Synchronized Media's Enhancing Impact on Engagement and Proficiency Growth in Hybrid Learning

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Abstract:- For a long time, the higher education system in Morocco has been based on traditional face-to-face training. Learners are obliged to be present at all class sessions and throughout their training. They do not have the possibility to follow the training in a different way, to recover missed sessions or to easily access the documents associated with the courses, but with the emergence of MOOCs and pedagogical content management platforms, different courses in various fields are available and accessible and Morocco has embarked on a good path in terms of setting up several projects of pedagogical innovation and use of new information and communication technologies in the field of education in order to encourage students and integrate them in this new approach.

The Containment has given a good opportunity to the Moroccan educational system, students and teachers have been forced to put their hands in the dough and carry out a totally distanciated teaching which has presented a solution to the problem of following the courses during the crisis. Our research aims to find out the impact of the synchronous communication media through which Moroccan students have been trained on two very important notions: commitment and competence, based on a theoretical framework that draws on several theories and historical and pedagogical developments and concretizing it with a questionnaire that was dedicated to the students to really measure whether the impact is positive or negative.

Keywords:- ICT, Engagement, skills development, blended learning

I. INTRODUCTION

Digital is the common name for this technological phenomenon of immediate scope and effect that the whole world is experiencing and that has entered the life of our generation in an irremediable way. Digital technology has rapidly established itself as a solid force in all sectors, in our daily lives and in our future.

The NICTs have marked a turning point, where the new information and communication technologies have played an inventive and non-destructive role, on the contrary, the digital has saved the delicate situation that Morocco was living, it has allowed it to renovate, innovate and move from theories and plans contained in the new strategic vision 2015 -2030 to the implementation of reality.

Containment created the opportunity to improvise and launch into the real experience: the world of practice, resolutions and adaptation.

The teachers, for their part, have tried to analyse their content and digitise it so that it is accessible to the learners, so they have found themselves obliged to solve the problems they face, they have had the opportunity to wear new hats, especially with digital teaching in virtual classrooms, which is done through synchronous communication media where the teacher is called upon to create digital content, The teacher is called upon to create digital content, to present it, to explain it, to ask questions, to identify vulnerabilities in the student's knowledge, to answer the student's questions and to rephrase the content so that the learner can assimilate it even better, and to create group work so that the learner can develop and give even more. The teacher's tasks are not limited to this stage but extend to answering students' emails and phone calls.

He is an instructional designer, a mediator, a facilitator, a guide, a facilitator, an evaluator and he also do some management, knowing that when he takes a position, he always puts the learner at the center of his teaching interest.

The student in turn makes a lot of effort to adapt to his new teaching mode, to hold his learning in his hands in order to develop new skills and to succeed in his training, showing responsibility and autonomy by committing himself fully to distance learning, this commitment constitutes the first notion we want to study in this research, it is reflected on three levels:

- the behavioral level: where the student proves his commitment by his presence in class, his participation, a spirit of initiative, attention, discipline and the absence of disruption as well as respect which is reflected in videoconferencing by the way of respecting the opinions of others and not cutting off the speech of peers and that of the teacher....

- The emotional level: which is expressed with empathy, intrinsic motivation, personal interest in the lessons, appreciation of the teacher's efforts, the feeling of personal efficiency, satisfaction as well as the feeling of belonging which is proved during group activities because if he/she has a feeling of belonging he/she will contribute to the Co-construction of a serene and favorable climate which will lead to his/her role to a good learning.

- The cognitive level which is directly related to the mental efforts that the student invests in mobilizing personal

strategies during the realization of the tasks, the time he/she gives to his/her activities and learning, the degree of sophistication of the learning strategies, the concentration and planning.

II. CONTEXT, PROBLEM AND RESEARCH METHODOLOGY

A. Context of the study

Competence is our second concept in question, which we are seeking to know the impact of synchronous communication media on it. It is a pillar notion which consists of the triptych "knowing - knowing how to do - knowing how to be" which, without having developed it the student will never be able to evolve in learning and to pass from one level to another, it differentiates him from the others, it gives him an added value.

Through digital technology, the student is not only called upon to develop pedagogical and cognitive skills, but also to develop relational and technical skills, because in distance learning, isolation is an obligation, each one in front of his own screen, but if he develops relational skills, he will be able to leave this isolation and create a relational sphere with his peers, This is the case for the technical skills that he develops by using every day the computer tools and by doing his learning through these tools which also without the good manipulation of these last ones he will build obstacles which will hinder the process of his learning.

