

دراسة فاعلية استخدام الدورات الهائلة المفتوحة عبر الانترنت (MOOCs) في تحسين الأداء

المهني لمدرسي اللغة الإنكليزية لغة أجنبية اثناء الخدمة

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Investigating the Effect of Using Massive Open Online Courses (MOOCs) in Improving the Professional Performance of Iraqi EFL In-service Teachers

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Abstract

Massive Open Online Courses are considered as one of the most effective ways in learning and teaching around the world in all the fields, especially in education. Teachers must continually update their experience of engaging with the educational programs, pedagogy, and style on teaching methods and teaching strategies; thus, they must be exposed to continuous and sufficient in-service training through MOOCs. The researcher has adopted the descriptive mixed method by using a questionnaire and an interview. The results show that the Iraqi EFL in-service teachers are highly satisfied with the questionnaire standards and items as well as the interview questions.

Keywords: MOOCs, Professional Performance, Iraqi EFL in-service teachers, online courses.

المستخلص

تعتبر الدورات الهائلة المفتوحة عبر الإنترنت من أكثر الطرق فعالية في التعلم والتعليم حول العالم في جميع المجالات، وخاصة في مجال التعليم. إذ يجب على المعلمين تحديث خبرتهم باستمرار في التعامل مع البرامج التربوية وطرق وأساليب التدريس وكذلك استراتيجيات التدريس؛ وبالتالي يجب أن يخضعوا للتدريب المستمر والكافي أثناء الخدمة من خلال هذه الدورات. اعتمد الباحث المنهج الوصفي المختلط باستخدام الاستبانة والمقابلة، وتظهر النتائج أن مدرسي اللغة الإنكليزية والمستمرين بالخدمة راضون بشكل كبير عن معايير الاستبانة وفقراتها بالإضافة إلى أسئلة المقابلة.

الكلمات المفتاحية: الدورات الهائلة المفتوحة عبر الانترنت، الأداء المهني، مدرسي اللغة الإنكليزية المستمرين بالخدمة، الدورات الالكترونية.

1. Introduction

In any educational system, the teachers are considered as a cornerstone of that system since they control the process of teaching and lead it in a professional way to achieve the goals of learning. Students are not just boys or girls who sit at their desks to spend time, but rather, they are active generators of knowledge. Information technology can be exploited in such environments by using massive revolutions of knowledge that demand for best training and preparing of teachers in order to reach the best levels of their performance (Lanier, 1997: 1).

The combination of open and distance learning (ODL) and teacher education is an important issue in the modern educational field. They have the ability to reinforce effective, dynamic and fair sources of education, and maximize the chances for many learners to access such sources. This is done through online learning (Danaher & Umar, 2010: 6).

The rapid development of the technology in the last years reflected its effects on many aspects and fields of life. Among these, the learning by the emergence of e-learning and especially what is called (MOOCs). Simply, MOOC can be defined as online courses and lectures that can be accessed freely by unlimited number of users around the world anytime and anywhere. The content which is presented in such courses is unlimited and anyone can enroll in these courses for different types of sciences and knowledge (Head, 2015: 14).

1.1 Statement of the Problem and its Significance

Teachers need to develop their knowledge, information and teaching skills by dealing with the curriculum, psychology, and pedagogy of the learners and follow new techniques and styles on teaching and learning; so, they need continuous and appropriate in-service training (Tuncel & Çobanoğlu, 2018: 159). Moreover, it is difficult for many teachers to attend the training courses which are conducted repeatedly within each academic year. Some teachers find it difficult to spend two weeks or more in attending such courses, because they may miss some lessons with their students while attending those training courses.

With the increasing number of teachers, it becomes more difficult to meet all training needs for them through traditional training methods in training centers which are not appropriate for the teachers' numbers (Al-Raghbi, 2019: 98). In addition to that, the spread of Coronavirus Pandemic (COVID-19) made it impossible for teachers to arrive the training centers. Therefore, this problem can be solved by offering free online courses for teacher to join distantly via online platforms without affecting their daily activities. One of the Iraqi Ministry of Education's visions is the preparing of the modern teacher who is able to use technology and online platforms to keep up with the latest methods of teaching. This is done through qualifying and training the teachers as well as the educational leaderships via Massive Open Online Courses which is represented by Iraq educational Platform and other platforms such as Google Classroom, Zoom etc.

Accordingly, the problem of the current study can be stated in the following question: "To what extent does the Massive Open Online Courses (MOOCs) have an effect on the Professional Performance of Iraqi EFL In-service Teachers?"

1.2 Aims

This study aims to find the effectiveness of using the Massive Open Online Courses in developing the professional performance and the skills of teachers who attend these courses, and tries to show the extent to which the teachers can benefit from these courses and how they apply them in their practical teaching. In addition to that, the study answers the questions raised by the researcher, such as, "Are these courses useful for

teachers in improving their abilities and skills in teaching?" Or "Are they satisfied with the contents of these courses?"

