

UTILIZATION OF ICT IN HIGHER EDUCATION FOR ISLAMIC EDUCATION LECTURERS TO INNOVATE

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Abstract

Taking a theoretical approach, this paper explores the concept of educational innovation within Higher Education and the use of Information and Communication Technology (ICT) as a fundamental tool for achieving it. It aims to demonstrate how universities are now producers of knowledge operating within a new cultural and paradigmatic shift, whereby ICT has facilitated a continuous process of transformation and improvement. Additionally, mobile phones and other devices have become a common feature in the classroom, and can play a vital role in the learning process, however, it falls on teachers to determine how to best utilize them. The challenge of innovation is thus presented to educators. The importance of technological innovation has become a pressing issue in the digital age, with a consensus among the scientific community that educational innovation is inextricably linked to digital technologies.

Keywords: *Islamic Education Technology, ICT, Educational Innovation*

INTRODUCTION

Given the multidimensional environment of modern Universities is essential to meet the innovation needs demanded by society, the bearer of the greatest mandate Undoubtedly, the progress that the Internet has made it the main protagonist of the great technological revolution of the XXI century. Its inescapable presence has made it a huge stage where new ways of learning, thinking, communicating, doing and acting take place. Throughout history, education has incorporated technology very slowly. In terms of Information and Communication Technology, subsequently ICT, multimedia education is combined, with video, computer and learning models such as e-learning and blended learning developed. (in English B-learning and blended-learning). But qualitative changes in

the teaching-learning process only occur when ICTs are integrated into innovative visions, which means that all the potential of each medium has been explored beforehand. The question many ask when thinking about innovation with the use of technology can be addressed: what is special about innovation if it is always important? According to (Yan Carlos Ureña Villamizar & Rixia Villalobos de Weffer, 2011), what is interesting to highlight about innovation is not only that its relevance has grown to represent a paradigm of survival and sustainable competitiveness, but that the rules of the game have changed, opening up fields of action beyond laboratories and test benches, extending beyond the company.

In this way, companies consider knowledge management and innovation processes as the most important disciplines to gain a competitive advantage in the satisfaction of their customers. While technologies can change societies, it is no less true that they are, in turn, socially constructed and developed. "ICT in all areas of human life, and fundamentally in higher education, demands a holistic and critical understanding of its nature and impact" (Özlem Yiğit, 2013). This technology and its vertiginous development have created new concerns and needs in the field of education. However, "these same technologies can be engines of change and innovation" (Attenberger et al., 2015). Despite their transcendental importance in the field of education, and their dominant use in all spheres of life, in the use of ICT still prevails the function of mere technological substitution, they are digital versions of traditional textbooks and whiteboards.

According to Portilla (2017), the use of ICT in educational practice remains with limited use, which remains below its potential. This situation shows the relevance of the conception and thought of education as the foundation and impetus of all innovation. "The pedagogical beliefs of teachers are a key element for the innovative use of ICT" (Gallego et al., 2017). While it is true that there is no correspondence between the great expectations of the potential represented by ICTs and the results of their impact, few specialists in the field agree on the improvement of learning evaluation results, with respect to traditional practices developed in the teaching-educational process. The incorporation of ICTs, not only thinking of equipment and access as essential elements, is a specific issue of relevance, concreteness and integrality, in processes regarding its adoption and development in concrete evaluative conceptions and practices, according to specific educational needs and contexts The University The incorporation of ICT in the University

tries to be deployed with a generalist character for the specificity of the teaching and learning process, depending on educational needs certain. Undoubtedly, the challenge lies in deriving educational objectives from public and institutional policies, towards achieving concrete levels in specific educational experiences. The incorporation of educational technology in higher education should be directed towards achieving educational goals. All concerns and tasks in education throughout history and at any level, respond in one way or another, to great philosophical-pedagogical questions: Why educate?, What to learn and teach? And how to do it? Some authors, when referring to innovations in education at the beginning of the century, reposition these questions based on: How to promote educational development, based on the potential of ICTs?, How to improve learning with the help of ICTs?, and How to integrate ICT into the classroom and change the evaluation process?

