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Research paper

The Role of ICT in Learning Process of International Student at Chinese University

Oubibi Mohamed[1]*, Zhao Wei[2],

[1]*School of Information Science and Technology, Northeast Normal University, Changchun, China*
[2]*School of Information Science and Technology, Northeast Normal University, Changchun, China*
**Corresponding author E-mail:oubibimohamed@gmail.com*

Abstract

Information and communication technologies (ICT) have become common place entities in all aspects of life. Across the past twenty years, the use of ICT has fundamentally changed the practices and procedures of nearly all forms of endeavor within business and governance. Education is a very socially oriented activity and quality education has traditionally been associated with strong teachers having high degrees of personal contact with learners. The use of ICT in education lends itself to more student-centered learning settings. But with the world moving rapidly into digital media and information, the role of ICT in education is becoming more and more important and this importance will continue to grow and develop in the 21st century. In this paper, a literature review regarding the use of ICTs in education was provided. Effective use of ICT for Education, and international students from 90 countries participated in order to know the importance of ICT in their studies and to investigate the importance of ICT in their daily life.

Keywords: *Information Communication Technology (ICT); International Students; Learning Process.*

1. Introduction

The world has encountered a mechanical upheaval that has developed quickly in all fields including the instruction field. In this manner, instructive frameworks are welcome to receive an ICT coordination system so as to enhance the educational practices.
Information communication technology (ICT) alludes to all the innovation used to deal with media communications, communicate media, keen building administration frameworks, varying media handling and transmission frameworks, and system based control and checking capacities. Although ICT is often considered an extended synonym for information technology (IT), its a scope is broader.
ICT has more recently been used to describe them convergence of several technologies and the use of common transmission lines carrying very diverse data and communication types and formats.
In fact, the coming of ICTs in advanced education and the remarkable development of their uses have totally revolutionized the relationship between knowledge and the pedagogical practices. This idea has already been confirmed by [1] "The ICT in the Education Programme focuses on the potential of ICT in achieving quality education for all".
Recognizing the positive impact of ICT on improving the quality of the teaching-learning activity, universities is actively involved in the restructuring of ICT. In this regard, the Higher Council of Education, Training and Scientific Research has emphasized the need for renovating the pedagogical practices through a judicious integration of ICT and promoting widespread access to ICT programs for both students and teachers [2]. Moreover, the utilization of ICT in the learning procedure by college understudies speaks to for them a key competency keeping in mind the end goal to better adjust to an always advancing society and to create aptitudes that address the issues of the 21st century. Undoubtedly, ICT invigorates their advantage and urges them to embrace a more up to date model of securing of information and abilities for enhancing they're subjective limits and building up their self-governing learning and in addition to their coordinated effort and sharing.

2. Theoretical Framework

2.1 Type of ICT Tools

Basically, ICT refers to forms of technology that are used to create, store, transmit, share or exchange information. According to [3] ICT is defined as the "diverse set of technological tools and resources used to communicate, and to create, disseminate, store, and manage information". These technologies include computers, the Internet, broadcasting technologies (radio and television), and telephony. There are many types of ICT tools that can be used by teachers and students in order to improve the teaching and learning process. In this regard, ICT tools have been classified into four categories by [4] as is shown in the table below:

Table 1: Types of ICT Tools

Type of ICT tools	Description	Examples
Informative tools	Applications that provide huge amounts of information in various for-mats such as text, sound, graphics or video	Multimedia encyclopedias or different digital resources available on the Internet
Situating tools	Systems that place students in an environment where they can experience both the	Games, simulation and virtual reality

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	context and the real life situation	
Constructive tools	These tools allow students to produce a certain tangible product for educational purposes	web authoring applications, wiki and office tools which al-low students to create their own web pages and share their ideas
Communicative tools	Systems that facilitate communication between the teacher and their students or among students.	Email, chat, social media teleconferencing

2.2 The Use of ICT

Two main meanings are given to the term "use" in the Robert dictionary of sociology [5]. The first refers to the social practice whose age or frequency renders it normal in a given culture. The second refers to the use of an object, natural or symbolic, for particular purposes. We can deduce that the social uses of a product, an instrument, or an object in order to highlight "the complex cultural meanings of daily life behaviors" [6]. In this regard, the notion of "use" serves to emphasize the complex relationship between the following elements: the social behavior of the user, the purpose of the use and the technological devices.