1.3 Procedures

The following procedures are to be followed:

- 1- First of all, descriptive approach with mixed (qualitative and quantitative) method will be used.
- 2- Personal interview with some senior supervisors and teachers of English language from intermediate and preparatory schools to document the problem of the study.
- 3- Setting up a questionnaire of many items to be answered by the intended English language in-service teachers whether online or in-hand.
- 4- Analyzing the data statistically to get results.
- 5- Finally, drawing conclusions, and recommendations.

2. Literature Review and Previous Studies

2.1 Massive Open Online Courses (MOOCs)

2.1.1 Definitions of MOOCs

Mackness et al. (2013: 142) define "Massive Open Online Course" as a dynamic phenomenon that helps creative developers and designers to take a variety of questions and decisions. The central point to be addressed here about the MOOC is considering it as fundamental pedagogy, that will ultimately impact the teaching and learning processes. Mota & Scott (2014: 65) consider MOOC as a new phenomenon in the field of online distant education and associated closely with the independent learning ideas. It is an important experiment of teaching especially in the higher education, and it may be considered as an essential point for online learning and teaching approaches in the future.

Porter (2015: 3) says that the acronym (MOOC), which refers to Massive Open Online Course, needs to be identified separately to know the meaning of each word clearly; **Massive** refers to hundreds or thousands of participants who enroll in the course without limits in their numbers; **Open** indicates that the course access is both free and unrestricted, and it does not need any entry requirements so it is open to all learners with their different educational background; **Online** means that the whole course is delivered online via internet with no face-to-face interaction, and this is done through the using of online technologies and different platforms and **Course** refers to any educational program which is run through a specific period of time, based upon specific subject, and the student is provided with the instructions through that period.

2.1.2 Emergence of MOOCs

It may be difficult to decide when anything has been formed or arisen. This usually occurs when the object's identity itself or its system is hard to describe. This could be the case for MOOCs, so when did MOOCs start exactly?. To make a better vision about the MOOCs and how they started, the historical development and origins of this educational invention must be examined (Johnson et al, 2014: 7). The term **MOOC** was first invented in 2008 by David Cormier to refer to an online course established by **George Siemens and Stephen Downes** (Hollands & Tirthali, 2014: 25).

They offered a course at the Manitoba University on the subject of connectivist learning theory, which is called "Connectivism and Connectivist Knowledge". Twenty-four students participated in this course with credit through the university while about 2300 learners were noncredit. The course was a great success over all scales of success, and it was considered as a signpost in the field of online education. In 2010, **The Chronicle of Higher Education Journal** noticed the significance of this course pointing

out that this new generation of courses deserves a new name i.e., “Massive Open Online Courses (MOOCs)” (Rhoads, 2015: 24).

The modern MOOC developed rapidly in the end of 2011 when Stanford University established three free online courses with an initial participation of more than 160000 users from different countries around the world. These courses concentrated on the possibilities exploiting of online audiences and paid little attention to the interaction between the learners. In 2012, the online learning witnessed the founding of the greatest platform of MOOCs by Stanford University to be the widest platform around the world until the current time, i.e., Coursera (Hollands & Tirthali, 2014: 34).

2.1.3 Types of MOOCs

2.1.3.1 cMOOCs

In 2008, Siemens and Downes created cMOOCs, the first form that concentrates on the development of knowledge and has a different theory of education from xMOOCs (Adham & Lundqvist, 2015: 125). In this type of MOOCs, ‘c’ refers to “connectivity” so, they are referred to as connectivist MOOCs and implement connectivist learning principles like the focus on related and interactive learning (Zheng et al, 2015: 1883 and Saha & Halder, 2019: 533). According to the study of Ulrich & Nedelcu (2015: 1542), “cMOOCs focus on knowledge creation and generation”.

In language education, cMOOCs are completely consistent with the communicative approach theory. This style of MOOC is distinguished by repeated work in couples or communities, tasks, roleplaying, and demonstrates the willingness of the individual to use and adjust the language to the original communicative situations (Panagiotidis, 2019: 288).

2.1.3.2 xMOOCs

In 2011, American universities introduced xMOOCs. Since then, MOOCs, particularly xMOOCs, have boomed, primarily due to the fact that top American universities such as Stanford University and Massachusetts Institute of Technology were the first to establish such MOOCs (Aoki, 2015: 22). In this form of MOOCs, the letter ‘x’ is used to refer to “the something else’s eXtension”. For more individualistic instruction, xMOOCs follow a more cognitive-behaviorist approach. They have specific underlying learning objectives that provide for a limited duration of organized development of knowledge and skills (Liyaganawardena, 2015: 36).

The xMOOCs are the latest kind of MOOCs that turn a conventional university model into an online area of study. Through the use of video presentations, audio files, PowerPoint slides, brief quizzes and training with an emphasis on knowledge sharing, the xMOOC model illustrates conventional learning approaches (Adham & Lundqvist, 2015: 126).