Skills and its development is obviously inseparable from the notion of commitment, one complements the other and ensures that it is well established and installed in the teaching process. Thus, it is not enough to know or to want to act in a synchronous course, it is also necessary to be able to act, not in the sense of being authorized to do so but of authorizing oneself to act, to commit oneself to constructing new knowledge and subsequently acquiring skills which will enable one to evolve in learning. It is to this last dimension, still little explored, that our study is attached, which seems to constitute a particularly interesting track to understand how the impact of the communication supports can influence these two lever notions and its contribution at the level of the teaching-learning from the point of view of the actors implied obligatorily in these dynamics: the teacher and the student. So, the question is the following:

Can synchronous media have a positive impact on the perceived engagement of students and therefore on the constructive development of skills?

In order to answer the research question, we established the following two hypotheses:

H1: Students show engagement with synchronous communication materials.

H2: Synchronous media enable the development of student's skills.

B. The target population

Our sample is composed of students in the

"Higher Institute of Nursing and Health Technology".

For the feasibility of our research, we have a sample of 62 students. We solicited 50 students, but only 35 completed the questionnaire.

C. Quantitative study

At this stage of the research, we will state, on the one hand, the epistemological positioning accompanying the chosen mode of reasoning in order to clarify our way of thinking and subsequently grant a certain legitimacy to the results of the work.

On the other hand, we will dissect the methodological reasoning by evoking the methodological approach chosen, the questions and the objectives of the research.

In our research work, it is clear that it is situated in a positivist perspective, which allows us to perceive our research object which revolves around synchronous communication media and their impact on engagement and competence. The positivist paradigm considers that reality exists in itself and has its own essence. The role of the researcher is to discover this reality outside of him or herself, which implies an independence between the subject and the object observed or experienced.

For the choice of the mode of reasoning, we have opted for a reasoning that starts from what is general towards what is particular. In other words, we have chosen to adopt a deductive reasoning, since it will allow us first to have a clear vision on the three pillar notions: ICT, commitment and competence and to have an idea on the impact of these supports on commitment and competence. Then, based on this line of reasoning, we can arrive at our general objective and the research objectives to be achieved through the empirical study.

Our research is based on a positive quantitative approach that responds to the exploratory nature of our study. Thus, our research is based on a quantitative framework of the positivist approach. In order to explore the impact of synchronous communication media on engagement and competence.

III. PRESENTATION OF THE RESULTS

We present the results of the analyses used to explore our data.

Our study includes a quantitative study that was conducted among students in Higher Institute of Nursing and Health Technology, specifically those in the multi-skilled nurse stream.
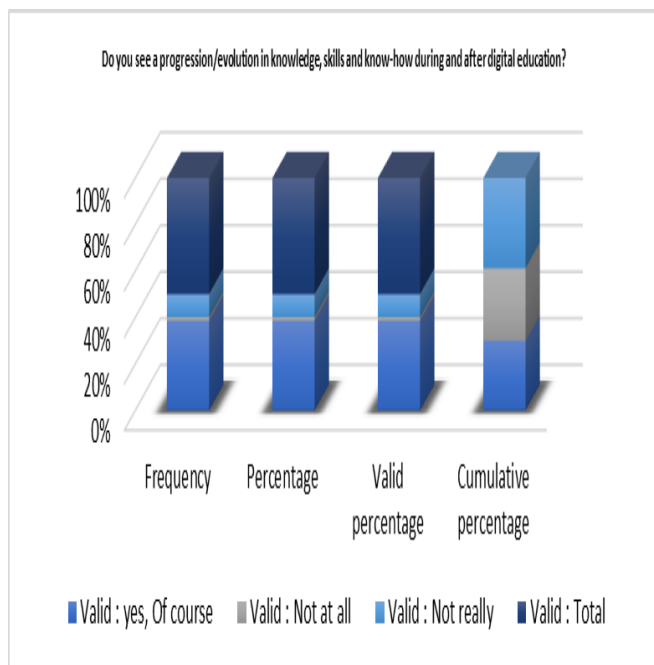
Graph 1: The Results of the Opinions on the Level of Development of Knowledge, Skills and Know-How during and After the Digital Education

the vast majority opted for a 'yes, of course' in the notion of knowledge development (77.1%), 20% chose 'not really' and only 2.9% voted 'not really.

