The Efficacy of a Developed Educational Content that Complies with Quality of Digital Courses on Achieving Concepts of Islamic Education and Developing Motivation among Female Students of Educational Sciences Faculty in Jordan

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Abstract

The study aimed to identify the impact of teaching a course on educational Islamic concepts through using a developed content, which complies with quality of digital courses, on concept achievement and motivation development among female students of Educational Sciences faculty in Jordan.

To achieve its objectives, the study adopted the quasi-experimental approach. The sample comprised (50) female class teacher students who were selected from the faculty of educational sciences in Jordan, second semester 2020/2021.

The sample was randomly divided into an experimental group that comprises (25) students who studied the developed learning content via distance education which complies with quality standards of digital courses, and a control one that comprises (25) students who studied the courses with the conventional way.

The two instruments of the study: achievement test of Islamic concepts, and motivation standard for learning a subject on Islamic education, were both tested for validity and reliability.

The findings revealed that there were differences with statistical significance at the function level (a = 0.05) between mean scores of the experimental group and those of the control counterpart, in concepts and in standard of motivation in favor of the experimental one.

In light of such findings, the study recommends that quality standards should be used in designing the content of digital courses.

Keywords

Quality of Digital Courses, Islamic Education Concepts, Motivation for Islamic Education.
Introduction

The world today is going through an important revolution in digital technology which became gateways for societies and governments to the world of knowledge. Such a revolution has positively impacted the processes of learning and teaching. Due to that, educational institutions were encouraged to use digital learning which became a national objective that they aim to achieve, in accordance with international standards (Dousari, 2014).

With the spread of Corona virus, the world is required to look for new education methods to confront several challenges at world level. Because of school closures, the UNESCO recommends to use distance teaching programs, applications and open platforms that allow schools and teachers to use them to ensure constant learning (Atrabi, 2020).

Sharhan (2015) indicated that because future learning, would be digital and that of distance, then digital courses need to be designed properly in accordance with standards and technology.

Due to the increasing need for this type of learning, besides the increasing number of students and the great development of information and communications, all that became a challenge for the teaching sector. Therefore, specialists are obliged to abide by specifications and standards to secure quality of digital courses given to students (Qarni, 2019). Digital courses are basic for the field of technological teaching. They are used collectively or individually, according to need and to few numbers of the educated. Generally, the teaching courses are not more than a repository of knowledge that includes multi-teaching and interactive methods that depend on two senses: hearing and sight (Dobudko et. al., 2018).

The concept of educational courses and their qualities have changed depending on developments of the current era which witnessed accelerating changes in the field of teaching in general and in the digital in particular. To ensure quality of digital courses, a set of standards should avail in the course to secure its validity and quality in order to get the best of results and outcomes (Milhem & Bader, 2018). Using quality standards in digital courses by teachers and learners improves teaching, achieves competence, efficacy of outcomes, and guarantees constant control and assessment of achievements. It also helps detect and correct errors and improve the course with minimal costs. Therefore, it is necessary to have standards to evaluate these courses and verify their quality and validity for teaching. Thus, determining standards to secure the quality of such courses guarantees
that the students get distinguished educational services, besides realizing the desired educational objectives (Sahtut, 2014).

Because Islamic education is the core of change and reform, then designing an attractive content based on quality and perfection should be given priority. The Islamic method of education deals with reforming everything in the human to create out of him an individual who is good for both his community and nation (Ayasreh, 2010).

Although the material of Islamic education is pivotal for forming Islamic identity of the student, yet the current educational content is still designed the conventional way without using technology and quality standards of digital courses. Such a way doesn’t suit or meet the requirements and needs of 21st century students.

**Statement of the Problem**

Several studies like those of (Abu Samoor, 2005 and Ashamalti, 2007) indicated that there was weakness in students’ understanding of Islamic concepts, in addition to that of low motivation to study Islamic material course.

