

A Collected Educational System Built on Blended Education and its Effect in Developing Art Education Teacher-Students' Teaching Skills

Firas Ali Hassan^a, Mohamed Sobeih Mahmoud^b, Attia Wazeh Abboud^c,
^{a,b,c}Mustansiriya University - Iraq - Baghdad / College of Basic Education /
Department of Art Education

The current study recognises the effect of a collected educational system which concentrates on blended education for developing Iraqi teacher-students' skills at Al-Mustansiriyah University in the College of Basic Education. The data collected was from 30 male and female teacher-students from the Art Education department and particularly the morning classes. The researchers intentionally choose this specific number of students and they choose the descriptive method in identifying the skills and the experimental method in identifying the effect of the collected educational system. Additionally, the researchers use two searching tools which are: 1. the knowledge achievement test for measuring the student's information, second; 2. a note-list of the teaching skills that guarantee the reliability and the stability of the teaching process. After collecting the data, the previously selected tools prior/ post and statistical applications have been executed. The current study shows a prominent statistical difference in the teacher-students average in the prior and post application of the achievement test and the note list in favour of the post application test. In this respect, the researchers emphasise the necessity of using the current collected system of the blended education in training the teacher-students to gain the learning skills.

Key words: *Education, Teaching, Teaching Methods, Art Education.*

Introduction

The Iraqi Basic Educational Colleges contribute to the process of preparing teacher-students to teach pupils, do their educational duties and especially the practical educational lessons in the preparatory schools. In general, the process of assisting the teacher-students to develop

educational skills is of extreme necessity in the educational system as a whole. If the previously mentioned skills are gained by the teacher-students, the teacher-student can gain a great deal of confidence, which enables them to use teaching strategies according to the requirements of the educational system. Moreover, it helps in constructing an appropriate classroom environment for achieving the targeted educational objectives (Mutar, 2010). Therefore, the researchers of this study try as much as possible within their specialisation (Art Education) to develop teacher-students' skill at Al-Mustansiriyah University/ College of Basic Education.

Statement of the Problem

The researchers noticed throughout their teaching process at the College of Basic Education/ department of Art Education that the teacher-students in the students-teaching period are not using teaching skills efficiently. They lack the capability of capturing the pupils' attention, formulating and asking questions, and using the teaching methods that are suitable for the pupils' age and ability. Also, they prefer to adopt the traditional ways of explaining and presenting the lessons. This leads to loss of the benefits of the art educational lessons and pupils' unawareness of artistic activity. This significant issue has motivated the researchers to explore ways of developing the teacher-students' teaching skills as an essential solution for the above-problems (Zytoon, 2006). Consequently, the focus of this paper revolves around the need to develop the teaching skills of the teacher-students in the College of Basic Education. The researchers are attempting to know the effect of a collected educational system built on blended education, in developing some actual teaching skills for the student-teachers of the College of Basic Education/ Al-Mustansiriyah University by answering the following questions:

1. What teaching skills must be developed in teacher-students by using blended education?
2. What is the effect of a collected educational system built on blended education, in increasing cognitive knowledge in the teacher-students?
3. What is the effect of the proposed collected educational system built on blended education in the developing the teacher-students' skills?

Significance of the Study

The significance of this study is represented by the following points:

1. The study is a new addition to the scientific research and studies related to the subject of blended education and its effect in developing the teacher-Students' teaching skills;
2. The findings of the study are of benefit for the teacher-students by enhancing their performance and developing their teaching skills and methods, in order to achieve purposeful and manageable teaching for the presented subject;

3. This study is of a benefit for the response of the educational process in the Iraqi ministries and particularly the Ministry of Education and the Ministry of Higher Education and Scientific Research (Sada et al., 2007). It supplies them with cognitive knowledge and modern technology which helps them in practicing and designing the proposed program which in return helps both teachers and learners

4. This study attempts to locate solutions for overcoming problems that are encountered when training teacher-students. The solution for these educational problems is realised by using the web for an organised education.