2.1.4 Characteristics of MOOCs

Czerniewicz et al (2015: 2) identify six characteristics for the MOOCs, and explain them as follows:

1. **Educator participation:** while educators are engaged in the creation and development of the MOOC, their participation is reduced in the course by lack of formal appraisal or academic credit.
2. **Engagement:** a large number of students can be contacted via discussion boards.
3. **Re-Watchable:** students can access and listen repeatedly to recordings of lectures.
4. **Scale:** MOOCs are meant for a broad number of students.
5. **Evaluable:** Most in-video MOOCs contain questions of concept-check, instant reviews and peer-review.

6. **Personalized learning experiences:** Participators will train at their own speed and choose the content in which they are associated.

2.1.5 Key Activities of MOOCs

According to the study of Mackness et al. (2013: 141), four main activities of MOOCs are described. These activities include:

1. **Aggregation** refers to filtering, sorting, and gathering individually relevant information.
2. **Remixing** includes interpreting and bringing personal viewpoints and observations to the aggregated information.
3. **Repurposing** means refashioning the data to fit personal purposes.
4. **Feeding forward** refers to sharing newly-formed knowledge with other participants and gaining from them.

2.2 Teacher Professional Development (TPD) & Teacher Professional Performance (TPP)

2.2.1 The Concept of TPD and TPP

Professional development of teachers is the process of continually improving professional achievement, expanding learning awareness, improving practical abilities, and improving teaching skills of teachers. The traditional mode of TPD is being developed with the emergence of new types of TPD and the improvement of learning styles in addition to the advancement of communication technology (Ji & Cao, 2016: 2061).

Professional performance of EFL teachers is an important element of the educational system. TPP can be described as what EFL teachers do inside the classrooms, including utilizing efficient communication skills, interacting with reflection, incorporating English language skills and using intercultural skills. Therefore, because of the teacher's active role in the growth and enhancement of the educational system, TPP evaluation gained a lot of coverage in the world (Boset et al., 2017: 67).

2.2.2 The Factors of Teachers' Professional Performance

Boset et al. (2017: 70) explain the three main factors that affect the TPP. These factors are: teachers' competency; teachers' work motivation, and teachers' job satisfaction. Teacher's competency is considered as one of the most effective factors of the EFL TPP. Because of its connection with teacher performance, the competency of EFL teachers occupies a significant position in contemporary educational literature.

The second factor that may affect the EFL teachers' PP is their work motivation. Essentially, what motivates the EFL teachers varies from one another, from time to time according to certain circumstances, cultural context, human nature and the effectiveness of each motivating technique. Understanding Motivating Factors and their Impact on the EFL Teacher's PP is very important in achieving important EFL teacher's performances (ibid).

Finally, the teachers' job satisfaction is regarded as a factor of notable effect on the EFL TPP. Work satisfaction is important in every sector, particularly in education, since it is all about humans. It is a matter that the teachers are the creators of communities and nations, so they should be pleased to perform their job well (Afshar & Doosti, 2016: 100).

2.2.3 Challenges of TPD

Misra (2018: 68) in his study states that the TPD process is not an easy job even in the countries of developed educational systems. Professional development process may face a number of challenges that affect the progress of development. These challenges can be listed as follows:

1. The time of the teachers themselves since they cannot attend the training courses or workshops during their school-day without affecting their lessons or timetable.
2. Planning for training and looking for the best procedures to achieve the best outcomes in teachers' performance.
3. The administration of training courses requires a well-planned steps and procedures.
4. Materials, services and facilities.
5. Spatial challenges for the teachers to access the training centers or workshops for PD.

2.2.4 The Use of MOOCs in EFL TPD

MOOC enables teachers to attend lessons anytime and anywhere, which removes the restriction of synchronic learning. The flexibility and openness design of MOOCs has altered the conventional perceptions of classroom teaching. With the application of MOOC, any educational aspect will contribute to its development in quality. Additionally, MOOC supplies teachers with a new platform to reflect their knowledge and experience in the educational field. MOOC can improve teachers' awareness and abilities, and fulfil their different needs, so MOOC has a bright future with its implementation to TPD, and can support the change on the education of teacher to some degree. TPD is directed by national plans and policies for teacher development. Therefore, policies promoting MOOC applications are essential for the success of MOOC applications to TPD (Ji & Cao, 2016: 2063).

In online courses and programs, teachers can make better achievements to develop their PP rather than those exposed to traditional training courses, and the learning in virtual environments helps teachers to reflect it on their PD (Anderson & Simpson, 2004: 4). Misra (2018: 69) states that the other significant point of MOOC application is that a variety of teachers from multiple locations can be accommodated by MOOCs. Thus, it may be argued that free and affordable MOOCs with Internet connectivity provide multiple opportunities for continuous enhancement of teacher creativity and development.

2.3 Previous Studies

2.3.1 Koutsodimou & Jimoyiannis (2015)

This study entitled "*MOOCs For Teacher Professional Development: Investigating Views and Perceptions of The Participants*" and aimed to observe and investigate Greek teachers' perceptions and their perspectives about the use of MOOCs in their professional development. The total size of the study sample is (328) participants of teachers, distributed to (73) males and (255) females.