Tests to control learning quality which were conducted by the ministry of education last few years unveiled that there was weakness in the students’ Islamic educational material in general and in the acquisition of concepts in particular. Results of 2004/2005 tests indicated that there was weakness in acquiring concepts of: Jurisdiction, doctrine, and biography of the prophet. That weakness was attributed to the method of presenting such topics in textbooks and to the absence of activities that cover the theoretical material (Ministry of Education, 2003, 2004, 2005).

The two researchers, being teaching staff members in universities, noted that the design of Islamic educational course was still being presented in a non-interactive method; the major concern of the teacher was directed to memorization which made such a course, uninteresting for students and that eventually led to weakness in motivation and acquisition. The researchers also noted that the content was designed in a non-attractive manner.

Thus, statement of the problem of the current study focuses on developing the educational content for distance learning in order to comply with quality digital standards characterized by interaction, making use of the huge potentials of the world wide web that enriches teaching process with the least efforts possible. It could also help students to acquire basic concepts of Islamic culture and to arouse in them motivation for learning.
This is how the need for investigating the impact of a developed education content for distance learning in conformity with quality standards of digital courses pertaining acquiring Islamic concepts and developing motivation in UNRWA students of faculty of educational sciences and arts/ UNESCO emerged.

Questions of the Study

The study came up with answers to the following two questions:

First, Are there differences with statistical significance at the function level (a =0.05) between the means of experimental and control groups, in achieving concepts of Islamic education that might be attributed to educational content (the developed for distance learning in accordance with quality standards of digital courses, and the conventional one)?

Second, Are there differences with statistical significance at the function level (a=0.05) between mean score of the experimental group and that of the control, pertaining motivation standard relevant to learning Islamic concepts, that might be attributed to educational content (the developed for distance learning in accordance with standards of quality of digital courses and the conventional one)?

Significance of the Study

From theoretical perspective, the significance is manifested in the following:

• It might help university teaching staff members to pay more attention to how much designing digital content in compliance with digital quality standards of Islamic educational material influences students’ acquisition of the concepts and their motivation for learning.

• It might add a qualitative material to the few studies, conducted locally and in the Arab world, that tackled the design of digital content which complies with quality standards at the university level. To the knowledge of the researchers, it might also be the first of its type to evaluate the level of teaching Islamic material to students in Jordan.

• It might contribute more information to Arab library regarding standards of digital quality related to educational content that relies on internet search in order to get the correct information directly with the least exerted effort possible.
Practically speaking, the significance lies in the following:

- The benefit which teaching staff members might gain from the digital content to be developed in accordance with standards of quality of class digital courses that might be a design model for various Islamic topics and for other teaching ones as well.
- The benefit that teaching staff members and students might get from testing concepts of Islamic culture and motivation standards towards learning Islamic educational material the researchers are going to prepare.

Study Limits and Limitations

Limits of the current study are:

- Human: It was applied to class teacher students of faculty of educational sciences and arts of UNRWA in Jordan.
- Place: This study has been limited to female students of faculty of educational sciences and arts of UNRWA/ UNESCO, Jordan.
- Subject: It has been limited to designing a digital educational content for distance learning pertaining biography of the prophet, one of the courses of Islamic education set for class teachers, in compliance with standards of digital quality matters.

Limitations of the Study

These are confined to the implications related to validity and reliability related to achievement test of Islamic educational concepts and motivation standards towards learning Islamic education which were designed by the researchers for the purpose of this study.

Terms and Procedural Definitions

The following are definitions of basic terms of the study:

Digital Courses

Musa (2015) defines them to be the digital tools collected from digital means, text and voice profiles, videos, in addition to images, motion pictures and all types of pictures.

Procedurally, they are identified as the content of any unit of prophet biography, a part of the course of Islamic educational concepts, that was digitally developed using the
previously mentioned profiles that comply with standards of electronic course quality linked to that of quality matters counterpart.

**Distance Learning**

Mubarak (2006) defines it as the system any educational institution uses to convey education material anywhere, anytime through various forms of communication media.

Procedurally, it is conveying educational materials to any learner through an electronic educational medium, the internet, which allows the learner to get information anytime, anywhere. In the current study, the term means, providing the digital content which was developed in accordance with the learning system model, to students for access and for interaction.

