

RESEARCH ARTICLE

THE INTERACTIVE WHITEBOARD AT PRIMARY SCHOOL A NEW INSTRUMENT TO INNOVATE TEACHING AND LEARNING OF FRENCH AS A FOREIGN LANGUAGE

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ABSTRACT

The techno-pedagogical device proposed in this article, requests fully the Interactive Whiteboard (IWB). It aims at developing French language expression and communication skills in concrete learning situations, and deepens the reflection on the functioning of the language. The socio-cognitive commitment of the learner is particularly solicited so that he can give more meaning to his learning. On a purely theoretical level, it is also an opportunity to consider the different pedagogical actions that can be envisaged with the Interactive Whiteboard in classroom of French as a foreign language.

Keywords:

Interactive Whiteboard,
Socio-Cognitive Commitment,
Techno-Pedagogical Device.

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INTRODUCTION

For a long time, the idea of presenting information to learners arouses interest especially among educationalists. As well should they lead reflections on the tool adequate for such presentation as well as on its possible uses. The blackboard is part of this series of artifacts designed for this purpose. Its use in the classroom was based on the principle color contrast (e.g. write with a white chalk on a black or green background). However, with the introduction of Information and Communication Technologies in education, another tool is needed more and more. It is the interactive table that we call Interactive Whiteboard (IWB). In this article, we will try to present this pedagogical and constituency tool, its perspectives, its limits as well as the approach pedagogical framework that underlies its uses.

Presentation

The interactive whiteboard (IWB) (see Fig.) or Interactive Digital Whiteboard, named also sometimes Interactive Educational Board (IEB), is a "Digital" technological artifact which, according to Moran, was destined since 1987 to replace

or complete the table with chalk or erasable pencil using three essential components: a computer, a white board and a video projector (Moran & Van Melle, 1997). Using a related software, we can articulate the different system components: video, audio and graphics that are the main tools for producing interactive courses multimedia on the board. Note that There are several types of software to drive the IWB; some are even open-source (e.g. free software) like Pylote and Open-Sankore. The table is interactive because it allows the user to manipulate the content on the projection whiteboard through these different applications (annotation, editing, capture, recording, etc.) using a pen (electronic pen).

From tool to instrument: In seeking to define the meaning of the words tool and instrument in dictionaries, we realize that we are, in general, in front of two synonyms: tool and instrument. According to the FLT (French Language Treasury), for example, it is specified that in the case of the use of a machine (e.g. the computer), the instrument assumes precision qualities that are not required by the tool, which is used to perform simple jobs in manual trades. Domains (arts, sciences, etc.) in which the instrument used give it a character of nobility and intellectuality. Still, according to Eric Bruillard, the tool is estimated in a pithy way, in the field of computing, as object that shapes; while the instrument proves to be an object that instructs (Jean-Baptiste Lagrange, 2009). Accordingly, the Interactive Whiteboard can be considered as an instrument designed and introduced in the field of education to educate learners. However, according to Lagrange, such an artifact can only be used as a teaching tool in two conditions:

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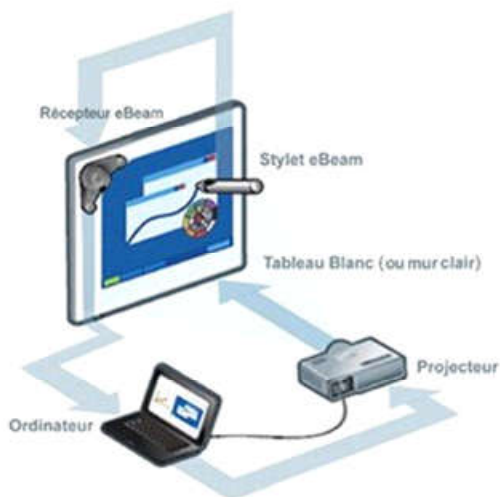


Fig. Interactive Whiteboard

- A paradigm underpinning its uses is adopted as “natural” by the teaching communities.
- Teachers incorporate action schemes of this instrument into their professionalism (BRUILLARD Eric, 1997). Thus the interactive board will undoubtedly be an educational tool only from the moment it fits into an approach where the learner is engaged in learning activities (e.g. evaluation or reinforcement exercises, etc.). However, if this paradigm and schemes can lead to real changes in the practices of teachers and will have penetrated into the professionalism of teachers of FFL, it is nonetheless true that, these two conditions are far from being satisfied prematurely!

