

A SMARTer Way to Teach Foreign Language: The SMART Board™ Interactive Whiteboard as a Language Learning Tool

Fabienne Gérard

French Instructor, Cary Academy, Cary, NC, U.S.A.
Ph.D. Candidate, La Sorbonne Nouvelle, Paris. France
fgerard@trinity.nyc.ny.us

Jamey Widener

Spanish Instructor, Cary Academy, Cary, NC, U.S.A.

Abstract: This study investigates the uses of SMART Board interactive whiteboards in foreign language classrooms. First we discuss how SMART Board interactive whiteboards can be used to facilitate the teaching process, and then we discuss how it can be used to facilitate the learning process. We will then identify the weaknesses of this tool. This study may show potential value in using this tool in foreign language acquisition.

Introduction

Cary Academy is situated in the Research Triangle Park, a booming area located near Raleigh, North Carolina. A 6-12 independent school, Cary Academy opened its doors to students in August 1997. Technology is widely used throughout the school in order to facilitate both teaching and learning. In most classrooms, there is one computer for each two students. In language classrooms (English classrooms or foreign language classrooms) there is one computer for each student. Several SMART Board interactive whiteboard were introduced into the classrooms during the first operational year.

This paper describes and analyses the uses of SMART Board interactive whiteboards in foreign language classrooms. We will first discuss the SMART Board interactive whiteboard from a teacher's point of view in order to see how it may facilitate teaching. We will then look at some of the same activities from the perspective of a student in order to see how it may facilitate learning. Finally, we will identify and discuss some of the weaknesses of this tool.

We will start by giving some information on the SMART Board interactive whiteboard itself.

The features of SMART Board interactive whiteboards

A SMART Board interactive whiteboard is an interactive electronic white board which can be used for different purposes. It is connected to a computer and to a projector which displays the image seen on the computer screen. First the software (and hardware) must be engaged, and then the board must be oriented. Once this is accomplished, you are ready to begin.

Once the computer screen has been projected onto the SMART Board interactive whiteboard, the user can control all Windows applications with the touch of a finger. The user's finger becomes, in effect, the mouse. The user needs only to press the board's surface to open and close files, explore web sites on the internet, or operate software.

As with any regular white board, the user can take notes on the SMART Board interactive whiteboard. But unlike notes that are taken on a regular white board, these notes can then be printed or saved like any other document.

Those are the two main features of the SMART Board interactive whiteboard. We will now see what kind of activities SMART Board interactive whiteboards can offer to the foreign language classroom.

SMART Board interactive whiteboard activities in the foreign language classroom

We will now take a look at the activities proposed for the foreign language classroom from two different perspectives – that of the teacher and that of the student.

Activities which support teaching

A SMART Board interactive whiteboard supports the teaching process of foreign languages in three main ways: it supports interaction and conversation in the classroom; it helps with the presentation of new cultural and linguistic elements; and it promotes the organizational skills of the teacher.

Activities which support interaction and conversation with students

A projection onto a SMART Board interactive whiteboard is very different from a classic projection of what is found on a computer screen. With a SMART Board interactive whiteboard the user is able to navigate from the board. He does not need to continually go back to the computer and, as a consequence, turn his back to the class. The teacher can spend his time concentrating on the learning process of the student instead of the technology. This is very important when using SMART Board interactive whiteboards to teach and is crucial in the foreign language classroom. All foreign language teachers know how difficult it can be to have a relaxed conversation with the students in the target language. The SMART Board interactive whiteboard can facilitate certain types of conversations in that all members of the classroom may concentrate on the same item at the same time and conversation may then spring from that. The merit of a SMART Board interactive whiteboard is that it enhances conversation. When the teacher is navigating from point to point, he faces and interacts with the class. The teacher is able to focus on the student's language production instead of technical issues.