Based on what is stated in the report, in the period 2009-2011, in the indicator Science, Technology and Innovation Activities in Ecuador, René Ramírez, Secretary of Higher Education, Science, Technology and Innovation argues that: "Human talent, science, technology and innovation are pillars of an economy based on knowledge". In this scenario, where higher education is an indispensable condition for achieving the Good Life, one of the University's priority tasks is to promote learning throughout life. Today, innovation is considered a basic factor of development in developed countries, consisting not only in combining technologies, but also helping to anticipate market needs and detect new products, processes and services of higher quality, generating new benefits at the lowest possible cost. There are several definitions and explanations of the term innovation, related to economic, social, educational, etc., all implied that innovating means introducing modifications in the way of doing things, to improve the end result. Innovation according to the Royal Academy of Language, is the action and effect of innovation for the creation or modification of a product, and its introduction to the market (Yan Carlos Ureña Villamizar & Rixia Villalobos de Weffer, 2011).

Innovation is an intensive process in technological knowledge, internal organization, resources and markets. An important element of innovation is its successful application in trade, they must be introduced to the market or used in production processes, so that they involve a whole set of scientific, technological, organizational, financial and commercial actions or activities (García-Peñalvo et al., 2015). According to (Becerra Rodríguez & Naranjo Valencia, 2008), the concept of innovation has been the

subject of several analyses in economic, business and social theory. The origin of this term can be placed in the postulates of Schumpeter (1997), in his book *Theory of economic development*. There the author alludes to phenomena associated with industrial and commercial spheres, which spontaneously and intermittently change the processes of economic life. According to Schumpeter (1997), innovation arises when a new combination is implemented to introduce a new good or change its quality, Introduce a new method of production, or do something, Open a new market, Conquer a new source of supply, Create a new organization. In essence, it refers to the incorporation (way of self-generation or acquisition) and implementation of new technological knowledge (García-Peñalvo et al., 2015), that is, the commercial and economic exploitation of said knowledge. Innovation describes how an organization creates value through new knowledge or new use of existing knowledge, which can be expressed through new products or services, new business models, management techniques, and organizational structures. Innovation is the result of a process that includes the definition of a problem or need and the conception of a solution idea, its adoption and implementation and commercialization (Cohen & Ball, 2006).

Educational innovation is understood as a transformation in educational thinking, based on specific problems and based on a desirable and deliberate educational situational perspective. The innovation process involves the creative use of appropriate theories, conceptions, practices and technologies. Among the most relevant criteria for assessing the quality of an innovation is its relevance, effectiveness and efficiency as evidenced in its processes and results. While in industrial societies innovation is focused on acquiring new products, today it is the result of a commitment to improve a service, product or resource. Therefore, when talking about innovation it does not only refer to the creation of a product, this concept is extended to the services, processes and even organizational management of the organization itself (Arias-Aranda & Romerosa-Martínez, 2010).

The confluence of the need for innovation with informal learning experiences can create conditions for developing an academic culture of recognition and optimization of distributed and collective intelligence, in which all University actors take on roles of participation and responsibility in the same transformation. "It is important to seize the present moment, as well as the space and platform we have to reflect and act individually and together to design an education that is not only renewed, but capable of responding to future changes". The future of the university is currently in question, many companies are accompanied by training projects, certification of large companies is worth as much as a

bachelor's degree from Harvard University. If you have accreditation from IBM, Microsoft, Google or Yahoo, it is enough to be admitted to any company or educational institution with the best competence (García-Peñalvo et al., 2015).

METHODS

This research explores the creation of new educational theories through the use of Information and Communication Technology. It also incorporates an analysis of Education-related literature. This study examines a particular field through reading and studying various documents and data related to it, such as journal articles, encyclopedia entries, and other information from published sources. It is supplemented by data from research-related websites and from public library collections. Data analysis involves collecting, classifying, analyzing, and coming up with conclusions for an article. This method allows authors to provide ideas and advice to educators on how to always improve their profession.