Integration of the IWB in Education and Learning: The introduction of the IWB in the learning environment is considered as an educational innovation that results from a certain mode of interaction between the human and the machine. However, the fate of such innovation “depends on how the dialectic between the downward logic of the institution, of power and that of voluntary commitment is managed” (Gather & Perrenoud, 2003).

Especially since there will be a positioning vis-à-vis this change on the part of the actors of the institute concerned by this innovation: obvious consequence. Educational innovation let's deal with the definition proposed by B. Charlier, J. Bonamy and M. Saunders which states that innovation is first technological and service since it is the fact of “introducing Information and Communication Technologies into a training device”. That is to say, it puts technology at the service of knowledge and communication, then it is considered pedagogical as long as it is at the level of pedagogical practices. Thus, innovation is manifest in this definition primarily as technological innovation and service and will be distinguished later as an educational innovation using Information and Communication Technologies to introduce methods and innovative device. Thus, we recognize the three facets of this innovation: technological, economic and social.

Succeed integration of iwb in the environment learning

According to Bétrancourt, we must consider three dimensions when we introduce or adopt a new technological system (Bétrancourt, M, 2007):

- **Usefulness:** learn more easily using IWB;

- **Usability:** the IWB is easily usable. “If the use of the device is made more intuitive and enjoyable to the learner, the latter can devote all his attention and cognitive energy to his learning activities” (Dillon & Morris, 1996);
- **Acceptability:** the device is easily integrated into pedagogical uses. Once these the conditions being fulfilled, the integration of IWB into the teaching and learning process becomes a fact.

Pedagogical approaches: As Alain Chaptal points out in an article, relating to a study conducted in March 2009 at the request of the digital content competitiveness cluster, Cap

Digital Paris-Region: "The debate on the appropriation of information and communication technologies in education by teachers, simple adoption allowing the enrichment of fairly traditional courses or agents of transformation of the pedagogy, seems therefore clearly leaning in favor of the first hypothesis, consistent with the deployment of interactive whiteboards and the rather simple use that is made of these” (Chaptal, 2009). Nevertheless, to adopt an instrumental perspective is to use the instrument either as a complement to an educational task or as an integral part. Thus, the interactive table generates a new situation related to the instrumentation of the teaching action. While in both, in this case, the collaboration of the learners remains a necessary condition to promote learning based on interactivity in classroom of French as a foreign language. Indeed, literature is increasingly positioning pedagogical scenarios in the socio-constructivist model to favor the interactions.

What can be done in FFL class?: The effective use of FFL is based on interactions between reflexive activities, expression and communication activities. That is to say, that the learner must be brought to develop his capacities of expression and communication in various situations while deepening his reflection on the functioning of the language. It is here, as we will see in the following table, to consider the different pedagogical actions that can be considered with the IWB in FFL class, ranging from reception to production through structuring.

Table based on Beauchamp and Parkinson's list of actions on the information presented on the screen (2005: 98)

| Educational action | Progress | Frequent step |
|---------------------|--|--|
| Capture | Copy and paste information from others software (e.g. screenshot). | Reception |
| Drag and drop | Match one item with another, classify items, etc. | Structuring |
| Bring out / hide | Zoom in on a portion of the painting, add highlighting, spot effect on a part screen, make elements disappear. | structuring |
| Annotate and modify | Add text (color, or lines) to existing text or images, use the drag function to implement labeling, scheduling, or closing activities, write on top of another writing or image. | Structuring The possibility of brainstorming is thus facilitated. |
| Connect | Make links between saved pages, with other files stored in the computer, with programs of the computer and with websites. | structuring |
| Store | Retain the screen pages, so to change them later. | Production |

Conclusion

The introduction of the Interactive Digital Board in education in Morocco puts us in front of a case of educational innovation according to a mode of interaction of the actor (learner or teacher) with the computer. A mode that must be analyzed to better understand the dynamic process generated by this innovation and determine the various variables that characterize it. It is in this way that, it becomes possible to support this innovative device, and pilot it according to a suitable model. We are talking about the integration of Interactive Board in teaching. Subsequently, it becomes possible to narrow the gap, which seems to be growing between the institutional intentions to transform teaching and personalize the actual practices of teachers.

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