The descriptive analytical method was adopted in this study, and the researcher conducted an online questionnaire of 54 items to investigate the teachers' perceptions. The completion percentage of the training courses was 82% of the total teachers. The survey was conducted only one week after the MOOC's course was finished to collect information regarding the teachers' views and attitudes. They were required to reply from their own point of view to the online survey.

Most of teachers were positive about the construction and the items of the course they have attended. The study also confirmed a high rate of interaction in completing the training courses and a positive perception towards using MOOCs. The findings offered supporting proof that the structure for the MOOC's design was successful in fostering the encouragement and willingness of teachers to finish the course through positive participation and peer involvement.

2.3.2 Al-Raghbi (2019)

The aim of this research which is entitled “*Use of Massive Open Online Courses (MOOCs) In the professional development of science teachers Jeddah*” is to recognize the usefulness of MOOCs as an online training tool for the PD of Jeddah's teachers of science. The researcher adopted the semi-experimental method in a one group design. She applied the experiment for the basic sample of the current study, which consists of (30) female teachers of science in Jeddah Governorate. Those teachers were chosen randomly and exposed to an active course of learning due to a direct training.

Two methods of collecting data were used by the researcher, i.e., a test of (20) items (pre-test and post-test) in addition to a satisfaction questionnaire of (48) items. The results showed that the using of MOOCs achieved a level of efficiency in the PD of teachers since the pre-test average was (5.17) while post-test was (19.63). The study revealed that there is a satisfaction of (very good degree) from the teachers toward using MOOCs for their PD. The researcher also noted that the MOOCs' environment has a positive and high impact upon the PD of Saudi teachers of science.

2.3.3 Discussion of the Previous Studies

The current study has benefited from these previous and related studies in the theoretical framework of the study. Concerning the topic, the current study agrees with all the previous studies in dealing with the use and impact of MOOCs as a type of online and distance learning on different sides. In relation to the purpose of the study, the current study agrees with the studies of **Koutsodimou & Jimoyiannis (2015)** and **Al-Raghbi, (2019)** for they both aim to improve the professional performance and professional development of teachers by using of MOOCs.

Concerning the method of the study, this study agrees with the **Koutsodimou & Jimoyiannis (2015)** for it follows the descriptive method, while **Al-Raghbi (2019)** is a quasi-experimental study. For the data collecting method, the current study agrees with the previous studies because both of them use a survey in data collecting.

3. Methodology

3.1 Design of the Study

Based on the nature of the study which aims at investigating the effect of using MOOCs on the professional performance of the teachers from their perceptions, the researcher adopted the descriptive research in the current study to achieve accurate results.

Descriptive research is one of educational and non-experimental research designs that consists of quantitative data in addition to the possibility of using qualitative data, and a mix of both quantitative and qualitative data can be used at the same time. Questions like *what, how, when and where* can be answered through descriptive researches. (Best & Khan, 2006: 24). The aim of the descriptive studies is to identify and interpret the current status of persons, settings, situations or events. In descriptive analysis, the researcher is actually researching the phenomena of concern

as it actually exists; no effort is made to influence individuals, situations or incidents (Mertler, 2015: 111).

3.2 Method of the Study

There are three key methodologies that tend to be addressed more frequently in educational researches, i.e., quantitative, qualitative, and mixed methods (Harwell, 2011: 148). In the current study, the researcher adopts the mixed method analysis because it is important to discover perceptions and required information in addition to get the best understanding of the research's problem. In other words, both numeric and text data are used, i.e., quantitative data are gathered through the statistical analysis of questionnaire and the qualitative data are gathered through the analysis of in-depth interviews with supervisors and EFL teachers.

Harwell (2011: 151) defines the mixed method research as "the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study". It is an attempt to justify the usage of various methods in addressing study questions, rather than limiting or restricting researchers' options.

3.3 Population and Sample

Sampling is a procedure of selecting a sample from a population and the population is a collection of all components from which the sample is derived. So, the sample is a precise representation of the population and it is a collection of components taken from a wider population due to such rules. (Johnson & Christensen, 2016: 546).

The sample of this study consists of **(250)** teachers to complete the questionnaire. The sample has been accessed through distributing the questionnaire in two forms, i.e., through online websites and in-hand method after taking permissions. A sample of **80** teachers has been collected through the online questionnaire and the rest sample of **170** teachers has been achieved through visiting of **31** random schools by the researcher.

3.4 Tools of Data Collection

3.4.1 Questionnaire

According to Johnson & Christensen (2016: 415), a questionnaire is an independent data collection tool that is filled out as part of the sample analysis by research participants. Researchers utilize questionnaires to collect information about the research participants' opinions, desires, attitudes, perceptions, interests, experiences, personalities and behavioral patterns.

In the current study, the researcher sets up the questionnaire of satisfaction about MOOCs and divides it into three main parts. The first part in questionnaire includes personal information about the respondents.

The second part of questionnaire is divided into nine main standards related to the nature of MOOCs, and there are five items in each standard. The total items in the second part are forty-five items. In the third part, there is an open-ended question to be answered by the EFL teachers whether they have additional positive or negative points about MOOCs.

