# From face-to-face to blended learning: A qualitative leap towards student autonomization

KSIOURA Aouatif [1] ⓘ, BEGGAR Awatif [2] ⓘ

and Mohammed Chakib TAZI CHERTI [3]

1 Sidi Mohamed Ben Abdellah University, Morocco
2 Moulay Ismail University, Morocco
3 Sidi Mohamed Ben Abdellah University, Morocco
Ksioura.aouatif@usmba.ac.ma

**Abstract.** Within the framework of blended higher education, this article deals with a quantitative research. The aim is not to show the feasibility of the process but rather to validate the usefulness and impact of this mode of teaching on student autonomization. Our contribution aims to emphasize the particularities of blended teaching and the autonomous and flexible aspect of these blended environments.

The present research is in line with this problematic. It has a double objective which, on the one hand, deals with the effectiveness of a given hybrid course and, on the other hand, evaluates the effect of autonomous students' characteristics on their performance in this course.

We first examined the aspects related to the underlying pedagogical theory of this mode of teaching: a study of the literature brought out two findings that motivated this work. The first concerns the autonomous aspect specific to this approach, characterized mainly by its openness and its activities that promote autonomy, initiative-taking, and the emergence and transition of knowledge through a connected network of learners. The second is the need to provide assistance to students.

The methodological approach chosen for this essay is quantitative. We were able to count on the collaboration of students in order to validate the degree of autonomy during this mode of teaching.

The results obtained showed that the blended teaching proved to be an adequate and effective systemic process that allowed them to conceive and develop their autonomy and flexibility as well as their self-directed and autodidact character.

**Keywords:** blended learning, autonomy, students, autodirection

**Résumé.** S'inscrivant dans le cadre de l'enseignement supérieur hybride, cet article fait état d'une recherche quantitative. Il ne sera pas question de montrer la faisabilité de l'acte mais plutôt valider l'utilité et l'impact de ce mode d'enseignement sur l'autonomisation des étudiants. Notre contribution a pour

objectif de mettre l'accent sur les particularités de l'enseignement en mode hybride et sur l'aspect autonome et flexible de ces environnements hybrides.

Cette recherche s'inscrit dans cette problématique en ayant un double objectif qui, d'une part, concerne l'efficacité d'un dispositif hybride donné et, d'autre part, évalue l'effet des caractéristiques des étudiants autonomes sur leurs performances dans ce dispositif.

Nous avons tout d'abord examiné les aspects liés à la théorie pédagogique sous-jacente de ce mode d'enseignement : une étude de la littérature a fait ressortir deux constats qui ont motivé ce travail. Le premier concerne l'aspect autonome spécifique à cette approche caractérisée principalement par son ouverture et ses activités qui favorisent l'autonomie, la prise d'initiative, l'émergence et la transition des connaissances à travers un réseau connecté d'apprenants. Le deuxième concerne le besoin d'apporter une assistance aux étudiants.

L'approche méthodologique retenue pour cet essai est quantitative. Nous avons pu compter sur la collaboration des étudiants afin de valider le degré d'autonomie lors de ce mode d'enseignement.

Les résultats obtenus auprès des étudiants ont démontré que l'enseignement hybride s'est avéré un processus systémique adéquat et efficace qui a permis de concevoir et de développer leur autonomie et leur flexibilité ainsi que leur caractère autodirectif et autodidacte.

**Mots clés** : Enseignement hybride, autonomie, élèves, auto-direction.

## 1. Introduction

We are witnessing a time of rapid change where digital technology has a major influence on the evolution of all societies and significantly affects all their economic, social and cultural dimensions.

In a world where the place of digital technology is becoming more and more important and where young people are captivated by technology, universities seem to have no other choice than to give a prominent place to digital technology. In fact, for a growing number of countries, getting students and teachers to act as informed and responsible digital citizens is one of the main missions of the 21st century. This is reinforced by the emergence of blended education. In this sense, it is legitimate to ask the following question: how can blended education revolutionize the field of education?

