to protract their interest and willingly engage in activities that the teacher creates from the DVD.

The DVD motivates them through a clear stimulus at the visual and linguistic levels, and represents an indispensable basis for any teaching and learning activities.

It involves the student in a repetition of the lexicon and sentence structure in various forms: play, narration, exercises and favour a remarkable “natural” acquisition.

Teachers relate that they are all too aware of the effort on the part of their deaf students to memorize new words and with what difficulty they are able to understand in which contexts to use them and how these materials contribute to reduce the effort.

We are told that this DVD is easy to consult, the images and signs are an effective support in memorizing Italian words, and enrich the lexicon of their classes, while thoroughly enjoying it, in LIS and in Italian.

They remarked at how easy it was to work on the sign language and the Italian once the story was totally comprehended through animation.

The most gratifying feedback, perhaps, was learning that teachers used the DVD to spin off various art, language and dramatization activities, which we hope in the future to collect and publish as a teachers’ resource anthology.

Feedback from the actual users and facilitators is crucial to continual improvement as subsequent volumes in the series are created.

5. BATTLE OF THE LANGUAGES

Creating this pilot was truly stimulating because we had no real precedents and our task was to bring together two languages that travel on different channels, and combine them with the languages of the multi media that would, in the end, transmit the content of the DVD to the users.

One simply cannot fathom the amount of time (and near fistfights) involved in arriving at comprehension among the different “languages” and media.

The next attempt, also with the help of feedback and further testing, will surely be easier.

The most important thing we learned was not to begin with the storyline in animation, but in LIS, and design the animation after the LIS narration, avoiding the need to narrate, often too fast, to fit the scenes.

At times, when the resulting LIS production for a scene was unacceptably too rapid, we redid the animation for those scenes, but this proved much too time-consuming and expensive.

We are now brainstorming a storyline for the next DVD. Any suggestions are welcome, especially from deaf storytellers!