3.4.2 Interview

The interview is a form of data collecting in which the researcher (interviewer) asks the research participant (interviewee) some questions related to the study subject. This means that the interviewer gathers the interviewee's data, i.e., it is a personal meeting (Johnson & Christensen, 2016: 546).

In the current study, the researcher conducts an interview with **ten respondents**. Three of interviewees are senior supervisors of English Language and seven EFL teachers from General Directorate of Education in Babylon.

3.5 Validity of Questionnaire

According to Bolarinwa (2015: 195), validity can be defined as "the degree to which a measurement measures what it purports to measure". It refers to the exactness of inferences taken on the basis of the result calculation. In addition to that, it refers to the meaningfulness of the research instruments so valid measurements allow researchers to make correct score-based inferences (Suter, 2012: 357).

In this study, the face and content validity of the questionnaire have been achieved by showing the questionnaire items to (15) of experts of English Language with different specializations from different Iraqi universities. There was no objection to the items of the questionnaire by the jury of experts, and they unanimously agreed that the questionnaire is comprehensive and accurate in all its aspects. Table (1) shows the results of applying Chi Square test (χ^2) to measure the face validity of the questionnaire's items with their significance

Table (1) Chi-square Test for Face Validity

Std.	Items	Experts No.	Agree	Disagree	Degree of freedom	χ^2		Sig.
						Cal.	Tab.	
1	1-5	15	15	0	1	15	3.84	0.05
2	6-10	15	15	0	1	15	3.84	0.05
3	11-15	15	15	0	1	15	3.84	0.05
4	16-20	15	15	0	1	15	3.84	0.05
5	21-25	15	15	0	1	15	3.84	0.05
6	26-30	15	15	0	1	15	3.84	0.05
7	31-35	15	15	0	1	15	3.84	0.05
8	36-40	15	15	0	1	15	3.84	0.05
9	41-45	15	15	0	1	15	3.84	0.05

From the above table the researcher finds that all the calculated values of the Chi-Square test, which are 15, are greater than the tabulated value (3.84) at the level of statistical significance of (0.05) and the degree of freedom (1).

3.6 Reliability of Questionnaire

According to Suter (2012: 356) reliability can be defined as "the degree to which the research tool gives the same or similar results if it is repeated in other situations and other time".

In the current study, the reliability has been measured by using Cronbach's alpha coefficient. The reliability value of the whole questionnaire's items with the total

size sample of 250 participants is **(0.916)**. This value indicates that the questionnaire's items are highly reliable. The standards' reliability has also been measured separately by using Cronbach's alpha coefficient, and Table (2) shows the results of reliability values for each standard.

Table (2) Reliability Values for Each Standard.

Standard No.	Standard name	Alpha values
1	Ease of use	0.777
2	Contents' view	0.732
3	Aims of the online courses	0.732
4	Training and technical support	0.720
5	Developing professional performance through MOOCs	0.732
6	Interaction, discussion and feedback	0.760
7	Teachers' trends towards online learning	0.758
8	Educational activities and assessments	0.749
9	Difficulties of joining MOOCs by Iraqi EFL teachers	0.728

3.7 Characteristics of Standards

In order to extract the standards' characteristics, different statistical features have been calculated by the researcher to know the nature of data distribution numerically as well as graphically by using histogram such as mean, median, mode, std. deviation, variance, skewness, std. error of skewness, kurtosis, std. error of kurtosis, minimum, and maximum. In addition to that, these features will be dependable in applying the parametric test (such as t-test). Table (3) shows the values of standards' features.

Table (3) Features of Questionnaire's Standards

Statistical features	Standards of questionnaire									
	1st	2 nd	3 rd	4th	5th	6th	7th	8th	9th	
N	Valid	250	250	250	250	250	250	250	250	250
	Missing	0	0	0	0	0	0	0	0	0
Mean	18.62	19.22	18.16	18.70	18.96	18.92	19.77	19.06	20.20	
Median	19.00	19.00	19.00	19.00	19.00	19.00	20.00	19.00	21.00	
Mode	19	19	20	21	18	19	20	20	20	
Std. deviation	3.115	2.736	3.103	3.082	2.708	3.131	2.524	2.958	2.767	
Variance	9.705	7.484	9.626	9.496	7.335	9.805	6.372	8.747	7.657	
Skewness	-.583-	-.408-	-.588-	-.628-	-.398-	-.742-	-.509-	-.231-	-.671-	
Std. error of skewness	.154	.154	.154	.154	.154	.154	.154	.154	.154	
Kurtosis	.115	-.040-	.379	.520	.765	.647	1.050	-.600-	.001	
Std. error of kurtosis	.307	.307	.307	.307	.307	.307	.307	.307	.307	
Minimum	9	11	8	8	10	9	10	11	12	
Maximum	25	25	25	25	25	25	25	25	25	

The following figures, i.e., from (1) up-to (9) show the distribution of the sample's individuals and statistical features for all standards by using of histogram