Type of skill you develop in synchronous media:
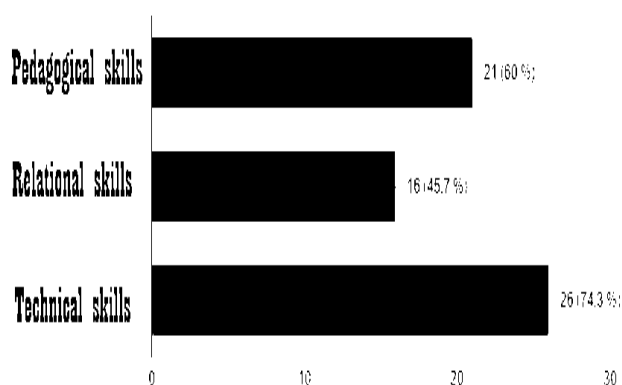
Graph 2: RESULTS IN RELATION TO THE DEVELOPMENT OF SYNCHRONOUS MEDIA

Technical skills were the most selected by the students with a percentage of 74.3%, pedagogical skills were the second choice (60%) and finally relational skills occupied 45.7%.

The opinions that students gave suggest three types of perspectives:

Personal development: the technological tools will lead to the cognitive personal development of the student.

Quality of teaching: the means will offer quality content adapted to each learner.

Hybridization: technologies will make face-to-face teaching a second choice and training will take the hybrid route.

IV. OVERALL DISCUSSION AND HYPOTHESIS TESTING

A. Interpretation and validation of hypotheses

The statistics allowed us to identify the real point of view of each student regarding our basic topic which concerns synchronous communication media and their impact on the two pillar notions of learning: engagement and competence.

Certainly, we cannot know all the factors and elements that help to engage most in distance learning, so we have left the lines blank so that we can take advantage of their real desires, we have categorized the students' proposals into three elements:

- **Technologies:** some expressed that this form of innovation in digital tools helps them to engage, they have the possibility to access information in different formats (audio, video, text, PDF etc.) at any time, they feel autonomous, they study in places that they describe as pleasant and they can move where they want and at the same time attend the course, as well as being a comfort zone for shy students or those with disabilities. The technologies offer a certain luxury if we can say that because they bring together: accessibility, flexibility, freedom, mobility, instant interaction and diversity.

- **The teacher:** the teacher plays a very important role in fostering engagement, students confided that the teacher is the source of their motivation for engagement, he is there to encourage them and to value their initiatives also with the way he presents and animates the course, the different pedagogical methods he uses for the facilitation and mediation of learning, many of them insisted on the importance of diagrams and Mind-mapping and the good planning of the course as well as the debates that the teacher launches around an idea According to our participants, it is very important that the teacher lets the students make their own choices regarding group or individual work and also regarding the choice of members.

- **Collaborative work:** Collaborative work helps students to engage and get rid of the feeling of isolation and to feel part of a community or group, they get to improve relationships with their peers and get used to speaking in front of other people which increases communicative skills. Interaction with the group and negotiation of ideas hooks students into the topic and therefore helps them to engage.

The results found give us the right to confirm the first hypothesis:

H1: Students show engagement with synchronous communication materials.

The percentages built a solid basis for the validation of this hypothesis, the students expressed that they are engaged with the synchronous communication materials already because this news arouses their engagement, the group work as well as the pedagogical methods and its animation hooks them to be interested in the content and thus to engage: behaviorally, emotionally and cognitively.

➤ *Skills:*

Skills is an important component in learning and its development is a goal of teaching, we found that the percentage of 95% which constitutes the vast majority of students answered yes regarding the ability of synchronous communication media to develop new skills for them, 74.3% of the students specified that they first develop technical skills as they use digital tools every day to access the courses, They learn to manipulate new software and work on new platforms, then they develop pedagogical skills (60%) based on courses, research and e-learning and lastly (45.7%) mentioned the development of relational and disciplinary skills which are forged through collaborative work and self-management of their relationships in the virtual classroom Since they are developing new skills, we thought to know if they perceive a progression in knowledge, skills and know-how during and after digital teaching and we observed that 77.1% answered with "yes, of course" which is a significant percentage and is in line with the idea of developing new skills.

The development of skills is generally driven by the teacher's encouragement, (54.3%) indicated that the teacher sometimes gives importance to their interventions while 42.9% expressed that the teacher always gives importance to their interventions, this behavior gives more increases the degree of self-confidence in the students, the more the teacher gives them importance they are motivated to always participate and share their ideas and talk about their shortcomings which will allow the development of various types of skills: communicative, cognitive, relational, technical etc.

In order to succeed in distance learning, it is necessary to show autonomy, a skill that helps the student to organize himself and not to get lost in the work, 54.3% of the students always set goals to achieve and 48.6% of them always know how to proceed to achieve the goals and objectives set, which shows that the students are doing good planning to constructively develop new skills.

