Digital Practices and Uses in Secondary Schools

Achieving Digital Literacy

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Abstract— **In the Georges Seurat Middle School in Courbevoie (Ile-de-France region), our study focuses on the description and analysis of students' and teachers' digital activities in the classroom and online, as well as the digital content offered in the school environment (OZE92) in face-to-face, distance learning, and hybrid courses.**

Keywords- digital literacy, digital workspace, digital practices, digital education, media literacy.

I. INTRODUCTION

This work presents qualitative research conducted with both students and teachers. We intend to complete this component and begin the quantitative study's reflection phase. The results show that group work motivation, digital knowledge, and abilities are actively being acquired. Hence, is it possible to enhance and deepen digital literacy in secondary schools.

The objective of our study is to assess how secondary school students and teachers interact with and use technology, teach digital literacy to students (digital citizens), how to instruct students in digital literacy, improve and upgrade professional teaching methods and contribute to the development of the professor's digital teaching strategies for secondary schools.

II. SCIENTIFIC POSITIONING

Our project is based on the interdisciplinary field of information, communication, and education sciences, as well as the position illustrated by F. Bernard regarding the articulation of the four dimensions of the link, meaning, knowledge, and action [1]. We shall employ the concepts of the situation (particularly learning and observation) and socio-technical devices or mediating artifacts. We shall begin with A. Mucchielli's " Dynamic situational contextualization method" and the various contexts that he proposes for a situation [2]. Then, we move on to A. Mucchielli's "Situation and Communication" (2010), where he discusses the "genesis of meanings" using a semiotic method based on "contextualization." [3]. Based on the socio-constructive approach, we shall examine social interactions in training [4].

We also analyze group interactions in the frame of the Adaptive Structuration Theory (AST) as Scott Poole argues that group members intentionally adopt rules and resources to achieve goals. Poole holds that group members have an impact on outcomes. In the seven necessary pieces of knowledge known for future education, we can refer to Edgar Morin [5].

III. METHODOLOGY

Our research applies a mixed methodology:

A. *Qualitative approach* (observations, interviews, and content analysis) and

B. *Quantitative approach* (based on questionnaires).

Alex Mucchielli's "Constructivist approach to communications" includes a qualitative study. It is a random sample of 397 students from various classes. This study is preliminary and based on 219 hours of observations in the classroom. The goal of qualitative research is to understand, analyze, and quantify the barriers to the growth of digital uses, practices, contents, devices, and so on in the context of schools.

This study relied on several digital projects that were carried out in different classes including media class, WebTv, Green delegate project, "O Lab Citizen", Mediatiks competitions (online newspaper, photo-reportage), and others.

IV. RESULTS

3.1. Students

The observations of our first study in the Digital Collaborative Space (DCS) are as follows: learners are more confident in DCS after observing digital practices. The enjoyable aspects of DCS encourage frequent participation. Online collaboration makes group work easier. Students are provided with the necessary homework tools, allowing them to complete their assignments in an optimal and efficient manner. Students can use the chat to ask questions and receive personalized responses. DCS allows teachers to engage students in personalized and differentiated instruction. All of the DCS's tools promote communication between students and teachers as well as between peers. The

teacher's role has changed; he or she now supervises and facilitates the students' learning. Students learn to work independently as well as in groups.

Students having trouble are assisted by the pair in the construction of knowledge within the framework of the DCS, which produces motivation and the desire to make an effort to complete the task.

### 3.1.1. DCS's difficulties

Progressive digital training constitutes one of the hardest subjects in the curriculum for students. There are differences in how students are trained because some academic subjects do not employ common digital technology. Also, the learner's level of digital literacy is influenced by the environment in which they live.

3.2. Teachers

In a setting where knowledge is created collaboratively within a group under the guidance of the teacher, the latter's role is modified, and he/she positions themselves as a facilitator and guide. The teacher is no longer the exclusive source of knowledge. Conversation and exchanges are encouraged through various communication technologies such as synchronous documents, chat, commenting, email, and so on. Within the parameters of the synchronous document, the teacher may adopt the immediate correction. This enables the student to receive individualized remediation. Students are encouraged to work both independently and in groups in a flipped classroom. By adapting objectives and content to the abilities and challenges of each student, the teacher in DCS can implement differentiated instruction. The teacher has access to the student's work at the same time. As a result, the student is encouraged to participate in the project and to demonstrate his or her involvement by name. All the tools required to complete the project are provided in the collaborative space where it is set up online (resources, etc.). In DCS, teachers can implement competency-based instruction by focusing on specific skills such as online information validation. Students are taught how to use the "OZE92" digital workspace's resources and services (ENT). They are also given information-documentary training (online research methodology, legal aspects of information, validation of online information, etc.). Students work exclusively on digital material during this experiment; paper copies are not necessary.

3.2.1 Teacher interviews – Results

Six teachers of mathematics, French, arts, sciences, history, and languages were questioned on the difficulties associated with the use of digital technology in classrooms.
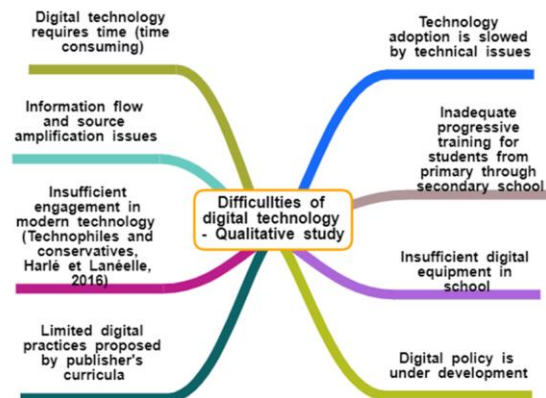
V. CONCLUSION

As a preliminary conclusion, we have found out that both individual and group work on the DCS is highly effective. The projects are progressing rapidly, and the objectives are being met. Also, we trust that the adoption of progressive digital citizen training should be applied in compulsory education. The equipment of schools and the training of teachers would be essential elements to guarantee the success of this process. It is worth mentioning that the school's director confirmed that digital technology represents one of the school's pillars of policy and its priority.

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