ABSTRACT:

Nowadays, the need for acquiring and developing new professional skills for teachers and the revival of learners’ enthusiasm for learning is imminent to be at the forefront of this new exigent world, a world of communication, information and technology dominance where the old classical trends in education started to expire. The actual context has resulted in raising many issues about the effectiveness of the educational policy, professional development and the integration of technology in the teaching process. This paper includes an exploration of the major areas of innovation in the domain of education including contextualization of learning and teaching, professional development, integration of media and finally, curriculum design and implementation. A new change based on creative thinking and innovation, two major notions for the continuity and development of the teaching/learning process. The paper ends with some suggestions about the concerned areas of change to be invested and concretized in the context of the Algerian university for policy makers and practitioners of the domain.
Introduction

This article explores and discusses some trends about creativity and innovation in the domain of education in general. It presents some reflexions concerned with the ongoing research and developments of pedagogical strategies as a solution to learners’ different challenges. These challenges found in higher education environment to improve their learning experience and to achieve the best outcomes through satisfying their growing demands and needs. These demands and needs are responses to a shifting and rapid globalizing world that shapes everything including education with all its dimensions. Recently a deep impact on education is highly remarkable through a call to renew everything to cope with rapid changes and conditions where learners show a great desire to start a professional career and to go through it successfully has become their first priority.

It appears that in the twenty first century, higher education reached a crossroads, in which the decision to keep the same traditional ways of considering learners’ needs or to move to a new conception of things is highly debatable. Through this paper, the notions of creativity and innovation are explored and some of the major areas of change are proposed including: Teaching innovation, contextualization of teaching/learning, curriculum design, and professional development. Finally, some pedagogical orientations to be taken into consideration related to the context of the Algerian university.

1. Creativity and innovation
Before discussing the different components of this paper, let us introduce its main items of it, namely creativity and innovation. For most of us these two terms are interrelated or have the same significance, but somehow there is a slight difference that should be mentioned.

1.1 Creativity
In its broad meaning the term “creativity” was and is still related to something “new” or “novel”. Concerned with all aspects of life, creativity tends to bring solutions to the different daily life obstacles and challenges. Adair stated (2007 :8): “Creativity is the faculty of
mind and spirit that enables us to bring into existence, ostensibly out of nothing, something of use, order, beauty or significance.”

Creativity here is not only concerned with new solutions but also with inventions and things that make life easier and simple.

1.2 Types of creativity
In the basis of assuming that all learners have a certain degree of creativity, relatively different from a person to the other, two types of creativity can be distinguished: ‘Little c creativity’, which represents the more ubiquitous, everyday form of creativity found in our daily routine and ‘Big C creativity’, which represents the highest forms of creative expression that may include a highly achieved action or thought according to the Encyclopedia of Educational Psychology (2008 :196).

1.3 Creativity cycle
Generally, there is not a set of procedure or steps to follow to be creative. Creativity is more a state of mind than a materialistic operation in its early stage, but creative people tend to be more organized and focused in their daily routine. When motivation and a healthy environment are combined, anyone could feel comfortable to think better and thus be more creative. Lau (2011 : 218-219) proposed a four-step procedure to generate creativity:

Step 1: Preparation
You start by gathering information about the problem you are facing. Different resources are available like libraries, the internet interviewing people…etc. In our case two particular sources are to be considered; the learners’ previous and current knowledge and the use of different materials by teachers or instructors.

Step 2: Exploration
When having enough data filtered and organized, you can start thinking about how to relate different ideas and draw conclusions. The final aim of this step is to come up with a new idea that would be used to solve the problem individually or collectively. During this part of the creative process, the learner needs a lot of focus, attention and time. Generating different ideas needs to be recorded or simply written for organizing and revisiting matters.
Step 3: Incubation
This step is what is called ‘break-time’ or rest period from the task you are doing, because the previous step was so demanding and in most times absorb a huge amount of energy from the learner. To have a break can promote creativity and give time to see the problem from a different angle in a better way than the first. In this case, few minutes are sufficient. In all fairness this might be helpful for some people but not for others, but it is a real stimulus for new and fresh thinking.