RESULTS AND DISCUSSION

Changes in the Role of Education Lecturers Islam

The changes that occur at the institutional level, among which the impact of ICT can be highlighted, inevitably leads to a change in the role of the teacher, from the role he plays in the teaching-learning system in the context of higher education. The introduction of ICT in the teaching-learning process certainly led to a transformation in the role of teachers in relation to the role they play in terms of university teaching, without a doubt we are in the presence of encouraging changes in teacher innovation development. Some authors who have dealt with the functions that teachers must develop in learning environments that exploit the possibilities of computer-mediated communication. Mason (1991), like Heeren and Collis (1993), talks about three roles: organizational role, social role and intellectual role. Berge (1995) categorizes them into four areas: pedagogical, social, organizational or administrative and technical. In addition, not all of these roles have to be performed by the same person. In this way, educational institutions and teachers cease to be sources of all knowledge, and teachers act as facilitators of students' use of the

resources and tools they need to explore and develop new knowledge and skills; She then acted as manager of the Learning Resource Pleiad and to accentuate her role as Counselor

Changes in student roles

There is no doubt that ICT-related students benefit in some way and advance in this new vision of training users. This requires educational actions related to the use, selection, use and organization of information, so that students are formed as mature citizens of the information society. The change in the role of teachers and students has given rise to one of the trends that occur in universities, consisting of students and teachers who bring their own technological devices to the classroom to teach and learn, among the most common They are: computers, smartphones, tablets, etc. This is the BYOD phenomenon, due to its acronym in English (bring your own device), which as some studies have shown, is one of the trends prevailing in contemporary universities. It is a way to ensure that individuals involved in the process are fully equipped and use mobile learning as a new opportunity to link informal learning with formal learning, and to harness its potential for innovation and effectiveness in learning, while contributing to overcoming barriers to access. Equipping supports the availability of institutional tools for those who still need them (C I L I A J Ac O B S, 2000).

This change in model on the part of teachers requires "an understanding of pedagogical techniques that constructively use technology to teach content; about what facilitates or hinders learning, how technology can be used to help solve student problems; and the way students learn to use technology, which leads to the construction of knowledge" (Dooley, 1999)

Methodological Changes in Learning

The reproduction of the traditional teaching-learning model is one of the problems that hinder the implementation of technology, and thus we find many courses and experiences that are basically based on the classical teaching-learning model. The possibility of ICT allows these models to be reproduced in several ways , and in some cases it is understood that this is the right option. The right combination of technological, pedagogical and organizational elements.

This model on the part of the teacher requires "an understanding of pedagogical techniques that constructively use technology to teach content; about what facilitates or hinders learning, how technology can be used to help solve student problems; and the way

students learn to use technology, which leads to knowledge construction. With regard to pedagogy, mastery of the teaching-learning process and its evaluation is necessary: goals, roles, activities, resources, among other elements. This model schematically articulates three components for adequate technology adoption in the classroom, and these have great conceptual and operational value. However, the problem remains in the development of technological-educational skills required by teachers. To take on this challenge, his pedagogical model urges to face the challenge of carrying out new pedagogical-didactic routes leading to a more relevant education, adapted to the demands of the current educational context in which the University appears (Espinosa Jiménez, 2015).

What will happen to the current university?

Gros and Lara (2009), consider that most universities do not consider innovation as something typical of the university system, a system whose key part is research and teaching, innovation is only considered as an activity of the business system, alien to the work of Academics. This situation over the years was changed and incorporated a more heterogeneous educational model in the University that offered a wide variety of proposals to develop processes that establish links between the academic system and the business sector, in this way innovations were assumed not only to generate open and smooth communication with the outside world. But it is proposed to the academic structure itself and the training system. Competition in this sector has a lot to do with the production of differentiating elements and this means that innovation plays a very important role in the future of academic institutions. It is important to integrate into the dynamics of this system or we are socially destroyed or they are simply diluted in the system. The idea is to legitimize the information space that allows nurturing the areas that companies are currently trying to conquer through the process of innovation and that the University has sufficient academic, research and technological potential to achieve this goal in its professionals and make them more competent (Özlem Yiğit, 2013).

What Happens in Contemporary Universities?