The evolution of university higher education tends more and more towards courses called today blended courses, articulating in particular face-to-face and distance. Gradually, in fact, face-to-face education and distance education have found complementarities that have led today to the implementation of blended courses (Peraya, 1995; Glikman, 2002; Paquette, 2002).

Some initial exploratory studies have shown the impact of these courses on the learning experienced by the participants, on their identity dynamics, on social interactions and finally on the emergence of communities of practice (Charlier and Denis, 2002; Peraya and Dumont, 2003; Charlier and Henri, 2004; Peraya and Jaccaz, 2004; Viens and Peraya, 2004; Charlier, Nizet and Van Dam, 2006).

Supported by the availability of digital tools and resources, the evolution of the pedagogical form has been based on sanitary conditions. Thus, the act of learning, usually conceived as a controlled activity and cadenced by the management of space and time (classroom, timetable, rituals, etc.), has diversified by becoming a shared, collaborative, interactive, individualized digital activity, which is free from the usual constraints of time and place.

## 2. Problematic:

Hybrid courses, being quite recent and having no real descriptive framework, few works have been devoted to them or have been dubbed differently. In recent years, a number of studies have attempted to define these courses and to propose an "efficient" appellation between the face-to-face and remote modes (Marques, Woodbury, Hsu et al., 1998; Jones, Cranitch and Jo, 2001; Sands, 2002).

Five initial questions guide this research.

— How can the potential initiation of blended learning be exploited to autonomize the learner?
— To what extent and by what means can blended education support the learner's self-direction and promote the construction of his or her autonomy?
— How to guarantee the maintenance of the pedagogical link and the acquisition of knowledge and autonomization skills?

These different questions allow us to structure our study in several steps. The first is to identify the specificity of the blended courses proposed by the teachers, to establish a precise description of this context by comparing the students' point of view. The second objective is to identify the learning approach of each student in relation to his or her perception of the blended course and to compare this with the approach and course desired by the teachers. The final one is to describe the degree of autonomization of the students in relation to the different available contents and to suggest ways of improving the course analyzed. In blended courses, what is the right balance between control and autonomy?

## 3. Theoretical framework:

### 3.1 What is blended learning?

To define this notion, we first recall that there are several definitions that have been attributed to this new mode of teaching, and that have been at the center of several research and academic debates. Thus, in our research, we refer to the definition proposed by (Bernadette Charlier, Deschyver and Peraya) who, according to them, hybridization or particularly hybrid training corresponds to "a fertile mixture and in variable proportions of different modalities of training in face-to-face and e-learning, and also between transmissive teaching postures and advantageous postures linked to the accompaniment of learning (Bernadette, 2006, pp. 469-496).

In the same vein, the researcher (Apop) adds that hybrid training "is an open combination of learning activities offered in face-to-face, real-time and distance learning, in synchronous or asynchronous mode" (Marina, 2017).

### 3.2 Blended learning: a step towards autonomy

Learning is a process by which the learner accesses knowledge. We can ask ourselves what does learning mean when we are in a hybrid system. In self-training systems, we need to think about the notions of individualization and autonomy.

Hybridization responds to a demand and a need for individualization of training on the part of students, and this is the paradox of ODL, which must respond both to this logic of individualization and to a logic of massification. Even if the learner feels the need to learn individually, he is not in reality alone behind his computer, he is not left to himself. He can exchange with his teacher-tutor and other students on a forum, a chat, by e-mail, via a facebook page... he participates in a co-construction of knowledge.

Being autonomous is not working alone but it is having "the ability to act by oneself by giving oneself one's own rules of conduct". However, in a training situation, the rules of conduct must respect the rules of the system and the rules of the virtual class set out by the teacher. We rely on the different forms of autonomy. It is obvious that the distance learner must necessarily have a general autonomy, i.e. he must be able to master the computer tool and to take initiatives in his training. However, they must also have linguistic autonomy to have access to the language of oral and written communication, for example, to read the statements and follow the courses. They must acquire an autonomy of learning, a cognitive autonomy to work independently, without the permanent mediation of the teacher.