Step 4: Verification
After finding some ideas, you need to check their usefulness and if not how to improve them. Most of times it is not easy to find the solution or the right answer from the first time. It is very important to review everything in case the proposed solution does not work positively and try to find the gap so that to avoid such mistakes in the future and to ameliorate the whole creative process.

Figure 1: Creativity cycle.

The figure above illustrates the different creativity items.

2. Innovation
Innovation as a notion in itself is to bring new ideas or actions into life within a specific context to make things better; innovation intends to make an improvement whatever it is. Nicholls stated “An innovation is an idea, object or practice perceived as new by an individual or individuals, which is intended to bring about improvement in relation to desired objectives, which is fundamental in nature and which is
planned and deliberate” (1983 :4). The following paragraph explains the relation between innovation and teaching.

3. Creative learning and innovative teaching

Creativity in the domain of education does not have a different conception from the general notion of creativity; it is the way on which we conceptualize creativity about learning and its different components. The application of creativity into a given learning context is to teach in a different new way or simply ‘innovatively’.

In the Final Report on the Creativity and Innovation in Education in the EU Member States 2010 by Romina Cachia, Anusca Ferrari, Kristi Ala-Mutka and Yves Punie, creativity and Innovation are considered as skills like different skills we have and defined as:

“A product or process that shows balance of originality and value. It is a skill, an ability to make unforeseen connections and to generate new and appropriate ideas. Creative learning is therefore any learning which involves understanding and new awareness, which allows the learner to go beyond notional acquisition, and focus on thinking skills.” (p. 19).

Innovation as a related notion is:

“The application of such a process or product for the good of a domain or field-in this case, teaching. Therefore, innovative teaching is the process leading to creative learning, the implementation of new methods, tools and contents which could benefit learners and their creative potential.” (p. 19).

From the above definitions of creative learning and innovative teaching, It is assumed that the interconnection between the two terms, resulting in a bilateral relationship making the first happens when the second is applied, a simple equation to be integrated into any pedagogical situation. It is very crucial to consider introducing new methods and techniques in teaching everyday to let more learners invest best their creative potential in solving learning issues, adopting better thinking, and gaining more intelligence to solve problems. Two main points are essential here the shift from a teacher-centered
teaching to a student-centered learning where the learner is more responsible for his/her learning based on learning by experience or technically called ‘Constructivism’. The role of the teacher or instructor is rather to create the best environment and conditions to let learners engage more and be creative in their learning.

4. Axes of improvement and development

This part of the paper is devoted to some pedagogical orientations to be considered, these orientations are the main axes that may contribute to the reform change in the Algerian University for a better academic achievement quality and for learners to be well prepared for their professional life with highly performance skills. What is needed is to link successfully what is learned in the classroom to the skills needed in the work situation.

Axe one: Contextualization of Teaching and Learning

Contextualization of teaching and learning is one of the most important axes of development under exploration, the following paragraphs present a short definition of it and how it is implemented in the classroom.

a. Definition
As mentioned above, contextualization of learning has as a major goal to let the learners find their own ways of learning and improving their skills. In this perspective Contextualized Teaching and Learning has been defined by Mazzeo (2008 :04) as: “A diverse family of instructional strategies designed to more seamlessly link the learning of foundational skills and academic or occupational content by focusing teaching and learning squarely on concrete application in a specific context that is of interest to the student.” According to Contextualized Teaching and Learning, learners are concerned to learn how to understand the content relevant to their learning experience when needed in different real situations that they would face in the future.
b. Implementation

Two major models for the implementation of contextualized teaching and learning are proposed by Mazzeo (2008); *stand-alone classroom practices and linked courses or learning communities*.

- **Stand-alone classrooms**: These single classrooms include infused academic courses focused on academic skill building with CTL like reading, writing and speaking, enhancing the relevance of those skills, and providing opportunities for students to actively engage in the learning process. Alternatively infused occupational courses CTL approach through a vocational focus, integrating academic skills with occupational or professional content like in translation, virtual trading and advertisement.

- **Linked courses or learning communities**: Using a series of connected courses, utilize a specific context for delivery, and often exhibit a high degree of collaboration between instructors and students. While each course retains its own objectives, learning community classes mutually reinforce a set of shared goals with faculty collaborating to ensure that the content of each course supports the other.

It is obvious that the first model cannot be implemented because of the huge number of students coming each year to the university (adaptability matters). Learning communities could give best opportunities for learners using different contexts as discussed before. We need to make learning more specific and personal to serve better future professional orientations.