In a certain way it concentrates the avant-garde in social, political, economic, cultural and intellectual thought and it is unstoppable, which is why it is necessary to virtualize space, using technological innovations in the sense of what is really achievable, but above all. based on well-defined pedagogical, technological and organizational criteria. In that sense we have to think about it from an innovative perspective. It is still our

university that overly abstract conceptions of innovation are addressed, sometimes we don't feel like innovative teachers. Generally, innovation is associated with saving resources, building artifacts, large investments, what is meant by this reflection is to understand innovation as a creative solution to everyday problems, in which the University feels part of this solution, in which the main protagonists are students and professionals who share the teaching-educational process.

What higher education professional is not innovating?

Why close the concept of innovation if it is valued worldwide among specialists, and assimilated as a binding concept. This means that we think of increased innovation, not radical innovation paradigms which are investigations involving major drastic changes, in that innovation enhancement involves process improvement, consolidation, adaptation, and in logic that is what drives our research. It is understood that innovation is related to acquiring new knowledge and creative processes, and although some consider it a characteristic feature of certain people who process problems creatively in their solutions, from the perspective of this analysis we consider it necessary to conceptualize it as a process of Innovation management carried out consciously and planned in such a way that all members of the group can operate with it, contribute knowledge, develop and transform it.

What are the challenges of universities in dealing with teaching innovation with the use of ICT?

The University is at a crossroads developing a sense of relevance and contextualisation on a large scale, in response to the changing demands of society. The lag in this era of accelerated change is obsolescence. Innovation is imperative for education in scenarios characterized by new and constantly flowing and involving all spheres of human life. Higher education is urged to rethink and reconstruct its conceptions, scenarios, roles and functions at a time when society as a whole is changing, and in many ways, without visible action, even in the view of experts. The demands imposed by modern society in the digital age are growing every day, in the same way it is the right terrain for research, initiative and innovation. A new development environment is created in which questions arise and varied answers are offered not only in theory, but in practice, using as outputs complements the use of technology in response to creative, innovative thinking and proposals relevant to the present. In this way, the University is formed as the main stage in

which great ideas are generated and reflections of the professionals formed in pursuit of a modern society that assimilates new paradigms that demand to be in harmony with their learning. When discussing the problems of society and the meaning of education for the twenty-first century, some authors consider that quality education for all is a necessary condition for the construction of a more just society.

In this context of change, necessity and responsibility in higher education, the postulates espoused by UNESCO since the last decades of the twentieth century, to promote lifelong learning, take on strength and meaning. This phenomenon is developing at a dizzying pace due to the progressive spread of ICT in almost all spheres of social life, both in the formal and non-formal spheres; so the challenge is to incorporate this new way of learning into the formative reality of the University. ICT is considered a key element for generating a culture of continuous learning and renewal, it is inconceivable that it can be developed on its own, for this it is necessary the presence of trained specialist personnel. In this sense, the educational thinking of teachers, their conceptions, beliefs and practices, is decisive for innovation with ICT, in search of improving the quality of the training process in its multidimensionality. This makes teachers, whose educational practices are student-centered, more motivated to innovate by incorporating technology (Becerra Rodríguez & Naranjo Valencia, 2008)

In the new pedagogy it is undeniable the existence of paradigms that have been placed to transform individuals, innovations with the use of technology, integrated into the educational process, their principles and approaches, which imply the development of an academic culture in which innovative relationships are based on cooperation and shared responsibility between teachers and students. Facing the challenges of this innovative use of ICT requires the transformation of ways of thinking and correspondence with the way of professional performance, so they must create initiative, participation, and adapt the experience and knowledge of students and teachers to the new demands of the knowledge society. Portilla (2017) states that the challenge of adopting ICT can be oriented towards synergy, which can be used as a privileged opportunity to promote among students a culture of protagonism and shared responsibility. Undoubtedly, this statement supports the idea of improving the quality of learning where both students and teachers are involved, both involved in a continuous learning process so that they have a lot to learn. One of the most pressing challenges for universities is integrating students' prior learning into the curriculum. Children and adolescents carry into the classroom an important

burden of knowledge and knowledge that is mostly developed in cyberspace. Prior learning has the potential to intrinsically motivate students to take a leading role in new learning. "The challenge is to optimize this learning pedagogically and didactically, characterized by the serendipitous, intuitive and spontaneous (Espinosa Jiménez, 2015).