**Quality Standards of Digital Courses**

Saleh (2010) defines them to be the items or statements that describe or control the process of designing digital learning courses and producing them qualitatively.

Procedurally, they are the standards adopted for judging the quality of digital content developed by the two researchers. They are the standards of the organization of eight quality matters and indicators included in each standard that should exist in contents of digital study courses via internet.

- Concepts: Ibrahim (2005) defines them to be a group or type of things, events, or symbols that combine one basic common quality which distinguishes them from other groups or types.

Procedurally, they are words with religious implications of prophetic biography that suit potentials of female class teachers. These for them represent tasks of significance like conquest and reconciliation. They were measured by the score the students earned in the test mainly set for the current study.

- Motivation: Qatami (2002) defines it as an internal psycho-physiological state which varies in degree from one person to another; it motivates the individual to behave in a way to achieve a certain goal.

Procedurally, it is a positive state which students of class-teacher majors feel when studying digital content of the course of Islamic educational concepts that comply with
standards of quality matters. The scores earned by students were measured by the scale mainly set for this study.

**Literature Review**

The researchers list down some of the foremost literatures relevant to their study as follows:

In his study, (Miner, 2014) aimed to identify the efficacy of electronic learning courses provided by Florida International American University on the standard program of quality matters in upgrading students’ academic achievement and satisfaction, besides average of course completion. The study adopted the quantitative assessment approach through a questionnaire designed in accordance with survey community model which was applied to male and female students studying twelve electronic courses that were based on quality standard related to such courses. The courses were offered through four academic semesters in Florida International University.

The study of woods (2014) tackled the grand educational significance by which he initiated applying standards of quality matters for designing one of the courses that benefit from electronic teaching based on web. The study recommended a general application of the suggested list of standards for teaching staff members who were willing to improve the quality of their electronic courses through using self-assessment tools by reviewing internal and external qualities and adopting standards of quality matters that end up with obtaining the official required licenses.

Blundell (2015) aimed to identify levels of satisfaction of teaching staff members with courses designed on the internet that use quality matters standards against those which don’t use the web.

The study used the comparative quantitative approach whose tool of measurement comprised three basic elements: student-related issues, faculty-related issues, and issues related to institutions. The results revealed that there was an apparent relationship between increasing the level of satisfaction in teaching staff members and that of students.

Quraan (2017) conducted a study that aimed to detect the influence of constructing and teaching an electronic course on the achievement of female students in the course of “Islam and Society Build up”. The results revealed that there were differences with statistical significance in favor of the experimental group in the post application domain of the achievement test. The study recommended that teaching staff members should be
encouraged to design and build up digital courses for their positive impact of increasing learners’ motivation for learning and acquiring self-learning skills.

Omar et. al., (2018) conducted a study that aimed at designing an electronic course for environmental education through the blackboard system in light of the standards of quality for designing electronic courses that rely on the organization of international quality matters in order to detect its impact on achievement and development of skills and environment ethics of B.A students at the college of education in king Khalid University, Saudi Arabia.

To achieve its objectives, a course on environmental education was electronically designed in light of quality matters standards. Three tools for measurement were prepared and the quasi-experimental approach was adopted in which two groups were used, an experimental and a control one, to implement the study experiment. The sample comprised two groups of B. A students registered in that course; the control group which comprised (36) students were taught the conventional way, while the experimental of (38) students were taught the course designed electronically in accordance with quality matters standards. The findings showed that the electronic course helped raise cognitive achievement, skills development, and environmental ethics in the students of the aforementioned university.

Qarni (2019) conducted a study to evaluate the quality of electronic courses via management system at Mujamaa University, Saudi Arabia, in light of international standards of electronic quality matters. The study adopted the analytical descriptive approach. Quality of electronic courses in the university were assessed through eight major standards that included all the nine courses offered via (D2L) system. The study revealed that the electronic course was neither applied to all university students, nor could it help in supporting the learner. The study recommended not to apply that course to all students except after experimenting with it on a limited sample and after ensuring its efficacy, besides holding periodic reviewing and evaluation of the course every three years, maximally.