2.3 Impact of ICT in Learning

ICTs arouse interest among university students and encourage them to adopt à new way of acquiring knowledge and developing skills, as pointed out by [7], ICT promote more in-depth learning among students, as well as its integration has a positive impact on learning and metacognition. Consequently, ICTs have the following impacts on learners:

• Motivate to learn: the aspects related to the motivation to learn based on ICTs have been the subject of a set of research papers. [8] Emphasize the link between ICT and motivation by recalling that a high level of motivation generally facilitates learning, it is one of the most important factors in learning environments where learners participate actively. In addition, ICTs promote responsibility and active engagement of student's towards learning and achievement [9] [10]. In this perspective, [11] built a model of motivation based on the social cognitive approach to explain the motivational dynamics of the learner in a learning situation.

• Co-construct knowledge: Researchers in social constructivism agree on the fact that the different uses of ICTs promote social interactions and learning. Indeed, [12] Talks about both the ability to develop social interactions and creating a "remote presence" in order to promote learning. Moreover, through ICTs, students are encouraged to work in teams, to learn through social interaction and to work on more or less long-term projects [13].

• Improve cognitive abilities: The judicious use of ICTs promotes reflection [14], and positively influences the way of processing information by learners. Indeed, [15] argues that ICTs make learning more meaningful, increase the ability to solve problems and to use metacognitive strategies. Moreover, [16] confirms that ICTs provide innovative means not only for the dissemination of knowledge but also for the exploration of learning strategies that promote the construction of skills.

• Learning independently: A study conducted by [17] demonstrates that ICTs support elf-determination, the exploration of identity, as well as collaboration and sharing. Moreover,[18] states that the most significant change in the technological educational environment refers to the learners' autonomy through the wide range of free choice available.

3. Methodology of the Study and Characteristics of the Servey

This study employs both quantitative and qualitative research methodologies to highlight the information communication technologies of 150 international students in learning processes at Northeast Normal University - Changchun, People's Republic of China.

The findings of this study are meant to improve the importance of ICT in learning processes at Chinese university. For this study, a questionnaire was first distributed among the 150 international students and thereafter interviews were conducted with twelve students, in order to identify students' learning environment requirements and how ICT can contribute to that environment for the effective learning.

To verify the reliability of the questionnaire, interviews were conducted with twelve students who had already completed the questionnaire.

Today's universities are on the forefront of technological advancement, and greater access to technology can result in a more valuable college experience. Whether a university is creating the next wave of technology in its laboratories and research centers or using it every day in its classrooms, university campuses are proving themselves to be some of the most technologically advanced places in the world.

4. Results

4.1 General Information of Respondents

The questionnaire completed by the 150 internationalstudents (69 males and 81 females) provided the following results:

第2题： Gender : [单选题]

选项	小计	比例
Male	69	46%
Female	81	54%
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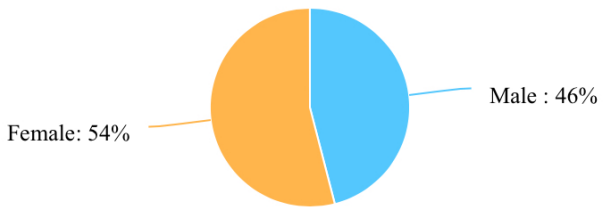

Fig 1. General Information of Respondent.

Fig1 show that from 150 international students 81 are female (54% of the student) and 61 male (46% of the student) who have

complete the questionnaire. And all this international student come from different countries around the world over 90 countries from Europe, Africa, Asia, Australia and others.

选项	小计	比例
Under 20	40	26.67%
20 - 30	94	62.67%
30 - 40	15	10%
40 - 50	1	0.67%
+50	0	0%
本题有效填写人次	150	

Fig 2. Age of Population.

In the fig 2 can show for as the age of our population in Northeast Normal University, studying their major in different field and different grade from undergraduate student to Ph.D student.
40 International students are under 20 years old, and 94 student from 20 to 30 years old and 15 student who have more than 30 years old and less than 40 years old and just one student who have more than 40 years old.

4.2 The Importance of ICT for Student in Learning Processes.

选项	小计	比例
Extremely agree	15	10%
Agree	72	48%
Nearly	46	30.67%
Not agree	16	10.67%
Extremely not agree	1	0.67%
本题有效填写人次	150	

Fig 3. The Importance of the Use of ICT in Learning Processes

From Fig. 3 it is evident that international students are not completely agree that ICT is important in there learning Processes becauses 17 student declare that ICT not Important and one of 17 student extremely agree that ICT don't have any importance in the classroom. And for the others student are agree or extremely agree that ICT have big importance in their academic studies.