All this requires higher education institutions to make their procedures, their working methods and didactics used to develop learning more flexible, adapting to alternative training modalities better suited to the needs presented by this new society, requiring a teacher who is in tune with the transformations imposed by the use of technology and virtualization. The existence of online offers, courses on the Internet or experimental projects of several professors and / or departments, do not suppose a more flexible university. It is necessary to review their current references and promote innovative experiences in the teaching-learning process, relying on ICT and emphasizing teaching, changes in teacher didactic strategies and communication systems and distribution of learning materials (Salinas, 2015). This means that universities need to be involved in quality improvement processes and this translates into ICT-supported teaching innovation processes.

In this task, ICT plays a major role as an optimizer of cultural context and relevant and relevant personal itineraries of learning, tutoring and scaffolding. Some studies refer to this as the "educational task challenge". The challenge is aligning self-paced learning with personalized feedback. The challenge for the University is to harness this interactive and communicative world to enhance learning as an informal experience of interactivity and social exchange, linked to an academically relevant and innovative educational process. There is no doubt that the culture of the university promotes production and research, often to the detriment of the teaching process and innovation in this field. Undoubtedly, it is this process that greatly strengthens the development of the university at all levels that can be evaluated. As Toffler (1985) points out, complex organizations, such as universities, change significantly when three conditions are met: significant external pressures, members dissatisfied with the existing order, and coherent alternatives presented in the plan, model, or vision.

The training modalities supported by ICT lead to a new conception of the teaching-learning process that accentuates the active involvement of students in the learning process; attention to emotional and intellectual skills at various levels; preparation of young

people to take responsibility in a rapidly changing world; the flexibility of learners to enter the workforce that will require lifelong learning; and the skills needed for this continuous learning process (Salinas, 1997). It is important to take into account that any educational innovation implies a multifaceted process in which political, economic, ideological, cultural and psychological factors intervene, and affect different contextual areas, ranging from the grade level to the complexity of the processes occurring at the university level. Whether success is achieved or a pure failure to operate with educational innovation largely depends on the way in which different educational actors interpret, redefine, filter and shape proposed changes. Without fear of error, innovation in education faces the main challenge of the adoption process by individuals, groups and institutions, as expressed by Salinas (2015), material and information things are, of course, easier to manage and introduce than changes in Human attitudes, practices and values. Teacher training in the field of ICT involves reflection and action around the guiding question of digital culture in education: What society do we have and want? Which citizens and collectives will make this desired society possible? How would he do it?

What is the Role of ICT in the Achievement of Social Goals Where Virtualization of the Educational Process Dominates?

Students bring to the classroom a variety of tools and practices of digital culture, the challenge is to turn them into powerful and innovative educational learning resources, yet there is still a predominance of teachers who continue to use traditional media , whiteboards, chalk, markers, among others that allow them to conceive traditional classrooms. To meet this challenge, it is important that students and teachers, digital natives and migrants, undertake multipurpose, mutually literate tasks; both have much to teach and learn from each other, together. Digital literacy involves a wide range of skills, in addition to technology-artifacts, didactic-discipline, multimedia, communicative-information, citizen-digital, aesthetic-emotional-digital, among others. The conceptual treatment of the virtualization process at the University is assumed from different positions. For Quéau, the question is defined as: "the representation of processes and objects related to teaching and learning activities, research and management, as well as objects whose manipulation allows users to perform various operations over the Internet, such as learning through interaction with electronic courses , enrolling in courses, consulting documents in electronic libraries, communicating with students and teachers and others (Enrique, 2020) .

Silvio, J. He considered the subject as: "The phenomenon through which, thanks to the expansion of digitalization, both objects and processes and phenomena of educational work, can acquire a virtual existence, manifested through electronic instruments, which implies a change in traditional relationships (professors / students, books / documents, users / services), which have dominated to this day the field of institutional functioning of universities (teaching, research and extension)..." (Silvio, J., 2000). Since the mid-2000s, work has been underway on the incorporation of ICT into institutional teaching and management processes. The process of virtualization of teaching begins and is expressed in bimodal offerings; increased support of digital didactic resources for the teaching process; Incorporation of subjects related to computer and information skills training; automation of academic processes; virtual course offerings; and learning in simulation systems and teacher-student interaction through virtual campuses (Sein-Echaluze et al., 2020).