Husein and Al-Rashid study (2020) aimed to design an educational evaluation course in light of quality matters standards in order to measure its efficacy in developing electronic evaluation skills in a group of (42) students from college of education at King Saud University, Saudi Arabia. The group was an experimental one on whom knowledge test of skills pertaining electronic assessment of the course of educational evaluation and three cards to note electronic skills were applied. The results showed that the proposed design
was effective in developing electronic evaluation skills in those students. The study recommended that courses in the college of education should be designed in light of quality matters standards.

**Commentary on the Previous Studies**

By reviewing the previous studies, one can notice that they discussed different concepts relevant to digital courses, their standards, quality of acquiring such concepts, and motivation for learning.

In addition, they were conducted in different societies with different sizes and natures. They also tackled study numerous variables, samples, methods of data collection, and the analysis adopted in designing digital courses in compliance with digital quality standards.

The current study agrees with that of Quraan (2017) in selecting the adopted approach, the quasi-experimental.

The researchers made use of the previous studies in developing study tools, method of sample selection, results it came up to, in addition to recommendations.

But the present study differs from the previous ones in tackling the subject of efficacy of a developed educational content for distance learning that complies with standards of digital courses quality for achieving educational Islamic concepts besides developing motivation on students of faculty of educational sciences and arts who use standards of digital quality rubric matters which, to the knowledge of the researchers, was never tackled before. The current study is one of the rare studies that discussed such a topic with its variables (developed educational content for distance learning that complies with standards of digital quality, achievement of Islamic education concepts, besides motivation).

**Method and Procedures**

This research includes description of the approach adopted, sample members, tools, methods for verifying validity and reliability, study procedures adopted, and the propitious SPSS used.

**Study Methodology**

In order to explain the influence of independent variable, the developed educational content for distance learning which complies with standards of courses digital quality on the dependent variable, achievement of concepts of Islamic education concepts pertaining
learning, the two researchers adopted the quasi-experimental method, being the most appropriate for this study.

Study Population

This comprises (50) female students, whose major is class teacher, registering for the course of educational Islamic sciences at UNRWA in Jordan. The faculty was purposively selected because one of the researchers works there and because of availability of application for study needs. Two groups were randomly selected from those students and each group comprised (25) students; group (A), the experimental one was taught the developed content via distance learning and group (B), the control one, was taught the conventional way. Distance teaching was used in teaching both groups via virtual class rooms’ using blue button application available at Moodle platform because of health conditions dictated by Corona pandemic which made teaching the conventional way to control group more difficult in a regular semester.

Study Instruments

To achieve objectives of the study, the two researchers used the following two instruments:

Achievement Test of Islamic Education Concepts

The researchers prepared a multiple-choice test for the achievements of Islamic education concepts. In its final shape, the exam consisted of (40) items from a unit on the prophetic biography, a course for class-teacher majors, in order to measure the students’ pre-and post-achievements.

Test Validity

Test content, which initially amounted to (40) items, was submitted to (12) judges specialized in the field of Islamic education and methods of teaching to verify its validity. Their comments were taken into consideration; some items were modified and others corrected. Forty items that constitute 80% of what the judges agreed on were considered.

Test Reliability

To verify reliability of the test, the researchers applied the test in its final shape on an exploratory sample comprising (25) students from the study population and from an extraneous one. In calculating coefficient of the test reliability, Richardson’s formula
(K-R-2020) was used. Reliability value amounted to (0.85), acceptable for the study purposes. Reliability was also calculated by another way through re-testing the same exploratory sample after two weeks. Correlation coefficient was calculated, using Pearson’s, amounting to (81.0), an acceptable value for the study purposes. As for test time, it was determined through an arithmetic mean the first student needed, (45) minutes, and that of the last one. (55) minutes. Thus, (50) minutes was the suitable time. Difficulty coefficients were also calculated; they ranged between (0.39-0.89), thus all items were suitable. As for items distinguishing coefficients, they ranged between (0.38- 0.78). Thus, 40 items were the final number of the achievement test. Every alternative correct item was given one point, the highest grade for the exam was 40 points.