Objectives of the Study

The current study aims at achieving the following objectives:

1. Identifying effective teaching skills for teacher-students and developing them depending on blended education;
2. Discovering the validity of the collected educational system built on blended education in the development of the distinctive aspects of teacher-students' knowledge; and
3. Discovering the validity of the collected educational system built on blended education in the development of teacher-students skilful aspects.

Hypotheses of the Study

This study is constructed depending on the following hypotheses:

1. There are no statistical function differences at the functional level 0.05% among the teacher-students' average grades of the prior / post applications of the achievement test and teaching skills due to the usage of a collected educational system built on the blended education; and (Abdul et al., 2009).
2. There are no statistical function differences at the functional level 0.05 among the teacher-students' average grades of the prior/ post-application of the note list and teaching skills due to the usage of a collected educational system built on the blended education.

Limitations of the Study

The current study is limited to the following:

1. The second course of the academic year 2018-2019;
2. This study is limited to giving fourth stage teacher-students teaching skills for teaching art education in preparatory schools. The teaching skills are: skills for preparing a lesson plan,

skills for preparing the lesson itself, skills for presenting the lesson and skills for formulating and asking questions;

3. This study is limited to the teacher-students of the art education department/college of Education/Al-Mustansriyah University.

Key concepts of the Study

1. The collected educational system is a collection of educational lessons enabling the teacher-students to do their duties and accomplishing the educational objectives according to an organised plan which contains variant educational activities;

2. Blended education is practically defined by specialist researchers as a method that depends on reading the targeted lesson and doing the required duties with assistance from a collection of tools and techniques. The collected tools and techniques include audio-visual interaction, textual conversation and the influential usage of a smart board Using the tools leads to interactive presentations, and direct and modern educational methods by adopting interesting and suitable means for preparatory school pupils;

3. Art education is an educational syllabus aimed at developing the pupils' capacity and providing them with artistic cognitive skills as part of a purposeful and social educational process; and

4. Teaching Skills: Researchers define this concept as a collection of verbal and behavioural educational actions which are expected to be possessed by the teacher-students throughout the students' teaching at preparatory schools. Teaching skills help the teacher-student to do their teaching duties easily and professionally which would conclude in the fulfilling of the teaching objectives.

The Theoretical Background of the Study

Designing a Collected Educational System in Relation to Blended Education

Educational design focuses on tracking learners' needs and gives them priority in constructing teaching subjects. Blended education as a system allows direct interaction between teachers and learners as it combines properties of traditional classes and electronic ones. This system is characterised by its flexibility and ease in selecting good timing for the teacher and the learners. The communication between teachers and learners can be done by using the dashboard and audio-written conversation to ensure achievement of the highest level of understanding and comprehension. In this way, researchers try to create harmony between educational design and the collected educational system by using distinctive and multiple means in blended education (Al-Canani and Fras, 2012; Al-Canani et.al. 2014).

The Characteristics of Blended Education

According to electronic educational systems (2003), there are a number of characteristics of blended education as discussed below:

1. Providing means of direct interaction between the teacher and the learner;
2. The possibility of interacting between the teacher and the learner by using the dashboard;
3. Interaction between the teacher and the learner can be achieved through talking when the learners use the computer speaker;
4. Enabling the teacher to do a brief survey about the learners' comprehension and interaction with the different aspects of the current lesson;
5. Enabling the teacher and the learner to do an immediate evaluation of the learner's reaction. This evaluation is also gained by formulating a quick and immediate survey. The prior survey facilitates the teacher's mission in guessing to what extent the learners are interacting with them and with the content of the presented material;
6. The possibility of using the application share;
7. Enabling the teacher and the learner to do alive evaluation by preparing a simple and timed test. This test helps in evaluating and discussing the learner's direct interaction within the teacher's presence.