From a more technical-cultural position, some of the difficulties related to the paradox of education to the digital generation are addressed , from the perspective of educators of the analog generation. Such a dichotomy is expressed in such difficulties as: "resistance to change, lack of openness and integration with the informal context; and the absence of assumptions of students as the main element of the learning environment with the use of technology. For this reason, in certain areas of virtualization it is important to have a functional management team, which plays a mediating and conciliatory role, aimed at resolving the tensions that occur when actions are proposed that try to improve the reality of training through ICT. "The formation of management teams, dynamic and prone to innovation, supports and facilitates progressive virtualization." (Becerra Rodríguez & Naranjo, Valencia, 2008).

Despite efforts to solve the problem of access and use of ICTs in education, from government, institutional and family levels, "the expected educational outcomes of these technologies are not being felt". It highlights the relevance of educational conceptions and thinking as the foundation and impetus of all innovation. "The pedagogical beliefs of teachers are a key element for the innovative use of ICT". It is important to mutate from a traditional model of education to one that responds to the demands of the twenty-first century. Changes that occur in higher education institutions present four manifestations that can be considered as responses from practice (García-Peñalvo et al., 2015).

Regardless of the methodology used, there is a transition from conventional classrooms on campus to classrooms in cyberspace. Teachers and students act differently in two types of classes. Learning products are also different. Courses and programs of computer-mediated communication have emerged so rapidly that, both educationally and socially, a thought has been developed about the possible impact of this method of distribution. The innovation of teaching-learning of the social sciences has become one of the most pending pedagogical-didactic tasks in the classroom, at all levels of the Ecuadorian educational system. However, today's technology opens up a wide range of real and potential possibilities for innovating and developing every field of the discipline. Undoubtedly, technology plays a major role in educational innovation in the digital age.

In Ecuador's education policy, teacher training in technology is a priority area for educational improvement. ICT comes to universities as an important element for classes, we must look by all means how to use it optimally. Similarly, some educational technologies such as cell phones and other mobile devices are in the classroom, and can be a key element to learning. You have to know what to do with them. That's the challenge that sits teachers around innovation. The attitude of teachers towards a vertiginous digital world is a tendency for constant and contextual innovation

ICT has an inescapable role in the teaching practice of the XXI century. Students handle a lot of technology; They learn best with technological tools. It is important to promote the training process for the improvement of teaching practices. At the Catholic University of Santiago de Guayaquil, pedagogical innovations in teaching practice are promoted through the provision of infrastructure for the use of ICT. At the institutional level, classrooms and campuses, in general, have WiFi service. In the library, teachers and students have tablets and access to digital databases. There is a tendency, on the part of managers, for the provision of the necessary digital infrastructure. There is a direction of educational innovation, since it is considered a transcendent sphere of the educational work of the University.

A special interest in technological innovation is manifested as a prerogative of relevance in the digital age. However, innovation is not something produced directly, or by provision, but rather a matter of academic culture. "We have the desire to be different and better. But we started," said Joaquim Prats, referring to the innovation of teaching practices at UNAE. Having a qualified teacher in every classroom is a priority, and this certainly

implies digital skills. Today, teachers must be trained through technology and for its use, both in the process of their training and in their teaching practice. These challenges must be faced in communities of people who learn, of which teachers are part of that community. Good teachers have an attitude of always learning to get better.

CONCLUSION

There is a certain consensus within the scientific community consulted, when it comes to understanding educational innovations related to the technologies of the digital age. It is important to value innovation as a procedural category that defines incremental or radical transformations for the sake of overcoming, complementing or improving an object, process or phenomenon, which can be social, cultural, technical, productive, economic or environmental. In this sense, the process of educational innovation involves the use of creative and novel means for cutting-edge educational theories, conceptions, practices and technologies. There is a prevalence of criteria around the consistency and functionality of educational innovations associated with digital-age technologies. This leads to the recognition of the usefulness and need for the use of ICT for innovative teaching practices. Training teachers for the innovation of their own practice through ICT involves reflection and practice located in the same teaching-learning process with such Technology.

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