**Motivation Scale for Learning Islamic Education**

After reviewing education literature in addition to relevant studies and theses like those of (Abu Safa, 2018 & Abid, 2012), the researchers developed a scale to measure motivation for learning Islamic education by students of class-teacher majors.

The questionnaire designed to measure the motivation was the five-point Likert scale whose points are distributed as follows: strongly agree, 5 points, agree, four, neutral, 3, disagree, 2, and strongly disagree, one point.

The motivation scale contained positive and negative items: The negative ones were five, 29, 30, 31, 32, 33; the rest which were (30) were positive. The negative items were taken care of and corrected. Their scaling was in accordance with Likert’s; while the negative items were given the following scaling: strongly agree, one point, agree, 2, neutral, 3, disagree, 4, and strongly disagree, 5.

The researchers’ intention was to provide short clear sentences as for as possible. The scale in its final shape contained (35) items in compliance with Likert’s.

**Validity of Motivation Scale**

To ensure validity of the scale the following are taken into consideration:

- Virtual validity, To verify the validity of scale content, it was given to a group of judges specialized in: general curricula and teaching, educational psychology, measurement and evaluation, Islamic education curricula and methods of teaching them in Jordanian universities. Each of the judges was asked for comments concerning clarity and language expression of the items. The items which were
agreed on and constituted 80% were taken after certain modification were done through rewriting certain items. Such comments confirm content validity of the motivation scale.

**Constructive Validity**

To verify validity of items of this scale, the researchers detected correlation coefficients between all items and motivation scale. Pearson’s correlation between each item and the total outcome was calculated and the correlation coefficients proved to be valid for purposes of the study.

**Digital Educational Material**

Content of digital educational material, according to quality standards of digital courses (quality matters), consists of a set of concepts, experiences, various activities and series of concepts of Islamic education present in the unit of prophetic biography.

Regular knowledge content is transformed into digital through videos that explain concepts, truths and implicit generalizations which will enrich websites thus, providing students with self-training of how to acquire the contents embedded in the material to build up interactive activities using H5p program.

The program helps in the production of digital interactive content which makes it easy for the student to surf the web. It also helps in: using answer garden platform to create blurry questions for brainstorming of the students, using word wall platform to create interactive games for students, and finally using padlet to increase students’ participations. All these were designed by the researchers with the help of experts in educational platforms. This should be presented to students in an interesting way accompanied with color, image and motion pictures in accordance with (Moodle) platform, the best system that secures several merits for the learner; it is a platform for managing education in general. After content completion, it is used in numerous issues, the foremost of which are: videos uploading, preparing electronic tests, creating virtual classes, electronically publishing interactive work sheets, holding participative forums for students, and finally upgrading Articulate storyline programming (3) at Moodle system to support the Scorm system.

**Teacher’s Guide**

Teacher’s guide was prepared to explain how to teach the fourth unit (The honorable prophetic biography), in the course of Islamic education concepts, which was designed in
compliance with digital quality (quality matters). The guide contains instructions which the teacher needs to consider in the process of teaching digital contents, besides a time plan for the number of classes of the unit and the special objectives set for the selected topics (Cognitive, skillful, and emotional), in addition to the procedural steps to deal with the digital content. The standards of quality matters organization, which include the following eight standards: course general outlook and introduction, learning objectives, evaluation and measurement, teaching materials, interaction with learner’s activities, course technology, teacher’s support, and easy access and use were explained to the teacher.