Results:

The Differences between the Blended Education and the Traditional Education

Contemporary researchers believe that blended education includes smart and variant techniques like direct talking (textual or audio, or textual and audio together) and direct contribution by using applications, programs, and systems between (teacher/pupils or pupils/pupils). Blended education gives the teacher or the symposium organiser the opportunity to interact with pupils. Razak (2006) insists that blended education is a primary means of evaluating lessons or lectures in every single class. Using the internet helps with the primary means of communication that teachers and learners need which depends mainly on interactive learning (Technological Development Centre, 2002; Mustafa, 2005). Also, it is one of the technical educational systems consisting of secondary electronic systems and it allows interaction with the teacher, through audio-visual means by depending on full access to educational content. Employing modern equipment and the internet is called simultaneous learning interaction. In the following table comparison between blended education and traditional education is presented (Al-Wakeel et al., 2007):

Table 1: A Comparison between the Blended Education and the Traditional Education

Blended Education	Traditional Education
1. High cost	1. Low cost
2. It is quite easy to find sources, contact libraries and use search centres by using the internet	2. It is limited to the selected books
3. Inside and outside the classroom interaction is available by raising issues to be discussed	3. Inside the classroom interaction is available
4. It is not limited by specific time or place	4. It is time specific
5. Continuous interacting, responding and tracking of the lesson material throughout and after the lesson time	5. Interacting and tracking the lesson material is limited to the lesson time only.
6. Face to face contact is not required	6. Face to face contact is required

The Characteristics of Designing the Environment of the Blended Education

The environment of blended education is usually a default one and the teacher plays the lead role in it. It promotes the chance for active interaction between the teacher and the learner. Al-Bseony (2000) identifies the advantages of using blended education at schools in the following points:

1. Simplified educational contact and communication;
2. An easy research, information and opinions exchange between the teacher and the learner;
3. The possibility of accomplishing all the styles of group supervising;
4. The possibility of teaching a huge number of pupils at one time;
5. Helping the teacher to notice to what extent their educational duties are comprehended;
6. Extremely fast in realising and reducing educational management problems;
7. Getting sources from electronic libraries and searching centres is straightforward;
8. Familiarisation of the discussion forums in default classrooms which encourages pupils to participate without any fear or confusion;
9. Continuous interacting and a meaningful comprehension between teachers and learners.

Several studies are dedicated to knowing the advantages of blended education and how it is useful in teaching and learning processes. Jaradat's study (1985) aims to identify three means of blended education which are, programmed education, the collected educational systems and the normal means of getting pupils. Ashur's study (2009) intends to recognise the validity of blended education and the process of gaining the skills of the three-dimensional design of the students of the Technology Education at the Islamic University. Ashur's study proves that there

are statistical differences between the prior/ post applications of the tested students in favour of the post-application and this refers to the program effect. Abed Al-Ati's (2009) study endeavours to discover the validity of a suggested training program in the development of skills in electronic content management of professional diploma students by using blended education. Al-Ati's study concludes that there are statistical functional differences in the average of the tested students at the prior and post-application in favour of the post-application. Razak's (2009) study aims to identify the influence of blended education upon the personal profession and teaching performance of science teachers before practicing their own career. After analysing the previous study results, the researcher identified the direct impact of blended education on the development of the training profession of teacher-students in the chemistry department. The above-mentioned result has been obtained due to transcendence of the experimental group upon the controlled group in a dimensional test of the measuring tools. Finally, Richards (2005) study attempts to know the influence of blended education upon teaching and learning processes. Richards (2005) explains that the experimental test shows that getting information and accomplishing teaching processes, with the aid of blended education, is seen as one of the top schooling activities. Blended education is characterised as an instrument or tool for motivating pupils towards learning. Careful investigation of these studies show that blended education of learning and teaching processes has a significant role in facilitating teachers', supervisors' and the lectures' duties. Moreover, it helps in presenting professional, practical and educational subjects and it is one of the pupils' and the trainee's teaching aids.