**Axe two: Curriculum Design**

When discussing the notion of curriculum design we are discussing the changes and the implementation of different and new items that go with the actual classroom practices. If we apply new conceptualization of teaching method for a reason or another, we need inevitably to
question the objectivity of curriculum and if it fits the new methodological concepts used. Many professionals feel that the actual curriculum is too prescribed and overloaded. Despite the huge importance of the curriculum, the creation and use of its content is really challenging the professional of the domain and the educational policy makers. Curriculum design, implementation and design have always been a subject of debate and discussion to be in harmony with changes and developments of teaching/learning methodology. We need to make the curriculum the best incubator for innovative practices. The actual status of higher education within the huge changes and metamorphoses in the social and cultural environment implies new directives in the development of a new curriculum to be considered based on the following elements proposed by Maree and Dirk (2014: 02):

*Changing students profiles, the pervasive influence of technologies and the pressure to produce work-ready graduates with more than discipline knowledge are just some of the themes to emerge that are influencing the nature of dynamics of presage, processes, and products informing the design of the twenty-first century curriculum.*

Three main objectives to be set in the elaboration of new curriculum are as follows:

- Respond to student diversity: different profiles including different social and cultural backgrounds, experiences and needs.
- Prepare graduate students to professional career success: provide students with the necessary skills and competences to be ready for the workplace, general knowledge is no longer sufficient.
- Integration of technology: the use of social network technologies, virtual learning (web), computing, video conferencing, videos, etc. The university should invest in the implementation and development of e-learning and speed communication to modernize higher education and shifting from the classical status to a contemporary status. Needless to stress that many other human, material and pedagogical factors
contribute to curriculum orientations need to be discussed and considered in a deeper study because of the seriousness of the matter.

**Axe three: Professional Development**

There is no doubt that the teacher is one of the most influential agents in the success of learners’ achievement and this is due mainly to how this teacher has been trained and accompanied during his/her career, so it is vital to consider how to prepare the new teacher as a starter teacher and support the senior ones as an experienced one. In Algeria, most of novice teachers at the university do not receive any training, preparation or even a little supervision when starting their teaching careers. A situation that needs to be changed insistently and the solution is not spectacular; all we need is the conventional way of receiving new teachers and preparing them to the job and the continuous monitoring during the whole career. Teacher professional development includes three critical phases as proposed by Edutopia and summarized as follows:

- **Teacher Preparation**: based on subject-matter mastery and real classroom attendance under supervision including different kinds of educational tools. This phase is considered before starting teaching assignment.

- **Teacher-induction Programs**: Including monitoring and coaching from experienced or veteran colleagues to gain best teaching practices.

- **Ongoing Professional Development**: For experienced teachers to keep them up-to-date about teaching methodology, technological tools, new curriculum orientations…etc. Continuity and collaboration are key features for such a process.

Edutopia Team (2008)

The latter axes represent the most important axes of improvement among others. These axes have been chosen because of their impact on the teaching/learning process if enhanced and given the highest priority.
5. Conclusion

It is very important to remind everyone about the noble and critical goal of higher education in shaping new generations who make the best societies. We suppose that all educators, teachers, instructors and professionals of the field from a side and ordinary people from the other feel that our higher education has deviated dramatically from delivering the elite leaders and sophisticated people to hustle youths with empty minds and disoriented paths. The reform that started decades before -even appreciable- did not bring a radical change or a better improvement. This may be due to overreliance on classical trends. Resulting in a purely quantitative educational policy and neglecting quality. We believe that the reform should be itself reformed embracing a fresh label entitled: “Innovative Higher Education” to catch up with a precious lost time and bettering the whole process. Priority should be given to human resources; we mean teachers as perfect raw models and learners as future successful potentials. In addition to the revision of learning/teaching perspectives, curriculum and professional development, other important factors have to be revised including: Controlling and managing flow of students, empowering teachers sufficiency, more institutional communication, collaboration and work contribution, finally complementary roles of economics, education and politics. Revision and re-evaluation of the whole pedagogical system could help us detect and eradicate the black points, to clear the way for a new wave of flourishing what to regain our real cultural and educational prestige within the international community.
6. References