Online self-training, for example, allows access to instrumented, technical didactic tools and they can be very playful and very "relational": videos can be consulted and downloaded online, language exercises can be done online, in the form of quizzes or MCQs, audio tapes can be listened to and re-listened to in order to develop comprehension, PDF files or PowerPoints can be read on a computer, a tablet or a Smartphone anywhere and at any time. We are reinventing another way of learning which is revolutionizing the field of training.

Hybridization requires the learner to have metacognitive skills. For example, an autonomous learner is someone who knows how to "learn how to learn", an expression very commonly used to talk about cognitive self-training (Carré, Moisan, Poisson, 1997, p. 4). They must know how to access resources on the Internet, work and

exchange with peers, etc. The learner's autonomy is therefore an ability to act from a distance, to ask for help, to dare to ask questions to help the learner and the group understand...

One could say that autonomy should be a prerequisite in a hybrid system. But that would be discriminating. One could rather say that online courses should be adapted to all audiences, whatever their meta-skills, their cognitive skills, their degree of autonomy, their mastery of ICT and their motivations.

### 3.3 Towards a balanced mix of autonomy:

Should we really focus on student autonomy?
One of the supposed changes between high school and university is that the number of hours of class time would be reduced, while the amount of time spent on personal work would increase. If class time is reduced, the time students have to manage on their own mechanically increases. They can put in personal work for their studies, paid activities, leisure, rest, etc.

The notion of autonomy alone is no longer enough, we must take an interest in the notion of commitment, so that we no longer have students who drop out and suffer.

The concept of autonomy in the field of learning represents both an end and a means. Autonomy can only be developed through practice. Philosophically, autonomy is a quest of the individual in his emancipation and a civic purpose of education advocated in the official decrees governing education. On the biological level, it is a vital impulse; we are born to learn (Trocmé-Fabre, 1987), the living being is subjected to this condition to survive. It is by integrating external elements and constantly rebalancing its internal organization subject to disturbances that a living being is autonomous (Varela, 1989).

### 3.4 An autonomous student model:

An autonomous student, whether studying at a distance or on campus, should be able to take responsibility, in whole or in part, for the management of his or her learning activity. To do so, he/she should possess or learn to develop certain knowledge and skills that refer to the concept and sub-concepts of metacognition.

Metacognition is a complex phenomenon combining knowledge about knowledge and regulation (Wenden, 1982). This phenomenon is considered as the process underlying the effective use of strategies and the essence of intelligent activity (Brown, 1978; Brown, Bransford, Ferrara, & Campione, 1982).

Deschênes (1991) defines an autonomous learner as one who positions his/herself as an actor in the management of his/her learning activity. This requires the implementation of metacognitive strategies which in turn involve knowledge of the self, of the tasks and of the learning strategies, as well as the mastery of planning, regulation and evaluation tools.

Let us go through the detailed description of this knowledge with Deschênes (1991). First, self-knowledge: the learner must question his or her own attitudes, i.e., interest, motivation, strengths and weaknesses. The knowledge of tasks in their rela-

tion to the method used for learning, i.e. memorization, comprehension, problem solving; while the knowledge of strategies responds to the concern of when, how and why to use each learning method. Planning requires the learner to be able to program and organize.

Planning requires the learner to be able to plan and organize. This programming is done according to the defined learning goals, the constraints of the task, the characteristics of the environment, and the available strategies.

Regulation is the learner's introspection activity; regulation is based on tools for identifying, interpreting and processing metacognitive experiences in order to uncover problems encountered during learning and, finally, to make the necessary corrections.

Evaluation is an instrument for determining the difference between the result achieved and that expected from the initial objectives; evaluation also makes it possible to examine the effectiveness of the methods used.

## 4.  Methodological approach:

In the era of the Covid-19 pandemic, particularly the Omicron variant, teachers from different school levels found themselves in charge of ensuring the continuity of their courses with a blended model, which has revolutionized the educational landscape in Morocco. The objective of the present paper is to analyze the degree of student autonomization in blended mode, particularly in distance learning models, to test the hypothesis that blended education effectively and perfectly autonomizes students; admittedly, distance learning models face constraints. The study focused on a deductive approach, through an online questionnaire, given that Vilatte, (2007) considers "the questionnaire as a quantitative method that is applied to a group especially a sample that must allow statistical inferences."