The Basic Means of the Blended Education

Sartaui (2010) and Khamis (2009) maintains that there are basic means used in blended education which are as follows:

1. Internet reply chat is the first basic means of blended education. This allows its users to directly communicate and find solutions for their own problems, depending on the session and mental exercises;
2. Real-time Audio with Visual is the second basic means of blended education. This means exemplifies the trainees' capacity of talking to each other by using the internet. Using the internet allows them to use audio-visual means;
3. Application sharing is the third basic means of blended education. This means indicates the applications which allow the trainees to share with others on a particular computing program, for instance, spreadsheet, PowerPoint and even Dashboard;
4. Dashboard is the fourth basic means of blended education. This means is considered the primary means among the other means of blended education. It provides trainees the ability to write and decide topics, share notes, insert drawings and posters within the application;

5. Survey is the fifth basic means of blended education. This gives the person responsible for the session to do a measuring test, in order to decide to what extent the session objectives have been obtained. By doing this the person responsible gets direct and quick feedback; and
6. Surfing the Internet is the sixth basic means of blended education. This means facilitates the process of surfing the internet by putting the electronic address or (URL) in its exact position.

Teaching Skills in Art Education

Teaching and learning processes depend essentially on the activities of teaching situations. Teaching is the foundational ground for achieving the objectives of educational processes. Positive educational and teaching outcomes are judged by the intended objectives of educational and teaching processes.

Teaching art education must be as valid as possible, because it requires a mutual interaction between the teacher and the learner, to achieve the desired educational and teaching outcomes. For this reason, art education teachers must have professional and teaching skills. Al-Zahawi (2010) defines professional and teaching skills, as a group of physical and behavioural processes that appear inside and outside the classroom, jointly within the teacher's teaching activity for achieving the lesson objectives and gaining the experience that the teacher would need. These behaviours are exhibited during the teacher's real practice. The targeted behaviours appear as an emotional, physical or verbal reactions. These are characterised by quick and precise performance and adaptation to educational circumstances during taught lessons.

Methodology:

The General Dimensional Teaching Skills of Art Education

1. Informative suspense and excitement: It depends on the teacher's skills and profession in their specialisation which is represented by:
 - New learning is established depending on the learner's old experience. This means the learner combines their old and new learning experience, and the teacher should be ready for such a thing;
 - The clarity of visual and verbal communication with learners when explaining and describing the exposed lessons;
 - The teacher's positive emotion affects the learners and leads to the smooth exposure of the taught subject.

2. Positive relationships between the teacher and the learners: The teacher must work on improving their skills of communication with the learners, to increase their learning motivation. This can be done by depending on these strategies:

- Avoid rebuking and raising negative emotions in the learners such as the feeling of anger or extreme worry;
- Encourage learners to realise their need for learning, because this realisation might increase their motivation towards learning more and more; and
- Developing the learners' positive and successful emotions towards their teacher such as, respect and confirming their good behavioural reactions.

Art Education Positive Teaching Bases

1. The learner's positivity and contribution in the learning process;
2. The concordance of the taught material with the learners' capacity;
3. The learner must be the core of the educational process;
4. Involving more than one sense of the learner in the learning process;
5. Learning from the findings of studies and research about the different aspects of learning and teaching;
6. Art education content must be in accordance with the learner's time and efforts;
7. The presented lesson must have an obvious and meaningful goal which is linked with the learners' needs and tendencies. The lesson goal must be connected with the learner's growth and requirements;
8. Art education teaching must be designed in a way that supports and affects the learners' motivation by using a reward policy, instead of a punishment policy. Recent studies show reward policy is much more effective than a punishment policy.

The Study Procedures

The Study Environment

The teacher-students of the College of Basic Education, who have already studied methods of teaching represent the basic element of the current study. They are currently going through their pupils- teaching period, in the second course, at the fourth stage.

Data Collection

The researchers choose 30 male and female teacher-students from the Art Education Department/ College of Basic Education/ Al-Mustansiriyah University. The 30 chosen teacher-students have been trained in the collected educational system built on blended education.

The Research Methodology

The researchers adopted descriptive and experimental methods because they fit the study purposes. These methods are used to identify independent variables (the collected educational system) and dependent variable (teaching skills) validity.

The Experimental Design

The researchers choose the experimental design which depends on one experimental group. In addition, they applied the prior/post measuring of collected data.