To verify its validity, the guide was given to judges whose comments were taken into consideration. To answer questions of the study and to test its hypotheses, a pre-and post-test was designed for two groups, control and experimental. The design might be explained as follows:

<table>
<thead>
<tr>
<th>G 1</th>
<th>O1</th>
<th>O2</th>
<th>X</th>
<th>O1</th>
<th>O2</th>
</tr>
</thead>
<tbody>
<tr>
<td>G 2</td>
<td>O1</td>
<td>O2</td>
<td></td>
<td>O1</td>
<td>O2</td>
</tr>
</tbody>
</table>

G 1= Experimental group
G 2= Control group
O 1= Achievement test for the concepts of Islamic education, pre/post.
O 2= Motivation scale for Islamic education learning, pre/post.
X= Experimental treatment (digital content designed in compliance with standards of quality matters).

**Study Procedures**

The study adopted the following procedures:

- Obtain the permission needed to apply the study at faculty of educational sciences, class teacher majors.
- Review relevant literature.
- Determine study population.
- Design achievement test of Islamic material concepts besides verifying it for validity and reliability.
- Design motivation scale for learning in addition to verifying it for validity and reliability.
- Design digital content in compliance with standards of quality matters.
- Pre-apply the two tools of study on the two groups: control and experimental.
• Apply study plan to the experimental group.
• Post-apply the two tools on the two groups: control and experimental.
• Tabulate data in special tables to analyze them via SPSS.
• Analyze the data using SPSS.
• Present study findings, discuss them and suggest suitable recommendation.

**Statistical Processing**

To achieve objectives of the study, the two researchers used the following statistical methods:

First: Arithmetic means and standard deviations for the performance of the two study groups with regard to pre-and post-Islamic education concepts in addition to motivation scale were calculated.

Second: ANCOVA was used in order to analyze first and second questions of the study and to examine associated hypotheses.

**Study Variables**

Variables of the study are:

First, Independent variable

• Designing education content with two levels (digital in accordance with standards of digital quality and conventional content).

Second, Dependent variables:

• Achievement of Islamic education concept.
• Motivation to learn Islamic education.

**Study Results**

This part of the study presents the findings it came up to with regard to the impact of teaching a course on Islamic education concepts by using a developed education content for distance learning. The results are arranged as follow:

First: Results pertaining the first question: “Are there differences with statistical significance…?”
In answering this question, arithmetic means and standard deviations for the performance of group members in the pre-and post-test were calculated, the results are presented in table (1).

Table 1 Arithmetic means and standard deviations for the performance of the two groups in the pre-and post-test of Islamic education concepts

<table>
<thead>
<tr>
<th>Group</th>
<th>Pre-test of Islamic education concepts</th>
<th>Post-test of Islamic education concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Arithmetic mean</td>
</tr>
<tr>
<td>Experimental</td>
<td>25</td>
<td>22.44</td>
</tr>
<tr>
<td>Control</td>
<td>25</td>
<td>22.52</td>
</tr>
</tbody>
</table>

Table (1) reveals that there are virtual differences between the means of pre-and post-application of the test pertaining the experimental and control groups. In the post-application on the experimental group, the mean was (34.08) with (2-12) deviation, while for the control one, it was (28.72) with (2.17) deviation. Such a thing proves that there are virtual differences in the means between the two groups. To figure out whether the differences of means of the two groups were of statistical significance at the function level (a=0.05), One Way ANCOVA was used. Results are presented in table (2).

Table 2

<table>
<thead>
<tr>
<th>Variance source</th>
<th>Squares total</th>
<th>Degree of freedom</th>
<th>Squares means</th>
<th>Calculated (t) value</th>
<th>Function level</th>
<th>ETA size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>4.347</td>
<td>1</td>
<td>4.347</td>
<td>.944</td>
<td>.336</td>
<td>.020</td>
</tr>
<tr>
<td>Post-test</td>
<td>357.817</td>
<td>1</td>
<td>357.817</td>
<td>77.667</td>
<td>0.000</td>
<td>.623</td>
</tr>
<tr>
<td>Error</td>
<td>216.533</td>
<td>47</td>
<td>4.607</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total modified</td>
<td>580.000</td>
<td>49</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table (2) shows that (F) statistical value for the variable of designing education content in the achievement of Islamic education concept was (77.667) with a function level (0.000). This indicates that there are differences with statistical significance at the function level (a=0.05) between the performance of the two groups of the study in the achievement test of Islamic education concepts.