The online questionnaire is mainly intended for students of the Faculty of Letters Dhar El Mahraz, given that it is the model most suited to this wave of digital and our target, it is consisted of 20 questions. It is divided into 4 parts. The first section includes the socio-professional situation of the student. The second part is based on the attitudes of students in blended courses, especially distance learning. The third section is devoted to the attitudes of teachers in distance education, and the fourth section addresses issues related to autonomization in the digital era. For data analysis, we used descriptive and explanatory statistical techniques.  The questionnaire was shared online on the month of January 2023 targeting students (specified beforehand) via social networks (Facebook, Instagram, and WhatsApp) by guaranteeing their anonymity throughout the data collection process. The analyses of the present survey were carried out through the Sphinx software.

**Description of the questionnaire:**

The questionnaire, entirely anonymous, was divided into 4 groups of questions:
- Group A: general data on the student allowing the extraction of possible differentiating criteria within the raw data: gender, year of birth, degree).

- Group B: general questions about hybrid teaching (previous experience, feeling of autonomy, advantages, disadvantages, etc.)
- Group C: questions related to the tools and methods used during the courses.
- Group D: questions related to support, degree of autonomization and self-direction of students.

## 5.  Discussion and interpretation of results:



**Fig. 1.** Assiduity in working

• As per the declarations of the students, who were in charge of attending the distance learning courses and the others in the face-to-face mode, we notice that a small minority showed seriousness and therefore a percentage of 27.3% of the students did not work regularly during the hybrid course. On the other hand, a preponderant part of them worked assiduously and faithfully.
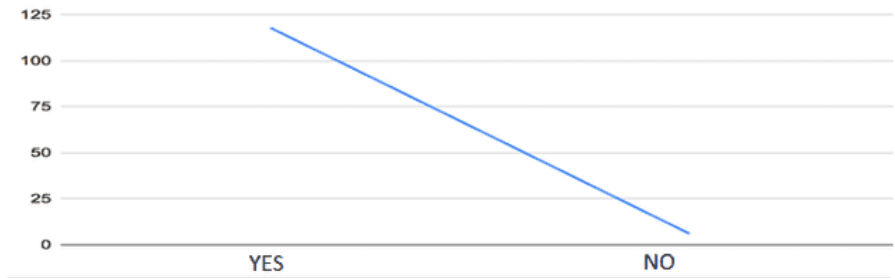


**Fig. 2.** Flexibility at work

• According to the two graphs, it is important to emphasize that the sample we are working with in this study is divided into 93.9% of the students who belong to a community that has experimented with hybrid education and a percentage of 4.5% of the rest, who have no prerequisites for hybrid education.

When asked, according to this graph, 95.5% of the students say that the hybrid type of course favors a certain flexibility, that is to say, they can work wherever they want.
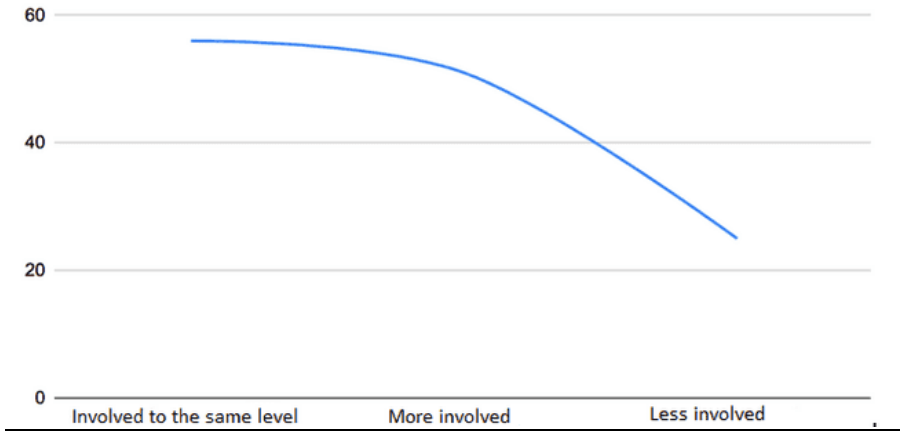
**Fig. 3.** Degree of student involvement

• Regarding speaking, 65.2% of students speak easily from a distance. While others find it easier to speak in class than in remote mode.