Preparing the Research Design

A. A-List of the Required Teaching Skills for Teaching the Art Education

In order to specify the effective teaching skills of the suggested collected educational system and to answer the first research question, the researchers did the following:

1. Checked the theoretical background of teaching skills and methods of teaching books. At the same time the researchers checked findings of the previous studies, which are concerned with the teaching skills;
2. Checked the practical educational syllabus and particularly the syllabus of teaching art education; and
3. Observed the teacher-students at the teaching-students period. The mentioned observation was accomplished by the researchers themselves.

After completing the third procedure, the researchers have the ability to present their own teaching skills list. The researchers' teaching skills list has been investigated by a number of referees and the referees' perspectives have been taken into consideration. As a result, the researchers find that the teaching skills can be divided into 48 skill and those skills are separated into eight aspects which are: skills in writing a teaching plan, skills in presenting and preparing the pupils, skills of explaining and practicing art education lessons, skills in managing the classroom, skills of formulating and asking questions, skills in encouraging pupils' learning motivation, skills in using the teaching aids and skills of evaluating the pupils' scientific level.

B. Testing the Cognitive Achievement of Teaching Skills

The researchers arrange a test to measure the cognitive achievement of teaching skills used, according to the following steps:

1. Deciding the test objectives;
2. Formulating the test items;

3. Sensing the authentication of the cognitive test;
4. Sensing the stability of the cognitive test;
5. Measuring the ease and difficulty variables of test items; and
6. Deciding the assessment criteria of the test.

C. A Note-List of the Teaching Skills of Art Education Teacher-Students

The researchers must prepare a note-list of 34 aspects according to the following steps:

1. Decide the purposes of the note-list;
2. Formulate the items of the note-list;
3. Adopt the assessment criteria;
4. Put the instructions of the note-list to use;
5. Measure the authentication variable of the note-list items; and
6. Sense the stability of the note-list items.

The Requirements for Starting the Application of the Research Test

1. Creating the proposed collected educational system:

For finding an answer to the first research question which says " what is the expected return of the coming training program, which is built on the blended education in developing the teacher-students' teaching skills", the following steps are made:

1. According to the suggested model the research design of the collected educational system in relation to blended education, the objectives of the collected education are divided into:
 - a. Art education teacher-students must design a good teaching plan;
 - b. Art education teaches- students must choose a new introduction for every new lesson;
 - c. Art education teacher-students' confidence is the key to presenting new lessons;
 - d. Art education teacher-students' good scientific stylisation is the major guidance for formulating the classroom questions.
2. In this step, the researchers start the application of the collected educational system built on blended education. The real application of the above-identified system takes place by using the typographical textual contexts of the program, collecting educational photographs and the required YouTube videos and lastly preparing PowerPoints which are all related to the learning issues;

3. Consulting a number of art education and teaching methods referees to check the validity and appropriateness of preliminary versions of the collected educational system built on the blended education; and
4. The referees' point of view has been taken into the researchers' consideration. The researchers make not only the recommended modifications, but they even make an experimental survey on another group of teacher-students. This experimental group has been excluded from the test. It is important that researchers familiarise themselves with the survey, by taking good notes about blended education and the processes of arranging topics, and using the targeted mechanisms.

The Prior/Post Applications of the Research Tools

The researchers' prior apply the research tools (achievement test, note-list) on the collected data (experimental group). The previous experimental application is justified by the researchers' aim to measure the cognitive and professional background of the teacher-students regarding the collected educational system before starting the real application.

Applying the Collected Educational System upon the Collected Data

- The researchers appoint a preliminary session through which they explain in detail the learning guide of the collected educational system and the blended education; and
- The researchers apply the final version of the collected educational system built on the blended education on the teacher-students on Saturday 20/3/[2018](#). The dated application lasts for four weeks.

The Post Application of the Research Tools

After lecturing the 30 male and female teacher-students about the collected educational system built on the blended education, the post application of the research tools (achievement test, note-list) on the collected data starts. By using the post application research tool a suitable statistical measurement has been accomplished. This procedure revolves around checking the truthfulness of the research hypotheses and questions.