The SMART Board interactive whiteboard also supports communication when used in combination with a wireless keyboard. The teacher can sit with the students, reading a text or having a conversation. When new vocabulary is needed or appears, the teacher can enter the new word into the keyboard, and it will then appear on the board. The awkward situation of having to stand up, go to the board, and write the new word on the board does not occur. By simply typing the new word onto the board, the conversation may progress smoothly. The students do not have to write the word immediately. At the end of the activity, the teacher can reinforce the vocabulary by underlining, highlighting or circling. If desired, it can be printed for the student and saved for the teacher.

Activities which support the presentation of new linguistic and cultural elements

An important use of the SMART Board interactive whiteboard is its aid in presentation of new linguistic and cultural elements. The teacher can prepare a lesson as usual in a Notebook file or Word Document, and is then able to use the features of the SMART Board interactive whiteboard to his advantage. The instructor can use the SMART Board interactive whiteboard to overwrite, underline, highlight or circle the elements that he wants to emphasize. Because the document is typed, it is very readable, and it – along with changes and new emphases – can be saved and displayed again at any time.

The features of the SMART Board interactive whiteboard can also make a big difference when presenting authentic documents such as web sites. The enable the teacher to explore the document at length rather than staying at a simple presentation level. Bacon/Finnemann (1990) and Allen, Bernhardt/Berry, Demel (1988) suggested in their studies the positive influence of authentic documents in language learning. With a SMART Board interactive whiteboard the instructor can not only simply project a web site, he can also overwrite it to emphasize specific linguistic and cultural elements. The SMART Board interactive whiteboard also facilitates navigation of the site because it is finger driven on the board. This, too, facilitates classroom activities.

Activities which support teacher organization

It is often very difficult for a foreign language teacher to keep track of vocabulary introduced in the classroom, especially in the more advanced classes. Because the teacher is able to save the notes written on the board, the SMART Board interactive whiteboard can help this process. The teacher has a record of all of the vocabulary introduced at any given time and can promote their reinforcement.

Activities which support the learning process

Activities which support oral skills

Pennington (1996, 10) noticed "that the computer can sometimes encourage a form of 'anti-social' behavior that amounts to working in isolation from others". This is a common criticism of computer use and is especially relevant to the foreign language teacher, who is supposed to interact with the class as much as possible. The introduction of the projector associated with the SMART Board interactive whiteboard brings the problem into a new perspective. When presented to the whole class, a web document can enhance oral interaction within the whole class. Opinions and ideas can be exchanged. It is possible to extend this operation of the SMART Board interactive whiteboard in order to let the student, instead of the teacher, navigate the board. The other students may guide him by giving directions in the target language. As suggested for group activities using the computer (Abraham and Liou 1991; Chapelle, Jamieson and Park 1996), the SMART Board interactive whiteboard brings people together and encourages communication.

It is also possible for students to present projects on the SMART Board interactive whiteboard. This enables them to speak without having to worry about the mouse. Pictures and text are shown without delay with the simple touch of a finger. This places the oral production in the target language in the foreground.

Activities which support the cognitive process

SMART Board interactive whiteboards can support and enhance the learning process in many ways. One basic feature of the SMART Board interactive whiteboard is that there are many possibilities for overwriting any projected object. This allows the student to focus. They are not so easily lost and they know what the teacher wants them to select. Because the teacher can emphasize any particular structure by highlighting, underlining, or circling with different colors, it is easier for the students to organize the new concepts. The SMART Board interactive whiteboard is a valuable learning tool.

A SMART Board interactive whiteboard does not just *support* learning. According to PAPERT, we generally think that "in the presence of computer, cultures might change and with them people's ways of learning and thinking." (Papert, 1987, 23). More specifically, Pennington (1996, 3) pointed out that the computer has the potential to *change* the processes involved in foreign language learning. The SMART Board interactive whiteboard may have this potential too. Used to accomplish certain activities, a SMART Board interactive whiteboard may enhance new kinds of learning processes. We specifically refer here to activities requiring the use of two windows. These kinds of activities use a first window displaying an original web page in the target language, and a second window showing the teacher's instructions on this web document (what the student has to look for or to discover on the site etc.). Studies are required to support this hypothesis.