In a collaborative work mode 51.4% feel comfortable and 62.9% find that through this mode they develop skills mutually and 62.9% expressed that group work is a source of motivation to give the best of themselves, so working with peers allows to co-construct new skills and improves the relationship between colleagues which establishes in the virtual classroom a favorable climate for learning.

Our last question allowed us to look into the future and to know the perspectives to which the technological tools lead us, the students proposed three categories:

Personal development: technological means will allow the development of new skills, help the learner to get rid of isolation and self-construct in various fields.

Qualitative: improving the quality of learning and facilitating the construction of knowledge and content by making it fun and attractive and accessible to all students which will increase motivation as well as making the content relevant to the learner.

Hybridization: some students find that technological tools can enable face-to-face teaching to go the way of hybridization or even make face-to-face teaching a second choice.

So, we are able to confirm the second hypothesis:

H2: Synchronous media allow the development of students' skills.

B. Conclusion of discussion

The new information and communication technologies have brought about a radical change in teaching, from the classical approach where the learner is just a receiver of knowledge and instructions dictated by the teacher who takes responsibility for managing the whole learning process to the constructivist approach which considers this process as an interactive exchange between the teacher and the learner.

The NICTs have reinforced the constructivist approach by placing it in a digital framework, they allow the student to develop autonomy in relation to knowledge, each of them is responsible for himself, nobody supervises him, he is alone in front of his computer and it is up to him to decide if he really wants to follow the course, take notes, participate, take the initiative, do group work, make presentations etc. Or not to attend these courses at all, so it is the student who takes the lead in the construction and acquisition of his knowledge.

These new technologies offer a luxury for the learner: he chooses the environment that suits him, he can do research at any time because the information is free and accessible, he has access to various software and platforms, he can move around the world and follow his training at the same time and he has the possibility to read and evolve in all fields and knowledge is available with all languages so these technologies can only be beneficial and an added value for learners.

Our research has shown that students are much more interested in learning through synchronous communication media, they feel through this mode of autonomy, responsibility and belonging, they are able to exchange instantly with the teacher and their peers which establishes in them a sense of belonging that automatically removes the isolation they experience in front of their screens.

Synchronous communication media create engagement and give students the opportunity to demonstrate it in all dimensions, without forgetting that the teacher plays a matrix role in this respect, thanks to his or her animation which hooks the learner to knowledge, His mediation that facilitates knowledge so that the learner sees it as attainable, as well as the debates and questions he asks to give rise to interactions, so all these factors can only help to improve teaching efficiency and the installation of a serene and benevolent virtual classroom climate that encourages exchanges and establishes a good link between teacher and learner.

V. CONCLUSION GÉNÉRALE

The advent of NICTs has marked an upheaval in the Moroccan educational environment, favoring the emergence of innovative techno-pedagogical experiences that allow the transition from a traditional transmissive teaching mode that is limited to the transmission and reception of the course presented by the teacher to a socio-constructivist form of learning that focuses on the learner and emphasizes his or her interactions and accustoms the learner to appropriating his or her own knowledge in his or her own way after it has been absorbed.

The Ministry of Education has offered teachers training to consolidate their technical skills and integrate them into their teaching practices, which has been beneficial during this health crisis where teachers have taken the reigns of 100% distance learning and have put a lot of effort into adapting the courses, they used to present in the classroom to a purely digital mode to help their students understand and assimilate the course and to encourage them to engage and thus develop new skills.

Learning through synchronous communication media has a positive impact on engagement and skills development from the students' point of view, they have been satisfied with distance learning throughout the two years as they have found various advantages in this mode of teaching such as: flexibility, accessibility and autonomy they feel in acquiring knowledge.

The students, in addition to these advantages, are engaged thanks to the method of animation and mediation of knowledge by the teacher; when the teacher launches debates or questions that require interaction, he/she attracts the attention of the students and makes the course fun, the student feels that he/she is part of the teaching process and therefore automatically engages.

These media guarantee access to learning at any time and from any place in the world with a very modest cost, the student can ask questions and interact with the teacher and his peers instantly, carry out group work and get out of the state of isolation he feels in front of his screen and become part of a small community that has the same final goals as him which encourages him to engage more and more in his training as well as in a collaborative work each one benefits from the knowledge of the other and co-develops new skills.

With the daily use of technological tools, in addition to pedagogical and relational skills, the student develops digital skills, he learns to manipulate new software, to manage to do good research, to work on new platforms and even to solve some basic technical problems so he develops a very high degree of autonomy towards his learning.

Distance learning is becoming more and more important, not just as an option but as a necessity, especially with synchronous communication media which have proven to be useful and have established a certain proximity between the teacher and the learners and between the latter and their peers.

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