THE ONLINE PRESCHOOL: IMPLEMENTATION OF A TRAINING PROGRAMME SYSTEM FOR PRESCHOOL EDUCATORS

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ABSTRACT
Economic development and social change have significantly changed family and preschool education worldwide. As a result, the preschool has become one of the top priorities of governments in many countries.

Based on all the studies and work carried out by our research team, and taking advantage of the distance learning technology, we proceeded to the establishment of an educational preschool platform.

This platform presents scripting and well-structured courses to meet the needs of a modern school education that fits the Moroccan context and affect the three main education stakeholders in the preschool: the child, the teacher and parents.

This article describes the steps involved in setting up a training device for preschool teachers, from conception to online posting, as well as its educational and technical characteristics.

General Terms
Distance learning, Reliability, Experimentation, Human Factors, Standardization.

Keywords
Continuing education, Distance learning, Moodle, Preschool, Scripting.

1. INTRODUCTION
The importance of preschool is now a reality, which is imposed in the entire world through its impact on the psycho-cognitive development of children. In fact, the results of research and studies from many scientific fields [1], [2], [3] and also those accumulated over several decades show that a good educational intervention in favor of early childhood is decisive in the intellectual, emotional and social development of the individual.

According to UNICEF [4], providing an education of quality in early childhood ensures the development and blossoming of children. In addition, a pre-school education constitutes the foundation of learning and allows for better results at school. It is also essential to the achievement of other rights of children, because it breaks the cycle that passes poverty, disease, gender inequality and violence from one generation to another. Consequently, it highlights human capital and acts as a catalyst for economic growth. It also reduces the budgets for health, education and welfare.

However, it is found that preschool educators do not receive continuing education that will allow them to update their knowledge related to a specific education in early childhood.

To this end, the general objective of this work is to establish an open distance training platform adapted to the requirements and needs of pre-school educators in order to promote the quality of preschool education for all and throughout all of Morocco.
conducted nationally and internationally show that preschool education remains a big weak spot in our education system.

Indeed, preschool education finds its origins in the industrial development in all societies. Early childhood education remained very long the exclusive domain of the family, mainly of women. Consequently, the appearance of a structured form of an external preschool family is inseparable from the development of industrial enterprises involving both parents work outside the home. Thus, the first forms of family external preschool education first appeared in Europe in industrialized countries.

In Morocco, preschool [6] is for children aged 4 years old to 6 years and is under the Ministry of Education. However, other departments involved in this sector (municipalities, associations particularly those of Habous and Islamic Affairs) work in the same direction. Thus, preschool education institutions are usually private and the rate of school children in the preschool has known a significant increase in 2010/2011 to 64.9% up from 50% in 2004 [7].

Indeed, the 2009/2010 emergency plan, departmental program appeared in 2009 with the aim to accelerate the completion of the reform, acknowledges that 80% of children are in preschool kuttab. However, he stressed that the educational content does not constitute what a true modern preschool should offer.

The emergency program has set the goal for a more widespread preschool education in the horizons of 2015 and specifies that quality will spread through actions in three areas in parallel:

- The upgrade of the existing preschool provision;
- The extension of a modern preschool provision throughout the territory;
- Insurance of an industry-leading framework to guarantee quality.

The declaration of actions to operate at different axes resulted in various measures including retraining of human resources. Indeed, the emergency plan notes a great disparity between the need for quality teachers and resources. All educators have no prior training in education and preschool education. It also states that 90% of teachers do not have the baccalaureate in addition to the gap between the need for educational support and resources available.

The emergency program also stipulates that the requalification of human resources will be through the lever of training [8] which will serve to ensure the upgrading of skills as educators it will serve to homogenize preschool education in existing establishments.

Continuing education [9] is also recognized as essential for educators to recycle knowledge and to adapt to social, cultural and economic changes of Morocco and the world.

Thinking about continuing education for educators in preschool, we find ourselves facing some constraints, among others:

- The absence of a formal training program;
- The diversity of profiles and levels of education pathways educators;
- The geographical disposition of training centers makes it difficult to access these trainings for some educators and devotes unequal opportunities of access to training;
- The distance of educators from their classes and costly effects on the education system.