It should be noted that more than 42.4% of the students consider that they feel invested at the same level as the face-to-face education, and it is only a very small number of students who do not exceed a percentage of (18.9%) who feel less invested.
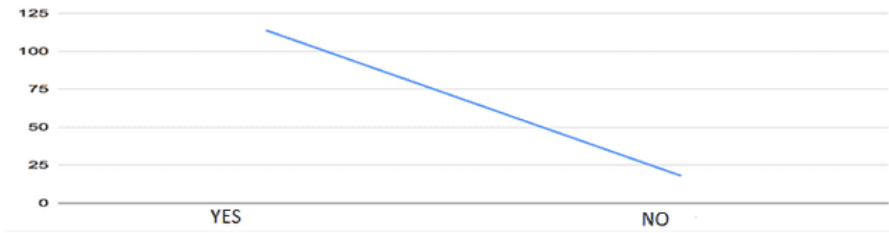


**Fig. 4.** The pace of learning

• Compared to a traditional course, the hybrid course allows you to learn at your own pace. When asked about their perception of family or professional obligations, it turned out that 78% feel that they suffer from them, while only 22% do not.

The results of this question show that hybrid teaching favors learning at one's own pace, while 13.6% say the opposite.

## 6.  Final considerations:

- Through the students' responses, we notice that more than half of the students are more comfortable with distance learning, they participate in activities and speak more easily in distance, while the others are more comfortable in the classroom. Hybridization therefore allows students who are less comfortable in the classroom to ask questions and participate remotely, and vice versa. In this sense, hybridization further encourages student investment and involvement since it accommodates a larger number of students by offering them two opportunities to get involved.

- In blended education, students can control some of the organization of their learning, including how, when and where they learn. Students work at their own pace using the resources available to them. The less advanced can take more time and rely on the basic, comprehensive and reliable resources. The more advanced can go further by working on additional resources.

**In a nutshell:**

Based on the findings, blended teaching has a dual characteristic. In fact, in order to adapt to hybrid teaching, it is necessary for the student to evolve his or her profession as a student in two ways in order to be able to appropriate the new expectations: those of learner-centered pedagogy and those of hybridization.

1. Adapting to the new expectations of learner-centered pedagogy: the results of the questionnaire show that some students have difficulties in appropriating the characteristics of learner-centered pedagogy, which means becoming more active in their learning.
2. Adapting to the new expectations of blended teaching: some students have difficulties in appropriating the asynchronicity of contacts, linked to the use of digital technology. We also observe that their difficulties concern the appropriation of flexibility. Some are unable to change their relation to time (time flexibility), space (geographical flexibility) and to themselves (pedagogical flexibility).
3. We hypothesize here that it is the most autonomous students who are most successful in evolving their new status of student to fit the new expectations.

## 7. Conclusion:

At the end of this work, we propose an assessment of the ideas and contributions we have put forward and the results obtained. We then highlight the contributions of our research. Finally, we open perspectives before concluding.

The works presented in this research paper lie within the framework of distance education in general and blended courses in particular. A concrete problem has been tackled, that of the autonomization of students in this blended mode.

Several questions were posed at the beginning of this project and formed the main theme of this research work. To answer them, we conducted a literature review, including a terminology study and related research, and then situated our work in relation to what already exists in order to highlight the pedagogical potential of hybrid teaching in the field of educational engineering.

Addressing this issue requires a reliable and credible tool such as a questionnaire in order to get an idea of students' opinions, feedback, impressions and proposals for improvement.

After a detailed analysis of the results carried out for the benefit of 132 students whose affiliation is the University of Letters and Humanities Dhar El Mahraz, those students have confirmed their motivations, appreciations and their satisfactions about the blended teaching, which is considered to be a perfect answer to our research question.

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