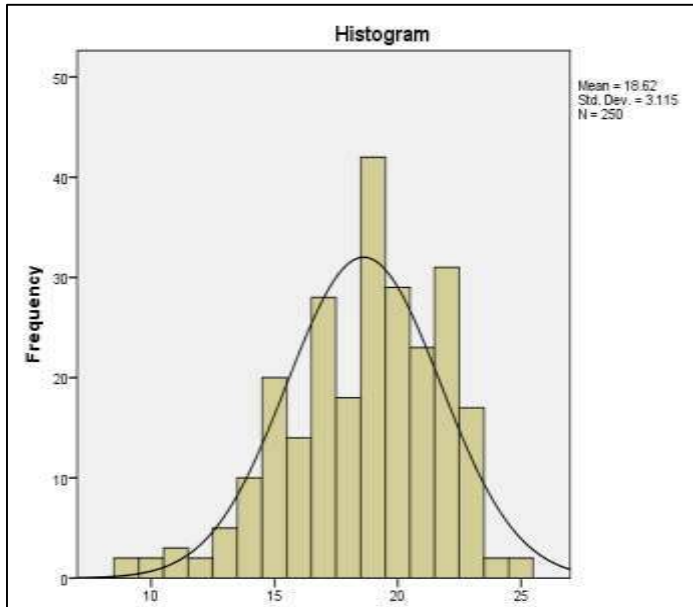


Figure (1) Distribution of Sample's Individuals in the First Standard

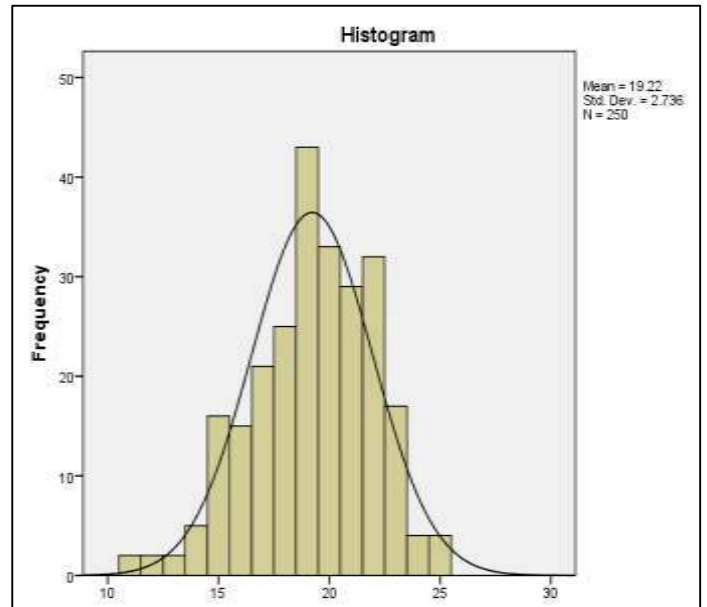


Figure (2) Distribution of Sample's Individuals in the Second Standard

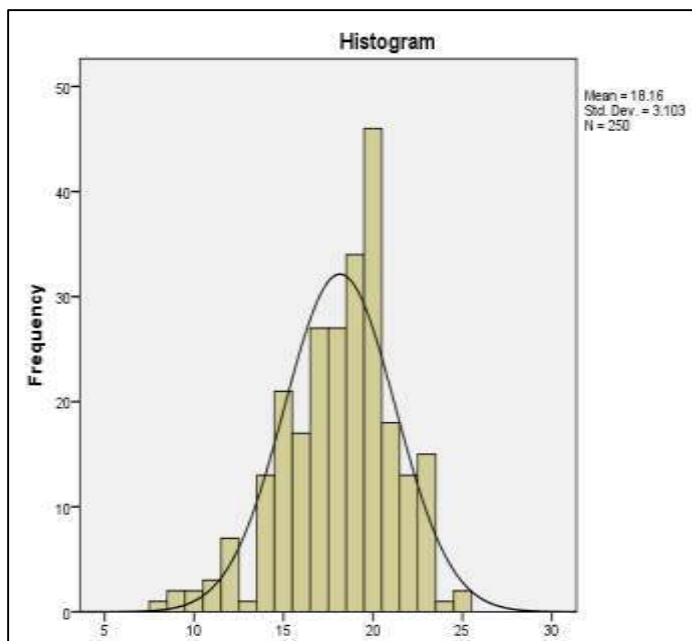


Figure (3) Distribution of Sample's Individuals in the Third Standard

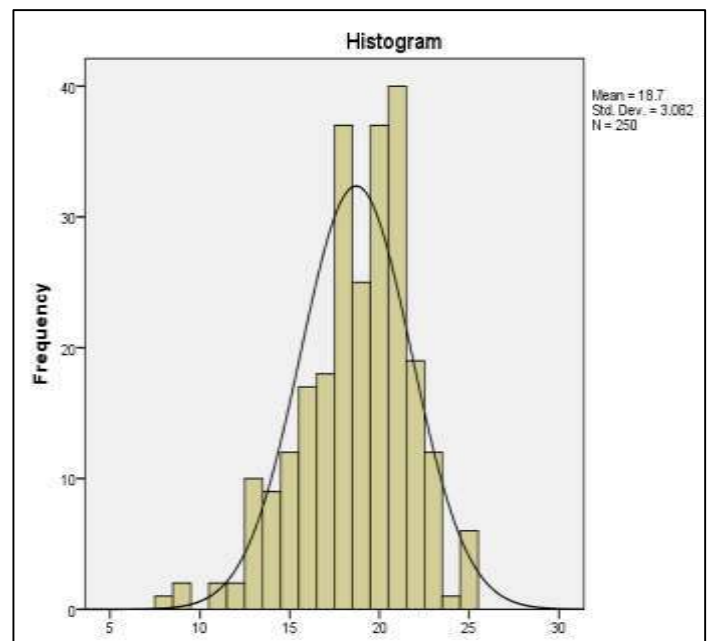


Figure (4) Distribution of Sample's Individuals in the Fourth Standard

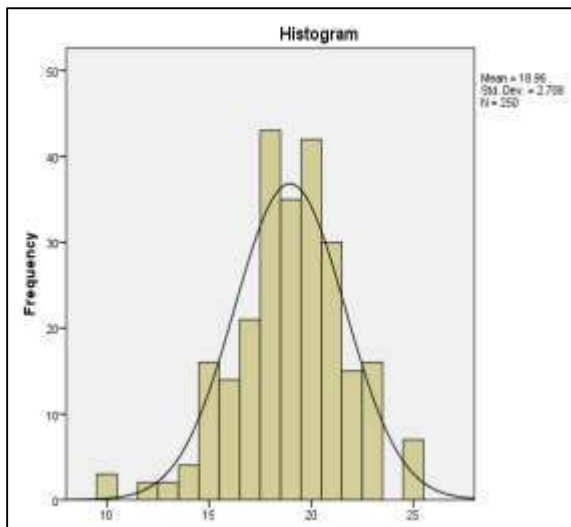


Figure (5) Distribution of Sample's Individuals in the Fifth Standard

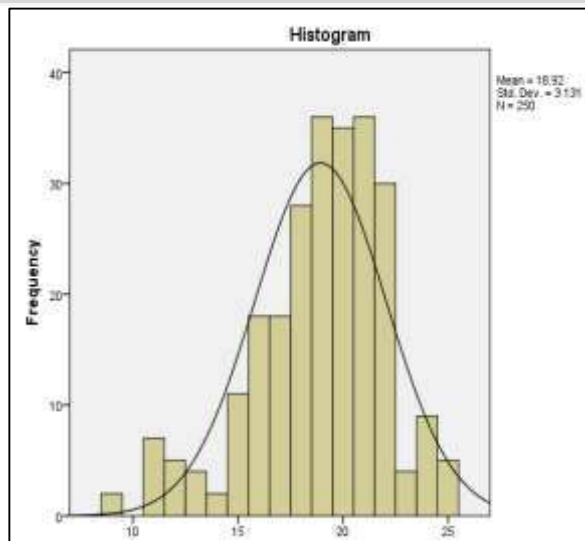


Figure (6) Distribution of Sample's Individuals in the Sixth Standard

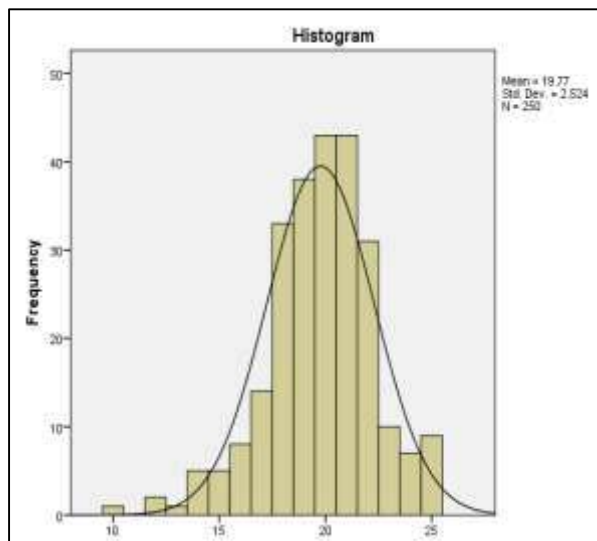


Figure (7) Distribution of Sample's Individuals in the Seventh Standard

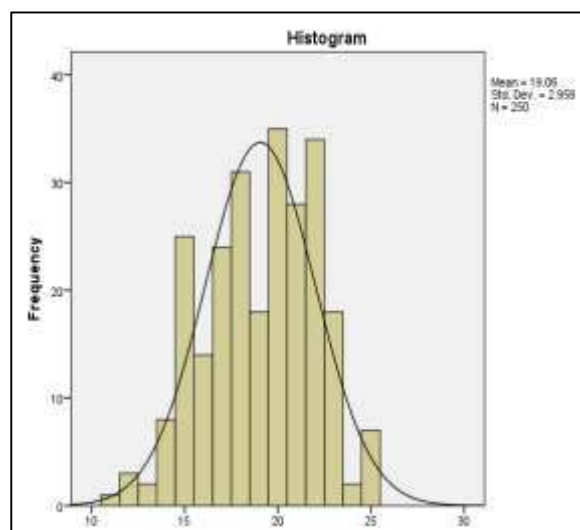


Figure (8) Distribution of Sample's Individuals in the Eighth Standard

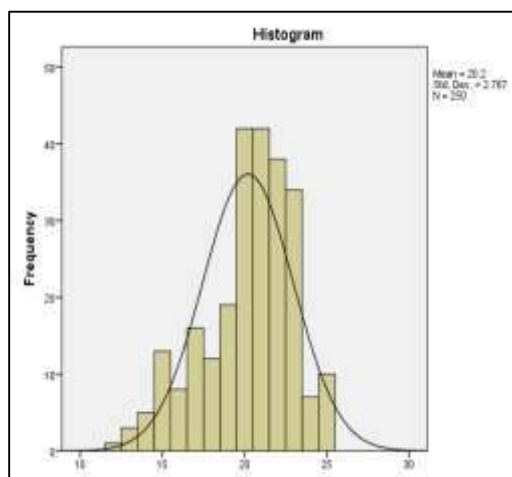


Figure (9) Distribution of Sample's Individuals in the Ninth Standard

From the previous figures, it has been noticed that the distribution of individuals in the study sample is normal.

4. Results and Discussion

4.1 Results of questionnaire

In order to achieve the aims of research which are related to the second part of questionnaire, the standards of this part have been analyzed statistically. The main aim here is to identify the level of significance for the questionnaire's standards for Iraqi EFL in-service (males and females) teachers in Babylon Governorate. To achieve this aim, the researcher has used T-test for one sample and obtained the results which are shown in Table (4). The following formula has been used to calculate the hypothetical mean or theoretical mean (m):

$$\frac{\text{No. of items in each standard} \times \text{Sum of total alternatives}}{\text{No. of alternatives}}$$