Hence our problem: What training device could overcome these constraints and provide ongoing training quality?

3. III. DISTANCE LEARNING

The issue of training has always been the subject of numerous studies to produce suitable training every time and provide learning modes compatible with the economic, social and technological society. It was obvious to want to take advantage of the rapid development of new information and communications technology in the field of training and this was reflected in the introduction of media (Sound, Image, Video, ...) in the learning process, and subsequently with the huge expansion of computer use, the mode of the computer-assisted instruction and tutorials quickly took place in the field of learning.

Distance learning is defined as: "A learning facilitated and supported by the use of ICT". [10] Today, with the development of one hand communication networks, and the need for self-training and continuing education (with the problem of the huge expansion amounts of knowledge) on the other hand, it is necessary to benefit from this development in order to reduce the constraints of time and space, which will allow us to provide learning spaces accessible in time and space [11], [12].

It is in this context that today we speak also of distance education called e-training or e-learning. This training seems to be the most suitable mode based on the circumstances and requirements to meet the challenge of continuing education for educators.

The term "Open Distance Learning" means "a flexible system of training organized depending on individual or collective needs (individuals, companies, territories). It includes individualized learning and access to resources and local expertise or remotely. It is not
necessarily performed under the permanent control of a trainer "[13].

Figure 1. From traditional learning to open distance training ODL

The distances in open formation presents itself as a great asset to exploit. The national charter [5] states that "(...) it will be done using new information and communications technology (ICT) and mainly in continuing education (...). ICT can be invested as paths of the future and put to use immediately to :

* Trim as much as possible, the difficulties of teaching or training of teachers, related to the remoteness or isolation of target learners (...);
* Moving towards equal opportunities of access to information resources, databases and communications networks while solving quickly and cheaply problems related to inadequate and unequal distribution based on documentary sources.

According to the French initiative for distance training of teachers (IFADEM) according to a UNESCO study, [14] the benefits of the use of open and distance learning (ODL) are described as follows:

- it overcomes the inequalities in access to training related to the remoteness of training centers;
- It reduces the consolidation requirements that are onerous for the system and depart the teachings of their classes;
- training directly affects teachers and gives them access to sustainable educational resources (they individually receive the materials) as well as information on curricula and teaching approaches;
- it reduces the time gap between learning new teaching practices and their implementation in the classroom testing;
- decentralized remote education system can be used for continuous professional support in school districts;
- ODL is even more effective because it organizes close interaction with a tutor and / or other learners.

This method of training can thus meet the continuing education needs of educators in preschool, hence our decision to create and experiment with a distance training platform dedicated to said educators.

4. METHODOLOGY OF WORK

The [15] training engineering focuses on the tools and methods leading to the design, implementation and ongoing maintenance of training systems. This engineering must be done following a methodological process based on the analysis of the labor market, analysis of the work situation (job), the development of a training manual, the production of guides or supplementary teaching materials and end implementation of training.

Figure 2. Training engineering approach followed

To create a platform that best meets the real needs of educators, we adopted the approach of training engineering by applying the following methodology:

Step 1 : The first step was to analyze the work situation: in this stage, we based primarily on the results of a survey conducted in the field by the team of ORDIPU [1] [16], and the repository of jobs and professions as defined by the Ministry of National Education [17]

Step 2 : This analysis allowed us to create a portrait of the profession of the teacher in preschool combining the main tasks entrusted to it, the skills needed for each task and the knowledge, attitudes and skills specific to each jurisdiction. On the basis of this portrait, we have structured the necessary knowledge training modules to produce a training manual.

Step 3 : In this step of preparing the guide and teaching resources, we conducted the analysis and structuring content. Thus, our training consists of five modules as shown in Figure.2:
Step 4: The survey conducted by our research team showed that most respondents expressed their great desire to own a box of teaching tools that offers them a variety of activities that meet the objectives and acquired competencies in preschool-children. To meet this demand, we conducted a literature review that allowed us to collect and filter a number of activities for each area of expertise. Thereafter, in order to be able to integrate these activities into our training platform, we created a “Child Space” in addition to the educator space. This child space contains proposals for educational activities and the educational scenarios of development of these activities and, depending on the qualifications specified in children in preschool education. In addition, we added to our platform a third component named "Parents Space" in which we have integrated files that provide information to parents in the form of guides and brochures available for consultation online and downloading.