Results and Discussion

Answering the question " what is the effect of a collected educational system built on the blended education on developing the cognitive aspects of the art education teacher-students' teaching skills" and checking the first hypothesis truthfulness which demonstrates that " there are no statistical functional differences between the teacher-students' average at the functional level [0.05](#), in the prior/post applications of the teaching skills, due to the usage of the collected

educational system built on the blended education" (T) test has been chosen for two linked groups and the results are explained in table (2)

Table 2: The results of the test (T) for testing the functional differences in the prior/post applications and the η^2

The test	The number	Arithmetic mean	Standard deviation	(T) Value	Functional value	Functional level
Prior	30	15.72	3.48	30	0.00	Functional
Post	30	42.8	1.30	6		

*The tabular value of (T) in the freedom degree is (31) and functional level (0.05) = 2.78

The previous table shows that there are statistical functional differences among the teacher-students' average at the functional level 0.05 in the post/prior application in favour of the post-application. These differences are justified by the active interaction that blended education produces in teaching situations. The blended education facilitates easy information accessing. Also, including educational alternatives in the collected educational system gives the teacher-students a license to choose what works for them. The blended education achieves manageable progress towards learning the desired skills. This progress provides the teacher-students with the opportunity to examine and review the desired skills, practice and gain training about the application and resume evaluation. This helps in enriching teaching situations and developing the teacher-students' cognitive achievement by using the collected educational system.

Answering the second research question "to what extent the efficiency of the collected educational system built on the blended education helps in developing the teacher-students' skilful aspects of the teaching skills" and checking the truthfulness of the second hypothesis which claims that "There are no statistical functional differences at the functional level 0.05 among the art education teacher-students in the prior/post application of the note-list due to the usage of the collected educational system. For checking the truthfulness of the above placed hypothesis a test (T) value of two linked groups has been used and table (3) shows the results of analysis.

Table 3: The results of the test (T) for testing the functional differences in the prior/post application of the note-list

The note cards	The group	Arithmetic mean	The number	Standard deviation	Freedom degrees	(T) value	Functional level
Skills of planning the lesson	prior	7.57	30	0.43	16	32.32	Functional at 0.05
	Post	19	30	1.41			
Skills of preparing the lesson	prior	23.44	30	1.43	16	45.03	Functional at 0.05
	post	50	30	2.63			
Skills of presenting the lesson	prior	7.20	30	0.10	16	31.14	Functional at 0.05
	post	19.41	30	2.02			
Skills of asking questions	prior	7.10	30	0.10	16	46.24	Functional at 0.05
	post	19.16	30	1.23			
The sum	prior	45.4	30	2.44	16	32.32	Functional at 0.05
	post	115	30	7.4			

*The (T) tabular value at the freedom degrees is (16) and the functional level (0.05)= 2.78

Table 3. indicates there are functional statistical differences among the art education teacher-students' average, at the functional level 0.05, in the prior/post applications of the note-list and the total marks, in favour of the post-application. The results in Table 3. confirm the positive and remarkable effect of blended education in developing skilful level of art education teacher-students. This positive remarkable effect of blended education is justified by the scientific and systematic steps, which are followed in constructing the collected educational system. These steps are: identifying the targeted group, collecting information and references that fulfil the targeted group's needs, adopting a plan to design a program in relation to the determined objectives, reviewing and correcting the collected educational system to decide its validity and giving the teacher-students the opportunity to examine its success or even failure, by providing them with an immediate feedback to affirm or modify the collected educational system.

Recommendations

The researchers recommend the following:

1. Use the collected educational system and blended education when practicing teaching skills for the other educational syllabus;



2. Gaining familiarity in the presented note-list when formulating the items of another note and evaluating other teachers and teacher-students' skills for another educational syllabus; and
3. Do not be limited by cognitive evaluative methods. The researchers recommend using a collection of variant methods that concentrate on the cognitive, emotional and psycho-physical aspects together.

Suggestions

In the light of the current study results, the researchers recognise that there are several issues relating to accurate studying and searching. Therefore, the suggestion is made to tackle the following issues:

1. Formulate practical educational programs to obtain practical skills that currently are not fulfilled;
2. Design practical programs for improving the practical skills for other educational subjects, in relation to new technological updating; and
3. Read studies similar to the current study, which use scientific design for other teaching aspects and teaching grades.

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