Post Measurement

To find out in favor of which of the two groups was the difference with statistical significance, the modified arithmetic means and standard error of the performance of group members regarding post application of the test were calculated. Table (3) shows that.
The results in table (3) reveal that the modified arithmetic means of performance of the experimental group which was taught through using the design method of education content amounted to (34.08) that is higher than the modified one for the performance of the control group which was (28.72). Such a difference assures efficacy of the content designed in accordance with quality of digital courses for the achievement of Islamic education concepts.

To determine the size of educational content, ETA trace size was calculated. It amounted to (0.623) with a percentage of (62.3%) of the mean variance of students’ achievement that might be attributed to the variable of using the modified education content. The rest of the variance (37.3%) couldn’t be explained due to other uncontrolled factors. Such a value indicates a big trace size (Cohn, 1977).

Results pertaining question two:

In answering question two: “Are there differences with statistical significance at the function level (a=0.05)?” arithmetic means and standard deviations for the performance of group members who were subjected to the pre-and post-application of the motivation scale pertaining learning the concepts, were calculated. The results are presented in table (4).

Table 4 Arithmetic means and standard deviations for performance of the two groups in the pre-and post-applications of motivation scale with regard to concepts

<table>
<thead>
<tr>
<th>Group</th>
<th>Pre- motivation scale for learning Islamic education</th>
<th>Post- motivation scale for learning Islamic education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Arithmetic mean</td>
</tr>
<tr>
<td>Experimental</td>
<td>25</td>
<td>3.44</td>
</tr>
<tr>
<td>Control</td>
<td>25</td>
<td>3.46</td>
</tr>
</tbody>
</table>

Table (4) shows that there are virtual differences between the arithmetic means of the post- application scale of the two groups which amounted to (3.84) and (0.17) deviation. The mean of the control group in the post-application was (3.66) and (0.19) deviation. Such a thing assures that there are differences regarding motivation between the two groups.
To figure out whether the arithmetic means of members’ performance was with statistical significance at the function level (α=0.05), One Way ANCOVA was used as presented in table (5).

**Table 5 Results of ANCOVA analysis of arithmetic means of the groups performance on motivation scale for learning Islamic education**

<table>
<thead>
<tr>
<th>Variance source</th>
<th>Squares total</th>
<th>Degrees of freedom</th>
<th>Squares means</th>
<th>Calculated (F) value</th>
<th>Function level</th>
<th>ETA trace size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-measurement</td>
<td>.613</td>
<td>1</td>
<td>.613</td>
<td>30.356</td>
<td>.000</td>
<td>.392</td>
</tr>
<tr>
<td>Post-measurement</td>
<td>.499</td>
<td>1</td>
<td>.499</td>
<td>24.725</td>
<td>0.000</td>
<td>.345</td>
</tr>
<tr>
<td>Error</td>
<td>.948</td>
<td>47</td>
<td></td>
<td>0.020</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modified total</td>
<td>1.995</td>
<td>49</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table (5) shows that the statistical value of (F) pertaining the variable of designing an education content for the motivation of learning Islamic education was (24.725) which is functional at the level (α = 0.05). This indicates that there are differences with statistical significance at the function level (α = 0.05) in arithmetic mean values of class teachers in the two groups that might be attributed to the method of designing the content.

To figure out which group got the difference with statistical significance, modified arithmetic means and standard error of post-measurement were calculated as presented in table (6).

**Table 6 Modified arithmetic means and standard error for the performance of the groups on motivation scale pertaining post-application**

<table>
<thead>
<tr>
<th>Group</th>
<th>Modified arithmetic mean</th>
<th>Standard error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>3.84</td>
<td>0.44</td>
</tr>
<tr>
<td>Control</td>
<td>3.66</td>
<td>0.44</td>
</tr>
</tbody>
</table>

Table (6) shows that modified arithmetic mean for the performance of the experimental group on the post-motivation scale for those who were taught using the modified content design in accordance with digital course quality amounted to (3.84) which is higher than the modified arithmetic mean for the performance of control group members who used the conventional content which amounted to (66.3). That proves the efficacy of content design in accordance with quality of digital courses pertaining motivation for learning Islamic education.