Given the importance attributed to parents and their place in the third pole of the triangle of interaction [18] for preschool, we found interesting to create their space in our platform, this space attempts to answer as many questions about the age of early childhood and preschool education (health, safety, food, health, and education).

Step 5: the fifth step consists in the implementation of the training, which we will deeply detail in the following section, given its importance in the production of the device.

5. THE IMPLEMENTATION OF THE TRAINING:

5.1 Choice of platform

The choice of our platform is focused on Moodle e-consult after many studies comparing the E-learning platforms [19], [20], among others, that carried out to select an LMS for 2L @ [21] project, the study for the establishment of a distance learning system at the University of Pau Pays de l’Adour, [22] and finally the one conducted by Sabin Graf [23].

Indeed, Moodle is a highly efficient platform for learning under a free license for creating communities around educating content and educational activities. The term "Moodle" was originally an acronym for "Modular Object-Oriented Dynamic Learning Environment". This platform provides knowledge management tools: wiki, RSS feed, blog and forums that promote collaborative work of a community centered around a learning project.

5.2 Media teaching resources

According Peraya [24], the concept of media has developed in the field of communication sciences on the occasion of the first analysis of the mass media, especially television, print media and advertising, but also their use in schools. It was to analyze certainly, but also produce content "transported" by the media. We therefore understand better the origin of the name of mediated communication that refers explicitly to the media, understood in the ordinary sense of mass media. The step of media coverage [25] is to use information and communications technology, including different media to convey the learning objects to:

- facilitate individualization of the educational process,
- foster collaborative work.

We used the software authors "Opal [2]" to flush seem content and basic media to produce the resources finalized.

After the scripting phase [26], [27], [28], we have exported developed content as zipped packets corresponding to the SCORM standard.

5.3 Integration of the platform contents

Content developed with SCENARIchain were exported as zip packages for the standard SCORM 1.2 (Shareable Content Object Reference Model) to be imported into the LMS Moodle.

6. PRESENTATION OF THE PLATFORM

The educator or parent can find in the many resources of our platform a self-training field for the first and help the second. It will also provide access to various activities required for teaching in preschool available in the child space.
Figure 5. The home page of the training [3].
The home page contains links that allow access to different areas of training.

Figure 6. The page of the space dedicated to children
"Child Space" Contains several educational activities and their educational scenarios, in pdf format, which are all available for download.

Figure 7. The page of the space dedicated for parents.
The part devoted to parents "parents room" contains files as guides and brochures that supply parents with information.

Figure 8. The main page of the educator space.
The home page provides an overview of the training modules available on the platform, discussion forums, content of lectures, Internet links related to the content and material related to the course content. The organization is interactive and the working language is French.

7. CONCLUSION
The two major issues addressed by this work are firstly, the proposal of a training device meeting the requirements as a variety of profiles and grades of educators, the geographical layout of the training centers which results in the inequalities of access to training and removal of teachers from their classrooms. Subsequently, the proposed training contents the addressing of the need for a modern preschool that fits the Moroccan context. The objective of this work is to implement an open distance learning platform that allows preschool educators to receive quality continuing education while overcoming the problems described above. The idea was to take advantage of existing solutions for distance learning, to address their weaknesses, take advantage of powerful technologies they use, and finally integrate quality content.

The implementation of the platform consists of an open distance learning platform (FODEP) based on the Moodle platform. This contains three spaces : The main space being the "Educator Space" which provides training for preschool educators. The "Parents Space" Contains guides that answer the questions of parents about early childhood, and finally the "Child Space" Which is a toolbox with educational activities and games.

Future work focused on the evaluation, as has implemented the platform, must be tested in order to judge its effectiveness, as it has to be extended by evaluation methods. In addition, the improved performance of the platform and the update of the content offered are deemed necessary.
8. REFERENCES


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