Preparing a web site based on French Guiana requires very different skills from simply writing a paper based on the same material. New features must be brought into the content because it makes little sense to simply reproduce a document on the web. One of the unique features of a web document is that it is non-linear. The use of links is a tool which can take a document to new levels.

A presentation supported by the SMART Board interactive whiteboard requires that the student prepare his project with the tools he can use to support it. In an electronic context, this means the use of links. By creating links to present a paper, the student must organize his thoughts and the content. The organization required by this may encourage him to make a learning habit out of this discipline. As Chapelle and Jamieson (1996) suggested, "It seems that the type of metacognitive strategies Oxford (1990) defines - e.g., organizing, setting goals and objectives, planning for a language task - would be essential for learners working in CALL environments."

Another activity supported by the SMART Board interactive whiteboard is the correction of a paper by the whole class. This gives everyone in the class the opportunity to improve their language skills. They may look for spelling or language mistakes and correct them by overwriting on the board. This helps to give them an eye for the language. They are more aware of linguistic elements when they try to figure out what is correct or incorrect in a language. This activity helps not only the original author of the work, but the whole group as well.

Activities which support student motivation and emulation

Students like to work on the SMART Board interactive whiteboard! They love to use a board that can be operated simply by touch. They may even ask to be quizzed, simply for the fun of writing on the board. It brings true excitement to the classroom.

Many studies indicate that such excitement and positive attitude are important for learning. The learning process can't be started without a student's positive attitude. Vester (1994, 73) affirms that the emotional and psychological state of the student, via hormonal activity, is crucial. He explains it this way: a "negative hormonal state" provoked by stress, fear, pain... provokes the production of the 'stress' hormone (adrenaline) which blocks the synapses' activities and the ionic exchanges necessary to the mental process cannot take place. The students have to be in a "positive hormonal situation." Using a SMART Board interactive whiteboard helps to give the students a positive attitude.

Some problematic aspects related to SMART Board interactive whiteboard use in the foreign language class

The problems found with SMART Board interactive whiteboards are not foreign language specific but rather are more general problems. The technical issues mentioned here may be specific to the use of the SMART Board interactive whiteboard in an educational setting.

The first issue that teachers need to know is that, in order to use the SMART Board interactive whiteboard properly, it is crucial that it be properly oriented. This must be done very carefully and nothing may be moved in order to get an optimal reaction from the SMART Board interactive whiteboard. No one should touch the projector or the cart which holds the projector. If a portable board is being used, care must be taken that the wheels are properly locked. If the orientation is not done properly or if it is disturbed, class time will be wasted.

Another problematic area with the use of the SMART Board interactive whiteboard is related to the SMART Board interactive whiteboard pens. The pen tray is electronically connected to the system so that it can recognize when a pen has been taken. This is how the SMART Board interactive whiteboard knows that you want to "write" and this is how it knows which color you want to use. However, if you forget to put a pen back in its place, the board will think that you want to write with it. Anything that you do on the board will be written there. You will be unable to navigate unless all pens and the eraser are covering their electronic fields.

Another small issue which is nonetheless relevant in an educational setting is the quality of writing. This is especially important when interacting with young students. When students are learning a language, they often cannot connect the new words to their sound system. It is important that they be able to see a very clear spelling of the new words.

Conclusion

This analysis of the SMART Board interactive whiteboard in the foreign language classroom has underlined benefits and possible problems sources classroom use.

Our impression is that the SMART Board interactive whiteboard is a very innovative and powerful support for language acquisition. First of all, it provides a bridge that allows using the features of computers without breaking *communication* – it even supports it. Secondly, it may enhance new kinds of learning processes, for instance when working with two windows.

On the practical side, the SMART Board interactive whiteboard offers a very interesting option for bringing the Internet into every FL class. The Internet, and the access it provides to authentic documents, is the biggest revolution in foreign language teaching/learning in the last few years. A SMART Board interactive whiteboard brings this interactive feature into the classroom without involving the cost of having one online computer for every student in the classroom.

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