4.3 Type of Tools Used by International Students.

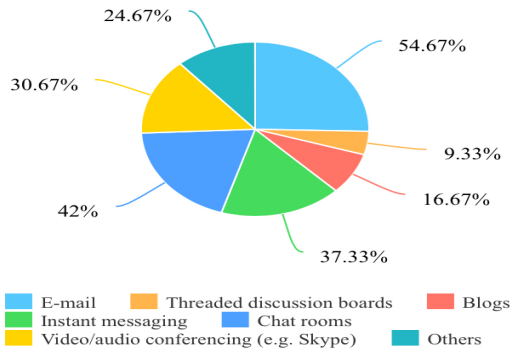

Fig.4 Type of ICT Used by International Student.

Figure 4 illustrates international students' use of different technology based on their knowledge of that specific technology. 54. 67% of the students make use of e-mails, 16.67% use blogs and more than 37% of the students use instant messaging for learning. 42% of the international students use chat rooms for learning and 30.67% use video/audio conferencing such as Skype. 9.33% of the international students use threaded discussion boards and 24.64% use other media such as tablets.

4.4 ICT are Helpful in Learning Processes

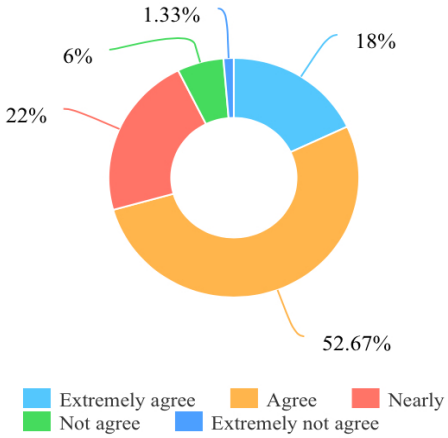

Fig. 5 ICT Regarding Learning Process

In the fig 5 can show for as that 52.67% of international student agree that ICT are helpful in teaching learning process and 18% of student are extremely agree and means that ICT have a big importance in daily life of student at Northeast Normal University Changchun, china.
6% of international student don't have an idea about the role of ICT and they thing that ICT are not helpful in their studies and 1.33% are extremely not agree.

5. Discussion

ICT have influenced and modified economic, politic, social and cultural structures. In today's digital and technical environment, employers are looking for personnel that can contribute to the organization not only with the use of technical skills but can also express their expertise with the use of positive emotional intelligence and communication effectiveness.
Information and Communication Technology can contribute to universal access to education, equity in education, the delivery of quality learning and teaching, teachers' professional development and more efficient education management, governance and administration. UNESCO takes a holistic and comprehensive approach to promoting ICT in education.
Access, inclusion and quality are among the main challenges they can address. The organization's Intersectral Platform for ICT in education focuses on these issues through the joint work of three of its sectors: Communication & Information, Education and Science[19].
Despite the power of computers to enhance and reform teaching and learning practices, improper implementation is a widespread issue beyond the reach of increased funding and technological advances with little evidence that teachers and tutors are properly integrating
ICT into everyday learning. Intrinsic barriers such as a belief in more traditional teaching practices and individual attitudes towards computers in education as well as the teachers own comfort with computers and their ability to use them all as result in varying effectiveness in the integration of ICT in the classroom[20].
Regading interviews with international student, we can understand that Information communication

technology have a big importance in the daily life at university and especially that student come from around the world and they need to communication with their parents, also to success in their studies, they need to be connected to internet with world, use different technologies to find information that they need in their studies but the problem in china that they need to use Chinese website or they should buy some application called VPN(virtual private Network) this program or application can change the address IP of your mobile
phone or your laptop and can help you to connect in all website that Chinese government prohibit to use in china.

6. Conclusion

The overwhelming presence of technologies in our lives has revolutionized the way young people learn and understand and has had a considerable impact on education. Therefore, it can be reasonably established that the teaching and learning processes can be greatly enhanced through the incorporation of ICT. It is worth emphasizing that ICT may cause radical change, not only in the ways in which learning takes place but also in the manner of thought and of knowledge. ICT enriches existing educational models and provides new learning models. These models share features of a technology-based training and suggest new learning methods in which the learner plays an active role and also emphasizes self-directed, independent, flexible and interactive learning.
All in all, ICT is used to prepare students for future jobs, improve student achievement, promote active learning strategies, individualize student learning experience, encourage cooperative and project-based learning, develop student independence, and make the learning process more interesting.

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