To determine ETA trace size, its square index which amounted to (0.345) was calculated. This means that (34.5%) of variance of class-teachers’ acquisition of motivation for learning Islamic education might be referred to using the modified education content; the
rest of the variance (65.5%) could never be explained due to non-controllable factors. This value indicates a big trace size (Cohn, 1977).

**Results Interpretation, Discussion, and Recommendations**

This part of the study provides an interpretation of the results pertaining the first and the second questions.

As for the first question which reads: “Are there differences with statistical significance at the function level (a=0.05) between means of the two groups…?”, the results showed that there were differences with statistical significance at the function level (a=0.05) between the score mean of the experimental and control groups in the achievement test of concepts that might be attributed to the design of education content in favor of the experimental one, for being taught through using the developed content of distance learning. The content was designed in accordance with standards of quality matters. Such a finding copes with the modern view of learning which ascertains that the student is pivotal for the teaching process, while the conventional method used to focus on the traditional role of the teacher. This is where quality matters counts because it determines design standards for quality of digital courses which specify learning objectives set for teaching before it starts. Quality matters develops creative skills in students, irrespective of course or unit level. This design, due to the various evaluation methods of the course given to students, greatly influences concept acquisition in students of the experimental group. The methods include: short and long tests, assignments, project preparation, participating in discussion forums, getting feedback from them correct their errors and increase understanding. It is noted that the evaluation used in the digital course of prophetic biography is set for learning, not for evaluation of learning.

It is also noted that digital courses composed according to quality matters secure a variety of learning sources such as: videos, electronic books, images, electronic games, etc. Such things increase the level of concept achievement in students of the experimental group. One of the standards that organization of quality matters focuses on is students’ support, as manifested in the websites the organization provides to students from which they can gain various forms of academic and technical support. Standards of digital courses also make access easy through Learning Management System (LMS).

The digital content design did not ignore the role of teaching staff members in teaching the unit of prophetic biography as it allowed the teacher to meet with his students as that which occurred through Blue Butin programming with a virtual class via Moodle platform.
in which students were informed about the way to deal with digital instruments and learning management system.

This result agrees with that of the (Quraan, 2017) that ascertained the efficacy of digital courses in the acquisition of concepts in general.

Second: Discussing results related to the second question which reads: “Are there differences with statistical significance…?”

The results show that there are differences with statistical significance at the function level (α=0.05) between mean scores of the experimental group and those of the control one in the motivation scale that might be attributed to the method of designing the educational content in favor of the experimental group. It might also be attributed to the efficacy of designing content in compliance with quality of digital courses that use various digital methods which secure a thrilling and interesting environment for students. The method also includes three forms of programming (Introduction, electronic book, flash) from which the student chooses what suits her, thus increasing motivation to learn the course.

The results might also be attributed to the standard learning activity and teachers interaction. In fact, quality matters cares about interaction between students and teachers and between students themselves. It also aims at upgrading learning level in general and at providing all forms of support to students who are pivotal in the process of learning. As a result, students feel happy through reading books on Islamic education. The electronic course didn’t also ignore activity of the student. It is the student who watches videos and determines perfection of the material on her part, being responsible for her learning.

**Recommendations**

In light of the findings, the study recommends the following:

- To direct people in charge of designing curricula of Islamic education to adopt the developed educational content which complies with standards of digital courses quality to increase acquisition of Islamic concepts and to develop motivation in them.
- To raise awareness in university faculty members with respect to holding training workshops on digital courses, their significance, and methods of application in accordance with standards of quality matters.
• To conduct further studies on programs related to distance teaching and digital courses for all subjects and academic levels in order to benefit from results of such courses in developing curricula and in improving teachers’ performance.

References