$$\frac{5 \times 15}{5} = \frac{75}{5} = 15$$

Table (4) T-test Application on the Questionnaire's Standards.

No.	Standard name	N	Mean	m	Std. deviation	T-test value	Tab.	Df.	Sig.
1	Ease of use	250	18.62	15	3.115	18.393	1.96	249	0.05
2	Contents' view	250	19.22	15	2.736	24.414	1.96	249	0.05
3	Aims of the online courses	250	18.16	15	3.103	16.083	1.96	249	0.05
4	Training and technical support	250	18.70	15	3.082	18.985	1.96	249	0.05
5	Developing PP through MOOCs	250	18.96	15	2.708	23.095	1.96	249	0.05
6	Interaction, discussion and feedback	250	18.92	15	3.131	19.814	1.96	249	0.05
7	Teachers' trends toward online learning	250	19.77	15	2.524	29.866	1.96	249	0.05
8	Educational activities and assessments	250	19.06	15	2.958	21.705	1.96	249	0.05
9	Difficulties of joining MOOCs by Iraqi EFL teachers	250	20.20	15	2.767	29.736	1.96	249	0.05

From the above table, the researcher has found that all values of the arithmetic mean, standard deviation and T-test are greater than the tabulated values at the level of statistical significance (0.05) and the degree of freedom of (249). Thus, there is a level of significance in all the nine standards of the questionnaire.

4.2 Results of Interview

The results of the interview show that most of interviewees' answers are positive and reflect their satisfaction towards using of the online courses in developing their professional performance. This means that they have showed their agreement on most of the interview questions. Moreover, the results show that the use of MOOCs in education is a successful way for enabling teachers to communicate with each other easily, sharing their knowledge and ideas, looking for additional information by using the internet,

increasing their creativity level in using computer programs such as Microsoft Office for making slides and educational lessons for their students, increasing their self-assurance to learn, and finally making them more cooperative in the assigned work as a team.

5. Conclusions

Massive Open Online Courses, as a new method of learning and teaching, play an important role in improving and developing the Iraqi EFL in-service teachers' professional performance, style, character, as well as the way of thinking. They allow the teachers to be familiar with the electronic devices and technology of distance learning that make them join and participate in any online course.

MOOCs are flexible and interactive, and allow the participating teachers to control their training by sharing ideas with other English language teachers easily. It also provides them with the possibility of self-learning that allows them to repeat the learning process at any time. In addition to that, the effectiveness of online courses lies in their positive impact on English Language teachers, and this is evident through the teachers' responses to the questionnaire's items and interview questions, which indicate a high degree of satisfaction with the use of electronic courses in training.

6. Recommendations

1. Teachers are the core of the educational process, and preparing and training them must come first among the priorities and plans of the Ministry of Education.
2. Directing officials at the Ministry of Education in the republic of Iraq to create Iraqi electronic platforms depend on Massive Open Online Courses to develop the professional performance and teaching skills of teachers, in general, and EFL teachers in particular.
3. The modern methods of training that depends on online technologies such as MOOCs must be applied in training teachers via online courses.
4. Online training courses for teachers must include different downloadable elements such as videos, pictures, slides, recordings, and texts.

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